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SNMP MIB Reference, StarOS Release 210

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STARENT-MIB DEFINITIONS ::= BEGIN

IMPORTS
   MODULE-IDENTITY,
   OBJECT-TYPE,
   enterprises,
   Integer32,
   Gauge32,
   Counter32,
   Counter64,
   Unsigned32,
   NOTIFICATION-TYPE,
   IpAddress
      FROM SNMPv2-SMI
   TEXTUAL-CONVENTION,
   DisplayString,
   DateAndTime,
   TruthValue
      FROM SNMPv2-TC
   Ipv6Address
      FROM IPV6-TC
   MODULE-COMPLIANCE,
   OBJECT-GROUP,
   NOTIFICATION-GROUP
      FROM SNMPv2-CONF
   InetAddressType,
   InetAddress
      FROM INET-ADDRESS-MIB
   radiusAuthServerIndex,
   radiusAuthServerAddress
      FROM RADIUS-AUTH-CLIENT-MIB
   radiusAccServerIndex,
   radiusAccServerAddress
      FROM RADIUS-ACC-CLIENT-MIB;

starentMIB MODULE-IDENTITY
   LAST-UPDATED "201608230000Z" -- August 23, 2016
   ORGANIZATION "Cisco Systems, Inc."
   CONTACT-INFO
      " Email:     support@starentnetworks.com
      Web:       www.cisco.com
      Cisco Systems, Inc.
      30 International Place
      Tewksbury, MA 01876
      (978) 851-1100"
   DESCRIPTION
      "Cisco Systems ASR 5xxx series of multimedia core platforms (ASR 5000, ASR 5500)

Designed exclusively for mobile and fixed mobile converged applications, Cisco's ASR 5xxx series products provide a high-performance, highly intelligent platform ideally suited for development in mobile operator networks to fulfill key multimedia core networking functions. The platform features 2G/3G/4G and WiFi multi-service access independent capabilities coupled with a carrier class high-availability design. Harnessing subscriber awareness with an abundant supply of distributed processing resources, the ASR 5xxx series offers a variety of high touch Inline Services to enable service providers to monetize the value of the network while enriching the overall subscriber experience."
   REVISION      "201609160000Z"
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION "Log Source (LS) log volume threshold is added."
REVISION  "201608230000Z"

DESCRIPTION "Added Management Card switchover due to HD Raid unrecoverable failure trap"
REVISION  "201607040000Z"

DESCRIPTION "Mark the unsupported traps to obsolete"
REVISION  "201606230000Z"

DESCRIPTION "Corrected the names of the traps in StarOS and Starent.my file"
REVISION  "201606220000Z"

DESCRIPTION "Added SI and DI keywords in Traps"
REVISION  "201605120000Z"

DESCRIPTION "Added DDF Reload Trap"
REVISION  "201604180000Z"

DESCRIPTION " Removed starThreshDiscRsn, and added correct object to starThreshSNXDisconnectReason and starThreshClearSNXDisconnectReason"
REVISION  "201604120000Z"

DESCRIPTION "Streamlined all the numbers from 21.x to 17.x"
REVISION  "201604120000Z"

DESCRIPTION "Corrected Traps and MIB oid numbers "
REVISION  "201604110000Z"

DESCRIPTION "Corrected few trap numbers and errors in mib file"
REVISION  "201604110000Z"

DESCRIPTION " Added trap no. 1312 with the following variables
starStatFileSizeLimit,
starStatFileSizeMeasured"
REVISION  "201509110000Z"

DESCRIPTION " Added trap no. 1313 with the following variables
starStatFileSizeLimit,
starStatFileSizeMeasured"

DESCRIPTION " Removed trap number 1191(starSEAGWServiceStart) and 1192(starSEAGWServiceStop) definition added"
REVISION  "201411040000Z"

DESCRIPTION " Removed trap number 1533 and 1534 and replaced with 1290 and 1291 supporting code"
REVISION  "201410300000Z"

DESCRIPTION " Added trap number 1288 and 1289 supporting code"
REVISION  "201410080000Z"

DESCRIPTION " Added trap no. 1282 with the following variables
starGTPCRLFSessMgrInst,
starGTPCRLFVPNName,
starGTPCRLFVPNId,
starGTPCRLFCtxtName,
starGTPCRLFCurrAppTPS

Added trap no. 1283 with the following variables
starGTPCRLFSSessMgrInst,
starGTPCRLFVPNName,
starGTPCRLFVPNId,
starGTPCRLFContextName,
starGTPCRLFCurrAppDelayTol

Added trap no. 1284 with the following variables
starGTPCRLFSSessMgrInst,
starGTPCRLFVPNName,
starGTPCRLFVPNId,
starGTPCRLFContextName,

Added trap no. 1285 with the following variables
starGTPCRLFSSessMgrInst,
starGTPCRLFVPNName,
starGTPCRLFVPNId,
starGTPCRLFContextName,

" REVISION      "201408040000Z"
DESCRIPTION " Added starNpudriverECCError trap supporting code"
REVISION      "201407230000Z"
DESCRIPTION " removing the extra 1533 and 1534 traps"
REVISION      "201407160000Z"
DESCRIPTION " Added starNpudriverECCError trap(reserving the trap id) at 1281"
REVISION      "201406110000Z"
DESCRIPTION " Added Severity in starChassisCrashListFull Traps"
REVISION      "201405080000Z"
DESCRIPTION " Added starBFDSessUp, starBFDSessDown and starSRSwitchoverOccured Traps"
REVISION      "201404250000Z"
DESCRIPTION " Added MME Related threshold traps from 440 to 445"
REVISION      "201302200000Z"
DESCRIPTION " Removing SGSN substring from trap number 1219 and 1220"
REVISION      "201302200000Z"
DESCRIPTION " Extended starChassisType to support KVM QvPC-SI chassis"
REVISION      "201312060000Z"
DESCRIPTION " Corrected IPv6 from IPv4 to trap number 1200"
REVISION      "201312050000Z"
DESCRIPTION 
"Fixed following issues
1. Revision not in reverse chronological order
2. not-accessible starent Index objects are modified to
 MAX-ACCESS accessible-for-notify for those sent in trap"
REVISION      "201311220000Z"
DESCRIPTION "Added two MIBs (starMMEServiceStart, starMMEServiceStop) for MME service
starMMEServiceStart- starentTraps 1264
starMMEServiceStop- starentTraps 1265
Added two MIBs (starThresholdPerServiceSAMOGSessions,
starThresholdClearPerServiceSAMOGSessions) for per service samog-service
starThresholdPerServiceSAMOGSessions- starentTraps 519
starThresholdClearPerServiceSAMOGSessions - starentTraps 520"
REVISION        "2013100400000Z"
DESCRIPTION
"Changed following notification names
  starThreshAAAaAcctArchiveQueue-1,
  starThreshClearAAAaAcctArchiveQueue-1,
  starThreshAAAaAcctArchiveQueue-2,
  starThreshClearAAAaAcctArchiveQueue-2,
  starThreshAAAaAcctArchiveQueue-3,
  starThreshClearAAAaAcctArchiveQueue-3
to
  starThreshAAAaAcctArchiveQueue1,
  starThreshClearAAAaAcctArchiveQueue1,
  starThreshAAAaAcctArchiveQueue2,
  starThreshClearAAAaAcctArchiveQueue2,
  starThreshAAAaAcctArchiveQueue3,
  starThreshClearAAAaAcctArchiveQueue3.

  Added , in starLIRcvryErrType object.

  Changed StarUDPPortNum object to starUDPPortNum object in
  following notifications:
   starECSreaddressServerDown,
   starECSreaddressServerUp.

  Added definition for starMMEInitialDisallowReason object.

  Added new number for QvPC-SI platform in starChassisType object."

REVISION        "2013092700000Z"
DESCRIPTION
" Added missing object starFractE1TribTimeslots to starSDHFractE1MIUp
notification , changed MAX-ACCESS to accessible-for-notify from
not-accessible for the following objects
  starFractE1TribSlot,
  starFractE1TribPort,
  starFractE1TribPath,
  starFractE1TribTug2,
  starFractE1TribTu12
and moved starFractE1TribBundNum object to obsolete state."

REVISION        "2013092500000Z"
DESCRIPTION
"Change starSlotPort to storSlotNum in ApsChannelMismatch trap 1150"

REVISION        "2013072300000Z"
DESCRIPTION
"Replaced underscore sign with hyphen from starServiceType enum "

REVISION        "2013071500000Z"
DESCRIPTION
"Modified SEVERITY from ERROR to MAJOR for following traps:
  starPortDown,
  starSRPConnDown,
  starLAGGroupDown.

  Changed starPortSlot, starPortNum, starContextName and starSRPiAddress
  objects access to accessible-for-notify."

REVISION        "2013071000000Z"
DESCRIPTION
"Changed the name of trap starThreshNAPTPortChunks to starThreshNATPortChunks and
  starThreshClearNAPTPortChunks to starThreshClearNATPortChunks"

REVISION        "2013062600000Z"
DESCRIPTION
"Changed the APS related traps according to the implementation present in trap_api.c
  following traps are modified:
STARENT-MIB DEFINITIONS ::= BEGIN

starApsCommandSuccess,
starApsCommandFailure,
starApsSwitchSuccess,
starApsSwitchFailure,
starApsModeMismatch,
starApsChannelMismatch,
starApsByteMismatch,
starApsFeProtLineFailure,
starApsLossOfRedundancy,
starApsLossOfRedundancyClear.

REVISION      "201306110000Z"
DESCRIPTION   "Changed object type from starContextName to starCLIContext for the following traps:"
starLocalUserAdded,
starLocalUserRemoved,
starOsShellAccessed,
starTestModeEntered,
starLicenseFeaturesModified,
starHiddenAccessEnabled,
starHiddenAccessDisabled."

REVISION      "201306040000Z"
DESCRIPTION   " Added the missing objects and modified the summary field for starTechSuppPasswdChanged trap"

REVISION      "201305240000Z"
DESCRIPTION   "Corrected starChassisCrashListFull description section"

REVISION      "201305070000Z"
DESCRIPTION   "changed starEGTPInterfaceType Enum in trap number 1112"

REVISION      "201304250001Z"
DESCRIPTION   "Deprecated following traps
starCardSPCSwitchoverStart,
starCardSPCSwitchoverComplete,
starCardSPCSwitchoverFailed
starCardPACMigrateStart,
starCardPACMigrateComplete,
starCardPACMigrateFailed,
Added following traps for above trap as respective replacement
starCardSwitchoverStart,
starCardSwitchoverComplete,
starCardSwitchoverFailed,
starCardMigrateStart,
starCardMigrateComplete,
starCardMigrateFailed"

REVISION      "201304250000Z"  
DESCRIPTION   "Added two MIBs (starSAMOSGServiceStart, starSAMOSGServiceStop) for SAMOG service. 
starSAMOSGServiceStart- starentTraps 1251
starSAMOSGServiceStop- starentTraps 1252"

DESCRIPTION
"Changed SUMMARY clause for starLongDurTimerExpiry notification.

Changed MAX-ACCESS to accessible-for-notify for following objects:
starSubMSID,
starSubName,
starSubTimerDuration,
starSubLongDurTimeoutAction,
starSubSetupTime,
starSubHomeAddr,
starSubHomeAddrv6."

REVISION      "201304160000Z"
DESCRIPTION
"changed STATE and SEVERITY fields for starSDHPathHopUp,
starSDHE1TribUp and starSDHFractE1LMIDown notifications."

REVISION      "201304090000Z"
DESCRIPTION
"Added trap no. 1251 with the following variables
starPMIFVpnName,
starPMIPServName,
starPMIFSelfAddrType,
starPMIFSelfAddr,
starPMIPPeerAddrType,
starPMIPPeerAddr,
starPMIPPeerOldRstCnt,
starPMIPPeerNewRstCnt,
starPMIPPeerSessCnt,
starPMIPFailureReason"

REVISION      "201304050000Z"
DESCRIPTION
" Added the following flags in APS related traps"

REVISION      "201304040000Z"
DESCRIPTION
"changed SEVERITY level from INFORMATIONAL to WARNING for
starSGSNRMMemWarn notification."

REVISION      "201303260000Z"
DESCRIPTION
"Added trap no. 1177, with the following variables
starSlotNum,
starCardType,
starPortSlot"

REVISION      "201303180000Z"
DESCRIPTION
"Modified starPCFUnreachable description section
Updated correct object name starEISServerVNNname in
starEISServerAlive
starEISServerDead traps.
Added starPCFReachable trap support"

REVISION      "201303110000Z"
DESCRIPTION
"Changed starFanNum range in SYNTAX and MAX-ACCESS.
Added starFanLocation ASR5500 fan location details.
Changed SUMMARY clause for following traps
REVISION   "201303060000Z"
DESCRIPTION
"Changed SYNTAX clause from Integer32 to Gauge32 for following objects:
starCPUUser,
starCPUSystem,
starCPUIdle,
starCPUIDRQ,
starCPUMemUsed,
starCPUMemCached

Changed SYNTAX clause from Integer32 to Gauge32 and also changed range for following objects:
starCPULoad1Min,
starCPULoad5Min,
starCPULoad15Min,
starCPUNumProcesses."

REVISION   "201302280000Z"
DESCRIPTION
"Added context name to the OBJECTS and updated ARGUMENTS field for the following traps:

starLocalUserAdded,
starLocalUserRemoved,
starOsShellAccessed,
starTestModeEntered,
starLicenseFeaturesModified,
starHiddenAccessEnabled,
starHiddenAccessDisabled"

REVISION   "201302260000Z"
DESCRIPTION
"Changed starThreshMeasuredPct SYNTAX from Integer32 to Gauge32.

Changed starPortNum object range.

Changed SUMMARY clause in starM3UAPCUnavailable and starM3UAPCAvailable traps.

Changed objects from starThreshInt and starThreshMeasuredInt to starThreshPct and starThreshMeasuredPct and also changed SUMMARY and ARGUMENTS clauses in following traps:

starThreshIPPoolAvail,
starThreshClearIPPoolAvail,
starThreshIPPoolHold,
starThreshClearIPPoolHold,
starThreshIPPoolUsed,
starThreshClearIPPoolUsed,
starThreshIPPoolRelease,
starThreshClearIPPoolRelease,
starThreshIPPoolFree,
starThreshClearIPPoolFree,
starThreshNATPortChunks,
starThreshClearNATPortChunks,
starThreshPortHighActivity,
starThreshClearPortHighActivity,
starThreshTpoDnsFailure,
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshClearTpoDnsFailure,
starThreshDnsLookupFailure,
starThreshClearDnsLookupFailure,
starThreshBGPRoutes,
starThreshClearBGPRoutes.

Changed SUMMARY and ARGUMENTS clauses in following traps:
starThreshCPUUtilization,
starThreshClearCPUUtilization,
starThreshCPUUtilization10Sec,
starThreshClearCPUUtilization10Sec,
starThreshCPUMemUsage,
starThreshClearCPUMemUsage,
starThreshCPUOrbsWarn,
starThreshClearCPUOrbsWarn,
starThreshCPUOrbsCritical,
starThreshClearCPUOrbsCritical,
starThreshLicense,
starThreshClearLicense,
starThreshPortRxUtil,
starThreshClearPortRxUtil,
starThreshPortTxUtil,
starThreshClearPortTxUtil,
starThreshAAAAuthFailRate,
starThreshClearAAAAuthFailRate,
starThreshAAAAcctFailRate,
starThreshClearAAAAcctFailRate,
starThreshAAARetryRate,
starThreshClearAAARetryRate,
starThreshAAAMgrQueue,
starThreshClearAAAMgrQueue,
starThreshAAAAcctArchiveQueue-1,
starThreshClearAAAAcctArchiveQueue-1,
starThreshAAAAcctArchiveQueue-2,
starThreshClearAAAAcctArchiveQueue-2,
starThreshAAAAcctArchiveQueue-3,
starThreshClearAAAAcctArchiveQueue-3,
starThreshRPSsetupFailRate,
starThreshClearRPSsetupFailRate,
starThreshPPPSsetupFailRate,
starThreshClearPPPSsetupFailRate,
starThreshStorageUtilization,
starThreshClearStorageUtilization,
starThreshIPSECIKEFailRate,
starThreshClearIPSECIKEFailRate,
starThreshEPDGIKEV2SetupFailureRate,
starThreshClearEPDGIKEV2SetupFailureRate,
starThreshNPUUtilization,
starThreshClearNPUUtilization,
starThreshDiameterRetryRate,
starThreshClearDiameterRetryRate,
starThreshSystemCapacity,
starThreshClearSystemCapacity,
starThreshEDRFileSpace,
starThreshClearEDRFileSpace,
starThreshCDRFileSpace,
starThreshClearCDRFileSpace,
starThreshCardTemperatureNearPowerOffLimit,
starThreshClearCardTemperaturePowerOffLimit.

REVISION      "201212040000Z"
DESCRIPTION
"Changed SYNTAX clause for starPortNum and starRedundantPortNum objects"
STARENT-MIB DEFINITIONS ::= BEGIN

REVISION "201209250000Z"
DESCRIPTION "Changed starSlotMappingTable table DESCRIPTION."

REVISION "201207230000Z"
DESCRIPTION "Removed starSGSNAllocated and starSGSNUsed objects and added
starSGSNThreshInt and starSGSNThreshMeasuredInt objects for starSGSNRMCPUWarn,
starSGSNRMCPUWarnClear, starSGSNRMMemWarn, starSGSNRMMemWarnClear,
starRMCPUOver, starRMCPUOverClear, starSGSNRMMemOver and
starSGSNRMMemOverClear."

REVISION "201207130000Z"
DESCRIPTION "Changed object from starServiceVpnID to starServiceVpnName and
arguments macro in starSessionRejectNoResource Notification.

Added commas(,) in ARGUMENTS field of starServiceLossLCClear
Trap definition.

Added additional object starCPUSlot and starCPUNumber in
starThreshCPUOrbsWarn, starThreshClearCPUOrbsWarn,
starThreshCPUOrbsCritical and starThreshClearCPUOrbsCritical traps."

REVISION "201207090000Z"
DESCRIPTION "starSAEGWSessThreshold and starSAEGWSessThresholdClear Notification
objects have been added.
Fixed starServiceLossLCClear ARGUMENTS field information."

REVISION "201205150000Z"
DESCRIPTION "ASR5500 slot types are added in StarentSlotType"

REVISION "201204130000Z"
DESCRIPTION "The Notifications starThreshPortSpecRxUtil,starThreshClearPortSpecRxUtil,
starThreshPortSpecTxUtil,starThreshClearPortSpecTxUtil has been moved to
deprecated state."

REVISION "201204050000Z"
DESCRIPTION "The object starPowerFilterUnitFailed has been moved to deprecated state"

REVISION "201110140000Z"
DESCRIPTION "The latest version of this MIB module"
::= { enterprises 8164 }

-- Textual Conventions

StarentSlotType ::= TEXTUAL-CONVENTION
STATUS current
DESCRIPTION "Describes the type of a slot. Each slot in the chassis is build to contain
specific type(s) of cards. Only a card of one of the appropriate types
can be put into a specific slot."
SYNTAX INTEGER {
    unknown(1),
    pactac(2),
    spc(3),
    lc(4),
    rcc(5),
    spio(6)
}

StarentCardType ::= TEXTUAL-CONVENTION
STATUS current
DESCRIPTION "Describes the type of a card. Each type represents a physically different
A card which would have a unique part number.

SYNTAX INTEGER {
    none(1),
    unknown(2),
    sspc(3),
    spc(4),
    spio(5),
    rcc(6),
    lceth(7),
    lcgeth(8),
    lcsds(9),
    tac(10),
    lcoc3(11),
    lcoc2(12),
    smc(13),
    psc(14),
    lgqgeth(15),
    lcetgh(16),
    vmc(17),
    vpc(18),
    vlctgeth(19),
    lcgeth2(20),
    lceth2(21),
    psc2(22),
    psc3(23),
    pscA(24), -- Packet Services Card A
    ppc(25), -- Packet Processing Card
    lcchan3p2(26), -- Channelized Line card 2 Port
    lcchan3p4(27), -- Channelized Line card 4 Port
    fanctrl(28), -- Fan control revision 6
    vioc(29), -- Virtual I/O Card
    gpdsdp(30), -- GP-DSP Daughter Card
    xme(31), -- XME Daughter Card
    vop(32), -- VOP Daughter Card
    edc(33), -- EDC card
    mio(34), -- Management & I/O Card
    mio10g(35), -- Management & 10x10Gb I/O Card
    mio10g2p(36), -- Management & 20x10Gb I/O Card
    mio40g2p(37), -- Management & 2x40Gb I/O Card
    mio40g4p(38), -- Management & 4x40Gb I/O Card
    mio40g12p(39), -- Management & 12x40Gb I/O Card
    miodc(40), -- MIO Daughter Card
    fsc(41), -- Fabric Card
    dpc(42), -- Data Processing Card
    mdpc(43), -- M Data Processing Card
    dpmcd(44), -- DPC Daughter Card
    ssc(45), -- System Status Card
    voc(46), -- Virtual Card
    cfc(47), -- Control Function Virtual Card
    sfc1p(48), -- 1-Port Service Function Virtual Card
    sfc2p(49), -- 2-Port Service Function Virtual Card
    sfc3p(50), -- 3-Port Service Function Virtual Card
    sfc4p(51), -- 4-Port Service Function Virtual Card
    dpc2(52), -- Data Processing Card 2
    mio2(53) -- Management & I/O Card 2
}
SYNTAX OCTET STRING (SIZE {0..256})

StarRelayState ::= TEXTUAL-CONVENTION
STATUS current
DESCRIPTION
"The state of a Central Office (CO) relay."
SYNTAX INTEGER {
  off(1),
  on(2),
  unknown(3)
}

StarLongDurTimeoutAction ::= TEXTUAL-CONVENTION
STATUS current
DESCRIPTION
"The action taken by the system upon detection of a long-duration session"
SYNTAX INTEGER {
  unknown(0),
  detection(1),
  disconnection(2),
  notapplicable(3),
  dormantdisconnection(4),
  dormantdetection(5)
}

StarShortName ::= TEXTUAL-CONVENTION
DISPLAY-HINT "32a"
STATUS current
DESCRIPTION
"A short identification string. Follows the same conventions as the DisplayString TEXTUAL-CONVENTION."
SYNTAX OCTET STRING (SIZE {1..32})

StarShortID ::= TEXTUAL-CONVENTION
DISPLAY-HINT "17a"
STATUS current
DESCRIPTION
"An abbreviated form for identifying a service, composed of the first 8 characters of the context name, and the first 8 characters of a service name, seperated by (:)"
SYNTAX OCTET STRING (SIZE {1..17})

StarMediumID ::= TEXTUAL-CONVENTION
DISPLAY-HINT "25a"
STATUS current
DESCRIPTION
"An abbreviated form for identifying a context-specific object, composed of the first 8 characters of the context name, and the first 16 characters of the object name, seperated by (:)"
SYNTAX OCTET STRING (SIZE {1..25})

StarENBID ::= TEXTUAL-CONVENTION
DISPLAY-HINT "16a"
STATUS current
DESCRIPTION
"An eNodeB identifier in the form aaa:bbb:cccccccc"
SYNTAX OCTET STRING (SIZE {1..16})

StarQOSTPAction ::= TEXTUAL-CONVENTION
STATUS current
DESCRIPTION
"Traffic Policing Action"
SYNTAX INTEGER {
  unknown(0),
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STARENT-MIB DEFINITIONS ::= BEGIN

    notapplicable(1),
    transmit(2),
    drop(3),
    loweripprecedence(4)

StarOSPFNeighborState ::= TEXTUAL-CONVENTION
    STATUS current
    DESCRIPTION
    "OSPF Neighbore State"
    SYNTAX INTEGER {
        unknown(0),
        down(1),
        attempt(2),
        init(3),
        twoway(4),
        exstart(5),
        exchange(6),
        loading(7),
        full(8)
    }

starentMIBObjects OBJECT IDENTIFIER ::= { starentMIB 1 }

-- Chassis table
starentChassis OBJECT IDENTIFIER ::= { starentMIBObjects 1 }

starChassisCriticalCO OBJECT-TYPE
    SYNTAX StarRelayState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
    "The current state of the Critical Central Office (CO) relay"
    ::= { starentChassis 1 }

starChassisMajorCO OBJECT-TYPE
    SYNTAX StarRelayState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
    "The current state of the Major Central Office (CO) relay"
    ::= { starentChassis 2 }

starChassisMinorCO OBJECT-TYPE
    SYNTAX StarRelayState
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
    "The current state of the Minor Central Office (CO) relay"
    ::= { starentChassis 3 }

starChassisAction OBJECT-TYPE
    SYNTAX INTEGER {
        noaction(1),
        aco(2),
        reset(3)
    }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
    "Trigger to perform certain system-wide operations.
noaction(1) performs no operation. It is the normal value received when this attribute is read.

aco(2) triggers the Alarm Cut-Off, which shuts off all of the Central Office (CO) audible/visual relays.

reset(3) triggers a system-wide restart. It will completely disrupt service on the device.

::= { starentChassis 5 }

starTimeTicks OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Time ticks since the Epoch"
 ::= { starentChassis 6 }

starChassisAudibleAlarm OBJECT-TYPE
SYNTAX StarRelayState
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current state of the chassis Audible Alarm"
 ::= { starentChassis 7 }

starChassisUTCTime OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current time on the chassis, in UTC format"
 ::= { starentChassis 8 }

starChassisLocalTime OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current time on the chassis, converted to the local timezone"
 ::= { starentChassis 9 }

starChassisType OBJECT-TYPE
SYNTAX INTEGER {
     unknown(0),
     st16(1),
     st40(2),
     xt2(3),
     st20(4),
     asr5000(5),
     asr5500(6),
     ssi(7),
     ssi-kvm-guest(8),
     ssi-kvm-vsm-guest(9),
     qvpc-di(10)
 }
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The type of physical chassis"
 ::= { starentChassis 10 }
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starChassisDescription OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "A brief description of the chassis"
 ::= { starentChassis 11 }

starChassisSWRevision OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The software revision running on the chassis"
 ::= { starentChassis 12 }

starChassisPeakCpuUsage OBJECT-TYPE
SYNTAX      Integer32(1..10000)
UNITS       "percentage times 100"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "Percentage of the system level peak cpu usage. starChassisPeakCpuUsage
     is the percentage value times 100; for example, 2.3% would be represented as 230"
 ::= { starentChassis 13 }

starChassisPeakMemoryUsage OBJECT-TYPE
SYNTAX      Integer32(1..2097152)
UNITS       "KB"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The system level peak memory usage, in kilobytes,
    rounded down (i.e. 1023 bytes = 0 kilobytes)"
 ::= { starentChassis 14 }

-- Slot table

starentSlots OBJECT IDENTIFIER ::= { starentMIBObjects 2 }

starSlotTable OBJECT-TYPE
SYNTAX  SEQUENCE OF StarSlotEntry
MAX-ACCESS  not-accessible
STATUS  current
DESCRIPTION
   "A table containing information on all of the slots"
 ::= { starentSlots 1 }

starSlotEntry OBJECT-TYPE
SYNTAX  StarSlotEntry
MAX-ACCESS  not-accessible
STATUS  current
DESCRIPTION
   "Information about a particular slot"
INDEX   { starSlotNum }
 ::= { starSlotTable 1 }

StarSlotEntry ::= SEQUENCE {
   starSlotNum           Integer32,
   starSlotType          StarentSlotType,
}
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

  starCardType       StarentCardType,
  starCardOperState  INTEGER,
  starCardAdminState INTEGER,
  starCardRevision   StarentVersionNum,
  starCardLastStateChange DateAndTime,
  starCardMode       INTEGER,
  starCardPacStandbyPriority Gauge32,
  starCardHaltIssued INTEGER,
  starCardLock       INTEGER,
  starCardRebootPending INTEGER,
  starCardUsable     INTEGER,
  starCardsinglePOF  INTEGER,
  starCardAttachment INTEGER,
  starCardTemperature Gauge32,
  starSlotVoltage1dot5 Gauge32,
  starSlotVoltage1dot5LowThresh Gauge32,
  starSlotVoltage1dot5HighThresh Gauge32,
  starSlotVoltage1dot8 Gauge32,
  starSlotVoltage1dot8LowThresh Gauge32,
  starSlotVoltage1dot8HighThresh Gauge32,
  starSlotVoltage2dot5 Gauge32,
  starSlotVoltage2dot5LowThresh Gauge32,
  starSlotVoltage2dot5HighThresh Gauge32,
  starSlotVoltage3dot3 Gauge32,
  starSlotVoltage3dot3LowThresh Gauge32,
  starSlotVoltage3dot3HighThresh Gauge32,
  starSlotVoltage5dot0 Gauge32,
  starSlotVoltage5dot0LowThresh Gauge32,
  starSlotVoltage5dot0HighThresh Gauge32,
  starSlotNumPorts   Gauge32,
  starSlotAction     INTEGER,
  starSlotVoltageState INTEGER,
  starSlotNumCPU     Integer32,
  starSlotPartNumber DisplayString,
  starSlotPartRevision DisplayString,
  starSlotSerialNumber DisplayString,
  starSlotCLEICode   DisplayString,
  starSlotCiscoModelName DisplayString,
  starSlotCiscoHardwareRev DisplayString,
  starSlotCiscoSerialNumber DisplayString,
  starDeviceNum      Integer32,
  starSerdesNum      Integer32,
  starDdfDev         INTEGER

  starSlotNum OBJECT-TYPE
  SYNTAX Integer32(1..48)
  MAX-ACCESS accessible-for-notify
  STATUS current
  DESCRIPTION
  "The slot number"
  ::= { starSlotEntry 1 }

  starSlotType OBJECT-TYPE
  SYNTAX StarentSlotType
  MAX-ACCESS read-only
  STATUS current
  DESCRIPTION
  "The type of the slot."
  ::= { starSlotEntry 2 }

  starCardType OBJECT-TYPE
  SYNTAX StarentCardType
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS read-only
STATUS current
DESCRIPTION "The type of the card which is plugged into a slot"
::= { starSlotEntry 3 }

starCardOperState OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  empty(2),
  offline(3),
  ready(5),
  standby(6),
  active(7),
  migrateto(9),
  starting(10),
  initializing(11),
  secondary(12)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current operational state of the card"
::= { starSlotEntry 4 }

starCardAdminState OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  enabled(2),
  disabled(3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The administrative state of the card"
::= { starSlotEntry 5 }

starCardRevision OBJECT-TYPE
SYNTAX StarentVersionNum
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The revision number of the card that is physically present in this slot"
::= { starSlotEntry 6 }

starCardLastStateChange OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The time when the last state change occurred for this row. A manager could poll this variable to determine if information has changed."
::= { starSlotEntry 7 }

starCardMode OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  notapplicable(2),
  standby(3),
  active(4),
  notinuse(5),
  starting(6),
  initializing(7),
  migrateto(8),
  migratofrom(9),
  notneeded(10)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current mode of the card"
::= { starSlotEntry 8 }

starCardFailover OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  primary(2),
  secondary(3),
  working(4),
  failed(5),
  contingencies(6),
  notinuse(7),
  notneeded(8)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The failover state of the card"
::= { starSlotEntry 9 }

starCardDiskStatus OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  available(2),
  notapplicable(3),
  disabled(4),
  readonly(5),
  failed(6),
  initializing(7),
  notneeded(8)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The disk status of the card"
::= { starSlotEntry 10 }

starCardDiskLastStateChange OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The time when the last state change occurred for this row. A manager could poll this variable to determine if information has changed."
::= { starSlotEntry 11 }

starCardDiskMode OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  notapplicable(2),
  readwrite(3),
  readonly(4),
  notneeded(5)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current mode of the card's disk"
::= { starSlotEntry 12 }

starCardDiskFailover OBJECT-TYPE
SYNTAX INTEGER {
  unknown(1),
  primary(2),
  secondary(3),
  working(4),
  failed(5),
  contingencies(6),
  notinuse(7),
  notneeded(8)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The failover state of the card's disk"
::= { starSlotEntry 13 }

starCardDiskLastStateChange OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The time when the last state change occurred for this row. A manager could poll this variable to determine if information has changed."
::= { starSlotEntry 14 }

end
activepac(5),
activetac(6),
activepsc(7),
activevpc(8),
activedpc(9)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The desired mode of the card. This field is applicable only to slots which can contain PAC/PSC and TAC cards. The active(4) value is obsolete and has been replaced with activepac(5) and activetac(6)"
 ::= {starSlotEntry 8}

starCardPacStandbyPriority OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
":"
 ::= {starSlotEntry 9}

starCardHaltIssued OBJECT-TYPE
SYNTAX INTEGER {
   notapplicable(1),
   yes(2),
   no(3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Only applicable to SPC cards"
 ::= {starSlotEntry 10}

starCardLock OBJECT-TYPE
SYNTAX INTEGER {
   unknown(1),
   locked(2),
   unlocked(3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Identifies if the card lock is currently engaged. A value of locked(2) means that the lock is engaged, and thus the card could not be removed from the chassis. A value of unlocked(3) means that the lock is not engaged, and an operator could remove the card from the chassis. A value of unknown(1) should represent that there is no card physically in the slot."
 ::= {starSlotEntry 11}

starCardRebootPending OBJECT-TYPE
SYNTAX INTEGER {
   no(1),
   yes(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Identifies if a reboot operation is currently pending for this card."
 ::= {starSlotEntry 12}

starCardUsable OBJECT-TYPE
SYNTAX  INTEGER {
    no(1),
    yes(2)
}
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "Identifies if the card is currently usable."
::= { starSlotEntry 13 }

starCardSinglePOF OBJECT-TYPE
SYNTAX      INTEGER {
    notapplicable(1),
    no(2),
    yes(3)
}
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "Identifies if this card represents a single point of failure (POF). A value
of no(1) indicates that this card is supported by a redundant card which can
take over in the event of a failure. A value of yes(2) indicates that this
card does not have a redundant partner, and that a failure of this card
could result in service interruption."
::= { starSlotEntry 14 }

starCardAttachment OBJECT-TYPE
SYNTAX      INTEGER {
    connected(1),
    unconnected(2)
}
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "Identifies if the card is currently attached to another card (a PAC/PSC attached
to a line card, or visa versa, for example"
::= { starSlotEntry 15 }

starCardTemperature OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "degrees Celcius"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "The temperature, in degrees Celcius, as measured on the card. A value of 0
indicates that the temperature cannot be read, or that the card is not
present. The maximum measurable temperature is 70 C"
::= { starSlotEntry 16 }

--
All of the "voltage"-related starSlot items are obsolete. As systems evolved and different cards
-- have different internal voltages these values had less meaning. The starSlotVoltageState
-- provides an overall state for the card.
--
starSlotVoltage1dot5 OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION  "The current voltage, in millivolts, of the nominal 1.5V power supply."
The working range for this card is the range defined by variables starSlotVoltage1dot5LowThresh and starSlotVoltage1dot5HighThresh. A value of 0 indicates that this voltage level is not present on this card, or that the card is not present.

This attribute is obsolete.
::: { starSlotEntry 20 }

starSlotVoltage1dot5LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the lowest allowable value for the nominal 1.5V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete.
::: { starSlotEntry 21 }

starSlotVoltage1dot5HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the highest allowable value for the nominal 1.5V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete.
::: { starSlotEntry 22 }

starSlotVoltage1dot8 OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The current voltage, in millivolts, of the nominal 1.8V power supply. The working range for this card is the range defined by variables starSlotVoltage1dot8LowThresh and starSlotVoltage1dot8HighThresh. A value of 0 indicates that this voltage level is not present on this card, or that the card is not present.

This attribute is obsolete.
::: { starSlotEntry 23 }

starSlotVoltage1dot8LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the lowest allowable value for the nominal 1.8V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete.
::: { starSlotEntry 24 }

starSlotVoltage1dot8HighThresh OBJECT-TYPE
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The voltage level, in millivolts, which is the highest allowable value
for the nominal 1.8V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 25 }

starSlotVoltage2dot5 OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current voltage, in millivolts, of the nominal 2.5V power supply.
The working range for this card is the range defined by variables
starSlotVoltage2dot5LowThresh and starSlotVoltage2dot5HighThresh.
A value of 0 indicates that the voltage cannot be read, or that the
card is not present.

This attribute is obsolete."
 ::= { starSlotEntry 26 }

starSlotVoltage2dot5LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The voltage level, in millivolts, which is the lowest allowable value
for the nominal 2.5V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 27 }

starSlotVoltage2dot5HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The voltage level, in millivolts, which is the highest allowable value
for the nominal 2.5V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 28 }

starSlotVoltage3dot3 OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current voltage, in millivolts, of the nominal 3.3V power supply.
The working range for this card is the range defined by variables
starSlotVoltage3dot3LowThresh and starSlotVoltage3dot3HighThresh.

This attribute is obsolete."

 ::= { starSlotEntry 29 }

starSlotVoltage3dot3LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The voltage level, in millivolts, which is the lowest allowable value
for the nominal 3.3V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 30 }

starSlotVoltage3dot3HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The voltage level, in millivolts, which is the highest allowable value
for the nominal 3.3V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."

 ::= { starSlotEntry 31 }

starSlotCurrent2dot5 OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "milliamps"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current, in milliamps, of the nominal 2.5V power supply.
The working range for this card is the range defined by variables
starSlotCurrent2dot5LowThresh and starSlotCurrent2dot5HighThresh.
A value of 0 indicates that the current cannot be read, or that the
card is not present.

This attribute is obsolete."
 ::= { starSlotEntry 32 }

starSlotCurrent2dot5LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "milliamps"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current level, in milliamps, which is the lowest allowable value
for the nominal 2.5V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 33 }

starSlotCurrent2dot5HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "milliamps"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current level, in milliamps, which is the highest allowable value
for the nominal 2.5V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 34 }

starSlotCurrent3dot3 OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "milliamps"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current, in milliamps, of the nominal 3.3V power supply.
The working range for this card is the range defined by variables
starSlotCurrent3dot3LowThresh and starSlotCurrent3dot3HighThresh.

This attribute is obsolete."
 ::= { starSlotEntry 35 }

starSlotCurrent3dot3LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "milliamps"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current level, in milliamps, which is the lowest allowable value
for the nominal 3.3V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 36 }

starSlotCurrent3dot3HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITs       "milliamps"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
 "The current level, in milliamps, which is the highest allowable value
for the nominal 3.3V power supply. A value of 0 indicates that there
is no card present.

This attribute is obsolete."
 ::= { starSlotEntry 37 }

END

A value of 0 indicates that the voltage cannot be read, or that the card is not present.

This attribute is obsolete.
::= { starSlotEntry 29 }

starSlotVoltage3dot3LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITS       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the lowest allowable value for the nominal 3.3V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete.
::= { starSlotEntry 30 }

starSlotVoltage3dot3HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITS       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the highest allowable value for the nominal 3.3V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete.
::= { starSlotEntry 31 }

starSlotVoltage5dot0 OBJECT-TYPE
SYNTAX      Gauge32
UNITS       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The current voltage, in millivolts, of the nominal 5.0V power supply. The working range for this card is the range defined by variables starSlotVoltage5dot0LowThresh and starSlotVoltage5dot0HighThresh. A value of 0 indicates that the voltage cannot be read, or that the card is not present.

This attribute is obsolete.
::= { starSlotEntry 32 }

starSlotVoltage5dot0LowThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITS       "millivolts"
MAX-ACCESS  read-only
STATUS      obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the lowest allowable value for the nominal 5.0V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete.
::= { starSlotEntry 33 }

starSlotVoltage5dot0HighThresh OBJECT-TYPE
SYNTAX      Gauge32
UNITS       "millivolts"
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS read-only
STATUS obsolete
DESCRIPTION
"The voltage level, in millivolts, which is the highest allowable value for the nominal 5.0V power supply. A value of 0 indicates that there is no card present.

This attribute is obsolete."
::= { starSlotEntry 34 }

starSlotNumPorts OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Number of data ports on this card. This value will be 0 for cards that do not contain ports, such as SPC/SMC/PAC/PSC/TAC cards, or for slots which do not contain a card.

This attribute is obsolete."
::= { starSlotEntry 35 }

starSlotAction OBJECT-TYPE
SYNTAX  INTEGER {
   noaction(1),
   reset(2)
}
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"Trigger to perform certain slot operations.

noaction(1) performs no operation. It is the normal value received when this attribute is read.

reset(2) causes the slot to be reset"
::= { starSlotEntry 36 }

starSlotVoltageState OBJECT-TYPE
SYNTAX  INTEGER {
   unknown(0),
   normal(1),
   outofrange(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The state of the voltage supplies on the card. A value of unknown(0) means that the state cannot be identified; normal(1) represents a properly functioning card; outofrange(2) indicates that one or more voltage sources are not within their specified operating range."
::= { starSlotEntry 37 }

starSlotNumCPU OBJECT-TYPE
SYNTAX  Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of general-purpose CPUs on this card"
::= { starSlotEntry 38 }

starSlotPartNumber OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The part number of this card"
 ::= { starSlotEntry 39 }

starSlotPartRevision OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The revision number of this card"
 ::= { starSlotEntry 40 }

starSlotSerialNumber OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The serial number of this card"
 ::= { starSlotEntry 41 }

starSlotCLEICode OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The CLEI code of this card"
 ::= { starSlotEntry 42 }

starSlotCiscoModelName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Cisco-defined Product Identifier (PID). The PID is an alphanumeric identifier used to
identify specific Cisco product hardware, and may be up to 18 characters in length.  
starSlotCiscoModelName will be blank (zero characters) if no PID is available."
 ::= { starSlotEntry 43 }

starSlotCiscoHardwareRev OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Cisco-defined Version Identifier (VID). The VID is used to track the version of the
Customer-Orderable Cisco Product Identifier (PID) [starSlotCiscoModelName]. The
data convention for VID is 'V' followed by a two digit number. VID numbering typically
begins at 'V01' but can be initiated at a higher value.  
starSlotCiscoHardwareRev will be blank (zero characters) if no VID is available."
 ::= { starSlotEntry 44 }

starSlotCiscoSerialNumber OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Cisco-defined Serial Number (SN). The SN is an 11 character identifier used in conjunction
with the Cisco Product Identifier (PID) [starSlotCiscoModelName] to identify a unique
product or Field Replaceable Unit (FRU) of a product."
starSlotCiscoSerialNumber will be blank (zero characters) if no VID is available.

::= { starSlotEntry 45 }

starDeviceNum OBJECT-TYPE
SYNTAX Integer32(1..4)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The device number"
::= { starSlotEntry 46 }

starSerdesNum OBJECT-TYPE
SYNTAX Integer32(0..127)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The serdes lane index number"
::= { starSlotEntry 47 }

-- Card Mapping Table
starentSlotMapping OBJECT IDENTIFIER ::= { starentMIBObjects 3 }

starSlotMappingTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarSlotMappingEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table identifying all of the slot mappings. This table
is applicable only to starChassisType ASR5000 platform."
::= { starentSlotMapping 1 }

starSlotMappingEntry OBJECT-TYPE
SYNTAX StarSlotMappingEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information about a particular slot mapping"
INDEX { starSlotMappingNum }
::= { starSlotMappingTable 1 }

StarSlotMappingEntry ::= SEQUENCE {
  starSlotMappingNum Integer32,
  starSlotMappingType INTEGER,
  starSlotMappingRCCNum Integer32,
  starSlotMappingToSlot Integer32
}

starSlotMappingNum OBJECT-TYPE
SYNTAX Integer32(17..48)
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The slot number. This always represents a slot in the back of the chassis."
::= { starSlotMappingEntry 1 }

starSlotMappingType OBJECT-TYPE
SYNTAX INTEGER {
STARENT-MIB DEFINITIONS ::= BEGIN

unknown(1),
    none(2),
    direct(3),
    rcc(4),
    cross(5)

MAX-ACCESS read-only
STATUS  current
DESCRIPTION
    "The type of the slot mapping. The value none(1) represents that there is no mapping,
    which typically represents that there is no card present in this slot."
 ::=  { starSlotMappingEntry 2 }

starSlotMappingRCCNum OBJECT-TYPE
SYNTAX     Integer32(0..2)
MAX-ACCESS read-only
STATUS  current
DESCRIPTION
    "Identifies which RCC card is responsible for this mapping. This value is only
    valid if the value of starSlotMappingType is rcc(3)."
 ::=  { starSlotMappingEntry 3 }

starSlotMappingToSlot OBJECT-TYPE
SYNTAX     Integer32(1..16)
MAX-ACCESS read-only
STATUS  current
DESCRIPTION
    "The slot number this slot is mapped to. This always represents a slot in the
    front of the chassis"
 ::=  { starSlotMappingEntry 4 }

-- Fan Table

starentFans OBJECT IDENTIFIER ::= { starentMIBObjects 4 }

starFanTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarFanEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION
    "A table containing information on all of the fan controllers"
 ::=  { starentFans 1 }

starFanEntry OBJECT-TYPE
SYNTAX     StarFanEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION
    "Information about a particular fan controller"
INDEX  { starFanNum }
 ::=  { starFanTable 1 }

StarFanEntry ::= SEQUENCE {
    starFanNum      Integer32,
    starFanLocation INTEGER,
    starFanStatus   Integer32,
    starFanSpeed    INTEGER
}

starFanNum OBJECT-TYPE
SYNTAX     Integer32(1..4)
MAX-ACCESS accessible-for-notify
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STARENT-MIB DEFINITIONS ::= BEGIN

    STATUS     current
    DESCRIPTION
        "The fan controller number"
    ::= { starFanEntry 1 }

starFanLocation OBJECT-TYPE
SYNTAX     INTEGER {
    upper(1),
    lower(2),
    lowerFront(3),
    lowerRear(4),
    upperFront(5),
    upperRear(6)
}
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
        "The physical location of the fan controller"
    ::= { starFanEntry 2 }

starFanStatus OBJECT-TYPE
SYNTAX     Integer32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
        "A bitmask representing the status of the fan tray.
        0x01     All Fans Good
        0x02     Multiple Fans Bad
        0x04     Single Fan Bad
        0x08     HB Error
        0x10     COM A Error
        0x20     COM B Error
        0x40     COMM Error
        0x80     Not Present
        0x100    Present
        0x200    Filter Clogged
        0x400    Unknown
        
        A normal, properly functioning fan tray would show 0x101 (257 decimal), meaning
        it is present (0x100) and all fans are working (0x1)"
    ::= { starFanEntry 3 }

starFanSpeed OBJECT-TYPE
SYNTAX     INTEGER {
    unknown(1),
    speed50(2),
    speed55(3),
    speed60(4),
    speed65(5),
    speed70(6),
    speed75(7),
    speed80(8),
    speed85(9),
    speed90(10),
    speed95(11),
    speed100(12)
}
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
        "The speed of the fans controlled by this fan controller.
        The values represent the percentage that the speed is running relative
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STARENT-MIB DEFINITIONS ::= BEGIN

-- log Table
-- Note that this table isn't expected to have an SNMP implementation; it is provided
-- to define Object Identifiers for use in log-related traps, which are implemented
-- This table may be useless, as we're not keeping on-disk logs except through syslogd
starentLogs OBJECT IDENTIFIER ::= { starentMIBObjects 5 }

starLogTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarLogEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "A table containing information about all of the system logs"
 ::= { starentLogs 1 }

starLogEntry OBJECT-TYPE
SYNTAX     StarLogEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "Information about a particular system log"
INDEX { starLogName }
 ::= { starLogTable 1 }

StarLogEntry ::=-
SEQUENCE {
   starLogName     StarShortName,
   starLogCurSize  Gauge32,
   starLogMaxSize  Gauge32,
   starLogText     OCTET STRING
}

starLogName OBJECT-TYPE
SYNTAX     StarShortName
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The name of the system log"
 ::= { starLogEntry 1 }

starLogCurSize OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The size, in bytes, of this log"
 ::= { starLogEntry 2 }

starLogMaxSize OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The maximum size, in bytes, of this log"
 ::= { starLogEntry 3 }

starLogText OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..512))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
STARENT-MIB DEFINITIONS ::= BEGIN

"For use in LogMsg trap"
 ::= { starLogEntry 4 }

-- trap management, ala RFC-1224

starentAlertMan OBJECT IDENTIFIER ::= { starentMIBObjects 8 }
starentFeedback OBJECT IDENTIFIER ::= { starentAlertMan 1 }

starMaxAlertsPerTime OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The maximum number of SNMP Traps which will be sent within
 the time period specified by starWindowTime"
 ::= { starentFeedback 1 }

starWindowTime OBJECT-TYPE
SYNTAX     Unsigned32
UNITS      "seconds"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The amount of time within which no more than starMaxAlertsPerTime
 SNMP Traps will be sent."
 ::= { starentFeedback 2 }

starAlertSendingEnabled OBJECT-TYPE
SYNTAX     TruthValue
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "Shows if SNMP traps are currently enabled or disabled. Traps are disabled
 when more than starMaxAlertsPerTime traps are sent within the
 starWindowTime time period. A value of true(1) indicates that traps
 will still be sent. A value of false(2) indicates that traps are no
 longer being generated"
 ::= { starentFeedback 3 }

starentPolledLog OBJECT IDENTIFIER ::= { starentAlertMan 2 }

-- power table, provided for use in traps only

starentPower OBJECT IDENTIFIER ::= { starentMIBObjects 9 }

starPowerTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarPowerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
 "A table containing information about all power filters"
 ::= { starentPower 1 }

starPowerEntry OBJECT-TYPE
SYNTAX     StarPowerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
 "Information about a particular power filter"
INDEX { starPowerNumber }
 ::= { starPowerTable 1 }

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STARENT-MIB DEFINITIONS ::= BEGIN

StarPowerEntry ::= SEQUENCE {
    starPowerNumber INTEGER,
    starPowerState INTEGER
}

starPowerNumber OBJECT-TYPE
SYNTAX INTEGER {
    powerA(1),
    powerB(2)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The identifying number for this power filter."
::= { starPowerEntry 1 }

starPowerState OBJECT-TYPE
SYNTAX INTEGER {
    active(1),
    failed(2),
    notpresent(3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The state of the power filter. The value active(1) means that the
power filter is present and operational. The value failed(2) means
that the power filter is present, but not operational. The value
not-present(3) means that the power filter is not physically present
in the system."
::= { starPowerEntry 2 }

-- CPU table

starentCPU OBJECT IDENTIFIER ::= { starentMIBObjects 10 }

starCPUTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarCPUEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing information about all CPUs"
::= { starentCPU 1 }

starCPUEntry OBJECT-TYPE
SYNTAX StarCPUEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information about a particular CPU"
INDEX { starCPUSlot, starCPUNumber }
::= { starCPUTable 1 }

StarCPUEntry ::= SEQUENCE {
    starCPUSlot Integer32,
    starCPUNumber Integer32,
    starCPUUser Gauge32,
    starCPUSystem Gauge32,
    starCPUIdle Gauge32,
    starCPUIO Gauge32,
    starCPUIRQ Gauge32,
starCPULoad1Min Gauge32,
starCPULoad5Min Gauge32,
starCPULoad15Min Gauge32,
starCPUMemTotal Integer32,
starCPUMemUsed Gauge32,
starCPUNumProcesses Gauge32,
starCPUMemCached Gauge32

starCPUSlot OBJECT-TYPE
SYNTAX     Integer32(1..48)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The slot number of the card holding this CPU"
::= { starCPUEntry 1 }

starCPUNumber OBJECT-TYPE
SYNTAX     Integer32(0..3)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The CPU number within this card. Numbers begin at 0."
::= { starCPUEntry 2 }

starCPUUser OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "percentage times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Percentage of the CPU spent running user processes. 
starCPUUser is the percentage value times 100; for example, 
2.3% would be represented as 230."
::= { starCPUEntry 3 }

starCPUSystem OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "percentage times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Percentage of the CPU spent running system processes. 
starCPUSystem is the percentage value times 100; for example, 
2.3% would be represented as 230."
::= { starCPUEntry 4 }

starCPUIdle OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "percentage times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Percentage of the CPU spent idle. 
starCPUIdle is the percentage value times 100; for example, 
2.3% would be represented as 230."
::= { starCPUEntry 6 }

starCPUIO OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "percentage times 100"
MAX-ACCESS read-only
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STARENT-MIB DEFINITIONS ::= BEGIN

   STATUS     current
   DESCRIPTION
   "Percentage of the CPU spent running io processes.
   starCPUIo is the percentage value times 100; for example,
   2.3% would be represented as 230."
   ::= { starCPUEntry 7 }

starCPUIrq OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "percentage times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Percentage of the CPU spent running irq processes.
starCPUIrq is the percentage value times 100; for example,
2.3% would be represented as 230."
 ::= { starCPUEntry 8 }

starCPULoad1Min OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "processes times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The average CPU load over the last minute. The CPU load is defined
to be the number of processes who are ready to run.
starCPULoad1Min is the average number of processes times 100; for example, 2.45 would be represented as 245."
 ::= { starCPUEntry 11 }

starCPULoad5Min OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "processes times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The average CPU load over the last 5 minutes. The CPU load is defined
to be the number of processes who are ready to run.
starCPULoad5Min is the average number of processes times 100; for example, 2.45 would be represented as 245."
 ::= { starCPUEntry 12 }

starCPULoad15Min OBJECT-TYPE
SYNTAX     Gauge32(1..10000)
UNITS      "processes times 100"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The average CPU load over the last 15 minutes. The CPU load is defined
to be the number of processes who are ready to run.
starCPULoad15Min is the average number of processes times 100; for example, 2.45 would be represented as 245."
 ::= { starCPUEntry 13 }

starCPUMemTotal OBJECT-TYPE
SYNTAX     Integer32(1..2147483647)
UNITS      "KB"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The total amount of memory dedicated to this CPU, in kilobytes"
 ::= { starCPUEntry 14 }
STARENT-MIB DEFINITIONS ::= BEGIN

starCPUMemUsed OBJECT-TYPE
SYNTAX  Gauge32(1..2147483647)
UNITS   "KB"
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The total amount of memory consumed by this CPU, in kilobytes"
 ::= { starCPUEntry 15 }

starCPUNumProcesses OBJECT-TYPE
SYNTAX  Gauge32(1..32768)
UNITS   "processes"
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The total number of processes which exist on this CPU"
 ::= { starCPUEntry 16 }

starCPUMemCached OBJECT-TYPE
SYNTAX  Gauge32(1..2147483647)
UNITS   "KB"
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The total amount of memory consumed by the (reusable) memory cache on this CPU, in kilobytes"
 ::= { starCPUEntry 17 }

-- Session In Progress

starentSessInP OBJECT IDENTIFIER ::= { starentMIBObjects 12 }

starSessInProgCalls OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The number of sessions current in progress"
 ::= { starentSessInP 1 }

starSessInProgActiveCalls OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The number of sessions with active calls"
 ::= { starentSessInP 2 }

starSessInProgDormantCalls OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The number of sessions associated with dormant calls"
 ::= { starentSessInP 3 }

starSessInProgArrived OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS  read-only
STATUS   current
DESCRIPTION
"The number of sessions in the arrived state"
 ::= { starentSessInP 4 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starSessInProgLCPNeg OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the link control protocol negotiation state"
 ::= { starentSessInP 5 }

starSessInProgLCPUp OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the link control protocol up state"
 ::= { starentSessInP 6 }

starSessInProgAuthenticating OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the authenticating state"
 ::= { starentSessInP 7 }

starSessInProgAuthenticated OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the authenticated state"
 ::= { starentSessInP 8 }

starSessInProgIPCPUp OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the IP control protocol up state"
 ::= { starentSessInP 9 }

starSessInProgSIPConn OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the Simple IP connected state"
 ::= { starentSessInP 10 }

starSessInProgMIPConn OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the Mobile IP connected state"
 ::= { starentSessInP 11 }

starSessInProgDisc OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of sessions in the disconnecting state"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentSessInP 12 }

-- NPU table
-- These objects are defined only for use in traps

starentNPUMgr OBJECT IDENTIFIER ::= { starentMIBObjects 11 }

starNPUMgrTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarNPUMgrEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing information about all NPU Managers"
 ::= { starentNPUMgr 1 }

starNPUMgrEntry OBJECT-TYPE
SYNTAX     StarNPUMgrEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information about a particular NPU Manager"
INDEX { starNPUMgrNumber }
 ::= { starNPUMgrTable 1 }

StarNPUMgrEntry ::= 
 SEQUENCE {
  starNPUMgrNumber   Integer32
 }

starNPUMgrNumber OBJECT-TYPE
SYNTAX     Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The identity of this NPU"
 ::= { starNPUMgrEntry 1 }

--

starentSessMgr OBJECT IDENTIFIER ::= { starentMIBObjects 13 }

starSessMgrCount OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The total number of session manager instances"
 ::= { starentSessMgr 1 }

starSessTtlArrived OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The total number of requested sessions"
 ::= { starentSessMgr 2 }

starSessTtlRejected OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
STARENT-MIB DEFINITIONS ::= BEGIN

  "The total number of rejected sessions"
  ::= { starentSessMgr 3 }

starSessTtlConnected OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of sessions which were connected"
  ::= { starentSessMgr 4 }

starSessTtlAuthSucc OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of sessions where authentication was successful"
  ::= { starentSessMgr 5 }

starSessTtlAuthFail OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of sessions which failed authentication"
  ::= { starentSessMgr 6 }

starSessTttlCPUp OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of sessions in the link control protocol up state"
  ::= { starentSessMgr 7 }

starSessTtlIPCPUp OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of IP control protocol up state"
  ::= { starentSessMgr 8 }

starSessTtlSrcViol OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of sessions which had an invalid source"
  ::= { starentSessMgr 9 }

starSessTtlKeepFail OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of sessions which had a keep alive failure"
  ::= { starentSessMgr 10 }

starSessTtlOctForwarded OBJECT-TYPE
SYNTAX     Counter32
UNITS      "Megabytes"
MAX-ACCESS read-only
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STARENT-MIB DEFINITIONS ::= BEGIN

STATUS deprecated
DESCRIPTION "The total number of octets forwarded (data + control)"
::= { starentSessMgr 11 }

starSessTtlRPRegAccept OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of Initial RRQ Accepted"
::= { starentSessMgr 12 }

starSessTtlRPRegAcceptInterPDSN OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of Inter PDSN Handoff RRQ Accepted"
::= { starentSessMgr 13 }

starSessCurrPPPSessions OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The current number of PPP sessions"
::= { starentSessMgr 14 }

starSessTtlTxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "The total number of bytes transmitted from mobiles"
::= { starentSessMgr 15 }

starSessTtlRxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "The total number of bytes received by mobiles"
::= { starentSessMgr 16 }

starSessTtlSIPTxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "The total number of bytes transmitted from mobiles using SIP"
::= { starentSessMgr 17 }

starSessTtlSIPRxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION
starSessTtlMIPTxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "The total number of bytes transmitted from mobiles using MIP"
 ::= { starentSessMgr 19 }

starSessTtlMIPRxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "The total number of bytes received by mobiles using MIP"
 ::= { starentSessMgr 20 }

starSessTtlOctForwardedGB OBJECT-TYPE
SYNTAX Counter32
UNITS "Gigabytes"
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "The total number of octets forwarded (data + control)"
 ::= { stARENTSessMgr 21 }

starSessTtlOctForwardedRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of octets forwarded (data + control).
   This object deprecates the old starSessTtlOctForwarded object."
 ::= { starentSessMgr 22 }

starSessTtlTxBytesRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of bytes transmitted from mobiles.
   This object deprecates the old starSessTtlTxBytes object."
 ::= { starentSessMgr 23 }

starSessTtlRxBytesRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of bytes received by mobiles.
   This object deprecates the old starSessTtlRxBytes object."
 ::= { starentSessMgr 24 }

starSessTtlSIPTxBytesRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of bytes transmitted from mobiles using SIP.
This object deprecates the old starSessTtlSIPTxBytes object."
::= { starentSessMgr 25 }

starSessTtlSIPRxBytesRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of bytes received by mobiles using SIP.
This object deprecates the old starSessTtlSIPRxBytes object."
 ::= { starentSessMgr 26 }

starSessTtlMIPTxBytesRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of bytes transmitted from mobiles using MIP.
This object deprecates the old starSessTtlMIPTxBytes object."
 ::= { starentSessMgr 27 }

starSessTtlMIPRxBytesRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of bytes transmitted from mobiles using MIP.
This object deprecates the old starSessTtlMIPRxBytes object."
 ::= { starentSessMgr 28 }

starSessTtlOctForwardedGBRev1 OBJECT-TYPE
SYNTAX Counter64
UNITS "Gigabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of octets forwarded (data + control).
This object deprecates the old starSessTtlOctForwardedGB object."
 ::= { starentSessMgr 29 }

-- AAA

starentAAAMgr OBJECT IDENTIFIER ::= { starentMIBObjects 14 }

starAAAMgrCount OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of AAA manager instances"
 ::= { starentAAAMgr 1 }

starAAAAttlRequests OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STARENT-MIB DEFINITIONS ::= BEGIN

starAAATtlAuthRequests OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of AAA authentication requests"
 ::= { starentAAAMgr 2 }

starAAATtlAcctRequests OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of AAA accounting requests"
 ::= { starentAAAMgr 3 }

starAAACurRequests OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The current number of AAA requests"
 ::= { starentAAAMgr 4 }

starAAACurAuthRequests OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The current number of AAA authentication requests"
 ::= { starentAAAMgr 5 }

starAAACurAcctRequests OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The current number of AAA accounting requests"
 ::= { starentAAAMgr 6 }

starAAATtlAcctSess OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The total number of AAA accounting sessions"
 ::= { starentAAAMgr 8 }

starAAACurAcctSess OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The current number of AAA accounting sessions"
 ::= { starentAAAMgr 9 }

starAAATtlAuthSuccess OBJECT-TYPE
SYNTAX     Counter32
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of AAA authentication successes"
 ::= { starentAAAMgr 10 }

starAAATtlAuthFailure OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of AAA authentication failures"
 ::= { starentAAAMgr 11 }

-- All

starentA11Mgr OBJECT IDENTIFIER ::= { starentMIBObjects 15 }

starA11MgrCount OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of All manager instances"
 ::= { starentA11Mgr 1 }

starA11TtlArrived OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of All session requests"
 ::= { starentA11Mgr 2 }

starA11TtlRejected OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of rejected All sessions"
 ::= { starentA11Mgr 3 }

starA11TtlDemultiplexed OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of demultiplexed All sessions"
 ::= { starentA11Mgr 4 }

starA11TtlDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of All deregistrations"
 ::= { starentA11Mgr 5 }

starA11CurActive OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
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STARENT-MIB DEFINITIONS ::= BEGIN

  STATUS   current
  DESCRIPTION
    "The current number of active All sessions"
  ::= { starentA11Mgr 6 }

-- HA

starentHAMgr OBJECT IDENTIFIER ::= { starentMIBObjects 16 }

starHAMgrCount OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
    "The total number of home agent manager instances"
  ::= { starentHAMgr 1 }

starHATtlArrived OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
    "The total number of home agent session requests"
  ::= { starentHAMgr 2 }

starHATtlRejected OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
    "The total number of rejected home agent sessions"
  ::= { starentHAMgr 3 }

starHATtlDemultiplexed OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
    "The total number of demultiplexed home agent sessions"
  ::= { starentHAMgr 4 }

starHATtlDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
    "The total number of home agent deregistrations"
  ::= { starentHAMgr 5 }

starHACurActive OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
    "The total number of active home agent sessions"
  ::= { starentHAMgr 6 }

-- FA

starentFAMgr OBJECT IDENTIFIER ::= { starentMIBObjects 17 }

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STARENT-MIB DEFINITIONS ::= BEGIN

starFAMgrCount OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The total number of foreign agent manager instances"
 ::= { starentFAMgr 1 }

starFATtlArrived OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The total number of foreign agent session requests"
 ::= { starentFAMgr 2 }

starFATtlRejected OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The total number of rejected foreign agent sessions"
 ::= { starentFAMgr 3 }

starFATtlDemultiplexed OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The total number of demultiplexed foreign agent sessions"
 ::= { starentFAMgr 4 }

starFATtlDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The total number of foreign agent deregistrations"
 ::= { starentFAMgr 5 }

starFACurActive OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The current number of active foreign agent sessions"
 ::= { starentFAMgr 6 }

-- Service Manager
-- Note that this table isn't expected to have an SNMP implementation; these objects are defined
-- for use within traps

starentService OBJECT IDENTIFIER ::= { starentMIBObjects 18 }

starServiceTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarServiceEntry
MAX-ACCESS  not-accessible
STATUS     current
DESCRIPTION
  ""
 ::= { starentService 1 }

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starServiceEntry OBJECT-TYPE
SYNTAX     StarServiceEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "Information on a particular Service Manager"
INDEX { starServiceVpnID, starServiceSvcID }
::= { starServiceTable 1 }

StarServiceEntry ::= SEQUENCE {
    starServiceVpnID  Gauge32,
    starServiceSvcID  Gauge32,
    starServiceVpnName  DisplayString,
    starServiceServName  DisplayString,
    starServiceSubLimit             Unsigned32,
    starServiceSubCurrent           Gauge32,
    starServiceType   INTEGER,
    starServiceFAIpAddr  IpAddress,
    starServiceHAIpAddr  IpAddress
}

starServiceVpnID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "The internal identification of the VPN (context)"
::= { starServiceEntry 1 }

starServiceSvcID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "The internal identification of this service; unique within a specific context"
::= { starServiceEntry 2 }

starServiceVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The name of this VPN (context)"
::= { starServiceEntry 3 }

starServiceServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The name of this service"
::= { starServiceEntry 4 }

starServiceSubLimit OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The configured subscriber limit"
::= { starServiceEntry 5 }
starServiceSubCurrent OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The current number of subscribers limit"
 ::= { starServiceEntry 6 }

starServiceType OBJECT-TYPE
SYNTAX INTEGER {
    unknown(1),
pdsn(2),
ggsn(3),
haf(4),
fa(5),
l2tpserver(6),
lac(7),
lns(8),
closedrp(9),
ecs(10),
cscf(11),
ipag(12),
evdoreva(13),
asngw(14),
pdif(15),
asnp(16),
mipv6ha(17),
phsgw(18),
phspcc(19),
sgw(20),
pgw(21),
mag(22),
gprs(23),
hsgw(24),
sgsn(25),
mme(26),
pdg(27),
standalonefa(28),
imsue(29),
fng(30),
pccpolicy(31),
pccquota(32),
pccaf(33),
hnbwg(34),
non-anchor-phs-gateway(35),
combination-3g-4g-gateway(36),
epdg(37),
pcpp(38),
henbgw-access(39),
henbgw-network(40),
wsog(41),
samog(42),
sgaw(43),
ppp-1back(44),
dhcp(45),
imse(46),
diameter(47),
dhcpv6(48),
lma(49),
crtd-ctl(50),
mme-hss(51),
gss(52),

::= { starServiceEntry 6 }
cbs(53),
egtp-ingress(54),
egtp-egress(55),
egtp(56),
gtpu(57),
sgtpc(58),
egtp-sv(59),
megad(60),
pcc(61),
ipe(62),
mseg(63),
bng(64),
gs(65),
map(66),
iups(67),
sgtp(68),
ics(69),
mme-embms(70)  
}  
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The type of service"
::= { starServiceEntry 7 }

starServiceFAIpAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The IP address for an FA service. Where unknown or not applicable
this will contain all zeroes."
::= { starServiceEntry 8 }

starServiceHAIpAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The IP address for an HA service. Where unknown or not applicable
this will contain all zeroes."
::= { starServiceEntry 9 }

-- CLI
-- Note that this table isn't expected to have an SNMP implementation; these objects are defined
-- for use within traps

starentCLINmgr OBJECT IDENTIFIER ::= { starentMIBObjects 19 }

starCLITable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarCLIEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing information on all interactive CLI sessions"
::= { starentCLINmgr 1 }

starCLIEntry OBJECT-TYPE
SYNTAX     StarCLIEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information on a particular CLI Session"
STARENT-MIB DEFINITIONS ::= BEGIN

INDEX { starCLIID }
::= { starCLITable 1 }

StarCLILEntry ::= SEQUENCE {
  starCLIID Gauge32,
  starCLIUsername DisplayString,
  starCLITtyname DisplayString,
  starCLIPrivs DisplayString,
  starCLIType INTEGER,
  starCLIRemoteIpAddrType InetAddressType,
  starCLIRemoteIpAddr InetAddress,
  starCLIContext DisplayString,
  starCLIDatabaseUsername DisplayString
}

starCLIID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identifier of this CLI session."
::= { starCLILEntry 1 }

starCLIUsername OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the user logged into this CLI session, or 'unknown' if not none"
::= { starCLILEntry 2 }

starCLITtyname OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the TTY device for this CLI session"
::= { starCLILEntry 3 }

starCLIPrivs OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The user presentable form of the privilege level of this CLI session"
::= { starCLILEntry 4 }

starCLIType OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  commandline(1),
  ftp(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The type of CLI; commandline(1) represents the normal interactive command line; ftp(2) represents an incoming FTP session"
::= { starCLILEntry 5 }

starCLIRemoteIpAddrType OBJECT-TYPE

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STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX     InetAddressType
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The type of remote IP address used to access this CLI session."
::= { starCLIEntry 6 }

starCLIRemoteIpAddr OBJECT-TYPE
SYNTAX     InetAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The remote IP address used to access this CLI session. Where unknown or
not applicable (such as access through a serial port) this will be 0"
::= { starCLIEntry 7 }

starCLIContext OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The context (VPN) currently being managed/viewed by the CLI session."
::= { starCLIEntry 8 }

starCLIDatabaseUsername OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The username of the user record in the database which was acted upon by the CLI session"
::= { starCLIEntry 9 }

-- Task Manager
-- Note that this table isn't expected to have an SNMP implementation; these objects are defined
-- for use within traps

starentTaskMgr OBJECT IDENTIFIER ::= { starentMIBObjects 20 }

starTaskTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarTaskEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "A table containing information about all active tasks"
::= { starentTaskMgr 1 }

starTaskEntry OBJECT-TYPE
SYNTAX     StarTaskEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "Information on a particular Task"
INDEX { starTaskFacility, starTaskInstance }
::= { starTaskTable 1 }

StarTaskEntry ::= SEQUENCE {
  starTaskFacility                Unsigned32,
  starTaskInstance                Unsigned32,
  starTaskFacilityName            DisplayString,
  starTaskCard                    Unsigned32,
  starTaskCPU                     Unsigned32
}

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STARENT-MIB DEFINITIONS ::= BEGIN

starTaskFacility OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
“The internal facility identifier”
 ::= { starTaskEntry 1 }

starTaskInstance OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
“The internal instance identifier which uniquely identifies this task
without a given facility”
 ::= { starTaskEntry 2 }

starTaskFacilityName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The name of the facility for this task”
 ::= { starTaskEntry 3 }

starTaskCard OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The slot number of the card where this task is running”
 ::= { starTaskEntry 4 }

starTaskCPU OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The CPU number where this task is running”
 ::= { starTaskEntry 5 }

-- PPP Stats

starentPPP OBJECT IDENTIFIER ::= { starentMIBObjects 21 }

starPPPStatTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarPPPStatEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
“A table containing PPP Stats”
 ::= { starentPPP 1 }

starPPPStatEntry OBJECT-TYPE
SYNTAX     StarPPPStatEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
“The statistics for an individual entry for a PPP context and service”
INDEX  { IMPLIED starPPPStatSvcID }
 ::= { starPPPStatTable 1 }

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```
StarPPPStatEntry ::= SEQUENCE {
    starPPPStatVpnID            Gauge32,
    starPPPStatSvcID            StarShortID,
    starPPPStatVpnName          DisplayString,
    starPPPStatServName         DisplayString,
    starPPPStatInit             Counter32,
    starPPPStatReneg             Counter32,
    starPPPStatSuccess          Counter32,
    starPPPStatFailed            Counter32,
    starPPPStatReleased          Counter32,
    starPPPStatReleasedLocal     Counter32,
    starPPPStatReleasedRemote    Counter32,
    starPPPStatLcpFailMaxRetry  Counter32,
    starPPPStatLcpFailOption    Counter32,
    starPPPStatIpcpFailMaxRetry Counter32,
    starPPPStatIpcpFailOption   Counter32,
    starPPPStatCcpFail           Counter32,
    starPPPStatAuthFail         Counter32,
    starPPPStatLcpEntered        Counter32,
    starPPPStatAuthEntered       Counter32,
    starPPPStatIpcpEntered       Counter32,
    starPPPStatRenegPdsn          Counter32,
    starPPPStatRenegMobil        Counter32,
    starPPPStatRenegAddrMismatch Counter32,
    starPPPStatRenegOther        Counter32,
    starPPPStatChapAuthAttempt   Counter32,
    starPPPStatPapAuthAttempt    Counter32,
    starPPPStatMSChapAuthAttempt Counter32,
    starPPPStatChapAuthFail      Counter32,
    starPPPStatPapAuthFail       Counter32,
    starPPPStatMSChapAuthFail    Counter32,
    starPPPStatStacComp          Counter32,
    starPPPStatMppcComp          Counter32,
    starPPPStatDeflComp          Counter32,
    starPPPStatFscErrs           Counter32,
    starPPPStatUnknProto         Counter32,
    starPPPStatBadAddr           Counter32,
    starPPPStatBadCtrl           Counter32,
    starPPPStatVjComp            Counter32,
    starPPPStatDiscLcpRemote     Counter32,
    starPPPStatDiscRpRemote      Counter32,
    starPPPStatDiscAdmin         Counter32,
    starPPPStatDiscIdleTimeout   Counter32,
    starPPPStatDiscAbsTimeout    Counter32,
    starPPPStatDiscPPPKeepalive  Counter32,
    starPPPStatDiscNoResource    Counter32,
    starPPPStatDiscMisc          Counter32,
    starPPPStatFailedReneg       Counter32,
    starPPPStatLcpFailUnknown    Counter32,
    starPPPStatIpcpFailUnknown   Counter32,
    starPPPStatAuthAbort         Counter32,
    starPPPStatLowerLayerDisc    Counter32,
    starPPPStatLcpSuccess        Counter32,
    starPPPStatAuthSuccess       Counter32,
    starPPPStatRenegLowerLayerHandoff Counter32,
    starPPPStatRenegParamUpdate  Counter32,
    starPPPStatChapAuthSuccess   Counter32,
    starPPPStatPapAuthSuccess    Counter32,
    starPPPStatMSChapAuthSuccess Counter32,
    starPPPStatChapAuthAbort     Counter32,
    starPPPStatPapAuthAbort      Counter32,
}
```
starPPPStatMSChapAuthAbort Counter32,
starPPPStatSessSkipAuth Counter32,
starPPPStatNegComp Counter32,
starPPPStatCCPNegFailComp Counter32,
starPPPStatDiscLocalLowerLayer Counter32,
starPPPStatDiscAddFlowFail Counter32,
starPPPStatDiscMaxRetriesLCP Counter32,
starPPPStatDiscMaxRetriesIPCP Counter32,
starPPPStatDiscMaxSetupTimer Counter32,
starPPPStatDiscInvalidDestVpn Counter32,
starPPPStatDiscOptNegFailLCP Counter32,
starPPPStatDiscOptNegFailIPCP Counter32,
starPPPStatDiscNoRemoteIpAddr Counter32,
starPPPStatDiscCallTypeDetectFail Counter32,
starPPPStatDiscRemoteDiscUpLayer Counter32,
starPPPStatDiscLongDuraTimeout Counter32,
starPPPStatDiscAuthFail Counter32,
starPPPStatLCPEchoTotalReq Counter32,
starPPPStatLCPEchoReqResent Counter32,
starPPPStatLCPEchoReqRecvd Counter32,
starPPPStatLCPEchoReqTimeout Counter32,
starPPPStatRecvErrBadCtrlField Counter32,
starPPPStatRecvErrBadPacketLen Counter32,
starPPPStatRemoteTerm Counter32,
starPPPStatMiscFail Counter32
}

starPPPStatVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of the PPP VPN (context)"
::= { starPPPStatEntry 1 }

starPPPStatSvcID OBJECT-TYPE
SYNTAX StarShortID
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The service identification is made up from first 8 chars of context name and first 8 chars of service name separated by :"
::= { starPPPStatEntry 2 }

starPPPStatVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the PPP VPN (context)"
::= { starPPPStatEntry 3 }

starPPPStatServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the PPP service"
::= { starPPPStatEntry 4 }

starPPPStatInit OBJECT-TYPE
SYNTAX Counter32
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STARENT-MIB DEFINITIONS ::= BEGIN

starPPPStatEntry 5.0

starPPPStatReneg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP session renegotiations for the associated VPN service"
::= { starPPPStatEntry 5

starPPPStatSuccess OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP session negotiation successes for the associated VPN service"
::= { starPPPStatEntry 6

starPPPStatFailed OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP session negotiation failures for the associated VPN service"
::= { starPPPStatEntry 7

starPPPStatReleased OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions released for the associated VPN service"
::= { starPPPStatEntry 8

starPPPStatReleasedLocal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions where the release was initiated locally for the associated VPN service"
::= { starPPPStatEntry 10

starPPPStatReleasedRemote OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions where the release was initiated remotely for the associated VPN service"
::= { starPPPStatEntry 11

starPPPStatLcpFailMaxRetry OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions which failed to bring up the link control protocol due to excessive retries for the associated VPN service"

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STARENT-MIB DEFINITIONS ::= BEGIN

::= { starPPPStatEntry 12 }

starPPPStatLcpFailOption OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which failed to bring up the link control protocol
due to an invalid option being received for the associated VPN service"
 ::= { starPPPStatEntry 13 }

starPPPStatIpcpFailMaxRetry OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which failed to start the IP control protocol
due to excessive retries for the associated VPN service"
 ::= { starPPPStatEntry 14 }

starPPPStatIpcpFailOption OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which failed to start the IP control protocol due to
an invalid option being received for the associated VPN service"
 ::= { starPPPStatEntry 15 }

starPPPStatCcpFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which failed to initialize the CCP"
 ::= { starPPPStatEntry 16 }

starPPPStatAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which failed authentication for the associated VPN"
 ::= { starPPPStatEntry 17 }

starPPPStatLcpEntered OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which successfully initialized the link control protocol"
 ::= { starPPPStatEntry 18 }

starPPPStatAuthEntered OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which were successfully authenticated"
 ::= { starPPPStatEntry 19 }

starPPPStatIpcpEntered OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP sessions which successfully initialized the IP control protocol"
 ::= { starPPPStatEntry 20 }

starPPPStatRenegPdsn OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP sessions which renegotiated the PDSN service access"
 ::= { starPPPStatEntry 21 }

starPPPStatRenegMobil OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP sessions which renegotiated the Mobile IP service access"
 ::= { starPPPStatEntry 22 }

starPPPStatRenegAddrMismatch OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP sessions which had an IP address mismatch during renegotiation"
 ::= { starPPPStatEntry 23 }

starPPPStatRenegOther OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP sessions which failed renegotiation for reasons other than IP address mismatch"
 ::= { starPPPStatEntry 24 }

starPPPStatChapAuthAttempt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP CHAP authentication attempts for the associated VPN service"
 ::= { starPPPStatEntry 25 }

starPPPStatPapAuthAttempt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP PAP authentication attempts for the associated VPN service"
 ::= { starPPPStatEntry 26 }

starPPPStatMSChapAuthAttempt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of PPP MSCHAP authentication attempts for the associated VPN service"
 ::= { starPPPStatEntry 27 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starPPPStatChapAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP CHAP authentication attempt failures for the associated VPN service"
 ::= { starPPPStatEntry 28 }

starPPPStatPapAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP PAP authentication failures for the associated VPN service"
 ::= { starPPPStatEntry 29 }

starPPPStatMSChapAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP MSCHAP authentication failures for the associated VPN service"
 ::= { starPPPStatEntry 30 }

starPPPStatStacComp OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions which had STAC compression enabled for the associated VPN service"
 ::= { starPPPStatEntry 31 }

starPPPStatMppcComp OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions which had MPPC compression enabled for the associated VPN service"
 ::= { starPPPStatEntry 32 }

starPPPStatDeflComp OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions which had DEFLATE compression enabled for the associated VPN service"
 ::= { starPPPStatEntry 33 }

starPPPStatFscErrs OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP forward sequence control errors in messaging"
 ::= { starPPPStatEntry 34 }

starPPPStatUnknProto OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PPP sessions which had an unknown protocol enabled for the associated VPN service"
 ::= { starPPPStatEntry 35 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starPPPStatBadAddr OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which failed due to a bad address being received
for the associated VPN service"
 ::= { starPPPStatEntry 36 }

starPPPStatBadCtrl OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions in which a bad control sequence was received"
 ::= { starPPPStatEntry 37 }

starPPPStatVjComp OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which had VJ header compression enabled for the
associated VPN service"
 ::= { starPPPStatEntry 38 }

starPPPStatDiscLcpRemote OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which were disconnected via the link control protocol
from the remote end for the associated VPN service"
 ::= { starPPPStatEntry 39 }

starPPPStatDiscRpRemote OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which were disconnected by the remote via the R-P
interface for the associated VPN service"
 ::= { starPPPStatEntry 40 }

starPPPStatDiscAdmin OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions which were disconnected by a local administrator
for the associated VPN service"
 ::= { starPPPStatEntry 41 }

starPPPStatDiscIdleTimeout OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only

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STARENT-MIB DEFINITIONS ::= BEGIN

starPPPStatDiscAbsTimeout OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The number of PPP sessions disconnected due to the session absolute timer expiration for 
the associated VPN service"  
 ::= { starPPPStatEntry 43 }

starPPPStatDiscPPPKeepalive OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The number of PPP sessions disconnected due to PPP keep alive failure for the 
associated VPN service"  
 ::= { starPPPStatEntry 44 }

starPPPStatDiscNoResource OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The number of PPP sessions disconnected due to local resource shortage for the 
associated VPN service"  
 ::= { starPPPStatEntry 45 }

starPPPStatDiscMisc OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The number of PPP sessions disconnected due to any cause which does not match 
any other existing disconnect statistics for the associated VPN service"  
 ::= { starPPPStatEntry 46 }

starPPPStatFailedReneg OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The number of failed PPP renegotiations the associated VPN service"  
 ::= { starPPPStatEntry 47 }

starPPPStatLcpFailUnknown OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The number of failed PPP LCP that are due to unknown reasons for the associated VPN service"  
 ::= { starPPPStatEntry 48 }

starPPPStatIpcpFailUnknown OBJECT-TYPE  
SYNTAX Counter32  
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of failed PPP IPCP that are due to unknown reasons
for the associated VPN service”
::= { starPPPStatEntry 49 }

starPPPStatAuthAbort OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of aborted PPP authentications
for the associated VPN service”
::= { starPPPStatEntry 50 }

starPPPStatLowerLayerDisc OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of Failed PPP session due to RP disconnect
for the associated VPN service”
::= { starPPPStatEntry 51 }

starPPPStatLcpSuccess OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of successful PPP LCPs
for the associated VPN service”
::= { starPPPStatEntry 52 }

starPPPStatAuthSuccess OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of successful PPP authentications
for the associated VPN service”
::= { starPPPStatEntry 53 }

starPPPStatRenegLowerLayerHandoff OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of PPP renigotiations for RP handoff
for the associated VPN service”
::= { starPPPStatEntry 54 }

starPPPStatRenegParamUpdate OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
“The number of PPP renigotiations for parameter update
for the associated VPN service”
::= { starPPPStatEntry 55 }

starPPPStatChapAuthSuccess OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
"The number of successful PPP CHAP authentications
for the associated VPN service"
::= { starPPPStatEntry 56 }

starPPPStatPapAuthSuccess OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of successful PPP PAP authentications
for the associated VPN service"
::= { starPPPStatEntry 57 }

starPPPStatMSChapAuthSuccess OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of successful PPP MSCHAP authentications
for the associated VPN service"
::= { starPPPStatEntry 58 }

starPPPStatChapAuthAbort OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of aboted PPP CHAP authentications
for the associated VPN service"
::= { starPPPStatEntry 59 }

starPPPStatPapAuthAbort OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of aboted PPP PAP authentications
for the associated VPN service"
::= { starPPPStatEntry 60 }

starPPPStatMSChapAuthAbort OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of aboted PPP MSCHAP authentications
for the associated VPN service"
::= { starPPPStatEntry 61 }

starPPPStatSessSkipAuth OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number ofPPP sessions that skipped authentications
for the associated VPN service"
::= { starPPPStatEntry 62 }

starPPPStatNegComp OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions that negotiated compressions
for the associated VPN service"
 ::= { starPPPStatEntry 63 }

starPPPStatCCPNegFailComp OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PPP sessions that failed compression negotiation
for the associated VPN service"
 ::= { starPPPStatEntry 64 }

starPPPStatDiscLocalLowerLayer OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of disconnected PPP sessions due to local RP disconnect
for the associated VPN service"
 ::= { starPPPStatEntry 65 }

starPPPStatDiscAddFlowFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of disconnected PPP sessions due to failure in adding new flow
for the associated VPN service"
 ::= { starPPPStatEntry 66 }

starPPPStatDiscMaxRetriesLCP OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of disconnected PPP sessions due to max retries for LCP
for the associated VPN service"
 ::= { starPPPStatEntry 67 }

starPPPStatDiscMaxRetriesIPCP OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of disconnected PPP sessions due to max retries for IPCP
for the associated VPN service"
 ::= { starPPPStatEntry 68 }

starPPPStatDiscMaxSetupTimer OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of disconnected PPP sessions due to max setup time out
for the associated VPN service"
 ::= { starPPPStatEntry 69 }

starPPPStatDiscInvalidDestVpn OBJECT-TYPE
SYNTAX Counter32
STARENT-MIB DEFINITIONS ::= BEGIN

starPPPStatDiscOptNegFailLCP OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of disconnected PPP sessions due to invalid destination VPN for the associated VPN service"
::= { starPPPStatEntry 70 }

starPPPStatDiscOptNegFailIPCP OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of disconnected PPP sessions due to failed IPCP option negotiation for the associated VPN service"
::= { starPPPStatEntry 71 }

starPPPStatDiscNoRemoteIpAddr OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of disconnected PPP sessions due to no remote ip address for the associated VPN service"
::= { starPPPStatEntry 72 }

starPPPStatDiscCallTypeDetectFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of disconnected PPP sessions due to failure detecting call type for the associated VPN service"
::= { starPPPStatEntry 73 }

starPPPStatDiscRemoteDiscUpLayer OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of disconnected PPP sessions due to failure detecting call type for the associated VPN service"
::= { starPPPStatEntry 74 }

starPPPStatDiscLongDuraTimeout OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of disconnected PPP sessions due to long duration time out for the associated VPN service"
::= { starPPPStatEntry 75 }

starPPPStatDiscAuthFail OBJECT-TYPE
Syntax     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The number of disconnected PPP sessions due to failed authentication 
for the associated VPN service"
::= { starPPPStatEntry 77 }

starPPPStatLCPEchoTotalReq OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The total number of PPP LCP echo requests 
for the associated VPN service"
::= { starPPPStatEntry 78 }

starPPPStatLCPEchoReqResent OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The total number of PPP LCP echo requests resent 
for the associated VPN service"
::= { starPPPStatEntry 79 }

starPPPStatLCPEchoRepRecved OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The total number of PPP LCP echo replys received 
for the associated VPN service"
::= { starPPPStatEntry 80 }

starPPPStatLCPEchoReqTimeout OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The total number of PPP LCP echo requests time out 
for the associated VPN service"
::= { starPPPStatEntry 81 }

starPPPStatRecvErrBadCtrlField OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The total number of received PPP error due to bad control fields 
for the associated VPN service"
::= { starPPPStatEntry 82 }

starPPPStatRecvErrBadPacketLen OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  
"The total number of received PPP error due to bad packet length 
for the associated VPN service"
::= { starPPPStatEntry 83 }

starPPPStatRemoteTerm OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The total number of PPP remote terminations
   for the associated VPN service"
::= { starPPPStatEntry 84 }

starPPPStatMiscFail OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of misc PPP failures
   for the associated VPN service"
::= { starPPPStatEntry 85 }

-- MIPHA Stats

starentMIPHA OBJECT IDENTIFIER ::= { starentMIBObjects 22 }

starMIPHAStatTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarMIPHAStatEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "A table containing MIP HA Stats"
::= { starMIPHAStatTable 1 }

starMIPHAStatEntry OBJECT-TYPE
SYNTAX     StarMIPHAStatEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "The Mobile IP home agent statistics for a specific VPN (context) and service"
INDEX { IMPLIED starMIPHAStatSvcID }
::= { starMIPHAStatTable 1 }

StarMIPHAStatEntry ::=--
SEQUENCE {
   starMIPHAStatVpnID                 Gauge32,
   starMIPHAStatSvcID                 StarShortID,
   starMIPHAStatVpnName               DisplayString,
   starMIPHAStatServName              DisplayString,
   starMIPHAStatDisconnects           Counter32,
   starMIPHAStatExpiry                Counter32,
   starMIPHAStatDereg                 Counter32,
   starMIPHAStatAdminDrop             Counter32,
   starMIPHAStatRegRecvTotal          Counter32,
   starMIPHAStatRegRecvInitial        Counter32,
   starMIPHAStatRegRecvRenew          Counter32,
   starMIPHAStatRegRecvDereg          Counter32,
   starMIPHAStatRegAcceptTotal        Counter32,
   starMIPHAStatRegAcceptReg          Counter32,
   starMIPHAStatRegAcceptRenew        Counter32,
   starMIPHAStatRegAcceptDereg        Counter32,
   starMIPHAStatRegDeniedTotal        Counter32,
   starMIPHAStatRegDeniedInitial      Counter32,
   starMIPHAStatRegDeniedRenew        Counter32,
   starMIPHAStatRegDeniedDereg        Counter32,
   starMIPHAStatRegReplyTotal         Counter32,

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starMIPHAStatRegReplyAcceptReg Counter32,
starMIPHAStatRegReplyAcceptDereg Counter32,
starMIPHAStatRegReplyDenied Counter32,
starMIPHAStatRegReplyBadReg Counter32,
starMIPHAStatRegReplyMismatchID Counter32,
starMIPHAStatRegReplyAdminProhib Counter32,
starMIPHAStatRegReplyUnspecErr Counter32,
starMIPHAStatRegReplyNoResource Counter32,
starMIPHAStatRegReplyMnAuthFail Counter32,
starMIPHAStatRegReplyFAAuthFail Counter32,
starMIPHAStatRegReplySimulBind Counter32,
starMIPHAStatRegReplyUnknownHA Counter32,
starMIPHAStatRegReplyRevTunUnav Counter32,
starMIPHAStatRegReplyRevTunMand Counter32,
starMIPHAStatRegReplyEncapUnav Counter32,
starMIPHAStatRegReplySendError Counter32,
starMIPHAStatFARevocations Counter32,
starMIPHAStatRegAcceptHO Counter32,
starMIPHAStatRegDeniedHO Counter32,
starMIPHAStatRegDiscardTotal Counter32
}

starMIPHAStatVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The internal identification of the home agent Mobile IP VPN (context)"
::= { starMIPHAStatEntry 1 }

starMIPHAStatSvcID OBJECT-TYPE
SYNTAX StarShortID
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The service identification is made up from first 8 chars of context name and first 8 chars of service name separated by [:]"
::= { starMIPHAStatEntry 2 }

starMIPHAStatVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the VPN (context)"
::= { starMIPHAStatEntry 3 }

starMIPHAStatServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The Mobile IP home agent service name"
::= { starMIPHAStatEntry 4 }

starMIPHAStatDisconnects OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session disconnects for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 5 }
starMIPHAStatExpiry OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session expirations for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 6 }

starMIPHAStatDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session deregistrations for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 7 }

starMIPHAStatAdminDrop OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session disconnects due to administrator actions for the associated Mobile IP home agent VPN"
::= { starMIPHAStatEntry 8 }

starMIPHAStatRegRecvTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session registrations received for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 9 }

starMIPHAStatRegRecvInitial OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of initial session registrations received for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 10 }

starMIPHAStatRegRecvRenew OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session registration renewals received for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 11 }

starMIPHAStatRegRecvDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session deregistrations received for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 12 }

starMIPHAStatRegAcceptTotal OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

  starMIPHAStatRegAcceptReg OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session registrations accepted for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 13 }  

  starMIPHAStatRegAcceptRenew OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session registration renewals accepted for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 14 }  

  starMIPHAStatRegAcceptDereg OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session deregistrations accepted for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 15 }  

  starMIPHAStatRegDeniedTotal OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session registrations denied for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 17 }  

  starMIPHAStatRegDeniedInitial OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session initial registrations denied for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 18 }  

  starMIPHAStatRegDeniedRenew OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session registration renewals denied for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 19 }  

  starMIPHAStatRegDeniedDereg OBJECT-TYPE
      SYNTAX     Counter32
      MAX-ACCESS read-only
      STATUS     current
      DESCRIPTION
        "The number of session deregistrations denied for the associated Mobile IP home agent VPN service"
      ::= { starMIPHAStatEntry 20 }  

END
STAREN-T-MIB DEFINITIONS ::= BEGIN

starMIPHAStatRegReplyTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The total number of session registration replies for the associated Mobile IP home agent VPN service"
 ::=  { starMIPHAStatEntry 21 }

starMIPHAStatRegReplyAcceptReg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies accepted indicating registration for the associated Mobile IP home agent VPN service"
 ::=  { starMIPHAStatEntry 22 }

starMIPHAStatRegReplyAcceptDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies accepted indicated deregistration for the associated Mobile IP home agent VPN service"
 ::=  { starMIPHAStatEntry 23 }

starMIPHAStatRegReplyDenied OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies which were denied for the associated Mobile IP home agent VPN service"
 ::=  { starMIPHAStatEntry 24 }

starMIPHAStatRegReplyBadReq OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies indicating a bad request for the associated Mobile IP home agent VPN service"
 ::=  { starMIPHAStatEntry 25 }

starMIPHAStatRegReplyMismatchID OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies indicating an ID mismatch for the associated Mobile IP home agent VPN service"
 ::=  { starMIPHAStatEntry 26 }

starMIPHAStatRegReplyAdminProhib OBJECT-TYPE
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies indicating administrator prohibition
for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 27 }

starMIPHAStatRegReplyUnspecErr OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies with an unspecified error
for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 28 }

starMIPHAStatRegReplyNoResource OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies indicating no resources
for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 29 }

starMIPHAStatRegReplyMnAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies indicating mobile number authentication failure
for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 30 }

starMIPHAStatRegReplyFAAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies indicating a foreign agent authentication
failure for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 31 }

starMIPHAStatRegReplySimulBind OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies indicating a simultaneous bind condition
for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 32 }

starMIPHAStatRegReplyUnknownHA OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration replies indicating unknown home agent
for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 33 }

starMIPHAStatRegReplyRevTunUnav OBJECT-TYPE

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SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration replies indicating no reverse tunnel available
for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 34 }

starMIPHAStatRegReplyRevTunMand OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration replies indicating reverse tunneling is
mandatory for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 35 }

starMIPHAStatRegReplyEncapUnav OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration replies indicating IP encapsulation was not
available for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 36 }

starMIPHAStatRegReplySendError OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration replies indicating a send error occurred
for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 37 }

starMIPHAStatFARevocations OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of FA revocations
for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 38 }

starMIPHAStatRegAcceptHO OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of hand over session registrations accepted
for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 39 }

starMIPHAStatRegDeniedHO OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of hand over session registrations denied
for the associated Mobile IP home agent VPN service"
 ::= { starMIPHAStatEntry 40 }
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STARENT-MIB DEFINITIONS ::= BEGIN

starMIPHAStatRegDiscardTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations discarded for the associated Mobile IP home agent VPN service"
::= { starMIPHAStatEntry 41 }

-- MIPFA Stats

starentMIPFA OBJECT IDENTIFIER ::= { starentMIBObjects 23 }

starMIPFAStatTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarMIPFAStatEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing MIP FA Stats"
::= { starentMIPFA 1 }

starMIPFAStatEntry OBJECT-TYPE
SYNTAX StarMIPFAStatEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific foreign agent Mobile IP VPN (context) service"
INDEX { IMPLIED starMIPFAStatSvcID }
::= { starMIPFAStatTable 1 }

StarMIPFAStatEntry ::= SEQUENCE {
  starMIPFAStatVpnID                      Gauge32,
  starMIPFAStatSvcID                      StarShortID,
  starMIPFAStatVpnName                    DisplayString,
  starMIPFAStatServName                   DisplayString,
  starMIPFAStatAdvertSend                 Counter32,
  starMIPFAStatDiscExpiry                 Counter32,
  starMIPFAStatDiscDereg                  Counter32,
  starMIPFAStatDiscAdmin                  Counter32,
  starMIPFAStatAuthAttempt                Counter32,
  starMIPFAStatAuthSuccess                Counter32,
  starMIPFAStatAuthFailure                Counter32,
  starMIPFAStatRegRecvTotal               Counter32,
  starMIPFAStatRegRecvInitial             Counter32,
  starMIPFAStatRegRecvRenewal             Counter32,
  starMIPFAStatRegAcceptTotal             Counter32,
  starMIPFAStatRegAcceptInitial           Counter32,
  starMIPFAStatRegAcceptRenewal           Counter32,
  starMIPFAStatRegDenTotal                Counter32,
  starMIPFAStatRegDenInitial              Counter32,
  starMIPFAStatRegDenRenewal              Counter32,
  starMIPFAStatRegDenDereg                Counter32,
  starMIPFAStatRegDiscardTotal            Counter32,
  starMIPFAStatRegDiscardInitial          Counter32,
  starMIPFAStatRegDiscardRenewal          Counter32,
  starMIPFAStatRegDiscardDereg            Counter32,
  starMIPFAStatRegRelayedTotal            Counter32,
  starMIPFAStatRegRelayedInitial          Counter32,
  starMIPFAStatRegRelayedRenewal          Counter32,
  starMIPFAStatRegRelayedDereg            Counter32,

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STARENT-MIB DEFINITIONS ::= BEGIN

starMIPFAStatRegAuthFailTotal         Counter32,
starMIPFAStatRegAuthFailInitial       Counter32,
starMIPFAStatRegAuthFailRenewal       Counter32,
starMIPFAStatRegAuthFailDereg         Counter32,
starMIPFAStatRegDenFDSTotal           Counter32,
starMIPFAStatRegDenFDSInitial         Counter32,
starMIPFAStatRegDenFDSRenewal         Counter32,
starMIPFAStatRegDenFDSDereg           Counter32,
starMIPFAStatRegDenHAInitTotal        Counter32,
starMIPFAStatRegDenHADereg            Counter32,
starMIPFAStatRegDenPDSNUnspec         Counter32,
starMIPFAStatRegDenPDSNTimeout        Counter32,
starMIPFAStatRegDenPDSNAdmin          Counter32,
starMIPFAStatRegDenPDSNResources       Counter32,
starMIPFAStatRegDenPDSNMnAuth         Counter32,
starMIPFAStatRegDenPDSNHAAuth         Counter32,
starMIPFAStatRegDenPDSNTooLong        Counter32,
starMIPFAStatRegDenPDSNBadReq         Counter32,
starMIPFAStatRegDenPDSNEncapUnav      Counter32,
starMIPFAStatRegDenPDSNRevTunUnav     Counter32,
starMIPFAStatRegDenPDSNRevTunMand     Counter32,
starMIPFAStatRegDenHAPeerAuth        Counter32,
starMIPFAStatRegDenHABadReq           Counter32,
starMIPFAStatRegDenHAMismatchID       Counter32,
starMIPFAStatRegDenHASimulBind        Counter32,
starMIPFAStatRegDenHAUnknownHA        Counter32,
starMIPFAStatRegDenHARespUnavail      Counter32,
starMIPFAStatRegRplRcvTotal           Counter32,
starMIPFAStatRegRplRcvTotalRly        Counter32,
starMIPFAStatRegRplRcvErrors          Counter32,
starMIPFAStatRegRplRcvInitial         Counter32,
starMIPFAStatRegRplRcvInitialRly      Counter32,
starMIPFAStatRegRplRcvRenewal         Counter32,
starMIPFAStatRegRplRcvRenewalRly      Counter32,
starMIPFAStatRegRplRcvDereg           Counter32,
starMIPFAStatRegRplRcvDeregRly        Counter32,
starMIPFAStatRegRplSentTotal          Counter32,
starMIPFAStatRegRplSentAcceptReg      Counter32,
starMIPFAStatRegRplSentAcceptDereg    Counter32,
starMIPFAStatRegRplSentBadReq         Counter32,
starMIPFAStatRegRplSentTooLong        Counter32,
starMIPFAStatRegRplSentMnAuthFail     Counter32,
starMIPFAStatRegRplSentHAAuthFail     Counter32,
starMIPFAStatRegRplSentAdminProhibit  Counter32,
starMIPFAStatRegRplSentNoResources    Counter32,
starMIPFAStatRegRplSentRevTunUnav     Counter32,
starMIPFAStatRegRplSentRevTunMand     Counter32,
starMIPFAStatRegRplSentSendErrors     Counter32,
starMIPFAStatRegDenPDSNBadReply       Counter32,
starMIPFAStatRegDenPDSNMissNAI        Counter32,
starMIPFAStatRegDenPDSNMissHomeAgent  Counter32,
starMIPFAStatRegDenPDSNMissHomeAddr   Counter32,
starMIPFAStatRegDenPDSNUnknChallenge  Counter32,
starMIPFAStatRegDenPDSNMissChallenge  Counter32,
starMIPFAStatRegDenPDSNStaleChallenge Counter32,
starMIPFAStatRegDenPDSNNTooDistant   Counter32,
starMIPFAStatRegDenPDSNStyleUnavail  Counter32,
starMIPFAStatRegDenPDSNHAHostUnreach  Counter32,
starMIPFAStatRegDenPDSNHAPortUnreach  Counter32,
starMIPFAStatRegDenPDSNHAUnreach           Counter32,
starMIPFAStatRegDenPDSNInvCOCOA            Counter32,
starMIPFAStatRegReqSentInitTotal           Counter32,
starMIPFAStatRegReqSentInitResend          Counter32,
starMIPFAStatRegReqSentRenewTotal          Counter32,
starMIPFAStatRegReqSentRenewResend         Counter32,
starMIPFAStatRegReqSentDeregTotal          Counter32,
starMIPFAStatRegReqSentDeregResend         Counter32,
starMIPFAStatRegRplSentMTuTooDistant       Counter32,
starMIPFAStatRegRplSentInvCOCOA            Counter32,
starMIPFAStatRegRplSentHANetUnreach        Counter32,
starMIPFAStatRegRplSentHAHostUnreach       Counter32,
starMIPFAStatRegRplSentHAPortUnreach       Counter32,
starMIPFAStatRegRplSentHAUnreach           Counter32,
starMIPFAStatRegRplSentRegTimeout          Counter32,
starMIPFAStatRegRplSentMissNAI             Counter32,
starMIPFAStatRegRplSentMissHomeAgent       Counter32,
starMIPFAStatRegRplSentMissHomeAddr        Counter32,
starMIPFAStatRegRplSentUnknChallenge       Counter32,
starMIPFAStatRegRplSentMissChallenge       Counter32,
starMIPFAStatRegRplSentStaleChallenge      Counter32,
starMIPFAStatRegRplSentBadReply            Counter32

starMIPFAStatVpnID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Internal identication of the foreign agent Mobile IP VPN (context)"
::= { starMIPFAStatEntry 1 }

starMIPFAStatSvcID OBJECT-TYPE
SYNTAX     StarShortID
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"The service identification is made up from first 8 chars of context name
and first 8 chars of service name separated by (:)"
::= { starMIPFAStatEntry 2 }

starMIPFAStatVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The foreign agent mobile IP VPN (context) name"
::= { starMIPFAStatEntry 3 }

starMIPFAStatServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The Mobile IP foreign agent service name"
::= { starMIPFAStatEntry 4 }

starMIPFAStatAdvertSend OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of advertisements sent for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 5 }

starMIPFAStatDiscExpire OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session disconnects due to expiration for the associated Mobile IP foreign agent
VPN service"
::= { starMIPFAStatEntry 6 }

starMIPFAStatDiscDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session disconnects due to deregistration for the associated Mobile IP foreign
agent VPN service"
::= { starMIPFAStatEntry 7 }

starMIPFAStatDiscAdmin OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session disconnects due to administrator action for the associated Mobile IP
foreign agent VPN service"
::= { starMIPFAStatEntry 8 }

starMIPFAStatAuthAttempt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session authentication attempts for the associated Mobile IP foreign agent VPN
service"
::= { starMIPFAStatEntry 9 }

starMIPFAStatAuthSuccess OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session authentication successes for the associated Mobile IP foreign agent VPN
service"
::= { starMIPFAStatEntry 10 }

starMIPFAStatAuthFailure OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of session authentication failures for the associated Mobile IP foreign agent VPN
service"
::= { starMIPFAStatEntry 11 }

starMIPFAStatRegRecvTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION

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"The total number of session registrations received for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 12 }

starMIPFAStatRegRecvInitial OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of initial session registrations received for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 13 }

starMIPFAStatRegRecvRenewal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration renewals for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 14 }

starMIPFAStatRegRecvDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session deregistrations for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 15 }

starMIPFAStatRegAcceptTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The total number of session registrations accepted for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 16 }

starMIPFAStatRegAcceptInitial OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of initial session registrations accepted for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 17 }

starMIPFAStatRegAcceptRenewal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration renewals accepted for the associated Mobile IP foreign agent VPN service"
   ::= { starMIPFAStatEntry 18 }

starMIPFAStatRegAcceptDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION

"The number of session deregistrations accepted for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 19 }

starMIPFAStatRegDenTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The total number of session registrations denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 20 }

starMIPFAStatRegDenInitial OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of initial session registrations denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 21 }

starMIPFAStatRegDenRenewal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration renewals denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 22 }

starMIPFAStatRegDenDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session deregistrations denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 23 }

starMIPFAStatRegDiscardTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The total number of session registrations discarded for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 24 }

starMIPFAStatRegDiscardInitial OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The total number of session registrations discarded for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 25 }

starMIPFAStatRegDiscardRenewal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"The number of session registration renewals discarded for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 26 }

starMIPFAStatRegDiscardDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistrations discarded for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 27 }

starMIPFAStatRegRelayedTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of session registrations relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 28 }

starMIPFAStatRegRelayedInitial OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of initial session registrations relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 29 }

starMIPFAStatRegRelayedRenewal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration renewals relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 30 }

starMIPFAStatRegRelayedDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistrations relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 31 }

starMIPFAStatRegAuthFailTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of session registration authentication failures for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 32 }

starMIPFAStatRegAuthFailInitial OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of initial session registration failures for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 33 }

starMIPFAStatRegAuthFailRenewal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration renewal failures for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 34 }

starMIPFAStatRegAuthFailDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistration authentication failures for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 35 }

starMIPFAStatRegDenPDSNTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of PDSN session registrations denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 36 }

starMIPFAStatRegDenPDSNInitial OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of initial PDSN session registrations denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 37 }

starMIPFAStatRegDenPDSNRenewal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PDSN session registration renewals denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 38 }

starMIPFAStatRegDenPDSNDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PDSN session deregistrations denied for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 39 }

starMIPFAStatRegDenHATotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
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STARENT-MIB DEFINITIONS ::= BEGIN

STATUS  current
DESCRIPTION  
"The total number of session deregistrations denied by the home agent
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 40 }

starMIPFAStatRegDenRAInitial OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION  
"The number of initial session registrations denied by the home agent
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 41 }

starMIPFAStatRegDenHARenewal OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION  
"The number of session registration renewals denied by the home agent
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 42 }

starMIPFAStatRegDenHADereg OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION  
"The number of session deregistrations denied by the home agent
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 43 }

starMIPFAStatRegDenPDSNUnspec OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION  
"The number of PDSN session registrations denied for an unspecified reason
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 44 }

starMIPFAStatRegDenPDSNTimeout OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION  
"The number of PDSN session registrations denied due to timer expiration
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 45 }

starMIPFAStatRegDenPDSNAdmin OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION  
"The number of PDSN session registrations denied due to administrator prohibition
for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 46 }

starMIPFAStatRegDenPDSNResources OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only

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STARENT-MIB DEFINITIONS ::= BEGIN

starMIPFASStatRegDenPDSNMnAuth OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PDSN session registrations denied due to mobile number authentication for the associated Mobile IP foreign agent VPN service"
::= { starMIPFASStatEntry 48 }

starMIPFASStatRegDenPDSNHAAuth OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PDSN session registrations denied by the home agent for the associated Mobile IP foreign agent VPN service"
::= { starMIPFASStatEntry 49 }

starMIPFASStatRegDenPDSNTooLong OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PDSN session registrations denied due to a life too long indication for the associated Mobile IP foreign agent VPN service"
::= { starMIPFASStatEntry 50 }

starMIPFASStatRegDenPDSNBadReq OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PDSN session registrations denied due to a bad request indication for the associated Mobile IP foreign agent VPN service"
::= { starMIPFASStatEntry 51 }

starMIPFASStatRegDenPDSNEncapUnav OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PDSN session registrations denied due to no IP encapsulation available for the associated Mobile IP foreign agent VPN service"
::= { starMIPFASStatEntry 52 }

starMIPFASStatRegDenPDSNRevTunUnav OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of PDSN session registrations denied due to no reverse tunnel available for the associated Mobile IP foreign agent VPN service"
::= { starMIPFASStatEntry 53 }

starMIPFASStatRegDenPDSNRevTunMand OBJECT-TYPE
SYNTAX Counter32


MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PDSN session registration denied due to reverse tunneling being mandatory for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 54 }

starMIPFAStatRegDenHAFAuth OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PDSN registrations denied by the home agent due to authentication failure for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 55 }

starMIPFAStatRegDenHABadReq OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration denied by the home agent due to the request being invalid for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 56 }

starMIPFAStatRegDenHAMismatchID OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied by the home agent due to an ID mismatch for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 57 }

starMIPFAStatRegDenHASimulBind OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied by the home agent due to a simultaneous bind attempt for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 58 }

starMIPFAStatRegDenHAUnknownHA OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied by the home agent for an unknown reason for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 59 }

starMIPFAStatRegDenHARunUnavail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied by the home agent due to no reverse tunnel being available for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 60 }

starMIPFAStatRegRplRcvTotal OBJECT-TYPE
SYNTAX Counter32
STARENT-MIB DEFINITIONS ::= BEGIN

starMIPFAStatRegRplRcvTotalRly OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session registration replies received for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 61 }

starMIPFAStatRegRplRcvErrors OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session registration replies relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 62 }

starMIPFAStatRegRplRcvInitial OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of initial session registration replies received for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 64 }

starMIPFAStatRegRplRcvInitialRly OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of initial session registration replies relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 65 }

starMIPFAStatRegRplRcvRenewal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration renewal replies received for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 66 }

starMIPFAStatRegRplRcvRenewalRly OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration renewal replies relayed for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 67 }

starMIPFAStatRegRplRcvDereg OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

starMIPFAStatRegRplRcvDeregRly OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies received indicating deregistration
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 68 }

starMIPFAStatRegRplSentTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The total number of session registration replies sent
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 70 }

starMIPFAStatRegRplSentAcceptReg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies which were sent and accepted
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 71 }

starMIPFAStatRegRplSentAcceptDereg OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies which were sent and accepted indication
 deregistration for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 72 }

starMIPFAStatRegRplSentBadReq OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies which were sent indicating the request
 was invalid for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 73 }

starMIPFAStatRegRplSentTooLong OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies which were sent indicating life too long
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 74 }

starMIPFASstatRegRplSentMnAuthFail OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registration replies which were sent indicating the request
 was invalid for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 75 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

  starMIPFAStatRegRplSentHAAuthFail OBJECT-TYPE
  SYNTAX        Counter32
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION
    "The number of session registration replies which were sent indicating home agent
    authentication failure for the associated Mobile IP foreign agent VPN service"
  ::= { starMIPFAStatEntry 76 }

  starMIPFASstatRegRplSentAdminProhib OBJECT-TYPE
  SYNTAX        Counter32
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION
    "The number of session registration replies which were sent indicating prohibited
    by the administration for the associated Mobile IP foreign agent VPN service"
  ::= { starMIPFAStatEntry 77 }

  starMIPFASstatRegRplSentNoResources OBJECT-TYPE
  SYNTAX        Counter32
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION
    "The number of session registration replies which were sent indicating no resources
    available for the associated Mobile IP foreign agent VPN service"
  ::= { starMIPFAStatEntry 78 }

  starMIPFASstatRegRplSentRevTunUnav OBJECT-TYPE
  SYNTAX        Counter32
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION
    "The number of session registration replies which were sent indicating no reverse
    tunnel available for the associated Mobile IP foreign agent VPN service"
  ::= { starMIPFAStatEntry 79 }

  starMIPFASstatRegRplSentRevTunMand OBJECT-TYPE
  SYNTAX        Counter32
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION
    "The number of session registration replies which were sent indicating reverse
    tunneling was mandatory for the associated Mobile IP foreign agent VPN service"
  ::= { starMIPFAStatEntry 80 }

  starMIPFASstatRegRplSentSendErrors OBJECT-TYPE
  SYNTAX        Counter32
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION
    "The number of session registration replies which were sent indicating there were
    errors in transmission for the associated Mobile IP foreign agent VPN service"
  ::= { starMIPFAStatEntry 81 }

END
starMIPFAStatRegDenPDSNBadReply OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to bad relply from HA
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 82 }

starMIPFAStatRegDenPDSNMissNAI OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to missing NAI
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 83 }

starMIPFAStatRegDenPDSNMissHomeAgent OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to missing home agent
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 84 }

starMIPFAStatRegDenPDSNMissHomeAddr OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to missing home address
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 85 }

starMIPFAStatRegDenPDSNUknChallenge OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to unknown challenge
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 86 }

starMIPFAStatRegDenPDSNMissChallenge OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to missing challenge
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 87 }

starMIPFAStatRegDenPDSNStaleChallenge OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied by PDSN due to stale challenge
 for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 88 }
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STARENT-MIB DEFINITIONS ::= BEGIN

starMIPFAStatRegDenPDSNMTooDistant OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations denied by PDSN due to MN too distant for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 89 }

starMIPFAStatRegDenPDSNSStyleUnavail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registration denied by PDSN due to style not available for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 90 }

starMIPFAStatRegDenPDSNHANetUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations denied by PDSN due to HA network unreachable for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 91 }

starMIPFAStatRegDenPDSNHAHostUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations denied by PDSN due to HA host unreachable for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 92 }

starMIPFAStatRegDenPDSNHAPortUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations denied by PDSN due to HA port unreachable for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 93 }

starMIPFAStatRegDenPDSNHAUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations denied by PDSN due to HA unreachable for misc reasons for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 94 }

starMIPFAStatRegDenPDSNIInvCOA OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of session registrations denied by PDSN due to invalid COA for the associated Mobile IP foreign agent VPN service"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starMIPFAStatEntry 95 }

starMIPFAStatRegReqSentInitTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of initial session registrations
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 96 }

starMIPFAStatRegReqSentInitResend OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of initial session registrations retried
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 97 }

starMIPFAStatRegReqSentRenewTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of renewal session registrations
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 98 }

starMIPFAStatRegReqSentRenewResend OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of renewal session registrations retried
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 99 }

starMIPFAStatRegReqSentDeregTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistrations
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 100 }

starMIPFAStatRegReqSentDeregResend OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistrations retried
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 101 }

starMIPFAStatRegRespSentMNTooDistant OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration reply that indicate MN too distant
for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 102 }

starMIPFAStatRegRplSentInvCOA OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The number of session registration reply that indicate invalid COA
    for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 103 }

starMIPFAStatRegRplSentHANetUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The number of session registration reply that indicate HA network unreachable
    for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 104 }

starMIPFAStatRegRplSentHAHostUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The number of session registration reply that indicate HA host unreachable
    for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 105 }

starMIPFAStatRegRplSentHAPortUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The number of session registration reply that indicate HA port unreachable
    for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 106 }

starMIPFAStatRegRplSentHAUnreach OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The number of session registration reply that indicate
    HA unreachable due to misc reasons
    for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 107 }

starMIPFAStatRegRplSentRegTimeout OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The number of session registration reply that indicate registration time out
    for the associated Mobile IP foreign agent VPN service"
 ::= { starMIPFAStatEntry 108 }

starMIPFAStatRegRplSentMissNAI OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration reply that indicate NAI missing for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 109 }

starMIPFAStatRegRplSentMissHomeAgent OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of session registration reply that indicate HA missing for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 110 }

starMIPFAStatRegRplSentMissHomeAddr OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of session registration reply that indicate home address missing for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 111 }

starMIPFAStatRegRplSentUnknChallenge OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of session registration reply that indicate unknown challenge for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 112 }

starMIPFAStatRegRplSentMissChallenge OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of session registration reply that indicate challenge missing for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 113 }

starMIPFAStatRegRplSentStaleChallenge OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of session registration reply that indicate stale challenge for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 114 }

starMIPFAStatRegRplSentBadReply OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The number of session registration reply that indicate bad reply for the associated Mobile IP foreign agent VPN service"
::= { starMIPFAStatEntry 115 }

-- RP Stats

starentRP OBJECT IDENTIFIER ::= { starentMIBObjects 24 }

starRPStatTable OBJECT-TYPE
STARENT—MIB DEFINITIONS ::= BEGIN

SYNTAX SEQUENCE OF StarRPStatEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing MIP FA Stats"
::= { starentRP 1 }

starRPStatEntry OBJECT-TYPE
SYNTAX StarRPStatEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific R-P VPN (context) service"
INDEX { IMPLIED starRPStatSvcID }
::= { starRPStatTable 1 }

StarRPStatEntry ::= SEQUENCE {
starRPStatVpnID             Gauge32,
starRPStatSvcID             StarShortID,
starRPStatVpnName           DisplayString,
starRPStatServName          DisplayString,
starRPRegRecvTotal          Counter32,
starRPRegAcceptTotal        Counter32,
starRPRegDeniedTotal        Counter32,
starRPRegDiscardTotal       Counter32,
starRPRegAcceptInitial      Counter32,
starRPRegAcceptIntraPDSN    Counter32,
starRPRegAcceptInterPDSN    Counter32,
starRPRegDeniedInitial      Counter32,
starRPRegAcceptRenew        Counter32,
starRPRegDeniedRenew        Counter32,
starRPRegAcceptDereg        Counter32,
starRPRegDeniedDereg        Counter32,
starRPRegSendError          Counter32,
starRPRegHashError          Counter32,
starRPRegDecodeError        Counter32,
starRPRegUnhandled          Counter32,
starRPRegAirlinkSeqError    Counter32,
starRPRegDenyUnspec         Counter32,
starRPRegDenyAdminProhib    Counter32,
starRPReqDenyNoResource     Counter32,
starRPRegDenyAuth           Counter32,
starRPRegDenyMismatchID     Counter32,
starRPRegDenyBadRequest     Counter32,
starRPRegDenyUnknownPDSN    Counter32,
starRPReqDenyRevTunUnav     Counter32,
starRPReqDenyRevTunReq      Counter32,
starRPReqDenyRecogVend      Counter32,
starRPRegUpdTotal           Counter32,
starRPRegUpdAccept          Counter32,
starRPRegUpdDenied          Counter32,
starRPRegUpdUnack           Counter32,
starRPRegUpdRetrans         Counter32,
starRPReqUpdReceived        Counter32,
starRPReqUpdDiscard         Counter32,
starRPRegUpdSendError       Counter32,
starRPReqUpdUplyrInit       Counter32,
starRPReqUpdOther           Counter32,
starRPReqUpdHandoff         Counter32,
starRPReqUpdDenyUnspec      Counter32,

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STARENT-MIB DEFINITIONS ::= BEGIN

starRPRegUpdDenyAdminProhib       Counter32,
starRPRegUpdDenyAuth              Counter32,
starRPRegUpdDenyMismatchID        Counter32,
starRPRegUpdDenyBadRequest        Counter32,
starRPSecViolations               Counter32,
starRPSecBadAuth                  Counter32,
starRPSecBadID                    Counter32,
starRPSecBadSpi                   Counter32,
starRPSecMissingMnHAAuth          Counter32,
starRPSecMissingRegUpdate         Counter32,
starRPRegRecvInitial              Counter32,
starRPRegAcceptActvStartIntraPDSN Counter32,
starRPRegAcceptActvStopIntraPDSN  Counter32,
starRPRegRecvRenew                Counter32,
starRPRegActvStartRenew           Counter32,
starRPRegActvStopRenew            Counter32,
starRPRegRecvDereg                Counter32,
starRPRegAcceptActvStopDereg      Counter32,
starRPDiscSessAbsent              Counter32,
starRPDiscNoMemory                Counter32,
starRPDiscMalformed               Counter32,
starRPDiscAuthFail                Counter32,
starRPDiscInternalBounce          Counter32,
starRPDiscInputQueueExceeded      Counter32,
starRPDiscMismatchedId            Counter32,
starRPDiscInvPacketLen            Counter32,
starRPDiscMisc                     Counter32,
starRP1xTxBytes                   Counter32,
starRP1xRxBytes                   Counter32,
starRP1xTxPackets                 Counter32,
starRP1xRxPackets                 Counter32,
starRPDoTxBytes                   Counter32,
starRPDoRxBytes                   Counter32,
starRPDoTxPackets                 Counter32,
starRPDoRxPackets                 Counter32

starRpStatVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The internal identification of the R-P VPN (context)"
::= { starRPStatEntry 1 }

starRpStatSvcID OBJECT-TYPE
SYNTAX StarShortID
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The service identification is made up from first 8 chars of context name
and first 8 chars of service name separated by [:]"
::= { starRPStatEntry 2 }

starRpStatVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The R-P VPN (context) name"
::= { starRPStatEntry 3 }

starRpStatServName OBJECT-TYPE
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

   SYNTAX     DisplayString
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The R-P service name"
   ::= { starRPStatEntry 4 }

starRPRegRecvTotal OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The total number of session registrations received for the associated R-P VPN service"
   ::= { starRPStatEntry 5 }

starRPRegAcceptTotal OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The total number of session registrations accepted for the associated R-P VPN service"
   ::= { starRPStatEntry 6 }

starRPRegDeniedTotal OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The total number of session registrations denied for the associated R-P VPN service"
   ::= { starRPStatEntry 7 }

starRPRegDiscardTotal OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The total number of session registrations discarded for the associated R-P VPN service"
   ::= { starRPStatEntry 8 }

starRPRegAcceptInitial OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The total number of initial session registrations accepted for the associated R-P VPN service"
   ::= { starRPStatEntry 9 }

starRPRegAcceptIntraPDSN OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     obsolete
   DESCRIPTION
      "The number of Intra-PDSN session registrations accepted for the associated R-P VPN service"
   ::= { starRPStatEntry 10 }

starRPRegAcceptInterPDSN OBJECT-TYPE
   SYNTAX     Counter32
   MAX-ACCESS read-only
   STATUS     current
   DESCRIPTION
      "The number of Inter-PDSN session registrations accepted for the associated R-P VPN service"
   ::= { starRPStatEntry 11 }

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STARENT-MIB DEFINITIONS ::= BEGIN

starRPRegDeniedInitial OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of initial session registrations denied for the associated R-P VPN service"
 ::= { starRPStatEntry 12 }

starRPRegAcceptRenew OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration renewals accepted for the associated R-P VPN service"
 ::= { starRPStatEntry 13 }

starRPRegDeniedRenew OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration renewals denied for the associated R-P VPN service"
 ::= { starRPStatEntry 14 }

starRPRegAcceptDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistrations accepted for the associated R-P VPN service"
 ::= { starRPStatEntry 15 }

starRPRegDeniedDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session deregistrations denied for the associated R-P VPN service"
 ::= { starRPStatEntry 16 }

starRPRegSendError OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations with errors in transmission for the associated R-P VPN service"
 ::= { starRPStatEntry 17 }

starRPRegHashError OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations with hash errors for the associated R-P VPN service"
 ::= { starRPStatEntry 18 }

starRPRegDecodeError OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of sessions registrations with decode errors for the associated R-P VPN service"
 ::= { starRPStatEntry 19 }

starRPRegUnhandled OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations unable to by proceeded for the associated R-P VPN service"
 ::= { starRPStatEntry 20 }

starRPRegAirlinkSeqError OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations with air link sequence errors for the associated R-P VPN service"
 ::= { starRPStatEntry 21 }

starRPRegDenyUnspec OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied for an unspecified reason for the associated R-P VPN service"
 ::= { starRPStatEntry 22 }

starRPRegDenyAdminProhib OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied due to administrator prohibition for the associated R-P VPN service"
 ::= { starRPStatEntry 23 }

starRPRegDenyNoResource OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied due to no resources available for the associated R-P VPN service"
 ::= { starRPStatEntry 24 }

starRPRegDenyAuth OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied due to authentication failure for the associated R-P VPN service"
 ::= { starRPStatEntry 25 }

starRPRegDenyMismatchID OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The number of session registrations denied due to an ID mismatch
STARENT-MIB DEFINITIONS ::= BEGIN

starRPRegDenyBadRequest OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied due to the request being invalid for the associated R-P VPN service"
 ::= { starRPStatEntry 26 }

starRPRegDenyUnknownPDSN OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied due to the packet data service not being recognized for the associated R-P VPN service"
 ::= { starRPStatEntry 27 }

starRPRegDenyRevTunUnav OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied due to no reverse tunnel being available for the associated R-P VPN service"
 ::= { starRPStatEntry 28 }

starRPRegDenyRevTunReq OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied due to reverse tunneling being mandatory for the associated R-P VPN service"
 ::= { starRPStatEntry 29 }

starRPRegDenyUnrecogVend OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registrations denied due to the vendor not being recognized for the associated R-P VPN service"
 ::= { starRPStatEntry 30 }

starRPRegUpdTotal OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total number of session registration updates for the associated R-P VPN service"
 ::= { starRPStatEntry 32 }

starRPRegUpdAccept OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of session registration updates which were accepted for the associated R-P VPN service"

END
::= { starRPStatEntry 33 }

counter32

starRPRegUpdDenied OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates which were denied for the associated R-P VPN service"
::= { starRPStatEntry 34 }

counter32

starRPRegUpdUnack OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates which were not acknowledged for the associated R-P VPN service"
::= { starRPStatEntry 35 }

counter32

starRPRegUpdTrans OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates sent for the associated R-P VPN service"
::= { starRPStatEntry 36 }

counter32

starRPRegUpdRetrans OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates resent for the associated R-P VPN service"
::= { starRPStatEntry 37 }

counter32

starRPRegUpdReceived OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates received for the associated R-P VPN service"
::= { starRPStatEntry 38 }

counter32

starRPRegUpdDiscard OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates discarded for the associated R-P VPN service"
::= { starRPStatEntry 39 }

counter32

starRPRegUpdSendError OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
"The number of session registration updates with errors in transmission for the associated R-P VPN service"
::= { starRPStatEntry 40 }

counter32

starRPRegUpdUplyrInit OBJECT-TYPE
SYNTAX    Counter32
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates with up-link reinitializations"
 ::= { starRPStatEntry 41 }

starRPRegUpdOther OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates with a reason of 'other'
for the associated R-P VPN service"
 ::= { starRPStatEntry 42 }

starRPRegUpdHandoff OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates due to a mobile hand-off
for the associated R-P VPN service"
 ::= { starRPStatEntry 43 }

starRPRegUpdDenyUnspec OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates denied for an unspecified
reason for the associated R-P VPN service"
 ::= { starRPStatEntry 44 }

starRPRegUpdDenyAdminProhib OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates denied due to administration
prohibition for the associated R-P VPN service"
 ::= { starRPStatEntry 45 }

starRPRegUpdDenyAuth OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates denied due to authentication
failure for the associated R-P VPN service"
 ::= { starRPStatEntry 46 }

starRPRegUpdDenyMismatchID OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of session registration updates denied due to an ID mismatch
for the associated R-P VPN service"
 ::= { starRPStatEntry 47 }

starRPRegUpdDenyBadRequest OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only

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STARENT-MIB DEFINITIONS ::= BEGIN

starRPRegRecvInitial OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session registration updates denied due to the request being invalid for the associated R-P VPN service"
::= { starRPStatEntry 48 }

starRPSecViolations OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session security violations for the associated R-P VPN service"
::= { starRPStatEntry 49 }

starRPSecBadAuth OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session security authentication violations for the associated R-P VPN service"
::= { starRPStatEntry 50 }

starRPSecBadID OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session security ID violations for the associated R-P VPN service"
::= { starRPStatEntry 51 }

starRPSecBadSpi OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session security SPI violations for the associated R-P VPN service"
::= { starRPStatEntry 52 }

starRPSecMissingMnHAAuth OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session security missing mobile number home agent authentication violation for the associated R-P VPN service"
::= { starRPStatEntry 53 }

starRPSecMissingRegUpdate OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of session missing registration update violations for the associated R-P VPN service"
::= { starRPStatEntry 54 }

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STARENT-MIB DEFINITIONS ::= BEGIN

"The total number of initial session registration
for the associated R-P VPN service"
::= { starRPStatEntry 55 }

starRPRegAcceptActvStartIntraPDSN OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of accepted registration request during
intraPDSN handoff which contains active start
for the associated R-P VPN service"
::= { starRPStatEntry 56 }

starRPRegAcceptActvStopIntraPDSN OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of accepted registration request during
intraPDSN handoff which contains active stop
for the associated R-P VPN service"
::= { starRPStatEntry 57 }

starRPRegRecvRenew OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of received renew registration request
for the associated R-P VPN service"
::= { starRPStatEntry 58 }

starRPRegActvStartRenew OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of received renew registration request that contains active start
for the associated R-P VPN service"
::= { starRPStatEntry 59 }

starRPRegActvStopRenew OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of received renew registration request that contains active stop
for the associated R-P VPN service"
::= { starRPStatEntry 60 }

starRPRegRecvDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of received deregistration request
for the associated R-P VPN service"
::= { starRPStatEntry 61 }

starRPRegAcceptActvStopDereg OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
"The number of accepted deregistration request that contains active stop
for the associated R-P VPN service"
::= { starRPStatEntry 62 }

starRPDiscSessAbsent OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded due to no session
for the associated R-P VPN service"
::= { starRPStatEntry 63 }

starRPDiscNoMemory OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded due to no memory
for the associated R-P VPN service"
::= { starRPStatEntry 64 }

starRPDiscMalformed OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because malformed
for the associated R-P VPN service"
::= { starRPStatEntry 65 }

starRPDiscAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because authentication failed
for the associated R-P VPN service"
::= { starRPStatEntry 66 }

starRPDiscInternalBounce OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because internal bounce
for the associated R-P VPN service"
::= { starRPStatEntry 67 }

starRPDiscInpuQueueExceeded OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because internal queue exceeded
for the associated R-P VPN service"
::= { starRPStatEntry 68 }

starRPDiscMismatchedId OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded due to mismatched id
for the associated R-P VPN service"
::= { starRPStatEntry 69 }

END
MAINT-DEFINITIONS ::= BEGIN

starRPStatEntry 69

starRPStatsEntry 70

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because mismatched ID
for the associated R-P VPN service"
 ::= { starRPStatsEntry 69 }

starRPStatsEntry 70

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because invalid packet length
for the associated R-P VPN service"
 ::= { starRPStatsEntry 70 }

starRPStatsEntry 71

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 71 }

starRPStatsEntry 72

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes transmitted, in megabytes"
 ::= { starRPStatsEntry 72 }

starRPStatsEntry 73

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes received, in megabytes"
 ::= { starRPStatsEntry 73 }

starRPStatsEntry 74

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets transmitted, in thousands"
 ::= { starRPStatsEntry 74 }

starRPStatsEntry 75

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets received, in thousands"
 ::= { starRPStatsEntry 75 }

starRPStatsEntry 76

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because invalid protocol
for the associated R-P VPN service"
 ::= { starRPStatsEntry 76 }

starRPStatsEntry 77

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because invalid protocol
for the associated R-P VPN service"
 ::= { starRPStatsEntry 77 }

starRPStatsEntry 78

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 78 }

starRPStatsEntry 79

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 79 }

starRPStatsEntry 80

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because invalid packet length
for the associated R-P VPN service"
 ::= { starRPStatsEntry 80 }

starRPStatsEntry 81

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because invalid packet length
for the associated R-P VPN service"
 ::= { starRPStatsEntry 81 }

starRPStatsEntry 82

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because mismatched ID
for the associated R-P VPN service"
 ::= { starRPStatsEntry 82 }

starRPStatsEntry 83

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because mismatched ID
for the associated R-P VPN service"
 ::= { starRPStatsEntry 83 }

starRPStatsEntry 84

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 84 }

starRPStatsEntry 85

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 85 }

starRPStatsEntry 86

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because invalid protocol
for the associated R-P VPN service"
 ::= { starRPStatsEntry 86 }

starRPStatsEntry 87

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because invalid protocol
for the associated R-P VPN service"
 ::= { starRPStatsEntry 87 }

starRPStatsEntry 88

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 88 }

starRPStatsEntry 89

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 89 }

starRPStatsEntry 90

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because invalid packet length
for the associated R-P VPN service"
 ::= { starRPStatsEntry 90 }

starRPStatsEntry 91

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because invalid packet length
for the associated R-P VPN service"
 ::= { starRPStatsEntry 91 }

starRPStatsEntry 92

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because mismatched ID
for the associated R-P VPN service"
 ::= { starRPStatsEntry 92 }

starRPStatsEntry 93

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because mismatched ID
for the associated R-P VPN service"
 ::= { starRPStatsEntry 93 }

starRPStatsEntry 94

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 94 }

starRPStatsEntry 95

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 95 }

starRPStatsEntry 96

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because invalid protocol
for the associated R-P VPN service"
 ::= { starRPStatsEntry 96 }

starRPStatsEntry 97

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded because invalid protocol
for the associated R-P VPN service"
 ::= { starRPStatsEntry 97 }

starRPStatsEntry 98

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 98 }

starRPStatsEntry 99

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x packets discarded due to misc reasons
for the associated R-P VPN service"
 ::= { starRPStatsEntry 99 }

starRPStatsEntry 100

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of 1x bytes discarded because invalid packet length
for the associated R-P VPN service"
 ::= { starRPStatsEntry 100 }

starRPStatsEntry 101

MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of registration request discarded because mismatched ID
for the associated R-P VPN service"
 ::= { starRPStatsEntry 101 }
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of Do bytes transmitted, in megabytes"
::= { starRPStatEntry 76 }

starRPDoRxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of Do bytes received, in megabytes"
::= { starRPStatEntry 77 }

starRPDoTxPackets OBJECT-TYPE
SYNTAX Counter32
UNITS "Thousands"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of Do packets transmitted, in thousands"
::= { starRPStatEntry 78 }

starRPDoRxPackets OBJECT-TYPE
SYNTAX Counter32
UNITS "Thousands"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of Do packets received, in thousands"
::= { starRPStatEntry 79 }

--Subscriber; these objects are provided for use in SNMP Traps only

starentSubscriber OBJECT IDENTIFIER ::= { starentMIBObjects 26 }

starSubTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarSubEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"A table containing subscriber information"
::= { starentSubscriber 1 }

starSubEntry OBJECT-TYPE
SYNTAX StarSubEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"Information for a specific Subscriber"
INDEX { starSubMSID, starSubName }
::= { starSubTable 1 }

StarSubEntry ::= SEQUENCE {
starSubContext DisplayString,
starSubMSID OCTET STRING,
starSubName OCTET STRING,
starSubTimerDuration Unsigned32,
STARENT-MIB DEFINITIONS ::= BEGIN

starSubLongDurTimeoutAction INTEGER,
starSubSetupTime            DateAndTime,
starSubHomeAddr             IpAddress,
starSubHomeAddrv6     Ipv6Address
}

starSubContext OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The context the subscriber is in"
::= { starSubEntry 1 }

starSubMSID OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..16))
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The MSID of the subscriber"
::= { starSubEntry 2 }

starSubName OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..128))
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The name of the subscriber"
::= { starSubEntry 3 }

starSubTimerDuration OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The length of the long-duration timer in seconds"
::= { starSubEntry 4 }

starSubLongDurTimeoutAction OBJECT-TYPE
SYNTAX     StarLongDurTimeoutAction
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The action taken by the system upon detection of a long-duration session"
::= { starSubEntry 5 }

starSubSetupTime OBJECT-TYPE
SYNTAX     DateAndTime
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The time when the call was setup"
::= { starSubEntry 6 }

starSubHomeAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The ipv4 home address."
::= { starSubEntry 7 }

starSubHomeAddrv6 OBJECT-TYPE
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX     Ipv6Address
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The ipv6 home address."
 ::= { starSubEntry 8 }

-- EIS; these objects are provided for use in SNMP Traps only

starentEISServer OBJECT IDENTIFIER ::= { starentMIBObjects 27 }

starEISServerTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarEISServerEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "A table containing EIS Server information"
 ::= { starentEISServer 1 }

starEISServerEntry OBJECT-TYPE
SYNTAX StarEISServerEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "Information for a specific EIS Server"
INDEX { starEISServerVPNID, starEISServerAddr }
 ::= { starentEISServerTable 1 }

StarEISServerEntry ::=-
   SEQUENCE {
      starEISServerVPNID Gauge32,
      starEISServerAddr IpAddress,
      starEISServerVPNName DisplayString
   }

starEISServerVPNID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS      current
DESCRIPTION
   "The VPN ID for the EIS Server"
 ::= { starEISServerEntry 1 }

starEISServerAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The IP Address for the EIS Server"
 ::= { starEISServerEntry 2 }

starEISServerVPNName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The VPN Name for this EIS Server"
 ::= { starEISServerEntry 3 }

-- Threshold; these objects are provided for use in SNMP Traps only

starentThresholds OBJECT IDENTIFIER ::= { starentMIBObjects 28 }

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starThreshMeasuredPct OBJECT-TYPE
SYNTAX     Gauge32(0..100)
UNITS      "Percent"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The measured value of a thresholded parameter"
 ::= { starentThresholds 1 }

starThreshPct OBJECT-TYPE
SYNTAX     Integer32(0..100)
UNITS      "Percent"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The configured value of a thresholded parameter"
 ::= { starentThresholds 2 }

starThreshMeasuredInt OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The measured value of a thresholded parameter"
 ::= { starentThresholds 3 }

starThreshInt OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The configured value of a thresholded parameter"
 ::= { starentThresholds 4 }

starThreshMeasuredMB OBJECT-TYPE
SYNTAX     Gauge32
UNITS      "Megabytes"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The measured value of a thresholded parameter"
 ::= { starentThresholds 5 }

starThreshMB OBJECT-TYPE
SYNTAX     Unsigned32
UNITS      "Megabytes"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The configured value of a thresholded parameter"
 ::= { starentThresholds 6 }

starThreshMeasuredGB OBJECT-TYPE
SYNTAX     Gauge32
UNITS      "Gigabytes"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
    "The measured value of a thresholded parameter"
 ::= { starentThresholds 7 }

starThreshGB OBJECT-TYPE
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX     Unsigned32
UNITS      "Gigabytes"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The configured value of a thresholded parameter"
 ::= { starentThresholds 8 }

starThreshPeriodInt OBJECT-TYPE
SYNTAX     Integer32(30..600)
UNITS      "Seconds"
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The configured value of a thresholded parameter"
 ::= { starentThresholds 9 }

starThreshDeviceNum OBJECT-TYPE
SYNTAX     Integer32(1..4)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The configured value of a thresholded parameter"
 ::= { starentThresholds 10 }

starentPort OBJECT IDENTIFIER ::= { starentMIBObjects 29 }

starPortTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarPortEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "A table containing Port information"
 ::= { starentPort 1 }

starPortEntry OBJECT-TYPE
SYNTAX     StarPortEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "Information for a specific Port"
INDEX { starPortSlot, starPortNum }
 ::= { starPortTable 1 }

StarPortEntry ::= SEQUENCE {
   starPortSlot            Integer32,
   starPortNum             Integer32,
   starPortType            INTEGER,
   starPortTypeDescr       DisplayString,
   starPortAdminState      INTEGER,
   starPortOperState       INTEGER,
   starPortOperMode        INTEGER,
   starPortLinkState       INTEGER,
   starRedundantPortSlot   Integer32,
   starRedundantPortNum    Integer32,
   starPortRxBytes         Counter32,
   starPortTxBytes         Counter32,
   starPortRxFrames        Counter32,
   starPortTxFrames        Counter32,
   starPortRxDiscards      Counter32,
   starPortTxDiscards      Counter32,
starPortRxErrors Counter32,
starPortTxErrors Counter32

starPortSlot OBJECT-TYPE
SYNTAX Integer32(1..48)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The Slot number for this port"
::= { starPortEntry 1 }

starPortNum OBJECT-TYPE
SYNTAX Integer32(1..29)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The Port number within this slot"
::= { starPortEntry 2 }

starPortType OBJECT-TYPE
SYNTAX INTEGER {
  none(0),
  ethernet10100(1),
  ethernet1000dualmedia(2),
  ethernet1000(3),
  ds3(4),
  oc3atm(5),
  oc12atm(6),
  ds3e(7),
  rs232(8),
  bitstle1(9),
  virtualethernet(10),
  ether10g(11),
  ether100g(12)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starPortEntry 3 }

starPortTypeDescr OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "A textual representing of the starPortType attribute"
::= { starPortEntry 4 }

starPortAdminState OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  enabled(1),
  disabled(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The administrative start of the port"
::= { starPortEntry 5 }

starPortOperState OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX INTEGER {
    unknown(0),
    up(1),
    down(2),
    notapplicable(3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
 ::= { starPortEntry 6 }

starPortOperMode OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    active(1),
    standby(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
 ::= { starPortEntry 7 }

starPortLinkState OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    up(1),
    down(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
 ::= { starPortEntry 8 }

starRedundantPortSlot OBJECT-TYPE
SYNTAX Integer32(0..48)
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The Slot number for the port the current port is redundant with, or 0 if unknown"
 ::= { starPortEntry 9 }

starRedundantPortNum OBJECT-TYPE
SYNTAX Integer32(0..29)
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The Port number for the port the current port is redundant with, or 0 if unknown"
 ::= { starPortEntry 10 }

starPortRxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of bytes successfully received, in megabytes.
For ports of type rs232(8) or bitstle1(9) this value will always be zero."
 ::= { starPortEntry 11 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starPortTxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of bytes successfully transmitted, in megabytes.
For ports of type rs232(8) or bitst1e1(9) this value will always be zero."
 ::= { starPortEntry 12 }

starPortRxFrames OBJECT-TYPE
SYNTAX Counter32
UNITS "Thousands"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of frames successfully received, in thousands.
For ports of type rs232(8) or bitst1e1(9) this value will always be zero.
For ports of type oc3atm(5) and oc12atm(6) this is the count of cells received"
 ::= { starPortEntry 13 }

starPortTxFrames OBJECT-TYPE
SYNTAX Counter32
UNITS "Thousands"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of frames successfully transmitted, in thousands.
For ports of type rs232(8) or bitst1e1(9) this value will always be zero.
For ports of type oc3atm(5) and oc12atm(6) this is the count of cells received"
 ::= { starPortEntry 14 }

starPortRxDiscards OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of inbound packets which were chosen to be discarded even though no
errors had been detected to prevent their being deliverable to a higher-layer
protocol. One possible reason for discarding such a packet could be to free up
buffer space."
 ::= { starPortEntry 15 }

starPortTxDiscards OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of outbound packets which were chosen to be discarded even though no
errors had been detected to prevent their being transmitted. One possible reason
for discarding such a packet could be to free up buffer space."
 ::= { starPortEntry 16 }

starPortRxErrors OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol."
 ::= { starPortEntry 17 }

starPortTxErrors OBJECT-TYPE
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

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SYNTAX Counter32
UNITS "Thousands"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of outbound packets that could not be transmitted because of errors."
::= { starPortEntry 18 }

starentIPPool OBJECT IDENTIFIER ::= { starentMIBObjects 30 }

starIPPoolTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarIPPoolEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing IP Pool information"
::= { starentIPPool 1 }

starIPPoolEntry OBJECT-TYPE
SYNTAX StarIPPoolEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information for a specific IP Pool"
INDEX { IMPLIED starIPPoolID }
::= { starIPPoolTable 1 }

StarIPPoolEntry ::= SEQUENCE {
  starIPPoolVpnID         Gauge32,
  starIPPoolID            StarMediumID,
  starIPPoolContext DisplayString,
  starIPPoolGroup DisplayString,
  starIPPoolName          OCTET STRING,
  starIPPoolType          INTEGER,
  starIPPoolState         INTEGER,
  starIPPoolStartAddr     IpAddress,
  starIPPoolMaskorEndAddr IpAddress,
  starIPPoolPriority      Integer32,
  starIPPoolUsed          Gauge32,
  starIPPoolHold          Gauge32,
  starIPPoolRelease       Gauge32,
  starIPPoolFree          Gauge32
}

starIPPoolVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The context ID for this pool"
::= { starIPPoolEntry 1 }

starIPPoolID OBJECT-TYPE
SYNTAX StarMediumID
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The service identification is made up from first 8 chars of context name
and the pool name (max 32 chars ) separated by (:)"
::= { starIPPoolEntry 2 }

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starIPPoolContext OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The context name string for this pool"
 ::= { starIPPoolEntry 3 }

starIPPoolGroup OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The name of the group to which the IP pool belongs"
 ::= { starIPPoolEntry 4 }

starIPPoolName OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..32))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The name of the IP pool"
 ::= { starIPPoolEntry 5 }

starIPPoolType OBJECT-TYPE
SYNTAX     INTEGER {
            unknown(0),
            private(1),
            public(2),
            static(3),
            resource(4),
            nat(5)
          }
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The type of the pool"
 ::= { starIPPoolEntry 6 }

starIPPoolState OBJECT-TYPE
SYNTAX     INTEGER {
            unknown(0),
            good(1),
            pendingdelete(2),
            alarm(3),
            resize(4),
            inactive(5)
          }
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The state of the pool"
 ::= { starIPPoolEntry 7 }

starIPPoolStartAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The start IP address of the pool"
 ::= { starIPPoolEntry 8 }

starIPPoolMaskorEndAddr OBJECT-TYPE
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The mask or end IP address of the pool"
 ::= { starIPPoolEntry 9 }

starIPPoolPriority OBJECT-TYPE
SYNTAX     Integer32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The priority of the pool"
 ::= { starIPPoolEntry 10 }

starIPPoolUsed OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of IP addresses in USED state in the pool"
 ::= { starIPPoolEntry 11 }

starIPPoolHold OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of IP addresses in HOLD state in the pool"
 ::= { starIPPoolEntry 12 }

starIPPoolRelease OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of IP addresses in RELEASE state in the pool"
 ::= { starIPPoolEntry 13 }

starIPPoolFree OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of IP addresses in FREE state in the pool"
 ::= { starIPPoolEntry 14 }

starentIPPoolGroup OBJECT IDENTIFIER ::= { starentMIBObjects 64 }

starIPPoolGroupTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarIPPoolGroupEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "A table containing IP Pool Group information"
 ::= { starentIPPoolGroup 1 }

starIPPoolGroupEntry OBJECT-TYPE
SYNTAX StarIPPoolGroupEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information for a specific IP Pool Group"
INDEX { IMPLIED starIPPoolGroupID}
 ::= { starIPPoolGroupTable 1 }

starIPPoolGroupEntry ::= 
 SEQUENCE {
   starIPPoolGroupVpnID    Gauge32,
   starIPPoolGroupID       StarMediumID,
   starIPPoolGroupName     DisplayString,
   starIPPoolGroupVpnName  DisplayString,
   starIPPoolGroupUsed     Gauge32,
   starIPPoolGroupHold     Gauge32,
   starIPPoolGroupRelease  Gauge32,
   starIPPoolGroupFree     Gauge32,
   starIPPoolGroupPctUsed  Integer32,
   starIPPoolGroupAvail    Gauge32
}

starIPPoolGroupVpnID OBJECT-TYPE
 SYNTAX      Gauge32
 MAX-ACCESS  not-accessible
 STATUS      current
 DESCRIPTION
 "The context ID for this pool group"
 ::= { starIPPoolGroupEntry 1 }

starIPPoolGroupID OBJECT-TYPE
 SYNTAX StarMediumID
 MAX-ACCESS  not-accessible
 STATUS      current
 DESCRIPTION
 "The service identification is made up from first 8 chars of context name
 and first 16 chars of pool group name separated by (:)"
 ::= { starIPPoolGroupEntry 2 }

starIPPoolGroupName OBJECT-TYPE
 SYNTAX      DisplayString
 MAX-ACCESS  read-only
 STATUS      current
 DESCRIPTION
 "The name of the IP pool group"
 ::= { starIPPoolGroupEntry 3 }

starIPPoolGroupVpnName OBJECT-TYPE
 SYNTAX      DisplayString
 MAX-ACCESS  read-only
 STATUS      current
 DESCRIPTION
 "The context name string for this pool group"
 ::= { starIPPoolGroupEntry 4 }

starIPPoolGroupUsed OBJECT-TYPE
 SYNTAX      Gauge32
 MAX-ACCESS  read-only
 STATUS      current
 DESCRIPTION
 "The number of IP addresses in USED state in the pool group"
 ::= { starIPPoolGroupEntry 5 }

starIPPoolGroupHold OBJECT-TYPE
 SYNTAX      Gauge32
 MAX-ACCESS  read-only
 STATUS      current

STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"The number of IP addresses in HOLD state in the pool group"
::= { starIPPoolGroupEntry 6 }

starIPPoolGroupRelease OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of IP addresses in RELEASE state in the pool group"
::= { starIPPoolGroupEntry 7 }

starIPPoolGroupFree OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of IP addresses in FREE state in the pool group"
::= { starIPPoolGroupEntry 8 }

starIPPoolGroupPctUsed OBJECT-TYPE
SYNTAX Integer32(0..10000)
UNITS "percentage times 100"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The percentage of IP addresses in USED state in the pool group is the percentage value times 100; for example, 2.3% would be represented as 230"
::= { starIPPoolGroupEntry 9 }

starIPPoolGroupAvail OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of IP addresses in AVAILABLE state in the pool group"
::= { starIPPoolGroupEntry 10 }

-- Objects used only in traps

starentTrapData OBJECT IDENTIFIER ::= { starentMIBObjects 31 }

starCongestionPolicy OBJECT-TYPE
SYNTAX INTEGER {
    reject(1),
    redirect(2),
    drop(3)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"The policy invoked for congestion events"
::= { starentTrapData 1 }

starCongestionResourceType OBJECT-TYPE
SYNTAX INTEGER {
    systemcpu(1),
    servicecpu(2),
    averagememory(3),
    queue-size(4),
    queuedelay(5),
    license(6),
    }
STARENT-MIB DEFINITIONS ::= BEGIN

  portutil(7),
  rxportutil(8),
  txportutil(9),
  rxperportutil(10),
  txperportutil(11),
  servicecapacity(12)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The resource type for a congestion event"
 ::= { starentTrapData 2 }

starPTACConfig OBJECT-TYPE
SYNTAX Integer32(0..14)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of PACs/PSCs/TACs configured in the system"
 ::= { starentTrapData 3 }

starPTACActive OBJECT-TYPE
SYNTAX Integer32(0..14)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of PACs/PSCs/TACs active in the system"
 ::= { starentTrapData 4 }

starContextName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of a context configured on the IMG"
 ::= { starentTrapData 5 }

starInterfaceName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of an interface"
 ::= { starentTrapData 6 }

starPCFAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The IP address of a PCF"
 ::= { starentTrapData 7 }

starPeerAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Peer Address"
 ::= { starentTrapData 8 }

-- License traps
STARENT-MIB DEFINITIONS ::= BEGIN

starLicensedSessions OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of sessions enabled by the software license"
 ::= { starentTrapData 9 }

starCurrentSessions OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of current sessions in use against a software license"
 ::= { starentTrapData 10 }

starL3Address OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "L3 Address"
 ::= { starentTrapData 11 }

starUDPPortNum OBJECT-TYPE
SYNTAX Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "UDP Port Number"
 ::= { starentTrapData 12 }

starSRPIpAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "SRP IP Address"
 ::= { starentTrapData 13 }

starBGPPeerIpAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "BGP Peer IP Address"
 ::= { starentTrapData 14 }

starContFiltCFFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "File name for the OPTCMDB"
 ::= { starentTrapData 15 }

starContFiltCFErrorCode OBJECT-TYPE
SYNTAX INTEGER {
  unknownerror(1),
  notavailable(2),
  loadfailure(3)
}
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Error code"
::= { starentTrapData 16 }

starFetchedFromAAAMgr OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number calls fetched from aaa mgr"
::= { starentTrapData 17 }

starPriorToAudit OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number calls prior to audit"
::= { starentTrapData 18 }

starPassedAudits OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of calls passed audit"
::= { starentTrapData 19 }

starCallsRecovered OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of calls recovered"
::= { starentTrapData 20 }

starAllCallLines OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of all call lines"
::= { starentTrapData 21 }

starElapsedMs OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The audit time elapsed in ms"
::= { starentTrapData 22 }

starCDRFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of a CDR (EDR/UDR) file"
::= { starentTrapData 23 }

-- Diameter
STARENT-MIB DEFINITIONS ::= BEGIN

starDiameterVpnName OBJECT-TYPE
SYNTAX        DisplayString
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "Diameter VPN (Context) Name"
 ::= { starentTrapData 24 }

starDiameterPeerAddr OBJECT-TYPE
SYNTAX        IpAddress
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "Diameter Peer Address"
 ::= { starentTrapData 25 }

starDiameterEndpointName OBJECT-TYPE
SYNTAX        DisplayString
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "Diameter Endpoint Name"
 ::= { starentTrapData 26 }

starDiameterPeerAddrIpv6 OBJECT-TYPE
SYNTAX        Ipv6Address
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "Diameter Peer Address"
 ::= { starentTrapData 34 }

starInterfaceIPAddress OBJECT-TYPE
SYNTAX        IpAddress
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "Interface IP Address"
 ::= { starentTrapData 27 }

starOSPFNeighborRouterID OBJECT-TYPE
SYNTAX        IpAddress
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "Interface IP Address"
 ::= { starentTrapData 28 }

starOSPFFromState OBJECT-TYPE
SYNTAX        StarOSPFNeighborState
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION   "FROM state for OSPF Neighbor"
 ::= { starentTrapData 29 }

starOSPFToState OBJECT-TYPE
SYNTAX        StarOSPFNeighborState
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION

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"TO state for OSPF Neighbor"
 ::= { starentTrapData 30 }

starBLFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "File name for the OPTBLDB"
 ::= { starentTrapData 31 }

starBLErrorCode OBJECT-TYPE
SYNTAX INTEGER {
  unknownerror(1),
  notavailable(2),
  loadfailure(3)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Error code"
 ::= { starentTrapData 32 }

starDiameterECode OBJECT-TYPE
SYNTAX INTEGER {
  notcomplete(1),
  hostnamemismatch(2),
  hostrealmmismatch(3),
  securitymismatch(4),
  tlssertificateerror(5),
  tlshandshakeerror(6),
  authappidmismatch(7)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Diameter Cause Code"
 ::= { starentTrapData 33 }

starContFiltCFUpgradeFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "File name for the Full or Incremental OPCMDB"
 ::= { starentTrapData 35 }

starContFiltCFUpgradeErrorCode OBJECT-TYPE
SYNTAX INTEGER {
  unknownerror(1),
  upgradefullfailure(2),
  upgradeincrfailure(3)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Error code"
 ::= { starentTrapData 36 }

starBLUpgradeFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION "File name for the Full OPTBLDB"
 ::= { starentTrapData 37 }

starBLUpgradeErrorCode OBJECT-TYPE
SYNTAX INTEGER {
   unknownerror(1),
   upgradefullfailure(2)
 }
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Error code"
 ::= { starentTrapData 38 }

starDynPkgFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "File name for the DynPkg"
 ::= { starentTrapData 39 }

starDynCFErrorCode OBJECT-TYPE
SYNTAX INTEGER {
   unknownerror(1),
   notavailable(2),
   loadfailure(3)
 }
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Error code"
 ::= { starentTrapData 40 }

starDynPkgUpgradeFilename OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "File name for the Full DynPkg"
 ::= { starentTrapData 41 }

starDynCFUpgradeErrorCode OBJECT-TYPE
SYNTAX INTEGER {
   unknownerror(1),
   upgradefullfailure(2)
 }
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Error code"
 ::= { starentTrapData 42 }

starCscfSessCongestionResourceType OBJECT-TYPE
SYNTAX INTEGER {
   cpu(1),
   memory(2)
 }

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STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS   accessible-for-notify
STATUS       current
DESCRIPTION  "Cscf Session resource type for a congestion event"
 ::= { starentTrapData 43 }

starSmgrId OBJECT-TYPE
SYNTAX      Integer32(1..255)
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "Session Manager Instance ID"
 ::= { starentTrapData 44 }

-- EGTP traps

starEGTPVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION  "The name of this VPN (context)"
 ::= { starentTrapData 45 }

starEGTPServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION  "The name of this service"
 ::= { starentTrapData 46 }

starEGTPInterfaceType OBJECT-TYPE
SYNTAX     INTEGER {
           invalid(0),
           sgwingress(1),
           sgwegress(2),
           pgwingress(3),
           sgn(4)
        }
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "Egtp interface type"
 ::= { starentTrapData 47 }

starEGTPSelfPort OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION  "The Port number of the EGTP"
 ::= { starentTrapData 48 }

starEGTPSelfAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION  "The IP Address of the EGTP"
 ::= { starentTrapData 49 }

starEGTPPeerPort OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

starEGTPPeerAddr OBJECT-TYPE
  SYNTAX     IpAddress
  MAX-ACCESS accessible-for-notify
  STATUS     current
  DESCRIPTION
    "The IP Address of the PeerNode"
 ::= { starentTrapData 51 }

starEGTPPeerOldRstCnt OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS accessible-for-notify
  STATUS     current
  DESCRIPTION
    "EGTP peer old restart counter"
 ::= { starentTrapData 52 }

starEGTPPeerNewRstCnt OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS accessible-for-notify
  STATUS     current
  DESCRIPTION
    "EGTP peer new restart counter"
 ::= { starentTrapData 53 }

starEGTPPeerSessCnt OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS accessible-for-notify
  STATUS     current
  DESCRIPTION
    "EGTP peer session count"
 ::= { starentTrapData 54 }

starEGTPFailureReason OBJECT-TYPE
  SYNTAX      INTEGER {
    unknown(0),
    restartcounterchange(1),
    noresponsefrompeer(2)
  }
  MAX-ACCESS  accessible-for-notify
  STATUS      current
  DESCRIPTION
    "Egtp path failure reason"
 ::= { starentTrapData 55 }

starGSSCDRLossConfigured OBJECT-TYPE
  SYNTAX     Unsigned32
  MAX-ACCESS accessible-for-notify
  STATUS     current
  DESCRIPTION
    "The configured value of threshold CDR Loss at GSS"
 ::= { starentTrapData 56 }

starGSSCDRLossMeasured OBJECT-TYPE
  SYNTAX     Unsigned32
  MAX-ACCESS accessible-for-notify
STARENT-MIB DEFINITIONS ::= BEGIN

starLicenseKey OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The license key"
::= { starentTrapData 58 }

starLicenseExpiryDate OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The license expiration date/time"
::= { starentTrapData 59 }

starLicenseDaysRemaining OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of days remaining before the license expires"
::= { starentTrapData 60 }

starLicenseDaysAfterExpiry OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The number of days after the license has expired"
::= { starentTrapData 61 }

starNPUSlot OBJECT-TYPE
SYNTAX Integer32(1..48)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The NPU slot number"
::= { starentTrapData 62 }

starSPRServerIpAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The IP Address of the SSC Server"
::= { starentTrapData 63 }

-- MVG objects, used for traps only

starMVGEndpointName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "MVG Endpoint Name"
::= { starentTrapData 66 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starMVGCauseCode OBJECT-TYPE
SYNTAX        INTEGER {
    servernotreachable(1),
    servicereachable(2)
}  MAX-ACCESS accessible-for-notify
STATUS        current
DESCRIPTION  "MVG Cause Code"
 ::= { starentTrapData 69 }

starMVGProtocolType OBJECT-TYPE
SYNTAX INTEGER {
    protocolhttp(1),
    protocoltcp(2),
    protocolicmp(3)
}  MAX-ACCESS accessible-for-notify
STATUS        current
DESCRIPTION  "MVG Protocol Types"
 ::= { starentTrapData 68 }

starPCCNtfyIntfPeerName OBJECT-TYPE
SYNTAX        DisplayString
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION  " IPCF Event Notification Interface Peer Name "
 ::= { starentTrapData 73 }

starECSTotalDNSLearntIPThresholdInstance OBJECT-TYPE
SYNTAX        Integer32 (1..65535)
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION  " ACSMgr Instance Id"
 ::= { starentTrapData 74 }

starECSTotalDNSLearntIPThresholdconfigured OBJECT-TYPE
SYNTAX        Integer32 (1..100)
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION  " Configured Threshold value in Percentage"
 ::= { starentTrapData 75 }

starECSTotalDNSLearntIPThresholdmeasured OBJECT-TYPE
SYNTAX        Integer32 (1..100)
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION  " Measured value in Percentage"
 ::= { starentTrapData 76 }

starPeerAddressIpv6 OBJECT-TYPE
SYNTAX        Ipv6Address
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION  "Peer Ipv6 Address"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTrapData 77 }

starLAGPartner OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The name of this service"
 ::= { starentTrapData 78 }

starSGSServiceVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "SGS service context name"
 ::= { starentTrapData 79 }

starSGSServiceServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "SGS service name"
 ::= { starentTrapData 80 }

starVLRName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "VLR name"
 ::= { starentTrapData 81 }

starVLRIpAddr1 OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "VLR IP Address1"
 ::= { starentTrapData 82 }

starVLRIpAddr2 OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "VLR IP Address2"
 ::= { starentTrapData 83 }

starVLRPortNum OBJECT-TYPE
SYNTAX     Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "VLR Port Number"
 ::= { starentTrapData 84 }

starCongestionType OBJECT-TYPE
SYNTAX     INTEGER {
   critical(1),
   major(2),
   minor(3)
}
STARENT-MIB DEFINITIONS ::= BEGIN

starCongestionActionProfileName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"The name of a action profile associated with the threshold type"
 ::= { starentTrapData 86 }

starSessMgrFlowInstId OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"Session Manager instance ID"
 ::= { starentTrapData 87 }

starSessMgrFlowPDNNo OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"Total PDNs Available"
 ::= { starentTrapData 88 }

starSessMgrFlowMemUsage OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"Total Memory Usage of this instance"
 ::= { starentTrapData 89 }

starSessMgrFlowCounter OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"Session Manager Active Flows"
 ::= { starentTrapData 90 }

starSessMgrTotalFlowCount OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"Session Manager Active Flows"
 ::= { starentTrapData 91 }

starHENBGWServiceVpnName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
"HENBGW Service VPN Name"
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STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTrapData 92 }

starHENBGWServiceServName OBJECT-TYPE
SYNTAX        DisplayString
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION
   "HENBGW Service Name"
 ::= { starentTrapData 93 }

starHENBGWServiceLogicalEnDbId OBJECT-TYPE
SYNTAX        DisplayString
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION
   "HENBGW Service Logical Enodb ID"
 ::= { starentTrapData 94 }

starHENBGWServiceMMEServName OBJECT-TYPE
SYNTAX        DisplayString
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION
   "HENBGW Service MME Name"
 ::= { starentTrapData 95 }

starHENBGWServiceSelfAddr OBJECT-TYPE
SYNTAX        IpAddress
MAX-ACCESS    not-accessible
STATUS        current
DESCRIPTION
   "HENBGW Service Self IP Address"
 ::= { starentTrapData 96 }

starHENBGWServicePeerAddr OBJECT-TYPE
SYNTAX        IpAddress
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION
   "HENBGW Service Peer IP Address"
 ::= { starentTrapData 97 }

starHENBGWServiceSelfPort  OBJECT-TYPE
SYNTAX        Integer32(1..65535)
MAX-ACCESS    not-accessible
STATUS        current
DESCRIPTION
   "HENBGW Service Self Port Number"
 ::= { starentTrapData 98 }

starHENBGWServicePeerPort  OBJECT-TYPE
SYNTAX        Integer32(1..65535)
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION
   "HENBGW Service Peer Port Number"
 ::= { starentTrapData 99 }

starNPUSlotNumber OBJECT-TYPE
SYNTAX        Integer32(1..65535)
MAX-ACCESS    accessible-for-notify
STATUS        current
DESCRIPTION
MIB DEFINITIONS ::= BEGIN

"NPU Slot Number"
::= { starentTrapData 100 }

starNPUCPUNumber OBJECT-TYPE
SYNTAX     Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "NPU CPU Number"
::= { starentTrapData 101 }

starNPUNPUNumber OBJECT-TYPE
SYNTAX     Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "NPU's NPU Number"
::= { starentTrapData 102 }

starChassisCrashList OBJECT-TYPE
SYNTAX     TruthValue
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "Chassis Crash List Full"
::= { starentTrapData 103 }

starLIRcvryErrType OBJECT-TYPE
SYNTAX     INTEGER {
    syncerror(0),
    readerror(1),
    writeerror(2),
    integrityerror(3)
}
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "LI Recovery Error Types"
::= { starentTrapData 104 }

starLIRcvryErrString OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "LI Recovery Error String"
::= { starentTrapData 105 }

-- PMIP

starPMIPvPnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "The name of this VPN {context}"
::= { starentTrapData 106 }

starPMIPvServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
   "The name of this service"
   ::= { starentTrapData 107 }

starPMIPSelfAddrType OBJECT-TYPE
SYNTAX     InetAddressType
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The IP Address of the PMIP"
   ::= { starentTrapData 108 }

starPMIPSelfAddr OBJECT-TYPE
SYNTAX     InetAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The IP Address of the PMIP"
   ::= { starentTrapData 109 }

starPMIPPeerAddrType OBJECT-TYPE
SYNTAX     InetAddressType
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The IP Address of the PMIP"
   ::= { starentTrapData 110 }

starPMIPPeerAddr OBJECT-TYPE
SYNTAX     InetAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "The IP Address of the PMIP"
   ::= { starentTrapData 111 }

starPMIPPeerOldRstCnt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "PMIP peer old restart counter"
   ::= { starentTrapData 112 }

starPMIPPeerNewRstCnt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "PMIP peer new restart counter"
   ::= { starentTrapData 113 }

starPMIPPeerSessCnt OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "PMIP peer session count"
   ::= { starentTrapData 114 }

starPMIPFailureReason OBJECT-TYPE
SYNTAX     INTEGER {
unknown(0),
  heartbeatprestartchange(1),
noreponsefrompeer(2)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"PMIP path failure reason"
 ::= { starentTrapData 115 }

starMMEInitialDisallowReason OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"MME initial connection disallow reason."
 ::= { starentTrapData 116 }

starSLSServiceVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"SLS service context name"
 ::= { starentTrapData 117 }

starSLSServiceServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"SLS service name"
 ::= { starentTrapData 118 }

starESMLCId OBJECT-TYPE
SYNTAX Integer32(0..255)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"ESMLC Id"
 ::= { starentTrapData 119 }

starESMLCIpAddr1 OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"ESMLC IP Address1"
 ::= { starentTrapData 120 }

starESMLCIpAddr2 OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"ESMLC IP Address2"
 ::= { starentTrapData 121 }

starESMLCPortNum OBJECT-TYPE
SYNTAX Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
   "ESMLC Port Number"
 ::= { starentTrapData 122 }

starSBCServiceVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "Sbc service context name"
 ::= { starentTrapData 123 }

starSBCServiceServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "Sbc service name"
 ::= { starentTrapData 124 }

starPeerId OBJECT-TYPE
SYNTAX     Integer32(0..255)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "Peer Id"
 ::= { starentTrapData 125 }

starPeerIpAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "Peer IP Address"
 ::= { starentTrapData 126 }

starPeerPortNum OBJECT-TYPE
SYNTAX     Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "Peer Port Number"
 ::= { starentTrapData 127 }

starBfdSrcAddressType OBJECT-TYPE
SYNTAX     InetAddressType
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
   "This object specifies IP address type of the source IP
   address of this BFD session. Only values unknown(0),
   ipv4(1), ipv6(2), or ipv6z(4) have to be supported.
   The value of unknown(0) is allowed only when the session
   is singleHop(1) and the source IP address of this BFD
   session is derived from the outgoing interface, or when
   the BFD session is not associated with a specific
   interface."
 ::= { starentTrapData 128 }

starBfdSrcAddress OBJECT-TYPE
SYNTAX     InetAddress
MAX-ACCESS accessible-for-notify
STATUS     current
starBfdDstAddress OBJECT-TYPE
SYNTAX           InetAddress
MAX-ACCESS       accessible-for-notify
STATUS           current
DESCRIPTION      "This object specifies the neighboring IP address which is being monitored with this BFD session."
 ::= { starentTrapData 131 }

starBfdLocalDisc OBJECT-TYPE
SYNTAX           Unsigned32
MAX-ACCESS       accessible-for-notify
STATUS           current
DESCRIPTION      "This object specifies the local discriminator for this BFD session, used to uniquely identify it"
 ::= { starentTrapData 132 }

starBfdRemDisc OBJECT-TYPE
SYNTAX           Unsigned32
MAX-ACCESS       accessible-for-notify
STATUS           current
DESCRIPTION      "This object specifies the session discriminator chosen by the remote system for this BFD session. The value may be zero(0) if the remote discriminator is not yet known or if the session is in the down or adminDown(1) state."
 ::= { starentTrapData 133 }

starBfdSessDiagCode OBJECT-TYPE
SYNTAX           INTEGER {
   noDiagnostic(0),
   controlDetectionTimeExpired(1),
   echoFunctionFailed(2),
   neighborSignaledSessionDown(3),
   forwardingPlaneReset(4),
   pathDown(5),
   concatenatedPathDown(6),
   administrativelyDown(7),
   reverseConcatenatedPathDown(8),
   misConnectivityDefect(9)
}
MAX-ACCESS       accessible-for-notify
STATUS    current
DESCRIPTION
"A diagnostic code specifying the local system's reason
for the last transition of the session from up(4)
to some other state."
::= { starentTrapData 134 }

starSRPSwitchReason OBJECT-TYPE
SYNTAX      INTEGER {
notDefined(0),
aasFailure(1),
bgpFailure(2),
bfdFailure(3),
diameterFailure(4),
hsrpSwitchover(5),
chassisChassisBfdFailure(6),
dualActive(7),
dualStandby(8),
deadTimerExpiry(9),
forceStateChange(10),
manualSwitchOver(11),
eggcFailure(12)
}
MAX-ACCESS    accessible-for-notify
STATUS    current
DESCRIPTION
"A Switchover code specifying the SRP's Switchover reason.
The following reasons would appear when chassis transitioning
from Active to Standby State:
  notDefined(0),
aasFailure(1),
bgpFailure(2),
bfdFailure(3),
diameterFailure(4),
hsrpSwitchover(5),
dualActive(7),
manualSwitchOver(11),
eggcFailure(12),

The following reasons would appear when chassis transitioning
from Standby to Pending Active State:
  notDefined(0),
  chassisChassisBfdFailure(6),
deadTimerExpiry(9)
"
::= { starentTrapData 135 }

starHENBGWServiceTLRI OBJECT-TYPE
SYNTAX      Unsigned32
MAX-ACCESS    accessible-for-notify
STATUS    current
DESCRIPTION
"HENBGW Service Overload Traffic load reduction indication percentage."
::= { starentTrapData 136 }

-- CBS START

starCBSServiceVpnName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS    accessible-for-notify
STATUS    current
DESCRIPTION
"CBS service context name"
::= { starentTrapData 139 }

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STARENT-MIB DEFINITIONS ::= BEGIN

starIuBcSelfPortNum OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "IuBc Self Port Number"
 ::= { starentTrapData 140 }

starIuBcSelfIpAddr OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "IuBc Self IP Address"
 ::= { starentTrapData 141 }

starIuBcPeerPortNum OBJECT-TYPE
SYNTAX      Integer32(1..65535)
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "Peer Port Number"
 ::= { starentTrapData 142 }

starIuBcPeerIpAddr OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "IuBc Peer IP Address"
 ::= { starentTrapData 143 }

starIuBcTcpConnCauseStr OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "IuBc Tcp Conn Cause Str"
 ::= { starentTrapData 144 }

starPhyPortId OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "Physical Port Id as IfIndex"
 ::= { starentTrapData 145 }

starGTPCRLFSessMgrInst OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "Session Manager Instance"
 ::= { starentTrapData 146 }

END
starGTPCRLFVPNSNotification OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"The context name of VPN is "
::= { starentTrapData 147 }

starGTPCRLFVPNId OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"The context Id of VPN is "
::= { starentTrapData 148 }

starGTPCRLFContextName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"The name of Context is "
::= { starentTrapData 149 }

starGTPCRLFCurrAppTPS OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"The current applied TPS value is "
::= { starentTrapData 150 }

starGTPCRLFCurrAppDelayTol OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"The current applied delay Tolerance value is "
::= { starentTrapData 151 }

starBGPPeerIpv6Address OBJECT-TYPE
SYNTAX      Ipv6Address
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"Diameter Peer Address in IPv6"
::= { starentTrapData 152 }

-- CBS END
-- MME-EMBMS START

starMMEEMBMSServiceVpnName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION
"MME-EMBMS service context name"
::= { starentTrapData 153 }

starMMEEMBMSServiceServName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS  accessible-for-notify
STATUS      current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIBITION
"MME-EMBMS service name"
 ::= { starentTrapData 154 }

starMMEEMBMSPeerId OBJECT-TYPE
SYNTAX Integer32(0..255)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Peer Id"
 ::= { starentTrapData 155 }

starMMEEMBMSPeerIpAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Peer IP Address"
 ::= { starentTrapData 156 }

starMMEEMBMSPeerPortNum OBJECT-TYPE
SYNTAX Integer32(1..65535)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Peer Port Number"
 ::= { starentTrapData 157 }

starImsiMgrInstId OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "IMSI Manager Instance"
 ::= { starentTrapData 158 }

starLAGGroup OBJECT-TYPE
SYNTAX Integer32(1..29)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The group number of the LAG group"
 ::= { starentTrapData 159 }

starLAGMinlink OBJECT-TYPE
SYNTAX Integer32(1..29)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The Minlink configured for this lag_group"
 ::= { starentTrapData 160 }

starVRFName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "VRF Name"
 ::= { starentTrapData 161 }

starStatFilesizeLimit OBJECT-TYPE
SYNTAX Integer32(1..29)

END
STARENT-MIB DEFINITIONS ::= BEGIN

starStatFilesizeMeasured OBJECT-TYPE
SYNTAX   Integer32(1..29)
MAX-ACCESS accessible-for-notify
STATUS   current
DESCRIPTION "The Stat file Size measured"
::= { starentTrapData 163 }

starTetheringDatabasePreDBVersion OBJECT-TYPE
SYNTAX   DisplayString
MAX-ACCESS accessible-for-notify
STATUS   current
DESCRIPTION "Tethering Database Pre-DB Version"
::= { starentTrapData 164 }

starTetheringDatabaseUpgradeDBVersion OBJECT-TYPE
SYNTAX   DisplayString
MAX-ACCESS accessible-for-notify
STATUS   current
DESCRIPTION "Tethering Database Upgrade DB Version"
::= { starentTrapData 165 }

starTetheringDatabaseUpgradeComment OBJECT-TYPE
SYNTAX   DisplayString
MAX-ACCESS accessible-for-notify
STATUS   current
DESCRIPTION "Tethering Database Upgrade Comment String"
::= { starentTrapData 166 }

starDiscReasons OBJECT-TYPE
SYNTAX   OCTET STRING (SIZE (1..512))
MAX-ACCESS accessible-for-notify
STATUS   current
DESCRIPTION "Disconnect Reasons"
::= { starentTrapData 167 }

starDdfDev OBJECT-TYPE
SYNTAX   INTEGER {
    ddf0(0),
    ddf1(1)
}
MAX-ACCESS read-only
STATUS   current
DESCRIPTION "Identifies DDF Engine number that was reloaded"
::= { starentTrapData 168 }

starHdRaidMgmtCardSwitchoverCause OBJECT-TYPE
SYNTAX   INTEGER {
    unknown(0),
    stuck(1)
}
MAX-ACCESS read-only
STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
"Management Card Switchover due to HD Raid irrecoverable error cause"
 ::= { starentTrapData 169 }

-- MME-EMBS END

-- L2TP objects, used for traps only

starentL2TP OBJECT IDENTIFIER ::= { starentMIBObjects 33 }

starL2TPTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarL2TPEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing L2TP related information"
 ::= { starentL2TP 1 }

starL2TPEntry OBJECT-TYPE
SYNTAX     StarL2TPEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"The statistics for a L2TP entry"
INDEX { starL2TPLocalTunnelID, starL2TPPeerTunnelID }
 ::= { starL2TPTable 1 }

StarL2TPEntry ::=-
SEQUENCE {
  starL2TPLocalTunnelID        Unsigned32,
  starL2TPPeerTunnelID         Unsigned32,
  starL2TPContextName          DisplayString,
  starL2TPServiceName          DisplayString,
  starL2TPServiceTypeName      DisplayString,
  starL2TPLocalAddress         IpAddress,
  starL2TPPeerAddress          IpAddress
}

starL2TPLocalTunnelID OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The internal identification of the L2TP local tunnel ID"
 ::= { starL2TPEntry 1 }

starL2TPPeerTunnelID OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The internal identification of the L2TP peer tunnel ID"
 ::= { starL2TPEntry 2 }

starL2TPContextName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The name of the context"
STARENT-MIB DEFINITIONS ::= BEGIN

 ::= { starL2TPEntry 3 }

starL2TPServiceName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The name of the service"
 ::= { starL2TPEntry 4 }

starL2TPServiceTypeName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The name of the service type"
 ::= { starL2TPEntry 5 }

starL2TPLocalAddress OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The local address of the service"
 ::= { starL2TPEntry 6 }

starL2TPPeerAddress OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The peer address of the service"
 ::= { starL2TPEntry 7 }

 -- GGSN; these objects are provided for use in SNMP Traps only

starentGGSNService OBJECT IDENTIFIER ::= { starentMIBObjects 32 }

starGGSNSerTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarGGSNSerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing GGSN related information"
 ::= { starentGGSNService 1 }

starGGSNSerEntry OBJECT-TYPE
SYNTAX     StarGGSNSerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"The statistics for a specific GGSN service"
INDEX { starGGSNSerVpnID, starGGSNSerSvcID }
 ::= { starGGSNSerTable 1 }

StarGGSNSerEntry ::= 
SEQUENCE {
    starGGSNSerVpnID             Gauge32,
    starGGSNSerSvcID             Gauge32,
    starSessGGSNVpnName          DisplayString,
    starSessGGSNServName         DisplayString,
    starSessGGSNPeerPort         Gauge32,
    starSessGGSNPeerAddr         IpAddress,

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STARENT-MIB DEFINITIONS ::= BEGIN

starSessGGSNImsi OCTET STRING,
starSessGGSNSubsName OCTET STRING,
starSessGGSNAPNName OCTET STRING,
starSessGTPPGroupName OCTET STRING
}

starGGSNSerVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The internal identification of the VPN (context)"
 ::= { starGGSNSerEntry 1 }

starGGSNSerSvcID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The internal identification of this service; unique within a specific context"
 ::= { starGGSNSerEntry 2 }

starSessGGSNVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The name of this VPN (context)"
 ::= { starGGSNSerEntry 3 }

starSessGGSNServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The name of this service"
 ::= { starGGSNSerEntry 4 }

starSessGGSNPeerPort OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"The Peer Port for which PATH Failure has occurred"
 ::= { starGGSNSerEntry 5 }

starSessGGSNPeerAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The Peer Address for which PATH Failure has occurred"
 ::= { starGGSNSerEntry 6 }

starSessGGSNImsi OBJECT-TYPE
SYNTAX OCTET STRING (SIZE (1..8))
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"The IMSI of the subscriber"
 ::= { starGGSNSerEntry 7 }

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starSessGGSNsubsName OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..128))
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The name of the subscriber"
 ::= { starGGSNserEntry 8 }

starSessGGSNAPNName OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..64))
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The name of the APN"
 ::= { starGGSNserEntry 9 }

starSessGTPPGroupName OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..64))
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
  "The name of the GTPP Group"
 ::= { starGGSNserEntry 10 }

-- single subscriber info

-- This is used to perform a lookup on information on a single subscriber. This is done in a
-- two-step process
--
-- 1. Use a SET pdu to provide the keys to lookup. Set one or more of the fields
--    starSessSub1Context, starSessSub1NAI, starSessSub1MSID, starSessSub1IPAddr
--
--    The SET pdu returns once the query is complete. This query can takes some time
--    especially on large systems, so do not use small retry timers.
--
-- 2. Use a GET pdu to retrieve the data.
--
-- Note that in some cases, multiple subscribers might match the given search criteria.
-- The starSessSub1LastResult field identifies if zero, one or multiple matches were found.
-- If multiple matches are found, data is returned for one of them.

starSessSub1 OBJECT IDENTIFIER ::= { starentMIBObjects 34 }

starSessSub1Context OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-write
STATUS     current
DESCRIPTION
  "The name of the context for this subscriber.

  If a SET is received, triggers a lookup for a subscriber that matches the
specified search criteria and fills in the various objects in this row."
 ::= { starSessSub1 1 }

starSessSub1NAI OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..128))
MAX-ACCESS read-write
STATUS     current
DESCRIPTION
STARENT-MIB DEFINITIONS ::= BEGIN

    "The NAI for this subscriber

    If a SET is received, triggers a lookup for a subscriber that matches the
    specified search criteria and fills in the various objects in this row."
    ::= { starSessSub1 2 }

starSessSub1MSID OBJECT-TYPE
    SYNTAX     OCTET STRING (SIZE (1..16))
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "The MSID for this subscriber

        If a SET is received, triggers a lookup for a subscriber that matches the
        specified search criteria and fills in the various objects in this row."
    ::= { starSessSub1 3 }

starSessSub1IpAddr OBJECT-TYPE
    SYNTAX     IpAddress
    MAX-ACCESS read-write
    STATUS     current
    DESCRIPTION
        "The remote IP address for this subscriber

        If a SET is received, triggers a lookup for a subscriber that matches the
        specified search criteria and fills in the various objects in this row."
    ::= { starSessSub1 4 }

starSessSub1LastResult OBJECT-TYPE
    SYNTAX     INTEGER {
        unknown(0),
        error(1),
        nomatch(2),
        onematch(3),
        multimatch(4)
    }
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "The result of the last search.  A value of unknown(0) means that the query
        wasn't created properly, or that no query has been performed; error(1) indicates
        an internal error performing the query, this is an abnormal condition that shouldn't
        normally be seen; nomatch(2) means that the query did not find a matching subscriber;
        onematch(3) means that the query found exactly one subscriber; multimatch(4) means that more than
        one subscriber matched; the information for one (random) subscriber
        was fetched"
    ::= { starSessSub1 5 }

starSessSub1ServiceName OBJECT-TYPE
    SYNTAX     OCTET STRING (SIZE (1..63))
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "The service name of the subscriber."
    ::= { starSessSub1 6 }

starSessSub1HAIpAddr OBJECT-TYPE
    SYNTAX     IpAddress
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
STARENT-MIB DEFINITIONS ::= BEGIN

"The HA IP address for FA MIP connections"
 ::= { starSessSub1 7 }

starSessSub1PeerIpAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The remote IP address of the peer. The type of peer depends on the session type.

<table>
<thead>
<tr>
<th>Session Type</th>
<th>Peer</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDSN</td>
<td>PCF</td>
</tr>
<tr>
<td>GGSN</td>
<td>SGSN</td>
</tr>
<tr>
<td>HA Mobile IP/HA IPSEC FA</td>
<td></td>
</tr>
<tr>
<td>LAC</td>
<td>LNS</td>
</tr>
<tr>
<td>LNS</td>
<td>LAC&quot;</td>
</tr>
</tbody>
</table>
 ::= { starSessSub1 8 }

starSessSub1InPackets OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The number of incoming packets for the subscriber"
 ::= { starSessSub1 9 }

starSessSub1InPacketsDropped OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The number of incoming packets dropped for the subscriber"
 ::= { starSessSub1 10 }

starSessSub1InBytes OBJECT-TYPE
SYNTAX     Counter32
UNITS      "KB"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The count of incoming bytes for the subscriber, in kilobytes, rounded down (i.e. 1023 bytes = 0 kilobytes"
 ::= { starSessSub1 11 }

starSessSub1OutPackets OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The number of outgoing packets for the subscriber"
 ::= { starSessSub1 12 }

starSessSub1OutPacketsDropped OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  "The number of outgoing packets dropped for the subscriber"
 ::= { starSessSub1 13 }

starSessSub1OutBytes OBJECT-TYPE

END
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STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1Activity OBJECT-TYPE
SYNTAX Gauge32
UNITS 
MAX-ACCESS read-only
STATUS current
DESCRIPTION "TBD"
 ::= { starSessSub1 15 }

starSessSub1State OBJECT-TYPE
SYNTAX INTEGER {
unknown(0),
connecting(1),
connected(2),
disconnecting(3)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The state of the subscriber"
 ::= { starSessSub1 16 }

starSessSub1CallID OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The internal call ID of the subscriber"
 ::= { starSessSub1 17 }

starSessSub1ConnectTime OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The connect time for the subscriber, in UTC. The UNIX epoch (Jan 1, 1970) is used if no value is available"
 ::= { starSessSub1 18 }

starSessSub1CallDuration OBJECT-TYPE
SYNTAX Counter32
UNITS "Seconds"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The duration of the call, in seconds"
 ::= { starSessSub1 19 }

starSessSub1TimeIdle OBJECT-TYPE
SYNTAX Gauge32
UNITS "Seconds"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The idle time of the call, in seconds"
::= { starSessSub1 20 }

starSessSub1AccessType OBJECT-TYPE
SYNTAX INTEGER {
   unknown(0),
   pdssimpleip(1),
   pdsmobileip(2),
   hamobileip(3),
   ggsnpdptpeipv4(4),
   ggsnpdptpeppp(5),
   ggsnpdptpeipv6(6),
   lns12tp(7),
   haiipsec(8),
   ipsg(9),
   pdssipmip(10),
   mipproxyfa(11),
   imsa(12),
   bcmcs(13),
   ggsnmip(14),
   ipproxy(15),
   ansgw(16)
}  
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The access type for the subscriber"
::= { starSessSub1 21 }

starSessSub1AccessTech OBJECT-TYPE
SYNTAX INTEGER {
   unknown(0),
   cdma1xrtt(1),
   cdmaevdo(2),
   cdmaother(3),
   wcdmautran(4),
   gprsgeran(5),
   gprsother(6),
   wirelesslan(7),
   ipsg(8),
   wimax(9),
   sip(10),
   other(11),
   cdmaevdoreva(12),
   pdif(13),
   phs(14),
   ehrpd(15),
   eutran(16),
   gan(17),
   hspa(18)
}  
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The access technology for the subscriber"
::= { starSessSub1 22 }

starSessSub1LinkStatus OBJECT-TYPE
SYNTAX INTEGER {
   unknown(0),
   active(1),
   dormant(2)
STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1NetworkType OBJECT-TYPE
SYNTAX     INTEGER {
    unknown(0),
    ip(1),
    mobileip(2),
    l2tp(3),
    proxymobileip(4),
    ipinip(5),
    gre(6),
    ipv6inipv4(7)
}
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The network type for the subscriber"
 ::= { starSessSub1 24 }

starSessSub1CarrierID OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (0..6))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Carrier ID"
 ::= { starSessSub1 25 }

starSessSub1ESN OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (0..15))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Electronic Serial Number"
 ::= { starSessSub1 26 }

starSessSub1GMTTimezoneOffset OBJECT-TYPE
SYNTAX     Integer32
UNITS "Seconds"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Timezone offset from GMT, in seconds. This is a signed value"
 ::= { starSessSub1 27 }

starSessSub1SessMgr OBJECT-TYPE
SYNTAX     Unsigned32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The instance number of the session manager for this subscriber."
 ::= { starSessSub1 28 }

starSessSub1RemoteIPAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Remote IP Address"
 ::= { starSessSub1 29 }

starSessSub1Card OBJECT-TYPE
SYNTAX     Integer32 (1..16)
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The card holding the session manager for this session. Use in combination
 with starSessSub1CPU"
 ::= { starSessSub1 30 }

starSessSub1CPU OBJECT-TYPE
SYNTAX     Integer32 (0..3)
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The CPU holding the session manager for this session. Use in combination
 with starSessSub1Card"
 ::= { starSessSub1 31 }

starSessSub1TimeIdleLeft OBJECT-TYPE
SYNTAX     Gauge32
UNITS      "Seconds"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The remaining idle time of the call, in seconds. A value of 0xffffffff is used if the call
does not have an idle timeout"
 ::= { starSessSub1 32 }

starSessSub1TimeLeft OBJECT-TYPE
SYNTAX     Gauge32
UNITS      "Seconds"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The remaining session time of the call, in seconds. A value of 0xffffffff is used if the call
does not have a session timeout"
 ::= { starSessSub1 33 }

starSessSub1TimeLongDurLeft OBJECT-TYPE
SYNTAX     Gauge32
UNITS      "Seconds"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The remaining long duration time of the call, in seconds. A value of 0xffffffff is used if the call
does not have a long duration timer"
 ::= { starSessSub1 34 }

starSessSub1LongDurAction OBJECT-TYPE
SYNTAX     StartLongDurTimeoutAction
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The action to take when the long duration timer is reached"
 ::= { starSessSub1 35 }

starSessSub1AlwaysOn OBJECT-TYPE
SYNTAX     INTEGER {
        unknown(0),
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

    enabled(1),
    disabled(2)
} MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 36 }

starSessSub1IPPoolName OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..31))
MAX-ACCESS read-only
STATUS current
DESCRIPTION "0 is returned if this is not applicable"
::= { starSessSub1 37 }

starSessSub1VLANID OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "0 is returned if this is not applicable"
::= { starSessSub1 38 }

starSessSub1LNSIPAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Only valid if starSessSub1NetworkType is l2tp(3), otherwise 0.0.0.0"
::= { starSessSub1 39 }

starSessSub1ProxyMIP OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    enabled(1),
    disabled(2)
} MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 40 }

starSessSub1GGSNMIP OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    enabled(1),
    disabled(2)
} MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 41 }

starSessSub1HomeAgentIpAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 42 }

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The IP address of the Home Agent. This value is applicable only if one of the following is true:
   1. The value of starSessSub1AccessType is pdsnmobileip(2)
   2. The value of starSessSub1ProxyMIP is enabled(1)
   3. The value of starSessSub1GGSNMIP is enabled(1)
If not applicable, a value of 0.0.0.0 will be returned
 ::= { starSessSub1 42 }

starSessSub1LocalIPAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The Local IP address of the Home Agent. This value is applicable only if one of the following is true:
   1. The value of starSessSub1AccessType is pdsnmobileip(1)
   2. The value of starSessSub1AccessType is ggsnpdptypeppp(5)
   3. The value of starSessSub1AccessType is lns12tp(7)
If not applicable, a value of 0.0.0.0 will be returned"
 ::= { starSessSub1 43 }

starSessSub1FAServiceName OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..63))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The FA service name for the subscriber. This value is applicable only if one of the following is true:
   1. The value of starSessSub1AccessType is pdsnmobileip(2)
   2. The value of starSessSub1ProxyMIP is enabled(1)
   3. The value of starSessSub1GGSNMIP is enabled(1)
"
 ::= { starSessSub1 44 }

starSessSub1FAVPNName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The FA VPN (Context) name. This value is applicable only if one of the following is true:
   1. The value of starSessSub1AccessType is pdsnmobileip(2)
   2. The value of starSessSub1ProxyMIP is enabled(1)
   3. The value of starSessSub1GGSNMIP is enabled(1)
"
 ::= { starSessSub1 45 }

starSessSub1SourceVPN OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The Source VPN (Context) name."
 ::= { starSessSub1 46 }

starSessSub1DestVPN OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The Destination VPN (Context) name."
 ::= { starSessSub1 47 }
STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1AAAVPN OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 48 }

starSessSub1AAADomain OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 49 }

starSessSub1AAAStart OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 50 }

starSessSub1AAAStrop OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 51 }

starSessSub1AAAInterim OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 52 }

starSessSub1AcctSessionID OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(0..47))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 53 }

starSessSub1AAARadiusGroup OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(0..63))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 54 }

starSessSub1AAARadiusAuthServerIPAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
  ::= { starSessSub1 55 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starSessSub1 55 }

starSessSub1AAARadiusAcctServerIPAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 56 }

starSessSub1NASIPAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "NAS IP Address (D2)"
::= { starSessSub1 57 }

starSessSub1NexthopIPAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 58 }

starSessSub1ActiveInACL OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..79))
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 59 }

starSessSub1ActiveOutACL OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..79))
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 60 }

starSessSub1ECSRulebase OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..63))
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 61 }

starSessSub1InPlcyGrp OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..15))
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 62 }

starSessSub1OutPlcyGrp OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..15))
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 63 }

END
starSessSub1DownTrafPolState OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  enabled(1),
  disabled(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink traffic policing state"

starSessSub1DownCommDataRate OBJECT-TYPE
SYNTAX Unsigned32
UNITS "bps"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink committed data rate, in bps. This value is only valid if starSessSub1DownTrafPolState is enabled(1)"

starSessSub1DownPeakDataRate OBJECT-TYPE
SYNTAX Unsigned32
UNITS "bps"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink peak data rate, in bps. This value will be 0 if the value of starSessSub1DownTrafPolState is anything other than enabled(1)"

starSessSub1DownBurstSize OBJECT-TYPE
SYNTAX Unsigned32
UNITS "bytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink burst size, in bytes. This value will be 0 if the value of starSessSub1DownTrafPolState is anything other than enabled(1)"

starSessSub1DownExceedAction OBJECT-TYPE
SYNTAX StarQOSTPAction
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink Exceed Action. This value will be notapplicable(1) if the value of starSessSub1DownTrafPolState is anything other than enabled(1)"

starSessSub1DownViolateAction OBJECT-TYPE
SYNTAX StarQOSTPAction
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink Violate Action. This value will be notapplicable(1) if the value of starSessSub1DownTrafPolState is anything other than enabled(1)"
STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1DownExceed OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink packets exceeded bandwidth parameters"
 ::= { starSessSub1 70 }

starSessSub1DownViolate OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Downlink packets violated bandwidth parameters"
 ::= { starSessSub1 71 }

starSessSub1UpTrafPolState OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  enabled(1),
  disabled(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Uplink traffic policing state"
 ::= { starSessSub1 72 }

starSessSub1UpCommDataRate OBJECT-TYPE
SYNTAX Unsigned32
UNITS "bps"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Uplink committed data rate, in bps. This value is only valid if
starSessSub1UpTrafPolState is enabled(1)"
 ::= { starSessSub1 73 }

starSessSub1UpPeakDataRate OBJECT-TYPE
SYNTAX Unsigned32
UNITS "bps"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Uplink peak data rate, in bps. This value will be 0 if the value
of starSessSub1UpTrafPolState is anything other than enabled(1)"
 ::= { starSessSub1 74 }

starSessSub1UpBurstSize OBJECT-TYPE
SYNTAX Unsigned32
UNITS "bytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Uplink burst size, in bytes. This value will be 0 if the value
of starSessSub1UpTrafPolState is anything other than enabled(1)"
 ::= { starSessSub1 75 }

starSessSub1UpExceedAction OBJECT-TYPE
SYNTAX StarQOSTPAction
STAR-ENT-MIB DEFINITIONS ::= BEGIN

starSessSub1UpViolateAction OBJECT-TYPE
SYNTAX      StarQOSTPAction
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Uplink Violate Action.  This value will be notapplicable(1) if the value
of starSessSub1UpTrafPolState is anything other than enabled(1)"
 ::= { starSessSub1 77 }

starSessSub1UpExceed OBJECT-TYPE
SYNTAX      Counter32
UNITS       "packets"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Uplink packets exceeded bandwidth parameters"
 ::= { starSessSub1 78 }

starSessSub1UpViolate OBJECT-TYPE
SYNTAX      Counter32
UNITS       "packets"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Uplink packets violated bandwidth parameters"
 ::= { starSessSub1 79 }

starSessSub1L3TunnelingState OBJECT-TYPE
SYNTAX      INTEGER {
              unknown(0),
              enabled(1),
              disabled(2)
          }
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Identifies if L3 tunneling is enabled.  This value should be enabled(1) if
starSessSub1NetworkType is ipinip(5) or gre(6)"
 ::= { starSessSub1 80 }

starSessSub1L3TunLocalIPAddr OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"L3 tunnel local address.  This value is valid only if starSessSub1L3TunnelState
is enabled(1), other it will be 0.0.0.0"
 ::= { starSessSub1 81 }

starSessSub1L3TunRemoteIPAddr OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"L3 tunnel remote address.  This value is valid only if starSessSub1L3TunnelState
is enabled(1), other it will be 0.0.0.0"
 ::= { starSessSub1 82 }

starSessSub1UpExceed ACTION
SYNTAX      StarQOSTPAction
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Uplink packets exceeded bandwidth parameters"
 ::= { starSessSub1 78 }

starSessSub1UpViolate ACTION
SYNTAX      StarQOSTPAction
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Uplink packets violated bandwidth parameters"
 ::= { starSessSub1 79 }

starSessSub1L3TunnelingState ACTION
SYNTAX      INTEGER {
              unknown(0),
              enabled(1),
              disabled(2)
          }
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"Identifies if L3 tunneling is enabled.  This value should be enabled(1) if
starSessSub1NetworkType is ipinip(5) or gre(6)"
 ::= { starSessSub1 80 }

starSessSub1L3TunLocalIPAddr ACTION
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"L3 tunnel local address.  This value is valid only if starSessSub1L3TunnelState
is enabled(1), other it will be 0.0.0.0"
 ::= { starSessSub1 81 }

starSessSub1L3TunRemoteIPAddr ACTION
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"L3 tunnel remote address.  This value is valid only if starSessSub1L3TunnelState
is enabled(1), other it will be 0.0.0.0"
 ::= { starSessSub1 82 }

END
STARIENT-MIB DEFINITIONS ::= BEGIN

is enabled(1), other it will be 0.0.0.0"
::= { starSessSub1 82 }

starSessSub1AddrViaDHCP OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    enabled(1),
    disabled(2)
}  
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 83 }

starSessSub1DHCPServName OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..63))  
MAX-ACCESS read-only
STATUS current
DESCRIPTION "DHCP service name. This value is only valid if starSessSub1DHCPAddrViaDHCP
is enabled(1)"
::= { starSessSub1 84 }

starSessSub1DHCPServIPAddr OBJECT-TYPE
SYNTAX IpAddress  
MAX-ACCESS read-only
STATUS current
DESCRIPTION "DHCP service IP address. This value is only valid if starSessSub1DHCPAddrViaDHCP
is enabled(1), otherwise it will be 0.0.0.0"
::= { starSessSub1 85 }

starSessSub1AccessLinkIPFrag OBJECT-TYPE
SYNTAX INTEGER {
    unkwnown(0),
    normal(1),
    dfignore(2),
    dffragandicmp(3)
}  
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starSessSub1 86 }

starSessSub1IgnoreDFBit OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    enabled(1),
    disabled(2)
}  
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Ignore DF-bit data-tunnel"
::= { starSessSub1 87 }

starSessSub1MIPGratARPMode OBJECT-TYPE
SYNTAX INTEGER {
    unkwnown(0),
    notapplicable(1),
    aggressive(2),
STARENT-MIB DEFINITIONS ::= BEGIN

normal(3)

}  
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"This field is only applicable if starSessSub1AccessType is hamobileip(3) or haipsec(8)"
::= { starSessSub1 88 }

starSessSub1ExtInlSrvrProc OBJECT-TYPE
SYNTAX   INTEGER {
    unknown(0),
    enabled(1),
    disabled(2)
}
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"The state of external inline server processing"
::= { starSessSub1 89 }

starSessSub1ExtInlSrvrIngrIPAddr OBJECT-TYPE
SYNTAX   IpAddress
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"The external inline server ingress IP address.  This value is only valid if
starSessSub1ExtInlSrvrProc is enabled(1)"
::= { starSessSub1 90 }

starSessSub1ExtInlSrvrIngrVLANTag OBJECT-TYPE
SYNTAX   Unsigned32
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"The external inline server ingress VLAN tag.  This value is only valid if
starSessSub1ExtInlSrvrProc is enabled(1)"
::= { starSessSub1 91 }

starSessSub1ExtInlSrvrEgrIPAddr OBJECT-TYPE
SYNTAX   IpAddress
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"The external inline server egress IP address.  This value is only valid if
starSessSub1ExtInlSrvrProc is enabled(1)"
::= { starSessSub1 92 }

starSessSub1ExtInlSrvrEgrVLANTag OBJECT-TYPE
SYNTAX   Unsigned32
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"The external inline server egress VLAN tag.  This value is only valid if
starSessSub1ExtInlSrvrProc is enabled(1)"
::= { starSessSub1 93 }

starSessSub1ExtInlSrvrVPNName OBJECT-TYPE
SYNTAX   DisplayString
MAX-ACCESS  read-only
STATUS current
DESCRIPTION
"The external inline server context (VPN).  This value is only valid if

STARENT-MIB DEFINITIONS ::= BEGIN

starSessSublExtIniSrvcProc is enabled(1)"
 ::= { starSessSubl 94 }

starSessSublRadAcctMode OBJECT-TYPE
SYNTAX  INTEGER {
    unknown(0),
    flowbasedaux(1),
    flowbasedall(2),
    flowbasednone(3),
    sessionbased(4)  
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Radius Accounting Mode"
 ::= { starSessSubl 95 }

starSessSublInBytesDropped OBJECT-TYPE
SYNTAX  Counter32
UNITS  "KB"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The count of incoming bytes dropped for the subscriber, in kilobytes,
 rounded down (i.e. 1023 bytes = 0 kilobytes"
 ::= { starSessSubl 96 }

starSessSublOutBytesDropped OBJECT-TYPE
SYNTAX  Counter32
UNITS  "KB"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The count of outgoing bytes dropped for the subscriber, in kilobytes,
 rounded down (i.e. 1023 bytes = 0 kilobytes"
 ::= { starSessSubl 97 }

starSessSublPeakBPSTx OBJECT-TYPE
SYNTAX  Gauge32
UNITS  "Bytes per second"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Peak rate from user, in bytes per second"
 ::= { starSessSubl 98 }

starSessSublPeakBPSRx OBJECT-TYPE
SYNTAX  Gauge32
UNITS  "Bytes per second"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Peak rate to user, in bytes per second"
 ::= { starSessSubl 99 }

starSessSublAveBPSTx OBJECT-TYPE
SYNTAX  Gauge32
UNITS  "Bytes per second"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Average rate from user, in bytes per second"
 ::= { starSessSubl 100 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1AveBPSRx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Bytes per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Average rate to user, in bytes per second"
 ::= { starSessSub1 101 }

starSessSub1SustBPSTx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Bytes per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Sustained rate from user, in bytes per second"
 ::= { starSessSub1 102 }

starSessSub1SustBPSRx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Bytes per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Sustained rate to user, in bytes per second"
 ::= { starSessSub1 103 }

starSessSub1PeakPPSTx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Packets per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Peak rate from user, in packets per second"
 ::= { starSessSub1 104 }

starSessSub1PeakPPSRx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Packets per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Peak rate to user, in packets per second"
 ::= { starSessSub1 105 }

starSessSub1AvePPSTx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Packets per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Average rate from user, in packets per second"
 ::= { starSessSub1 106 }

starSessSub1AvePPSRx OBJECT-TYPE
SYNTAX  Gauge32
UNITS   "Packets per second"
MAX-ACCESS read-only
STATUS  current
DESCRIPTION "Average rate to user, in packets per second"
::= { starSessSub1 107 }

starSessSub1SustPPSTx OBJECT-TYPE
SYNTAX     Gauge32
UNITS     "Packets per second"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Sustained rate from user, in packets per second"
 ::= { starSessSub1 108 }

starSessSub1SustPPSRx OBJECT-TYPE
SYNTAX     Gauge32
UNITS     "Packets per second"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Sustained rate to user, in packets per second"
 ::= { starSessSub1 109 }

starSessSub1ActivePct OBJECT-TYPE
SYNTAX     Integer32(0..100)
UNITS     "percent"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Link online/active percentage"
 ::= { starSessSub1 110 }

starSessSub1IPv4BadHdr OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"IPv4 Bad Headers"
 ::= { starSessSub1 111 }

starSessSub1IPv4TtlExceeded OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"IPv4 Total Exceeded"
 ::= { starSessSub1 112 }

starSessSub1IPv4FragSent OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"IPv4 Fragments sent"
 ::= { starSessSub1 113 }

starSessSub1IPv4FragFail OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"IPv4 Could Not Fragment errors"
 ::= { starSessSub1 114 }

starSessSub1IPv4InACLDrop OBJECT-TYPE
SYNTAX     Counter32
STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1IPv4InACLDrop OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Input ACL Drops"
::= { starSessSub1 115 }

starSessSub1IPv4OutACLDrop OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv5 Output ACL Drops"
::= { starSessSub1 116 }

starSessSub1IPv4InCSSDownDrop OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Input CSS Down Drops"
::= { starSessSub1 117 }

starSessSub1IPv4OutCSSDownDrop OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Output CSS Down Drops"
::= { starSessSub1 118 }

starSessSub1IPv4OutXOFFDropPkt OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Output XOFF Packets Drop"
::= { starSessSub1 119 }

starSessSub1IPv4OutXOFFDropByte OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Output XOFF Bytes Drop"
::= { starSessSub1 120 }

starSessSub1IPv4SrcViol OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Source Violations"
::= { starSessSub1 121 }

starSessSub1IPv4ProxyDNSRedir OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Proxy-DNS Redirect"
::= { starSessSub1 122 }

END
starSessSub1IPv4SrcProxyDNSThru OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Proxy-DNS Pass-Thru"
::= { starSessSub1 123 }

starSessSub1IPv4ProxyDNSDrop OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Proxy-DNS Drop"
::= { starSessSub1 124 }

starSessSub1IPv4SrcViolNoAcct OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Source Violations No Account"
::= { starSessSub1 125 }

starSessSub1IPv4SrcViolIgnored OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 Source Violations Ignored"
::= { starSessSub1 126 }

starSessSub1ExtInlSrvrTxPkt OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Packets transmitted to inline server. This value is valid only if the value of starSessSub1ExtInlSrvrProc is enabled(1)"
::= { starSessSub1 127 }

starSessSub1ExtInlSrvrRxPkt OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Packets received from inline server. This value is valid only if the value of starSessSub1ExtInlSrvrProc is enabled(1)"
::= { starSessSub1 128 }

starSessSub1IPv4ICMPDropPkt OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 ICMP Packets dropped"
::= { starSessSub1 129 }

starSessSub1TunnelType OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

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SYNTAX     INTEGER {
  unknown(0),
  none(1),
  pptp(2),
  l2tp(3),
  ah(4),
  ipinip(5),
  esp(6),
  gre(7)
}
MAX-ACCESS read-only
STATUS      current
DESCRIPTION
"Tunnel Type"
::= { starSessSub1 130 }

starSessSub1IPSECTunDownDropPkt OBJECT-TYPE
SYNTAX Counter32
UNITS "packets"
MAX-ACCESS read-only
STATUS      current
DESCRIPTION
"Pool IPSEC tunnel down packets dropped. This value is only valid if the
value of starSessSub1TunnelType is esp(6)"
::= { starSessSub1 131 }

starSessSub1IPSECFlowID OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS read-only
STATUS      current
DESCRIPTION
"IP Pool IPSEC flow id. This value is only valid if the
value of starSessSub1TunnelType is esp(6)"
::= { starSessSub1 132 }

starSessSub1DormancyTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS      current
DESCRIPTION
"Dormancy total. This value is not valid if the value of
starSessSub1AccessType is ggsnpdptypeipv4(4) or ggsnpdptypeppp(5)"
::= { starSessSub1 133 }

starSessSub1HandoffTotal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS      current
DESCRIPTION
"Handoff total. This value is not valid if the value of
starSessSub1AccessType is ggsnpdptypeipv4(4) or ggsnpdptypeppp(5)"
::= { starSessSub1 134 }

starSessSub1AccessFlows OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS      current
DESCRIPTION
"Access flows"
::= { starSessSub1 135 }

starSessSub1TFT OBJECT-TYPE
STAR-ENT-MIB DEFINITIONS ::= BEGIN

SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Number of TFTs"
::= { starSessSub1 136 }

starSessSub1NASPort OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "NAS port"
::= { starSessSub1 137 }

starSessSub1CorrID OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..47))
MAX-ACCESS read-only
STATUS current
DESCRIPTION "ThreeGPP2-correlation-id (C2)"
::= { starSessSub1 139 }

starSessSub1L2TPPeerIPAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "L2TP Peer address. This value is only valid if the value of
starSessSub1NetworkType is l2tp(3)"
::= { starSessSub1 140 }

starSessSub1IPv4EarlyPDURecv OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "IPv4 early PDU received"
::= { starSessSub1 141 }

--- Nw Reacheability Srvr; these objects are provided for use in SNMP Traps only

starentNwReachServer OBJECT IDENTIFIER ::= { starentMIBObjects 35 }

starNwReachTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarNwReachEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing Network Reacheable Server information"
::= { starentNwReachServer 1 }

starNwReachEntry OBJECT-TYPE
SYNTAX StarNwReachEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information for a specific Ntw Reachable Server"
INDEX { starNwReachName }
::= { starNwReachTable 1 }

StarNwReachEntry ::= SEQUENCE {

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starNwReachName OBJECT-TYPE
SYNTAX OCTET STRING
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The Name for this Network Reacheable Server"
::= { starNwReachEntry 1 }

starNwReachSrvrAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The IP Address for the Network Reacheable Server"
::= { starNwReachEntry 2 }

-- IPSEC; these objects are provided for use in SNMP Traps only

starentIPSEC OBJECT IDENTIFIER ::= { starentMIBObjects 36 }

starIPSECContextName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of a context"
::= { starentIPSEC 1 }

starIPSECGroupName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of a crypto group"
::= { starentIPSEC 2 }

starIPSECTunLocalIpAddr OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The local IP Address for an IPSEC tunnel"
::= { starentIPSEC 3 }

starIPSECTunRemoteIpAddr OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The remote IP Address for an IPSEC tunnel"
::= { starentIPSEC 4 }

starIPSECPolicyName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "An IPSEC policy name"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentIPSEC 5 }

starIPSECDynPolicyType OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  manual(1),
  isakmp(2),
  subscribertemplate(3),
  subscribertain(4),
  test(5),
  dynamic(6)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "An IPSEC dynamic policy type. Note that the value test(5) is used only for internal testing"
::= { starentIPSEC 6 }

starIPSECDynPolicyPayloadType OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  control(1),
  data(2),
  ipip(3),
  gre(4),
  test(5)
}
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "An IPSEC dynamic policy payload type"
::= { starentIPSEC 7 }

starIPSECLocalGateway OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""
::= { starentIPSEC 8 }

starIPSECRemoteGateway OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""
::= { starentIPSEC 9 }

starentSIPRoute OBJECT IDENTIFIER ::= { starentMIBObjects 37 }

starSIPRouteTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarSIPRouteEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing SIPRoute related information"
::= { starentSIPRoute 1}

starSIPRouteEntry OBJECT-TYPE
SYNTAX StarSIPRouteEntry
MAX-ACCESS not-accessible
STARENT-MIB DEFINITIONS ::= BEGIN

STATUS  current
DESCRIPTION  "The statistics for a specific SIPRoute service"
INDEX { starSIPRouteVpnID }
 ::= { starSIPRouteTable 1 }

StarSIPRouteEntry ::= SEQUENCE {
  starSIPRouteVpnID             Gauge32,
  starSIPRouteVpnName           DisplayString,
  starSIPRouteVmgName           DisplayString,
  starSIPRouteAsName            DisplayString,
  starSIPRouteDestPartyNum      DisplayString,
  starSIPRouteReqNum            DisplayString
}

starSIPRouteVpnID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION  "The internal identification of the VPN (context)"
 ::= { starSIPRouteEntry 1 }

starSIPRouteVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The name of this VPN (context)"
 ::= { starSIPRouteEntry 2 }

starSIPRouteVmgName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The name of this Vmg (context)"
 ::= { starSIPRouteEntry 3 }

starSIPRouteAsName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The name of this As (context)"
 ::= { starSIPRouteEntry 4 }

starSIPRouteDestPartyNum OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "The dest. party number"
 ::= { starSIPRouteEntry 5 }

starSIPRouteReqNum OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
STARENT-MIB DEFINITIONS ::= BEGIN

  "The request number"
  ::= { starSIPRouteEntry 6 }

starentRPServiceOption OBJECT IDENTIFIER ::= { starentMIBObjects 38 }

starRPServiceOptionTable OBJECT-TYPE
SYNTAX  SEQUENCE OF StarRPServiceOptionEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION ""
 ::= { starentRPServiceOptionTable 1 }

starRPServiceOptionEntry OBJECT-TYPE
SYNTAX  StarRPServiceOptionEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION ""
INDEX { starRPServiceOptionNum }
 ::= { starRPServiceOptionTable 1 }

StarRPServiceOptionEntry ::= 
  SEQUENCE {
    starRPServiceOptionNum  Integer32,
    starRPServiceOptionCalls Gauge32
  }

starRPServiceOptionNum OBJECT-TYPE
SYNTAX  Integer32(1..255)
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION ""
 ::= { starRPServiceOptionEntry 1 }

starRPServiceOptionCalls OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION ""
 ::= { starRPServiceOptionEntry 2 }

-- PCF statistics

starentPCFStats OBJECT IDENTIFIER ::= { starentMIBObjects 39 }

starPCFStatTable OBJECT-TYPE
SYNTAX  SEQUENCE OF StarPCFStatEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION "A table of per-PCF statistics"
 ::= { starentPCFStats 1 }

starPCFStatEntry OBJECT-TYPE
SYNTAX  StarPCFStatEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION

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"The statistics for a specific PCF"
INDEX { starPCFStatVpnID, starPCFStatIpAddr }
::= { starPCFStatTable 1 }

StarPCFStatEntry ::= 
  SEQUENCE {
    starPCFStatVpnID Gauge32,
    starPCFStatIpAddr IpAddress,
    starPCFStatVpnName DisplayString,
    starPCFStatRxPkts Counter32,
    starPCFStatTxPkts Counter32,
    starPCFStatRxBytes Counter32,
    starPCFStatTxBytes Counter32,
    starPCFStatTotalSessions Counter32,
    starPCFStatCurrentSessions Gauge32,
    starPCFStatCurrentActiveSessions Gauge32,
    starPCFStatCurrentDormantSessions Gauge32,
    starPCFStatCurrentSIPConnected Gauge32,
    starPCFStatCurrentMIPConnected Gauge32,
    starPCFStatCurrentPMIPConnected Gauge32,
    starPCFStatCurrentL2TPLACConnected Gauge32,
    starPCFStatCurrentOtherConnected Gauge32
  }

starPCFStatVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION " "
::= { starPCFStatEntry 1 }

starPCFStatIpAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION " "
::= { starPCFStatEntry 2 }

starPCFStatVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION " "
::= { starPCFStatEntry 3 }

starPCFStatRxPkts OBJECT-TYPE
SYNTAX Counter32
UNITS "Millions"
MAX-ACCESS read-only
STATUS current
DESCRIPTION " "
::= { starPCFStatEntry 4 }

starPCFStatTxPkts OBJECT-TYPE
SYNTAX Counter32
UNITS "Millions"
MAX-ACCESS read-only
STATUS current
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STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION " " ::= { starPCFStatEntry 5 }

starPCFStatRxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 6 }

starPCFStatTxBytes OBJECT-TYPE
SYNTAX Counter32
UNITS "Megabytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 7 }

starPCFStatTotalSessions OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 8 }

starPCFStatCurrentSessions OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 9 }

starPCFStatCurrentActiveSessions OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 10 }

starPCFStatCurrentDormantSessions OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 11 }

starPCFStatCurrentSIPConnected OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION " " ::= { starPCFStatEntry 12 }

starPCFStatCurrentMIPConnected OBJECT-TYPE
Starent MIB Definitions ::= BEGIN

SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starPCFStatEntry 13 }

starPCFStatCurrentPMIPConnected OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starPCFStatEntry 14 }

starPCFStatCurrentL2TPLACConnected OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starPCFStatEntry 15 }

starPCFStatCurrentOtherConnected OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION ""
::= { starPCFStatEntry 16 }

-- Per Service PCF statistics

starPCFTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarPCFEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table of per service PCF statistics"
::= { starentPCFStats 2 }

starPCFEntry OBJECT-TYPE
SYNTAX StarPCFEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific PCF per service"
INDEX { starPCFSvcID, starPCFIpAddr }
::= { starPCFTable 1 }

StarPCFEntry ::= SEQUENCE {
  starPCFSvcID StarShortID,
  starPCFIpAddr IpAddress,
  starPCFVpnID Gauge32,
  starPCFVpnName DisplayString,
  starPCFServName DisplayString,
  starPCFRrqRcvd Counter32,
  starPCFRrqAccepted Counter32,
  starPCFRrqDenied Counter32,
  starPCFRrqDiscarded Counter32,
  starPCFInitialRrqRcvd Counter32,

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starPCFInitialRrqAccepted  Counter32,
starPCFItraPDSNActiveHORRrqAccepted  Counter32,
starPCFItraPDSNDormantHORRrqAccepted  Counter32,
starPCFInterPDSNHORRrqAccepted  Counter32,
starPCFInitialRrqDenied  Counter32,
starPCFInitialRrqDiscarded  Counter32,
starPCFRenewRrqRcvd  Counter32,
starPCFRenewRrqAccepted  Counter32,
starPCFRenewActiveRrqAccepted  Counter32,
starPCFRenewDormantRrqAccepted  Counter32,
starPCFRenewRrqDenied  Counter32,
starPCFRenewRrqDiscarded  Counter32,
starPCFDeregRrqRcvd  Counter32,
starPCFDeregRrqAccepted  Counter32,
starPCFDeregDormantRrqAccepted  Counter32,
starPCFDeregRrqDenied  Counter32,
starPCFDeregRrqDiscarded  Counter32,
starPCFItraPDSNActiveAnidHORRrqAccepted  Counter32,
starPCFItraPDSNDormantAnidHORRrqAccepted  Counter32,
starPCFDeniedUnSpeReason  Counter32,
starPCFDeniedAdmProh  Counter32,
starPCFDeniedInsufResource  Counter32,
starPCFDeniedMobNodeAuthFail  Counter32,
starPCFDeniedIdentMismatch  Counter32,
starPCFDeniedPoorFormedReq  Counter32,
starPCFDeniedUnknownPDSNAddr  Counter32,
starPCFDeniedRevTunnelUnavail  Counter32,
starPCFDeniedRevTunnelRequire  Counter32,
starPCFDeniedUnrecogVendorId  Counter32,
starPCFDeniedSessionClosed  Counter32,
starPCFDeniedBsnSessionInfoUnavail  Counter32,
starPCFRegUpdTransmitted  Counter32,
starPCFRegUpdAccepted  Counter32,
starPCFRegUpdateRpLifetimeExpiry  Counter32,
starPCFRegUpdateUpperLayerInitiated  Counter32,
starPCFRegUpdateOtherReason  Counter32,
starPCFRegUpdateHORelease  Counter32,
starPCFRegUpdateSessmgrDied  Counter32,
starPCFAuxA10ConnectionsSetup  Counter32,
starPCFSessionsDenied  Counter32,
starPCFSessionsInit  Counter32,
starPCFSessionsReneg  Counter32,
starPCFDiscLcpRemote  Counter32,
starPCFDiscRpRemote  Counter32,
starPCFDiscRpLocal  Counter32,
starPCFDiscMaxTcpIpOptRetr  Counter32,
starPCFDiscMaxIpv6OptRetr  Counter32,
starPCFDiscMaxLcpIpOptRetr  Counter32,
starPCFDiscAuthFail  Counter32,
starPCFDiscSessSetupTimeout  Counter32,
starPCFDiscFlowAddFail  Counter32,
starPCFDiscInvDestContext  Counter32,
starPCFDiscLcpIpOptFail  Counter32,
starPCFDiscIpv6OptFail  Counter32,
starPCFDiscLcpIpOptFail  Counter32,
starPCFDiscNoRemIpAddr  Counter32,
starPCFDiscDetectionFail  Counter32,
starPCFDiscMisc  Counter32,
starPCFCurrentSessions  Gauge32,
starPCFCurrentSessionsSetup  Counter32,
starPCFSessionsRelsese  Counter32,
starPCFCurrentRevASessions  Gauge32,
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

  starPCFRevaSessionsReleasese Counter32

starPCFSvcID OBJECT-TYPE
SYNTAX   StarShortID
MAX-ACCESS not-accessible
STATUS    current
DESCRIPTION "The service identification is made up from first 8 chars of context name
and first 8 chars of service name separated by :, with the length of this
structure at the beginning"
 ::= { starPCFEntry 1 }

starPCFiPAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "The PCF IP address"
 ::= { starPCFEntry 2 }

starPCFVpnId OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The internal identification of the VPN (context)"
 ::= { starPCFEntry 3 }

starPCFVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The VPN (context) name"
 ::= { starPCFEntry 4 }

starPCFServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The name of this service"
 ::= { starPCFEntry 5 }

starPCFRqRcvd OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "Number of rrq received"
 ::= { starPCFEntry 6 }

starPCFRqAccepted OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "Number of rrq accepted"
 ::= { starPCFEntry 7 }

starPCFRqDenied OBJECT-TYPE
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

    starPCFRrqDiscarded OBJECT-TYPE
    SYNTAX     Counter32
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "Number of rrq discarded"
    ::= { starPCFEntry 9 }

    starPCFInitialRrqRcvd OBJECT-TYPE
    SYNTAX     Counter32
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "Initial rrq received"
    ::= { starPCFEntry 10 }

    starPCFIntraPDSNAccepted OBJECT-TYPE
    SYNTAX     Counter32
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "Intra PDSN dormant handoff rrq accepted"
    ::= { starPCFEntry 13 }

    starPCFInterPDSNHORrqAccepted OBJECT-TYPE
    SYNTAX     Counter32
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "Inter PDSN handoff rrq accepted"
    ::= { starPCFEntry 14 }

    starPCFInitialRrqDenied OBJECT-TYPE
    SYNTAX     Counter32
    MAX-ACCESS read-only
    STATUS     current
    DESCRIPTION
        "Initial rrq denied"
    ::= { starPCFEntry 15 }

END
STARENT-MIB DEFINITIONS ::= BEGIN

starPCFInitialRrqDiscarded OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Initial rrq discarded"
 ::= { starPCFEntry 16 }

starPCFRenewRrqRcvd OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Renew rrq received"
 ::= { starPCFEntry 17 }

starPCFRenewRrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Renew rrq accepted"
 ::= { starPCFEntry 18 }

starPCFRenewActiveRrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Renew active rrq accepted"
 ::= { starPCFEntry 19 }

starPCFRenewDormantRrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Renew dormant rrq accepted"
 ::= { starPCFEntry 20 }

starPCFRenewRrqDenied OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Renew rrq denied"
 ::= { starPCFEntry 21 }

starPCFRenewRrqDiscarded OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Renew rrq discarded"
 ::= { starPCFEntry 22 }

starPCFDeregRrqRcvd OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Deregistration rrq received"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starPCFEntry 23 }

starPCFDeregRrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Deregistration rrq accepted"
 ::= { starPCFEntry 24 }

starPCFDeregDormantRrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Deregistration dormant rrq accepted"
 ::= { starPCFEntry 25 }

starPCFDeregRrqDenied OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Deregistration rrq denied"
 ::= { starPCFEntry 26 }

starPCFDeregRrqDiscarded OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Deregistration rrq discarded"
 ::= { starPCFEntry 27 }

starPCFIntraPDSNActiveAnidHORrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Intra PDSN active anid handoff rrq accepted"
 ::= { starPCFEntry 28 }

starPCFIntraPDSNDormantAnidHORrqAccepted OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Intra PDSN dormant anidhandoff rrq accepted"
 ::= { starPCFEntry 29 }

starPCFDeniedUnSpeReason OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Denied unspecified reason"
 ::= { starPCFEntry 30 }

starPCFDeniedAdmProh OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION

---

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"Denied admin prohibited"
 ::= { starPCFEntry 31 }

starPCFDeniedInsufResource OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied insufficient resources"
 ::= { starPCFEntry 32 }

starPCFDeniedMobNodeAuthFail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied mobile node authentication failure"
 ::= { starPCFEntry 33 }

starPCFDeniedIdentMismatch OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied identification mismatch"
 ::= { starPCFEntry 34 }

starPCFDeniedPoorFormedReq OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied poor formed request"
 ::= { starPCFEntry 35 }

starPCFDeniedUnknownPDSNAddr OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied unknown PDSN address"
 ::= { starPCFEntry 36 }

starPCFDeniedRevTunnelUnavail OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied rev tunnel unavilable"
 ::= { starPCFEntry 37 }

starPCFDeniedRevTunnelRequire OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Denied rev tunnel required"
 ::= { starPCFEntry 38 }

starPCFDeniedUnrecogVendorId OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STARENT-MIB DEFINITIONS ::= BEGIN

  STATUS current
  DESCRIPTION "Denied unrecognized vendor id"
  ::= { starPCFEntry 39 }

starPCFDeniedSessionClosed OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Denied session closed"
 ::= { starPCFEntry 40 }

starPCFDeniedBsnSessionInfoUnavail OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Denied bsn session information unavailable"
 ::= { starPCFEntry 41 }

starPCFRegUpdTransmitted OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Registration updates transmitted"
 ::= { starPCFEntry 42 }

starPCFRegUpdAccepted OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Registration updates accepted"
 ::= { starPCFEntry 43 }

starPCFRegUpdateRpLifetimeExpire OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Registration update rp lifetime expiry"
 ::= { starPCFEntry 44 }

starPCFRegUpdateUpperLayerInitiated OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Registration update upper layer initiated"
 ::= { starPCFEntry 45 }

starPCFRegUpdateOtherReason OBJECT-TYPE
SYNTAX        Counter32
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION    "Registration update other reason"
 ::= { starPCFEntry 46 }

starPCFRegUpdateHORelase OBJECT-TYPE
SYNTAX        Counter32
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS read-only
STATUS current
DESCRIPTION "Registration update handoff release"
 ::= { starPCFEntry 47 }

starPCFRegUpdateSessmgrDied OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Registration update sessmgr denied"
 ::= { starPCFEntry 48 }

starPCFAuxA10ConnectionsSetup OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Aux a10 connections setup"
 ::= { starPCFEntry 49 }

starPCFSessionsDenied OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Number of sessions denied"
 ::= { starPCFEntry 50 }

starPCFSessionsInit OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Number of sessions initiated"
 ::= { starPCFEntry 51 }

starPCFSessionsReneg OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Number of PCF sessions renegotiated"
 ::= { starPCFEntry 52 }

starPCFDiscLcpRemote OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Disconnect reason lcp remote"
 ::= { starPCFEntry 53 }

starPCFDiscRpRemote OBJECT-TYPE
SYNTAX  Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Disconnect reason rp remote"
 ::= { starPCFEntry 54 }

END
starPCFDiscRpLocal OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason rp local"
 ::= { starPCFEntry 55 }

starPCFDiscMaxIpPcpRetr OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason ppp maximum ipcp retries"
 ::= { starPCFEntry 56 }

starPCFDiscMaxIpv6CpRetr OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason max ipv6cp retries"
 ::= { starPCFEntry 57 }

starPCFDiscMaxLcpRetr OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason max lcp retries"
 ::= { starPCFEntry 58 }

starPCFDiscAuthFail OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason authentication failure"
 ::= { starPCFEntry 59 }

starPCFDiscSessSetupTimeout OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason session setup timeout"
 ::= { starPCFEntry 60 }

starPCFDiscFlowAddFail OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason flow add failure"
 ::= { starPCFEntry 61 }

starPCFDiscInvDestContext OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "Disconnect reason invalid destination context"
 ::= { starPCFEntry 62 }
STARENT-MIB DEFINITIONS ::= BEGIN

starPCFDiscLcpOptFail OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Disconnect reason lcp option failure"
 ::= { starPCFEntry 63 }

starPCFDiscIpcpOptFail OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Disconnect reason lcp option failure"
 ::= { starPCFEntry 64 }

starPCFDiscIpv6cpOptFail OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Disconnect reason ipv6cp option failure"
 ::= { starPCFEntry 65 }

starPCFDiscNoRemIpAddr OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Disconnect reason no ip remote ip address"
 ::= { starPCFEntry 66 }

starPCFDiscDetectionFail OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Disconnect reason detection failure"
 ::= { starPCFEntry 67 }

starPCFDiscMisc OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Disconnect reason misallaneous"
 ::= { starPCFEntry 68 }

starPCFCurrentSessions OBJECT-TYPE
SYNTAX    Gauge32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
   "Current sessions"
 ::= { starPCFEntry 69 }

starPCFSessionsSetup OBJECT-TYPE
SYNTAX    Counter32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION

STARENT-MIB DEFINITIONS ::= END
"Session setup"
 ::= { starPCFEntry 70 }

starPCFSessionsRelease OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "Sessions release"
 ::= { starPCFEntry 71 }

starPCFCurrentRevaSessions OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "Current reva sessions"
 ::= { starPCFEntry 72 }

starPCFRevaSessionsSetup OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "Reva session setup"
 ::= { starPCFEntry 73 }

starPCFRevaSessionsRelease OBJECT-TYPE
SYNTAX     Counter32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION  "Reva session release"
 ::= { starPCFEntry 74 }

-- SIP Route Server
-- These objects are defined only for use in traps

starentSIPRouteServer OBJECT IDENTIFIER ::= { starentMIBObjects 40 }

starSIPRouteServerTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarSIPRouteServerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION  "A table containing SIPRouteServer related information"
 ::= { starentSIPRouteServer 1 }

starSIPRouteServerEntry OBJECT-TYPE
SYNTAX     StarSIPRouteServerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION  "The statistics for a specific SIPRouteServer"
INDEX { starSIPRouteServerVpnID }  
 ::= { starentSIPRouteServerTable 1 }

StarSIPRouteServerEntry ::=  
SEQUENCE {  
    starSIPRouteServerVpnID             Gauge32,  
    starSIPRouteServerVpnName           DisplayString,  
    starSIPRouteServerVmgName           DisplayString,  
    starSIPRouteServerAsName            DisplayString,  

}
STARENT-MIB DEFINITIONS ::= BEGIN

starSIPRouteServerIpAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The Sip Route Server IP Address"
::= { starSIPRouteServerEntry 5 }

starSIPRouteServerVpnId OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of the VPN (context)"
::= { starSIPRouteServerEntry 1 }

starSIPRouteServerVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this VPN (context)"
::= { starSIPRouteServerEntry 2 }

starSIPRouteServerVmgName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this VMG (context)"
::= { starSIPRouteServerEntry 3 }

starSIPRouteServerAsName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this AS (context)"
::= { starSIPRouteServerEntry 4 }

-- VIM Service
-- These objects are defined only for use in traps

starentVIMService OBJECT IDENTIFIER ::= { starentMIBObjects 41 }

starVIMServiceTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarVIMServiceEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing VIM's Service related information"
::= { starentVIMService 1 }

starVIMServiceEntry OBJECT-TYPE
SYNTAX StarVIMServiceEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The statistics for a specific VIM's Service"
INDEX { starVIMServiceVpnID, starVIMServiceInstanceId }
::= { starVIMServiceTable 1 }

StarVIMServiceEntry ::=  
SEQUENCE {  
  starVIMServiceVpnID                   Gauge32,
  starVIMServiceVpnName                 DisplayString,
  starVIMServiceInstanceId              Unsigned32,
  starVIMServiceFMDMaxCallRate          Unsigned32,
  starVIMServiceFMDContinuousLoadCount  Unsigned32
}

starVIMServiceVpnID OBJECT-TYPE  
SYNTAX     Gauge32  
MAX-ACCESS not-accessible  
STATUS     current  
DESCRIPTION
"The internal identification of the VPN (context)"
::= { starVIMServiceEntry 1 }

starVIMServiceVpnName OBJECT-TYPE  
SYNTAX     DisplayString  
MAX-ACCESS read-only  
STATUS     current  
DESCRIPTION
"The name of this VPN (context)"
::= { starVIMServiceEntry 2 }

starVIMServiceInstanceId OBJECT-TYPE  
SYNTAX     Unsigned32  
MAX-ACCESS accessible-for-notify  
STATUS     current  
DESCRIPTION
"The VIM Instance ID"
::= { starVIMServiceEntry 3 }

starVIMServiceFMDMaxCallRate OBJECT-TYPE  
SYNTAX     Unsigned32  
UNITS      "Calls per minute"  
MAX-ACCESS read-only  
STATUS     current  
DESCRIPTION
"Configured FMD max call rate"
::= { starVIMServiceEntry 4 }

starVIMServiceFMDContinuousLoadCount OBJECT-TYPE  
SYNTAX     Unsigned32  
MAX-ACCESS read-only  
STATUS     current  
DESCRIPTION
"Configured FMD continuous load count"
::= { starVIMServiceEntry 5 }

-- GTTP Storage Server, used for traps only
-- The GTTP Storage Server is an external entity, but the ST-16/ST-40 reports notifications
-- on its behalf
starentGSS OBJECT IDENTIFIER ::= { starentMIBObjects 42 }

starGSSClusterName OBJECT-TYPE
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of the Storage Server Cluster"
 ::= { starentGSS 1 }

starGSSClusterNodeName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The name of a node within a Storage Server Cluster"
 ::= { starentGSS 2 }

starGSSClusterRgName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Resource Group"
 ::= { starentGSS 3 }

starGSSClusterRsName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "Resource Name"
 ::= { starentGSS 4 }

starGSSClusterNodeState OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""
 ::= { starentGSS 5 }

starGSSClusterPrevOnlineNode OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""
 ::= { starentGSS 6 }

starGSSClusterFromNode OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""
 ::= { starentGSS 7 }

starGSSClusterToNode OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""
 ::= { starentGSS 8 }

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starGSSDiskPath OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
""
::= { starentGSS 9 }

starGSSTransportPath OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
""
::= { starentGSS 10 }

starGSSIPMFGroupName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
""
::= { starentGSS 11 }

starGSSInterfaceName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
""
::= { starentGSS 12 }

--

starentPDIFSys OBJECT IDENTIFIER ::= { starentMIBObjects 43 }

starPDIFSysStatus OBJECT-TYPE
SYNTAX     INTEGER {
    unknown(0),
    noservice(1),
    active(2),
    temporary(3),
    outofservice(4)
}
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The overall status of the chassis as a PDIF service. A value of noservice(1) means that
the chassis is not configured/licensed for PDIF; active(2) indicates that at least one
PDIF service is available for processing sessions; temporary(3) indicates that PDIF is
running in a temporary capacity, such as running in standby mode during an online
upgrade; outofservice(4) indicates that no PDIF service is currently active,
but one or more PDIF services are configured"
::= { starentPDIFSys 1 }

starPDIFSysNumService OBJECT-TYPE
SYNTAX     Unsigned32
UNITS       "Services"
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The number of PDIF services configured"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentPDIFSys 2 }

starPDIFSysSessCurrent OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of current PDIF sessions for this chassis"
 ::= { starentPDIFSys 3 }

starPDIFSysSessCurrActive OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently active PDIF sessions for this chassis"
 ::= { starentPDIFSys 4 }

starPDIFSysSessCurrDormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently dormant PDIF sessions for this chassis"
 ::= { starentPDIFSys 5 }

starPDIFSysSessTtlSetup OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The cumulative total number of PDIF sessions that has been setup"
 ::= { starentPDIFSys 6 }

starPDIFSysChildSACurrent OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of current PDIF child SAs for this chassis"
 ::= { starentPDIFSys 7 }

--

starentPDIFService OBJECT IDENTIFIER ::= { starentMIBObjects 44 }

starPDIFTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarPDIFEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table of per-service PDIF information"
 ::= { starentPDIFService 1 }

starPDIFEntry OBJECT-TYPE
SYNTAX StarPDIFEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The information for a PDIF service"
INDEX { IMPLIED starPDIFSvcID }
 ::= { starPDIFTable 1 }

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STARENT-MIB DEFINITIONS ::= BEGIN

StarPDIFEntry ::= SEQUENCE {
    starPDIFSvcID StarShortID,
    starPDIFVpnID Gauge32,
    starPDIFVpnName DisplayString,
    starPDIFServName DisplayString,
    starPDIFStatus INTEGER,
    starPDIFSessCurrent Gauge32,
    starPDIFSessRemain Gauge32,
    starPDIFSessCurrentActive Gauge32,
    starPDIFSessCurrentDormant Gauge32,
    starPDIFSessCurrentIpv6Active Gauge32,
    starPDIFSessCurrentIpv6Dormant Gauge32,
    starPDIFSessCurrentIpv4Active Gauge32,
    starPDIFSessCurrentIpv4Dormant Gauge32,
    starPDIFBindIpAddress IpAddress,
    starPDIFBindIpPort Integer32,
    starPDIFBindSlot Integer32,
    starPDIFBindPort Integer32
}

starPDIFSvcID OBJECT-TYPE
SYNTAX StarShortID
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
   "The service identification is made up from first 8 chars of context name
    and first 8 chars of service name separated by (:)"
::= { starPDIFEntry 1 }

starPDIFVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The internal identification of the VPN (context). Note that this identifier can change due to
    configuration changes and/or the restart of the PDIF device; in general starPDIFVpnName should
    be used to identify the VPN (context)"
::= { starPDIFEntry 2 }

starPDIFVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The VPN (context) name"
::= { starPDIFEntry 3 }

starPDIFServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The name of this service"
::= { starPDIFEntry 4 }

starPDIFStatus OBJECT-TYPE
SYNTAX INTEGER {
    unknown(0),
    in-service(1),
    out-of-service(2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The state of this Pdif service. The value unknown(0) indicates that the
system is unable to determine the status; inservice(1) indicates that the
service is available for processing sessions; outofservice(2) indicates that
the service is configured, but unavailable, either due to operator action
or due to a fault."
::= { starPDIFEntry 5 }

starPDIFsSessCurrent OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of current sessions for this Pdif service."
::= { starPDIFEntry 6 }

starPDIFsSessRemain OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"A count of the remaining capacity for this Pdif service, in terms
of sessions. If a session limit is configured for this Pdif service,
starPDIFsSessRemain will identify the difference between this limit
and starPDIFsSessCurrent. If no individual limit has been configured
for this service, starPDIFsSessRemain will identify the remaining
capacity for the entire chassis. Note that in this latter case,
the value for starPDIFsSessRemain cannot be summed across multiple
services."
::= { starPDIFEntry 7 }

starPDIFsSessCurrentActive OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently active sessions for this Pdif service"
::= { starPDIFEntry 8 }

starPDIFsSessCurrentDormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently dormant sessions for this Pdif service. Note that this value
will always be 0, as the current system does not identify Pdif sessions as dormant."
::= { starPDIFEntry 9 }

starPDIFsSessCurrentIpv6Active OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently active IPv6 sessions for this Pdif service. Note that this value
will always be 0, as the current system does not support IPv6 sessions."
::= { starPDIFEntry 10 }

starPDIFsSessCurrentIpv6Dormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
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STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
"The number of currently dormant IPv6 sessions for this PDIF service. Note that this value
will always be 0, as the current system does not support IPv6 sessions."
::= { starPDIFEntry 11 }

starPDIFSessCurrentIpv4Active OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently active IPv4 sessions for this PDIF service. Note that all PDIF
sessions are currently identified as 'active', and the value for starPDIFSessCurrentIpv4Dormant
will always be zero."
::= { starPDIFEntry 12 }

starPDIFSessCurrentIpv4Dormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently dormant IPv4 sessions for this PDIF service. Note that all PDIF
sessions are currently identified as 'active', so the value for starPDIFSessCurrentIPv4Dormant
will always be zero."
::= { starPDIFEntry 13 }

starPDIFBindIpAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The bind IP address for this PDIF service"
::= { starPDIFEntry 14 }

starPDIFBindIpPort OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The bind IP port for this PDIF service"
::= { starPDIFEntry 15 }

starPDIFBindSlot OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The physical slot number for the physical port which holds the interface
bound to the starPDIFBindIpAddress address."
::= { starPDIFEntry 16 }

starPDIFBindPort OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The physical port number for the physical port which holds the interface
bound to the starPDIFBindIpAddress address."
::= { starPDIFEntry 17 }

--PDG     - START
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STARENT-MIB DEFINITIONS ::= BEGIN

starentPDGsys OBJECT IDENTIFIER ::= { starentMIBObjects 62 }

starPDGSysStatus OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  noservice(1),
  active(2),
  temporary(3),
  outofservice(4)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The overall status of the chassis as a PDG service. A value of noservice(1) means that
the chassis is not configured/licensed for PDG; active(2) indicates that at least one
PDG service is available for processing sessions; temporary(3) indicates that PDG is
running in a temporary capacity, such as running in standby mode during an online
upgrade; outofservice(4) indicates that no PDG service is currently active,
but one or more PDG services are configured"
 ::= { starentPDGSys 1 }

starPDGSysNumService OBJECT-TYPE
SYNTAX Unsigned32
UNITS "Services"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of PDG services configured"
 ::= { starentPDGSys 2 }

starPDGSysSessCurrent OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of current PDG sessions for this chassis"
 ::= { starentPDGSys 3 }

starPDGSysSessCurrActive OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently active PDG sessions for this chassis"
 ::= { starentPDGSys 4 }

starPDGSysSessCurrDormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The number of currently dormant PDG sessions for this chassis"
 ::= { starentPDGSys 5 }

starPDGSysSessTtlSetup OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The cumulative total number of PDG sessions that has been setup"
 ::= { starentPDGSys 6 }

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starPDGSysChildSACurrent OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The number of current PDG child SAs for this chassis"
 ::= { starentPDGSys 7 }

starentPDGService OBJECT IDENTIFIER ::= { starentMIBObjects 63 }

starPDGTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarPDGEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "A table of per-service PDG information"
 ::= { starentPDGService 1 }

starPDGEntry OBJECT-TYPE
SYNTAX     StarPDGEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "The information for a PDG service"
INDEX { IMPLIED starPDGSvcID }
 ::= { starPDGTable 1 }

StarPDGEntry ::= 
SEQUENCE {
   starPDGSvcID                   StarShortID,
   starPDGVpnID                   Gauge32,
   starPDGVpnName                 DisplayString,
   starPDGServName                DisplayString,
   starPDGStatus                  INTEGER,
   starPDGSessCurrent             Gauge32,
   starPDGSessRemain              Gauge32,
   starPDGSessCurrentActive       Gauge32,
   starPDGSessCurrentDormant      Gauge32,
   starPDGSessCurrentIpv6Active   Gauge32,
   starPDGSessCurrentIpv6Dormant  Gauge32,
   starPDGSessCurrentIpv4Active   Gauge32,
   starPDGSessCurrentIpv4Dormant  Gauge32,
   starPDGBindIpAddress           IpAddress,
   starPDGBindIpPort              Integer32,
   starPDGBindSlot                Integer32,
   starPDGBindPort                Integer32
}

starPDGSvcID OBJECT-TYPE
SYNTAX     StarShortID
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "The service identification is made up from first 8 chars of context name
    and first 8 chars of service name separated by :"
 ::= { starPDGEntry 1 }

starPDGVpnID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The internal identification of the VPN (context). Note that this identifier can change due to
configuration changes and/or the restart of the PDG device; in general starPDGVpnName should
be used to identify the VPN (context)"
::= { starPDGEntry 2 }

starPDGVpnName OBJECT-TYPE
SYNTAX       DisplayString
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION   "The VPN (context) name"
::= { starPDGEntry 3 }

starPDGServName  OBJECT-TYPE
SYNTAX       DisplayString
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION   "The name of this service"
::= { starPDGEntry 4 }

starPDGStatus OBJECT-TYPE
SYNTAX       INTEGER {
              unknown(0),
              inservice(1),
              outofservice(2)
            }
MAX-ACCESS read-only
STATUS       current
DESCRIPTION   "The state of this PDG service. The value unknown(0) indicates that the
system is unable to determine the status; inservice(1) indicates that the
service is available for processing sessions; outofservice(2) indicates that
the service is configured, but unavailable, either due to operator action
or due to a fault."
::= { starPDGEntry 5 }

starPDGSessCurrent  OBJECT-TYPE
SYNTAX       Gauge32
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION   "The number of current sessions for this PDG service."
::= { starPDGEntry 6 }

starPDGSessRemain  OBJECT-TYPE
SYNTAX        Gauge32
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION   "A count of the remaining capacity for this PDG service, in terms
of sessions. If a session limit is configured for this PDG service,
starPDGSessRemain will identify the difference between this limit
and starPDGSessCurrent. If no individual limit has been configured
for this service, starPDGSessRemain will identify the remaining
capacity for the entire chassis. Note that in this latter case,
the value for starPDGSessRemain cannot be summed across multiple
services."
::= { starPDGEntry 7 }

starPDGSessCurrentActive  OBJECT-TYPE
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STARENT-MIB DEFINITIONS ::= BEGIN

SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently active sessions for this PDG service"
::= { starPDGEntry 8 }

starPDGSessCurrentDormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently dormant sessions for this PDG service"
::= { starPDGEntry 9 }

starPDGSessCurrentIpv6Active OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently active IPv6 sessions for this PDG service. Note that this value will always be 0, as the current system does not support IPv6 sessions."
::= { starPDGEntry 10 }

starPDGSessCurrentIpv6Dormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently dormant IPv6 sessions for this PDG service. Note that this value will always be 0, as the current system does not support IPv6 sessions."
::= { starPDGEntry 11 }

starPDGSessCurrentIpv4Active OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently active IPv4 sessions for this PDG service. Note that all PDG sessions are currently identified as 'active', and the value for starPDGSessCurrentIpv4Dormant will always be zero."
::= { starPDGEntry 12 }

starPDGSessCurrentIpv4Dormant OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of currently dormant IPv4 sessions for this PDG service. Note that all PDG sessions are currently identified as 'active', so the value for starPDGSessCurrentIpv4Dormant will always be zero."
::= { starPDGEntry 13 }

starPDGBindIpAddress OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The bind IP address for this PDG service"
::= { starPDGEntry 14 }

starPDGBindIpPort OBJECT-TYPE
SYNTAX Integer32
STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS read-only
STATUS current
DESCRIPTION "The bind IP port for this PDG service"
::= { starPDGEntry 15 }

starPDGBindSlot OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The physical slot number for the physical port which holds the interface
bound to the starPDGBindIpAddress address."
::= { starPDGEntry 16 }

starPDGBindPort OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The physical port number for the physical port which holds the interface
bound to the starPDGBindIpAddress address."
::= { starPDGEntry 17 }

-- PDG End

-- HNBGW -START

starentHNBGWService OBJECT IDENTIFIER ::= { starentMIBObjects 65 }

starHNBGWServTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarHNBGWServEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing HNBGW related information"
::= { starentHNBGWService 1 }

starHNBGWServEntry OBJECT-TYPE
SYNTAX StarHNBGWServEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific HNBGW service"
INDEX { starHNBGWServVpnID, starHNBGWServSvcID }
::= { starHNBGWServTable 1 }

StarHNBGWServEntry ::= SEQUENCE {
  starHNBGWServVpnID Gauge32,
  starHNBGWServSvcID Gauge32,
  starSessHNBGWVpnName DisplayString,
  starSessHNBGWServName DisplayString,
  starSessHNBGWCSNwName DisplayString,
  starSessHNBGWPsnName DisplayString,

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STARENT-MIB DEFINITIONS ::= BEGIN

starSessHNBGWSgsnPtCd  Integer32,
starSessHNBGWMscPtCd   Integer32
}

starHNBGWServVpnID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "The internal identification of the VPN (context)"
 ::= { starHNBGWServEntry 1 }

starHNBGWServSvcID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
   "The internal identification of this service; unique within a specific context"
 ::= { starHNBGWServEntry 2 }

starSessHNBGWVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The name of this VPN (context)"
 ::= { starHNBGWServEntry 3 }

starSessHNBGWServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The name of this Service"
 ::= { starHNBGWServEntry 4 }

starSessHNBGWCSNwName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The name of the CS NW"
 ::= { starHNBGWServEntry 5 }

starSessHNBGWPSNwName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
   "The name of the PS NW"
 ::= { starHNBGWServEntry 6 }

starSessHNBGWSgsnPtCd OBJECT-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

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STARENT-MIB DEFINITIONS ::= BEGIN

starSessHNBGWMsgPtCd OBJECT-TYPE
SYNTAX  Integer32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION
   "SGSN Point Code"
 ::= { starHNBGWServEntry 7 }

--End of HNBGW Service

-- ALCAP Service

starentALCAPService OBJECT IDENTIFIER ::= { starentMIBObjects 66 }

starALCAPServTable OBJECT-TYPE
SYNTAX  SEQUENCE OF StarALCAPServEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION
   "A table containing ALCAP relate information"
 ::= { starALCAPService 1 }

starALCAPServEntry OBJECT-TYPE
SYNTAX  StarALCAPServEntry
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION
   "The statistics for a specific ALCAP service"
INDEX  { starALCAPSerVpnID, starALCAPSerSvcID }
 ::= { starALCAPServTable 1 }

StarALCAPServEntry ::= SEQUENCE {
   starALCAPSerVpnID          Gauge32,
   starALCAPSerSvcID          Gauge32,
   starSessALCAPVpnName       DisplayString,
   starSessALCAPServName      DisplayString,
   starSessALCAPAAL2NodeName  DisplayString,
   starSessALCAPPathId        Integer32
}

starALCAPSerVpnID OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS not-accessible
STATUS  current
DESCRIPTION
   "The internal identification of the VPN (context)"

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::= { starALCAPServEntry 1 }

starALCAPSerSvcID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The internal identification of this service; unique within a specific context"
::= { starALCAPServEntry 2 }

starSessALCAPVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The name of this VPN (context)"
::= { starALCAPServEntry 3 }

starSessALCAPServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The name of this Service"
::= { starALCAPServEntry 4 }

starSessALCAPAAL2NodeName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The name of the AAL2 Node"
::= { starALCAPServEntry 5 }

starSessALCAPPathId OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The path id of AAL2 path"
::= { starALCAPServEntry 6 }

-- ALCAP END

--FNG  - START

starentFNGSys OBJECT IDENTIFIER ::= { starentMIBObjects 60 }

starFNGSysStatus OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),
  noservice(1),
  active(2),
  temporary(3),
  outofservice(4)
}
MAX-ACCESS read-only
STARENT-MIB DEFINITIONS ::= BEGIN

  STATUS  current
  DESCRIPTION
    "The overall status of the chassis as a FNG service. A value of noservice(1) means that
    the chassis is not configured/licensed for FNG; active(2) indicates that at least one
    FNG service is available for processing sessions; temporary(3) indicates that FNG is
    running in a temporary capacity, such as running in standby mode during an online
    upgrade; outofservice(4) indicates that no FNG service is currently active,
    but one or more FNG services are configured"
 ::= { starentFNGSys 1 }

starFNGSysNumService OBJECT-TYPE
  SYNTAX     Unsigned32
  UNITS      "Services"
  MAX-ACCESS read-only
  STATUS     current
  DESCRIPTION
    "The number of FNG services configured"
 ::= { starentFNGSys 2 }

starFNGSysSessCurrent OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS read-only
  STATUS     current
  DESCRIPTION
    "The number of current FNG sessions for this chassis"
 ::= { starentFNGSys 3 }

starFNGSysSessCurrActive OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS read-only
  STATUS     current
  DESCRIPTION
    "The number of currently active FNG sessions for this chassis"
 ::= { starentFNGSys 4 }

starFNGSysSessCurrDormant OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS read-only
  STATUS     current
  DESCRIPTION
    "The number of currently dormant FNG sessions for this chassis"
 ::= { starentFNGSys 5 }

starFNGSysSessTtlSetup OBJECT-TYPE
  SYNTAX     Counter32
  MAX-ACCESS read-only
  STATUS     current
  DESCRIPTION
    "The cumulative total number of FNG sessions that has been setup"
 ::= { starentFNGSys 6 }

starFNGSysChildSACurrent OBJECT-TYPE
  SYNTAX     Gauge32
  MAX-ACCESS read-only
  STATUS     current
  DESCRIPTION
    "The number of current FNG child SAs for this chassis"
 ::= { starentFNGSys 7 }

starentFNGService OBJECT IDENTIFIER ::= { starentMIBObjects 61 }

END
starFNGTable OBJECT-TYPE
SYNTAX      SEQUENCE OF StarFNGEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "A table of per-service FNG information"
::= { starentFNGService 1 }

starFNGEntry OBJECT-TYPE
SYNTAX      StarFNGEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "The information for a FNG service"
INDEX       { IMPLIED starFNGSvcID }
::= { starFNGTable 1 }

StarFNGEntry ::=-
SEQUENCE {
  starFNGSvcID                   StarShortID,
  starFNGVpnID                   Gauge32,
  starFNGVpnName                 DisplayString,
  starFNGServName                DisplayString,
  starFNGStatus                  INTEGER,
  starFNGSessCurrent             Gauge32,
  starFNGSessRemain              Gauge32,
  starFNGSessCurrentActive       Gauge32,
  starFNGSessCurrentDormant      Gauge32,
  starFNGSessCurrentIpv6Active   Gauge32,
  starFNGSessCurrentIpv6Dormant  Gauge32,
  starFNGSessCurrentIpv4Active   Gauge32,
  starFNGSessCurrentIpv4Dormant  Gauge32,
  starFNGBindIpAddress           IpAddress,
  starFNGBindIpPort              Integer32,
  starFNGBindSlot                Integer32,
  starFNGBindPort                Integer32
}

starFNGSvcID OBJECT-TYPE
SYNTAX      StarShortID
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "The service identification is made up from first 8 chars of context name
    and first 8 chars of service name separated by (:)"
::= { starFNGEntry 1 }

starFNGVpnID OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The internal identification of the VPN (context).  Note that this identifier can change due to
    configuration changes and/or the restart of the FNG device; in general starFNGVpnName should
    be used to identify the VPN (context)"
::= { starFNGEntry 2 }

starFNGVpnName OBJECT-TYPE
SYNTAX      DisplayString
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The VPN (context) name"
::= { starFNGEntry 3 }

starFNGServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The name of this service"
::= { starFNGEntry 4 }

starFNGStatus OBJECT-TYPE
SYNTAX     INTEGER {
    unknown(0),
    inservice(1),
    outofservice(2)
}
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The state of this FNG service. The value unknown(0) indicates that the
system is unable to determine the status; inservice(1) indicates that the
service is available for processing sessions; outofservice(2) indicates that
the service is configured, but unavailable, either due to operator action
or due to a fault."
::= { starFNGEntry 5 }

starFNGSessCurrent OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The number of current sessions for this FNG service."
::= { starFNGEntry 6 }

starFNGSessRemain OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"A count of the remaining capacity for this FNG service, in terms
of sessions. If a session limit is configured for this FNG service,
starFNGSessRemain will identify the difference between this limit
and starFNGSessCurrent. If no individual limit has been configured
for this service, starFNGSessRemain will identify the remaining
capacity for the entire chassis. Note that in this latter case,
the value for starFNGSessRemain cannot be summed across multiple
services."
::= { starFNGEntry 7 }

starFNGSessCurrentActive OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The number of currently active sessions for this FNG service"
::= { starFNGEntry 8 }

starFNGSessCurrentDormant OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
   "The number of currently dormant sessions for this FNG service"
 ::= { starFNGEntry 9 }

starFNGSessCurrentIpv6Active OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The number of currently active IPv6 sessions for this FNG service. Note that this value
   will always be 0, as the current system does not support IPv6 sessions."
 ::= { starFNGEntry 10 }

starFNGSessCurrentIpv6Dormant OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The number of currently dormant IPv6 sessions for this FNG service. Note that this value
   will always be 0, as the current system does not support IPv6 sessions."
 ::= { starFNGEntry 11 }

starFNGSessCurrentIpv4Active OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The number of currently active IPv4 sessions for this FNG service. Note that all FNG
   sessions are currently identified as 'active', and the value for starFNGSessCurrentIPv4Dormant
   will always be zero."
 ::= { starFNGEntry 12 }

starFNGSessCurrentIpv4Dormant OBJECT-TYPE
SYNTAX      Gauge32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The number of currently dormant IPv4 sessions for this FNG service. Note that all FNG
   sessions are currently identified as 'active', so the value for starFNGSessCurrentIPv4Dormant
   will always be zero."
 ::= { starFNGEntry 13 }

starFNGBindIpAddress OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The bind IP address for this FNG service"
 ::= { starFNGEntry 14 }

starFNGBindIpPort OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
   "The bind IP port for this FNG service"
 ::= { starFNGEntry 15 }

starFNGBindSlot OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION

END
STARENT-MIB DEFINITIONS ::= BEGIN

"The physical slot number for the physical port which holds the interface bound to the starFNGBindIpAddress address."
 ::= { starFNGEntry 16 }

starFNGBindPort OBJECT-TYPE
SYNTAX    Integer32
MAX-ACCESS read-only
STATUS    current
DESCRIPTION
 "The physical port number for the physical port which holds the interface bound to the starFNGBindIpAddress address."
 ::= { starFNGEntry 17 }

-- FNG End

-- SGSN

starentSGSNService OBJECT IDENTIFIER ::= { starentMIBObjects 45 }

starSGNSerTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarSGNSerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
 "A table containing SGSN related information"
 ::= { starentSGSNService 1 }

starSGNSerEntry OBJECT-TYPE
SYNTAX     StarSGNSerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
 "The statistics for a specific SGSN service"
INDEX { starSGNSerVpnID, starSGNSerSvcID }
 ::= { starSGNSerTable 1 }

StarSGNSerEntry ::= SEQUENCE {
    starSGNSerVpnID             Gauge32,
    starSGNSerSvcID             Gauge32,
    starSessSGSNVpnName          DisplayString,
    starSessSGNServName          DisplayString,
    starSessSGSNMcc              OCTET STRING,
    starSessSGSNMnc              OCTET STRING,
    starSessSGSNRncId            Gauge32,
    starSessSGSNHlrNum           OCTET STRING
}

starSGNSerVpnID OBJECT-TYPE
SYNTAX    Gauge32
MAX-ACCESS not-accessible
STATUS    current
DESCRIPTION
 "The internal identification of the VPN (context)"
 ::= { starSGNSerEntry 1 }

starSGNSerSvcID OBJECT-TYPE
SYNTAX    Gauge32
MAX-ACCESS not-accessible
STATUS    current

END
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"The internal identification of this service; unique within a specific context"
::= { starSGSNSerEntry 2 }

starSessSGSNVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The name of this VPN (context)"
::= { starSGSNSerEntry 3 }

starSessSGSNServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The name of this service"
::= { starSGSNSerEntry 4 }

starSessSGSNMcc OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..3))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Mobile Country Code"
::= { starSGSNSerEntry 5 }

starSessSGSNMnc OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..3))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Mobile Network Code"
::= { starSGSNSerEntry 6 }

starSessSGSNRncId OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The Id of the RNC"
::= { starSGSNSerEntry 7 }

starSessSGSNHlrNum OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE (1..16))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The Id of the HLR"
::= { starSGSNSerEntry 8 }

--SS7Rd

starentSS7Rd OBJECT IDENTIFIER ::= { starentMIBObjects 46 }

starSS7RdTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarSS7RdEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing SS7Rd related information"
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentSS7Rd 1 }

starSS7rdEntry OBJECT-TYPE
SYNTAX StarSS7rdEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific ss7rd"
INDEX { starSS7rdId }
:= { starSS7RdTable 1 }

StarSS7rdEntry ::= SEQUENCE {
  starSS7rdId                     Gauge32,
  starSS7Pc                       Gauge32,
  starSS7M3UAPsId                 Gauge32,
  starSS7M3UAPspId                Gauge32,
  starSS7MTP3LinkSetId            Gauge32,
  starSS7MTP3LinkId               Gauge32,
  starSS7SCTPSelfAddr             IpAddress,
  starSS7SCTPPeerAddr             IpAddress,
  starSS7SCTPSelfPort             Gauge32,
  starSS7SCTPPeerPort             Gauge32,
  starSS7CongLevel                Gauge32,
  starSS7LocalCong                Gauge32,
  starSS7CauseString         DisplayString
}

starSS7rdId   OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "SS7 Routing Domain identification"
:= { starSS7RdEntry 1 }

starSS7Pc OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "Point Code"
:= { starSS7RdEntry 2 }

starSS7M3UAPsId OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "Peer Server identification"
:= { starSS7RdEntry 3 }

starSS7M3UAPspId OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "Peer Server process identification"
:= { starSS7RdEntry 4 }

starSS7MTP3LinkSetId OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "MTP3 LinkSet Identifier"
 ::= { starSS7RdEntry 5 }

starSS7MTP3LinkId OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "MTP3 Link Identifier"
 ::= { starSS7RdEntry 6 }

starSS7SCTPSelfAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The self end point IP Address"
 ::= { starSS7RdEntry 7 }

starSS7CTPPeerAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The IP Address of the PeerNode"
 ::= { starSS7RdEntry 8 }

starSS7SCTPSelfPort OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The self end point sctp port"
 ::= { starSS7RdEntry 9 }

starSS7CTPPeerPort OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The peer end point sctp port"
 ::= { starSS7RdEntry 10 }

starSS7CongLevel OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Congestion Level Value"
 ::= { starSS7RdEntry 11 }

starSS7LocalCong OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Local Congestion Value"
 ::= { starSS7RdEntry 12 }
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starSS7CauseString OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Cause string for failure"
::= { starSS7RdEntry 13 }

--SCCP Network

starentSccpNw OBJECT IDENTIFIER ::= { starentMIBObjects 47 }

starSccpNwTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarSccpNwEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing Sccp Network related information"
::= { starentSccpNw 1 }

starSccpNwEntry OBJECT-TYPE
SYNTAX     StarSccpNwEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"The statistics for a specific Sccp Network"
INDEX { starSccpNwId }
::= { starSccpNwTable 1 }

StarSccpNwEntry ::= SEQUENCE {
  starSccpNwId                 Gauge32,
  starSccpSsn                  Gauge32
}

starSccpNwId OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"SCCP Network Id"
::= { starSccpNwEntry 1 }

starSccpSsn OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"Sub System Number"
::= { starSccpNwEntry 2 }

-- SGTP Service

starentSGTPService OBJECT IDENTIFIER ::= { starentMIBObjects 48 }

starSGTPSerTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarSGTPSerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing SGTP Service related information"
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

::= \{ starentSGTPService 1 \}

starSGTPSerEntry OBJECT-TYPE
SYNTAX StarSGTPSerEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific SGTP service"
INDEX \{ starSGTPSerVpnID, starSGTPSerSvcID \}
 ::= \{ starSGTPSerTable 1 \}

StarSGTPSerEntry ::= SEQUENCE {
  starSGTPSerVpnID             Gauge32,
  starSGTPSerSvcID             Gauge32,
  starSGTPVpnName             DisplayString,
  starSGTPServName            DisplayString,
  starSGTPSelfAddr            IpAddress,
  starSGTPPeerAddr            IpAddress,
  starSGTPSelfPort            Gauge32,
  starSGTPPeerPort            Gauge32
 }

starSGTPSerVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of the VPN (context)"
 ::= \{ starSGTPSerEntry 1 \}

starSGTPSerSvcID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of this service; unique within a specific context"
 ::= \{ starSGTPSerEntry 2 \}

starSGTPVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this VPN (context)"
 ::= \{ starSGTPSerEntry 3 \}

starSGTPServName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this service"
 ::= \{ starSGTPSerEntry 4 \}

starSGTPSelfAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The IP Address of the SGSN"
 ::= \{ starSGTPSerEntry 5 \}
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starSGTPPeerAddr OBJECT-TYPE
SYNTAX     IpAddress
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The IP Address of the PeerNode"
 ::= { starSGTPSerEntry 6 }

starSGTPSelfPort OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The self end point sgtp port"
 ::= { starSGTPSerEntry 7 }

starSGTPPeerPort OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The peer end point sgtp port"
 ::= { starSGTPSerEntry 8 }

-- IPMS

starentIPMSServer OBJECT IDENTIFIER ::= { starentMIBObjects 49 }

starIPMSServerTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarIPMSServerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table containing information on IPMS Servers"
 ::= { starentIPMSServer 1 }

starIPMSServerEntry OBJECT-TYPE
SYNTAX     StarIPMSServerEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information about a particular IPMS Server"
INDEX { starIPMSServerVpnID, starIPMSServerAddr }
 ::= { starIPMSServerTable 1 }

StarIPMSServerEntry ::= SEQUENCE {
 starIPMSServerVpnID  Gauge32,
 starIPMSServerAddr  IpAddress,
 starIPMSServerVpnName  DisplayString
}

starIPMSServerVpnID OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"The internal identification of the VPN (context)"
 ::= { starIPMSServerEntry 1 }

starIPMSServerAddr OBJECT-TYPE
SYNTAX     IpAddress
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The IP address of the IPMS server within this VPN (context)"
::= { starIPMServerEntry 2 }

starIPMServerVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this VPN (context)"
::= { starIPMServerEntry 3 }

-- Certificates
starentCert OBJECT IDENTIFIER ::= { starentMIBObjects 50 }

starCertTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarCertEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing information on X.509 Certificates"
::= { starentCert 1 }

starCertEntry OBJECT-TYPE
SYNTAX StarCertEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information about a particular X.509 Certificate"
INDEX { IMPLIED starCertSerialNumber }
::= { starCertTable 1 }

StarCertEntry ::= SEQUENCE {
  starCertSerialNumber     DisplayString,
  starCertExpiryTime       DateAndTime,
  starCertIssuer           DisplayString
}

starCertSerialNumber OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The serial number for the certificate"
::= { starCertEntry 1 }

starCertExpiryTime OBJECT-TYPE
SYNTAX DateAndTime
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The Certificate expiration date/time"
::= { starCertEntry 2 }

starCertIssuer OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The Certificate issuer"
::= { starCertEntry 3 }

-- Files; defined for traps only

starentFile OBJECT IDENTIFIER ::= { starentMIBObjects 51 }

starFileTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarFileEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table of files stored on a mass storage device"
::= { starentFile 1 }

starFileEntry OBJECT-TYPE
SYNTAX     StarFileEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information about a particular file on a mass storage device"
INDEX { IMPLIED starFileName }
::= { starFileTable 1 }

StarFileEntry ::= SEQUENCE {
  starFileName  DisplayString,
  starFileApplication INTEGER
}

starFileName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The name (full path) of the file"
::= { starFileEntry 1 }

starFileApplication OBJECT-TYPE
SYNTAX     INTEGER {
  unknown(0),
  systemfile(1),
  cdrmod(2)
}
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The application that owns this file"
::= { starFileEntry 2 }

-- FTP Servers, defined for use in traps only

starentFTPServ OBJECT IDENTIFIER ::= { starentMIBObjects 52 }

starFTPServTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarFTPServEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table of FTP servers configured"
::= { starentFTPServ 1 }
STAR-ENTRY-MIB DEFINITIONS ::= BEGIN

starFTPServEntry OBJECT-TYPE
SYNTAX StarFTPServEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information about a particular FTP Server"
INDEX { starFTPServVpnID, starFTPServIpAddr }
 ::= { starFTPServTable 1 }

StarFTPServEntry ::= SEQUENCE {
starFTPServVpnID Unsigned32,
starFTPServIpAddr IpAddress,
starFTPServVpnName DisplayString
}

starFTPServVpnID OBJECT-TYPE
SYNTAX Unsigned32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of the VPN (context) used to reach this FTP server"
 ::= { starFTPServEntry 1 }

starFTPServIpAddr OBJECT-TYPE
SYNTAX IpAddress
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The IP address of the FTP server"
 ::= { starFTPServEntry 2 }

starFTPServVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the VPN (context)"
 ::= { starFTPServEntry 3 }

---for cscf peer server
starentCSCFPeerServer OBJECT IDENTIFIER ::= { starentMIBObjects 53 }

starCSCFPeerServerTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarCSCFPeerServerEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table containing PeerServer related information"
 ::= { starCSCFPeerServerTable 1 }

starCSCFPeerServerEntry OBJECT-TYPE
SYNTAX StarCSCFPeerServerEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The statistics for a specific CSCF service"
INDEX { starCSCFPeerServerVpnID, starCSCFPeerServerSvcID }
 ::= { starCSCFPeerServerTable 1 }

StarCSCFPeerServerEntry ::= SEQUENCE {
starCSCFPeerServerVpnID Gauge32,
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starCSCFPeerServerVpnID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of the VPN (context)"
::= { starCSCFPeerServerEntry 1 }

starCSCFPeerServerSvcID OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The internal identification of this CSCF service; unique within a specific context"
::= { starCSCFPeerServerEntry 2 }

starCSCFPeerServerVpnName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this VPN (context)"
::= { starCSCFPeerServerEntry 3 }

starCSCFPeerServerSvcName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of this CSCF-service"
::= { starCSCFPeerServerEntry 4 }

starCSCFPeerServerListName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the cscf-peer-server"
::= { starCSCFPeerServerEntry 5 }

starCSCFPeerServerName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the cscf-peer-server"
::= { starCSCFPeerServerEntry 6 }

starCSCFPeerServerState OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The state of the cscf-peer-server"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starCSCFPeerServerEntry 7 }

---end for cscf peer server

--

starentSDH OBJECT IDENTIFIER ::= { starentMIBObjects 54 }

starSDHTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarSDHEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table ..."
::= { starentSDH 1 }

starSDHEntry OBJECT-TYPE
SYNTAX StarSDHEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information about a specific ..."
INDEX { starSDHSlot, starSDHPort }
::= { starSDHTable 1 }

StarSDHEntry ::= SEQUENCE {
  starSDHSlot  Integer32,
  starSDHPort  Integer32,
  starSDHOperState  Integer32
}

starSDHSlot OBJECT-TYPE
SYNTAX Integer32(17..48)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The slot number for this port"
::= { starSDHEntry 1 }

starSDHPort OBJECT-TYPE
SYNTAX Integer32(1..8)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The port number within this slot"
::= { starSDHEntry 2 }

starSDHOperState OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "A bitmask indicating the state of SDH layer SCT.
  0x0000  Good
  0x0001  lais
  0x0002  linesd
  0x0004  linesf
  0x0010  lof
  0x0020  los
  0x0040  msrdi"
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starSDHEntry 3 }

---

starentSDHPath OBJECT IDENTIFIER ::= { starentMIBObjects 55 }

starSDHPathTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarSDHPathEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table ..."
 ::= { starSDHPathTable 1 }

starSDHPathEntry OBJECT-TYPE
SYNTAX StarSDHPathEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "Information about a specific ..."
INDEX { starSDHPathSlot, starSDHPathPort, starSDHPathNum }
 ::= { starSDHPathTable 1 }

StarSDHPathEntry ::= SEQUENCE {
starSDHPathSlot Integer32,
starSDHPathPort Integer32,
starSDHPathNum Integer32,
starSDHPathOperState Integer32
}

starSDHPathSlot OBJECT-TYPE
SYNTAX Integer32(17..48)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The slot number for this port"
 ::= { starSDHPathEntry 1 }

starSDHPathPort OBJECT-TYPE
SYNTAX Integer32(1..8)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The port number within this slot"
 ::= { starSDHPathEntry 2 }

starSDHPathNum OBJECT-TYPE
SYNTAX Integer32(1..3)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "The path number"
 ::= { starSDHPathEntry 3 }

starSDHPathOperState OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "A bitmask indicating the state of SDH Path HOP.
0x0000 Good
---

starentE1Trib OBJECT IDENTIFIER ::= { starentMIBObjects 56 }

starE1TribTable OBJECT-TYPE
SYNTAX      SEQUENCE OF StarE1TribEntry
MAX-ACCESS not-accessible
STATUS      current
DESCRIPTION "A table ..."
 ::= { starE1TribTable 1 }

starE1TribEntry OBJECT-TYPE
SYNTAX      StarE1TribEntry
MAX-ACCESS not-accessible
STATUS      current
DESCRIPTION "Information about a specific ..."
INDEX { starE1TribSlot, starE1TribPort, starE1TribPath, starE1TribTug2, starE1TribTu12 }
 ::= { starE1TribTable 1 }

StarE1TribEntry ::=
SEQUENCE {
  starE1TribSlot  Integer32,
  starE1TribPort  Integer32,
  starE1TribPath  Integer32,
  starE1TribTug2  Integer32,
  starE1TribTu12  Integer32,
  starE1TribOperStateLOP  Integer32,
  starE1TribOperState  Integer32
}

starE1TribSlot OBJECT-TYPE
SYNTAX Integer32(17..48)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION "The slot number for this port"
 ::= { starE1TribEntry 1 }

starE1TribPort OBJECT-TYPE
SYNTAX Integer32(1..8)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION "The port number within this slot"
 ::= { starE1TribEntry 2 }

starE1TribPath OBJECT-TYPE
SYNTAX Integer32(1..3)
MAX-ACCESS accessible-for-notify
STATUS      current
DESCRIPTION
STARENT-MIB DEFINITIONS ::= BEGIN

starE1TribTug2 OBJECT-TYPE
SYNTAX Integer32(1..7)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""

starE1TribTu12 OBJECT-TYPE
SYNTAX Integer32(1..3)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION ""

starE1TribOperStateLOP OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "A bitmask indicating the state of SDH layer LOP.
  0x0000  Good
  0x0001  lopathsd
  0x0002  lopathsf
  0x0100  erdi
  0x0200  rdi
  0x0400  lop
  0x0800  ais
  0x1000  lom"

starE1TribOperState OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "A bitmask
  0x0000 Good
  0x0001 inf
  0x0002 insmf
  0x0004 incmf
  0x0008 ooof
  0x0010 raiccrc
  0x0020 cfebe
  0x0040 rai
  0x0080 rmai
  0x0100 aisd
  0x0200 red
  0x0400 ais
  0x0800 ts16aisd"

---

starentFractE1Trib OBJECT IDENTIFIER ::= { starentMIBObjects 58 }

starFractE1TribTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarFractE1TribEntry
STARENT-MIB DEFINITIONS ::= BEGIN

starFractE1TribEntry OBJECT-TYPE
SYNTAX StarFractE1TribEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information about a specific ..."
INDEX { starFractE1TribSlot, starFractE1TribPort, starFractE1TribPath, starFractE1TribTug2, starFractE1TribTu12, starFractE1TribBundNum }
 ::= { starFractE1TribTable 1 }

StarFractE1TribEntry ::= 
  SEQUENCE {
    starFractE1TribSlot  Integer32,
    starFractE1TribPort  Integer32,
    starFractE1TribPath  Integer32,
    starFractE1TribTug2  Integer32,
    starFractE1TribTu12  Integer32,
    starFractE1TribBundNum  Integer32,
    starFractE1TribTimeslots  DisplayString
  }

starFractE1TribSlot OBJECT-TYPE
SYNTAX Integer32(17..48)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The slot number for this port"
 ::= { starFractE1TribEntry 1 }

starFractE1TribPort OBJECT-TYPE
SYNTAX Integer32(1..8)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The port number within this slot"
 ::= { starFractE1TribEntry 2 }

starFractE1TribPath OBJECT-TYPE
SYNTAX Integer32(1..3)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
" "
 ::= { starFractE1TribEntry 3 }

starFractE1TribTug2 OBJECT-TYPE
SYNTAX Integer32(1..7)
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
" "
 ::= { starFractE1TribEntry 4 }

starFractE1TribTu12 OBJECT-TYPE
SYNTAX Integer32(1..3)
MAX-ACCESS accessible-for-notify
STATUS     current

STARENT-MIB DEFINITIONS ::= END
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
""
 ::= { starFractE1TribEntry 5 }

starFractE1TribBundNum OBJECT-TYPE
SYNTAX Integer32(0..31)
MAX-ACCESS not-accessible
STATUS obsolete
DESCRIPTION
""
 ::= { starFractE1TribEntry 6 }

starFractE1TribTimeslots OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
""
 ::= { starFractE1TribEntry 7 }

--GPRSLink
starentGPRSLink OBJECT IDENTIFIER ::= { starentMIBObjects 57 }

starGPRSLinkTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarGPRSLinkEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"A table containing GPRSService Link related information"
 ::= { starentGPRSLink 1 }

starGPRSLinkEntry OBJECT-TYPE
SYNTAX StarGPRSLinkEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The link statistics for a specific GPRS service"
INDEX { starGPRSNsei }
 ::= { starGPRSLinkTable 1 }

StarGPRSLinkEntry ::= SEQUENCE {
  starGPRSNsei Gauge32,
  starGPRSNsvci Gauge32,
  starGPRSvci Gauge32
}

starGPRSNsei OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"Network Service Entity Indentifier"
 ::= { starGPRSLinkEntry 1 }

starGPRSNsvci OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Network Service Virtual Circuit Identifier"
 ::= { starGPRSLinkEntry 2 }

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starGPRSvci OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Base Station System GPRS(General Packet Radio Service) Protocol Virtual Circuit Identifier"
::= { starGPRSLinkEntry 3}

-- end of GPRSLink

-- Files; defined for traps only

starentStorage OBJECT IDENTIFIER ::= { starentMIBObjects 59 }

starStorageTable OBJECT-TYPE
SYNTAX SEQUENCE OF StarStorageEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"A table of mass storage devices"
::= { starentStorage 1 }

starStorageEntry OBJECT-TYPE
SYNTAX StarStorageEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"Information about a particular file on a mass storage device"
INDEX { starStorageSlot, IMPLIED starStorageName }
::= { starStorageTable 1 }

StarStorageEntry ::= SEQUENCE {
  starStorageSlot Integer32,  
  starStorageName DisplayString,  
  starStorageDeviceType INTEGER  
}

starStorageSlot OBJECT-TYPE
SYNTAX Integer32(1..16)
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"The slot number of the card holding this storage device"
::= { starStorageEntry 1 }

starStorageName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION
"The name of the storage device"
::= { starStorageEntry 2 }

starStorageDeviceType OBJECT-TYPE
SYNTAX INTEGER {
  unknown(0),  
  independent(1),  
  raid(2),  
  raidmember(3)  
}  
MAX-ACCESS read-only
STARENT-MIB DEFINITIONS ::= BEGIN

  STATUS     current
  DESCRIPTION
  "The storage device type. A value of independent(1) means that the device can be
  accessed as a standalone device, and is not part of a raid array. A value of
  raid(2) means that this device is a raid array. A value of raidmember(3) means
  the device is part of a raid array, and thus cannot be read/written to
  outside of the raid array"
  ::= { starStorageEntry 3 }

-- MME S1 Associations; defined for traps only

starentMMES1Assoc OBJECT IDENTIFIER ::= { starentMIBObjects 67 }

starMMES1AssocTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarMMES1AssocEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"A table of MME S1 Associations"
 ::= { starentMMES1Assoc 1 }

starMMES1AssocEntry OBJECT-TYPE
SYNTAX     StarMMES1AssocEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"Information about a particular MME S1 Association"
INDEX { starMMES1AssocSvcID, starMMES1AssocENBID }
 ::= { starMMES1AssocTable 1 }

StarMMES1AssocEntry ::= SEQUENCE {
  starMMES1AssocSvcID     StarMediumID,
  starMMES1AssocENBID     StarENBID,
  starMMES1AssocVpnName   DisplayString,
  starMMES1AssocServName  DisplayString
}

starMMES1AssocSvcID OBJECT-TYPE
SYNTAX     StarMediumID
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
"The service identification is made up from the first 8 characters of the
VPN name and the first 16 characters of the service name seperated by (:)"
 ::= { starMMES1AssocEntry 1 }

starMMES1AssocENBID OBJECT-TYPE
SYNTAX     StarENBID
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION
"The identification of the eNodeB"
 ::= { starMMES1AssocEntry 2 }

starMMES1AssocVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The name of this VPN (context)"
 ::= { starMMES1AssocEntry 3 }

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STARENT-MIB DEFINITIONS ::= BEGIN

starMMES1AssocServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION "The name of this MME Service"
::= { starMMES1AssocEntry 4 }

-- MME S1 path; defined for traps only
starentMMES1Path OBJECT IDENTIFIER ::= { starentMIBObjects 70 }

starMMES1PathTable OBJECT-TYPE
SYNTAX     SEQUENCE OF StarMMES1PathEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "A table of MME S1 Path"
::= { starMMES1PathTable 1 }

starMMES1PathEntry OBJECT-TYPE
SYNTAX     StarMMES1PathEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "Information about a particular MME S1 Pathiation"
INDEX { starMMES1PathSvcID, starMMES1PathENBID }
::= { starMMES1PathTable 1 }

StarMMES1PathEntry ::= SEQUENCE {
  starMMES1PathSvcID     StarMediumID,
  starMMES1PathENBID     StarENBID,
  starMMES1PathVpnName   DisplayString,
  starMMES1PathServName  DisplayString,
  starMMES1PathSelfAddr  IpAddress,
  starMMES1PathSelfPort  Gauge32,
  starMMES1PathPeerAddr  IpAddress,
  starMMES1PathPeerPort  Gauge32
}

starMMES1PathSvcID OBJECT-TYPE
SYNTAX     StarMediumID
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION "The service identification is made up from the first 8 characters of the
VPN name and the first 16 characters of the service name seperated by (:)"
::= { starMMES1PathEntry 1 }

starMMES1PathENBID OBJECT-TYPE
SYNTAX     StarENBID
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION "The identifcation of the eNodeB"
::= { starMMES1PathEntry 2 }

starMMES1PathVpnName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"The name of this VPN (context)"
 ::= { starMMES1PathEntry 3 }

starMMES1PathServName OBJECT-TYPE
SYNTAX     DisplayString
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The name of this MME Service"
 ::= { starMMES1PathEntry 4 }

starMMES1PathSelfAddr OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
 "Interface IP Address"
 ::= { starMMES1PathEntry 5 }

starMMES1PathSelfPort OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "Self port number"
 ::= { starMMES1PathEntry 6 }

starMMES1PathPeerAddr OBJECT-TYPE
SYNTAX      IpAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
 "Interface IP Address"
 ::= { starMMES1PathEntry 7 }

starMMES1PathPeerPort OBJECT-TYPE
SYNTAX     Gauge32
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "Peer port number"
 ::= { starMMES1PathEntry 8 }

-- traps

starentTraps OBJECT IDENTIFIER ::= { starentMIB 2 }

-- Card Trap

starCardTempOverheat NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardTemperature }
STATUS current
DESCRIPTION
 "The card has reached a temperature beyond its safe operating range.
Probable Cause: External temperature is too high; One or more fan failures; blockages the prevent fan air inflow/outflow.
Action to be Taken: Inspect chassis for any item that may be blocking chassis air flow. Verify adjacent equipment is not obstructing air flow."
Verify that the fans are running via the CLI/EMS. Check air filters. Check chassis maintenance schedule to see if chassis needs routine air filter replacement. Verify room temperature is within acceptable operating conditions.

Clear Condition: This condition is cleared when the card reaches its operating temperature range or is removed from the system.

Condition Clear Alarm: This condition is cleared by a starCardTempOK notification.

---#SUMMARY "[Card %d] Card has overheated; measured temperature %d C"
---#ARGUMENTS {0,1}
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 1 }

starCardTempOK NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardTemperature }
STATUS current
DESCRIPTION
"The temperature of the card is now within its safe operating range. This notification is only generated if the card has previously generated a starCardTempOverheat notification."

Action to be Taken: No action required. The cause for the card overheat condition should be investigated. This is not applicable to QVPC-SI and QVPC-DI.

---#SUMMARY "[Slot %d] Temperature OK (%d C)"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 2 }

starCardReset NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS obsolete
DESCRIPTION
"A reset operation has been invoked on the card. This trap is obsolete. This is not applicable to QVPC-SI."

---#SUMMARY "[Card %s-%d] Card has been reset"
---#ARGUMENTS {1,0}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 3 }

starCardRebootRequest NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION
"A Reboot operation has been invoked on this card by an administrator. If successful, a subsequent CardDown trap is typically generated."

Action to be Taken: No action required. If the reboot was not scheduled the admin logs can be examined to determine who invoked the reboot operation. This is not applicable to QVPC-SI.

---#SUMMARY "[Card %s-%d] Reboot operation invoked on card"
---#ARGUMENTS {1,0}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 4 }

::=

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starCardUp NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION
"The card is up (operational). This is not applicable to QVPC-SI."
---#SUMMARY "[Card %s-%d] Card is up"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 5 }

starCardVoltageFailure NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION
"A voltage regulation failure has been detected on this card. 
Probable Cause: Problem with incoming power; failure of power filters; 
hardware issue with card. Note that this is an extremely abnormal 
condition. 
Action To Be Taken: Verify that the power supplied to the chassis is 
operating correctly; use the CLI/EMS to check the state of the chassis 
power filters; replace the card
Clear Condition: This is not a recoverable error except via restarting the card, 
so the condition is only cleared via a starCardUp or starCardActive notification. 
This is not applicable to QVPC-SI and QVPC-DI."
---#SUMMARY "[Card %s-%d] Voltage Failure"
---#ARGUMENTS (1,0)
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 6 }

starCardRemoved NOTIFICATION-TYPE
OBJECTS { starSlotNum, 
                  starCardType }
STATUS current
DESCRIPTION
"A card has been removed from the chassis. 
Probable Cause: An operator has physically unlocked and removed a card from the chassis 
Action to be Taken: No action is required. If the card removal was unplanned, 
the admin logs can identify the time when the card was initially unlocked. 
This is not applicable to QVPC-SI."
---#SUMMARY "[Card %s-%d] Card removed"
---#ARGUMENTS (1,0)
---#STATE NONOPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 7 }

starCardInserted NOTIFICATION-TYPE
OBJECTS { starSlotNum, 
                  starCardType }
STATUS current
DESCRIPTION
"A card has been inserted into the chassis. This is not applicable to QVPC-SI."
---#SUMMARY "[Card %s-%d] Card inserted"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY INFORMATIONAL ::= { starentTraps 8 }

starCardBootFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION "A card has failed to startup properly. The card is not operational
Probable Cause: The system logs should contain additional information
about the cause of the boot failure. This is not applicable to QVPC-SI."
--SUMMARY "[Card %s-%d] Card boot failure"
--ARGUMENTS (1,0)
--STATE NONOPERATIONAL
--SEVERITY MAJOR ::= { starentTraps 9 }

starCardFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS obsolete
DESCRIPTION "The card has failed and is no longer operational. This trap is obsolete
and has been replaced with more specific traps to identify specific
failures. This is not applicable to QVPC-SI."
 ::= { starentTraps 10 }

starCardSWFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum }
STATUS obsolete
DESCRIPTION "A unrecoverable software error has occured on the card. This trap is obsolete
and has been replaced with more specific traps to identify specific
failures. This is not applicable to QVPC-SI."
 ::= { starentTraps 11 }

starCardRCCFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum }
STATUS obsolete
DESCRIPTION "The RCC has failed.
Probable Cause: A hardware failure on the RCC card. This trap is obsolete.
This is not applicable to QVPC-SI and QVPC-DI."
--SUMMARY "[Card RCC-%d] Card failure"
--ARGUMENTS (0)
--STATE NONOPERATIONAL
--SEVERITY MAJOR ::= { starentTraps 12 }

starCardMismatch NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION "The card does not match its configuration, or the card does not
match the slot it was inserted into, or the card is of an unsupported type.
Probable Cause: A card was inserted into a slot which was configured
for a different type of card. For example, a Gigabit Ethernet card
was inserted into a slot configured for a Fast Ethernet card.

A starCardUp or starCardActive notification would indicate that this
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STARENT-MIB DEFINITIONS ::= BEGIN

   condition has been cleared. This is not applicable to QVPC-SI.
---#SUMMARY "[Card %s-%d] Card does not match system configuration"
---#ARGUMENTS {1,0}
---#STATE NONOPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 13 }

starCardFailureLEDOn NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS obsolete
DESCRIPTION
   "The failure LED is illuminated on the card. This trap is obsolete and has
   been replaced with more specific traps for specific failures.
   This is not applicable to QVPC-SI and QVPC-DI."
::= { starentTraps 14 }

starCardFailureLEDOff NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS obsolete
DESCRIPTION
   "The failure LED is no longer illuminated on the card. This notification
   is only generated if the card has previously generated a
   starCardFailureLEDOn notification. This trap is obsolete and has been
   replaced with more specific traps for specific failures. This is not
   applicable to QVPC-SI and QVPC-DI."
::= { starentTraps 15 }

starCardPACMigrateStart NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS deprecated
DESCRIPTION
   "A PAC/PSC Migration operation has begun. The first varbind identifies the PAC/PSC
   being migrated away from; the second varbind identifies the PAC/PSC being
   migrated to.

   Probable Cause: This is typically caused by an operator action; it can also
   represent the system recovering from a software or hardware fault.

   A starCardPACMigrateComplete is generated when the migration is completed"
---#SUMMARY "[Card PAC-%d] Migration start to card PAC-%d"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 16 }

starCardPACMigrateComplete NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS deprecated
DESCRIPTION
   "A PAC/PSC Migration operation has successfully completed. The first varbind identifies the PAC/PSC
   that was migrated away from; the second varbind identifies the PAC/PSC that was
   migrated to."
---#SUMMARY "[Card PAC-%d] Migration completed from card PAC-%d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 17 }

starCardPACMigrateFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }

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STARENT-MIB DEFINITIONS ::= BEGIN

   condition has been cleared. This is not applicable to QVPC-SI.
---#SUMMARY "[Card %s-%d] Card does not match system configuration"
---#ARGUMENTS {1,0}
---#STATE NONOPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 13 }

starCardFailureLEDOn NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS obsolete
DESCRIPTION
   "The failure LED is illuminated on the card. This trap is obsolete and has
   been replaced with more specific traps for specific failures.
   This is not applicable to QVPC-SI and QVPC-DI."
::= { starentTraps 14 }

starCardFailureLEDOff NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS obsolete
DESCRIPTION
   "The failure LED is no longer illuminated on the card. This notification
   is only generated if the card has previously generated a
   starCardFailureLEDOn notification. This trap is obsolete and has been
   replaced with more specific traps for specific failures. This is not
   applicable to QVPC-SI and QVPC-DI."
::= { starentTraps 15 }

starCardPACMigrateStart NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS deprecated
DESCRIPTION
   "A PAC/PSC Migration operation has begun. The first varbind identifies the PAC/PSC
   being migrated away from; the second varbind identifies the PAC/PSC being
   migrated to.

   Probable Cause: This is typically caused by an operator action; it can also
   represent the system recovering from a software or hardware fault.

   A starCardPACMigrateComplete is generated when the migration is completed"
---#SUMMARY "[Card PAC-%d] Migration start to card PAC-%d"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 16 }

starCardPACMigrateComplete NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS deprecated
DESCRIPTION
   "A PAC/PSC Migration operation has successfully completed. The first varbind identifies the PAC/PSC
   that was migrated away from; the second varbind identifies the PAC/PSC that was
   migrated to."
---#SUMMARY "[Card PAC-%d] Migration completed from card PAC-%d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 17 }

starCardPACMigrateFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }

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**STARENT-MIB DEFINITIONS ::= BEGIN**

```plaintext
SNMP
```

```plaintext
STATUS deprecated
DESCRIPTION
"A PAC/PSC Migration operation has failed. The first varbind identifies the PAC/PSC
that was attempted to be migrated away from; the second varbind identifies the PAC/PSC that was
attempted to be migrated to.

Probable Cause: The PAC/PSC being migrated to was removed or reset before
the migration completed; the migration operation was terminated by an
operator; or a software or hardware failure on either PAC/PSC involved
in the migration operation.

The PAC/PSC in question will be reset; a starCardUp notification will be generated
when the card is operational again."

```
--#SUMMARY "[Card PAC-%d] Migration failed to card PAC-%d"
```

```
--#ARGUMENTS {0,1}
```

```
--#STATE DEGRADED
```

```
--#SEVERITY MAJOR
```

```plaintext
::= { starentTraps 18 }
```

**starCardSPCSwitchoverStart NOTIFICATION-TYPE**

```plaintext
OBJECTS { starSlotNum, starSlotNum }
```

```plaintext
STATUS deprecated
DESCRIPTION
"An SPC switchover operation has begun. The first varbind identifies the SPC
being switched away from; the second varbind identifies the SPC being
switched to. Note that since an SPC switchover can cause a momentary loss
of communication through the management (SPIO) interface, it is possible
that this trap will not be successfully delivered.

Probable Cause: This is typically caused by an operator action; it can also
represent the system recovering from a software or hardware fault.

Action to be Taken: If the SPC switchover was unplanned, the admin logs should
be examined for the cause of the switchover. If the cause was a software failure,
the system crash logs should be examined.

Clear Condition: Verify the SPC switchover completes successfully.

Clear Condition Alarm: A starCardSPCSwitchoverComplete is generated when the
switchover operation has completed."

```
--#SUMMARY "[Card SPC-%d] Switchover started to card SPC-%d"
```

```
--#ARGUMENTS {0,1}
```

```
--#STATE DEGRADED
```

```
--#SEVERITY MAJOR
```

```plaintext
::= { starentTraps 19 }
```

**starCardSPCSwitchoverComplete NOTIFICATION-TYPE**

```plaintext
OBJECTS { starSlotNum }
```

```plaintext
STATUS deprecated
DESCRIPTION
"An SPC Switchover has completed successfully. The starSlotNum varbind identifies the
new primary SPC

Action to be Taken: If the SPC switchover was unplanned, the admin logs should
be examined for the cause of the switchover. If the cause was a software failure,
the system crash logs should be examined."

```
--#SUMMARY "[Card SPC-%d] Switchover complete to card SPC-%d"
```

```
--#ARGUMENTS {0,0}
```

```
--#STATE OPERATIONAL
```

```
--#SEVERITY INFORMATIONAL
```

```plaintext
::= { starentTraps 20 }
```

**starCardSPCSwitchoverFailed NOTIFICATION-TYPE**

```plaintext
```

**END**
```
OBJECTS { starSlotNum, starSlotNum }
STATUS  deprecated
DESCRIPTION
"An SPC switchover operation has failed. The first varbind identifies the SPC
that was attempted to be switched away from; the second varbind identifies the SPC
that was attempted to be switched to.

Probable Cause: The SPC being migrated to was removed or reset before
the migration completed; the migration operation was terminated by an
operator; or a software or hardware failure on either SPC.

Action to be Taken: Verify that both SPCs have the card locks in the locked
position; examine the admin logs for the cause of the failure. If the cause was
a software failure, the system crash logs should be examined.

Clear Condition: The SPC in question will be reset; a starCardUp notification will be
generated when the card is operational again."

--#SUMMARY "[Card SPC-%d] Switchover failed to card SPC-%d"
--#ARGUMENTS (0,1)
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 21 }

-- Fan Notifications

starFanFailed NOTIFICATION-TYPE
OBJECTS { starFanNum, starFanStatus }
STATUS  current
DESCRIPTION
"One of more fans have failed on the indicated fan controller.

Probable Cause: A hardware failure on the fan tray. The fan tray should
be replaced.

Action to be Taken: Verify there is no physical obstruction to the fans;
Replace the fan tray.

Clear Condition: Verify the fans are running

Condition Clear Alarm: A starFanInserted notification will be generated when the
fan tray is replaced.
This is not applicable to QVPC-SI and QVPC-DI."

--#SUMMARY "[FTC] Fan failure fan number %d fan status %s"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 22 }

starFanRemoved NOTIFICATION-TYPE
OBJECTS { starFanNum }
STATUS  current
DESCRIPTION
"A fan tray has been removed

Action to be Taken: Replace the fan tray

Clear Condition: Verify both fan trays are present and operational.

Condition Clear Alarm: A starFanInserted notification will be generated when the
fan tray is replaced.
This is not applicable to QVPC-SI and QVPC-DI."
starFanInserted NOTIFICATION-TYPE
OBJECTS { starFanNum }
STATUS current
DESCRIPTION "A fan tray has been inserted
This is not applicable to QVPC-SI and QVPC-DI."
--#SUMMARY "[FTC] Fan tray inserted fan number %d"
--#ARGUMENTS {0}
--#STATE Operational
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 24 }

-- Log Notifications.
starLogThreshold NOTIFICATION-TYPE
OBJECTS { starLogName, starLogCurSize, starLogMaxSize }
STATUS obsolete
DESCRIPTION "A system log has reached its maximum size. This trap is obsolete."
 ::= { starentTraps 25 }

-- CPU Notifications
starCPUBusy NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION "The CPU is experiencing very high usage.
Probable Cause: For SPC/SMC CPUs this typically represents an abnormal amount of management (CLI, SNMP, CORBA) requests. For PAC/PSC cards this indicates that the system is reaching its capacity.
Action to be Taken: For SPC/SMC cards, this may be a transient condition because of a burst of management activity. Monitor the CPU usage and if it is persistently high, examine the CPU table to determine which management activity is causing the excessive usage. For PAC/PSC cards, this indicates the system is nearing its overall capacity. Monitor CPU usage and if it is persistently high, the system may need additional PACs/PSCs to keep up with the system load.
Clear Condition: Verify that CPU usage returned to a normal load. This can represent a transient condition; the trap will be periodically repeated if the condition persists."
--#SUMMARY "[Card %d] CPU %d is experiencing very high usage"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
 ::= { starentTraps 26 }

starCPUMemoryLow NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION "The CPU is experiencing a low memory condition."
Probable Cause: For SPC CPUs this typically represents an abnormal number of management sessions, in particular CLI sessions. For PAC/PCS cards this indicates that the system is reaching its capacity.

Action to be Taken: For SPC cards, this may be a transient condition because of a burst of management activity. Monitor memory usage and if it is persistently high, examine the CPU table to determine which management activity is causing the excessive usage. Verify that large numbers of CLI sessions are not being generated and, if needed, terminate extra sessions. For PAC/PCS cards, this indicates the system is nearing its overall capacity. Monitor memory usage and if it is persistently high, the system may need additional PACs/PCSs or additional PAC/PCS memory to keep up with the system load.

Clear Condition: Verify that memory usage returned to a normal load. This can represent a transient condition; the trap will be periodically repeated if the condition persists."

---#SUMMARY "[Card %d] CPU %d is low on available memory"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 27 }

starCPUMemoryFailed NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION
"The memory on this CPU has failed.
Probable Cause: This indicates a hardware problem.
Action to be Taken: Replace the failing card.
The card will be reset; a starCardUp will be generated if the card is restored to an operational state."
---#SUMMARY "[Card %d] CPU %d memory failure"
---#ARGUMENTS {0,1}
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 28 }

starCPUFailed NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION
"The CPU has failed.
Probable Cause: This indicates a hardware problem.
Action to be Taken: Replace the failing card.
The card will be reset; a starCardUp will be generated if the card is restored to an operational state."
---#SUMMARY "[Card %d] CPU %d failure"
---#ARGUMENTS {0,1}
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 29 }

starCPUWatchDogExpired NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION
"The watch dog has expired on this CPU.
Probable Cause: This indicates a hardware problem.
Action to be Taken: Replace the failing card.
The card will be reset; a starCardUp will be generated if the card is restored to an operational state."
---#SUMMARY "[Card %d] CPU %d watch dog expired"
---#ARGUMENTS {0,1}
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 30 }
"The watchdog timer has failed on this CPU.

Probable Cause: This could indicate an extremely busy CPU, a software problem, or a hardware issue.

Action to be Taken: Check the admin logs for an indication of the problem. Check the system crash logs for an indication of software problems. If the problem persists, replace the card.

Clear Condition: Verify that an SPC/SMC switchover or PAC/PSC migration completes successfully to recover from the failure condition.

Condition Clear Alarm: A starCardUp will be generated if the card is restored to an operational state."

--#SUMMARY "[Card %d] CPU %d watchdog expiry"
--#ARGUMENTS {0,1}
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 30 }

-- NPU Manager Notifications

starNPURARPListExhausted NOTIFICATION-TYPE
OBJECTS { starNPUMgrNumber }
STATUS current
DESCRIPTION
"The ARP pool on this NPU manager is exhausted. When this occurs, the ARP entry isn't added and traffic to the local device is forwarded through a slower path.

Action To Be Taken: Reduce the total number of directly connected devices or clear ARP entries."

--#SUMMARY "[System] NPU ARP pool exhausted for NPU Manager %d"
--#ARGUMENTS (0)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 31 }

-- Power Notifications

starPowerFilterUnitFailed NOTIFICATION-TYPE
OBJECTS { starPowerNumber }
STATUS deprecated
DESCRIPTION
"A Power Filter Unit (PFU) failed.

Probable Cause: The external power source has failed or has been disconnected, or a hardware failure on the PFU.

Action to be Taken: Verify that the input power to the power filter is operational and repair if needed. Verify that the connections to the power filter are intact and that the power filter is properly inserted into the chassis. Replace the power filter if required.

Clear Condition: Verify that both power filters are operating.

Condition Clear Alarm: A starPowerFilterAvail will be generated when the power filter is replaced."

--#SUMMARY "[Power %d] Power filter has failed."
--#ARGUMENTS (0)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 32 }
starPowerFilterUnitUnavail NOTIFICATION-TYPE
OBJECTS { starPowerNumber }
STATUS current
DESCRIPTION
"A Power Filter Unit (PFU) is unavailable.

Probable Cause: The power filter has been removed from the chassis, or no power is being provided to the PFU.

Action to be Taken: If the power filter removal wasn't planned, verify that the input power to the power filter is operational and repair if needed. Verify that the connections to the power filter are intact and that the power filter is properly inserted into the chassis. Replace the power filter if required.

Clear Condition: Verify that both power filters are operating.

Condition Clear Alarm: A starPowerFilterUnitAvail will be generated when the power filter is replaced. This is not applicable to QVPC-SI and QVPC-DI.
---#SUMMARY "[Power %d] Power filter has been removed"
---#ARGUMENTS {0}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 33 }

starPowerFilterUnitAvail NOTIFICATION-TYPE
OBJECTS { starPowerNumber }
STATUS current
DESCRIPTION
"A Power Filter Unit (PFU) is available. This typically means that a PFU has been inserted into the chassis or has has its power source restored.

Action to be Taken: No action required

This is not applicable to QVPC-SI and QVPC-DI.
---#SUMMARY "[Power %d] Power filter is available"
---#ARGUMENTS {0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 34 }

starAlertsDisabled NOTIFICATION-TYPE
OBJECTS { starMaxAlertsPerTime, starWindowTime }
STATUS current
DESCRIPTION
"The sending of SNMP Traps has been disabled because too many alerts were generated within the defined window type.

Probable Cause: Either a large number of SNMP notifications are being generated, or the configured threshold which limits the number of notifications is set too aggressively.

Actions to be Taken: Examine the admin logs and the SNMP trap logs to determine the source of the large number of traps and take appropriate actions; verify that the configured limit for the rate at which traps will be sent is appropriate for your environment.

Clear Condition Alarm: When the rate of SNMP notifications goes down a starAlertsEnabled notification is generated"
---#SUMMARY "[System] SNMP alarts disabled; %d alerts generated in %d seconds"
starAlertsEnabled NOTIFICATION-TYPE
STATUS current
DESCRIPTION "The sending of SNMP Traps has been reenabled"
--#SUMMARY "[System] SNMP alert re-enabled"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 37 }

-- AAA Failures

starAAAAuthServerUnreachable NOTIFICATION-TYPE
OBJECTS { radiusAuthServerIndex, radiusAuthServerAddress }
STATUS current
DESCRIPTION "The Authentication, Authorization and Accounting (AAA) server cannot be reached.

Probable Cause: The AAA server is down, or there is a network issue preventing communication with the AAA server.

Actions to be Taken: Restore the AAA server to an operational status; Verify that the AAA server is reachable by performing a 'ping' operation from the CLI in the appropriate context. Check the admin logs for notification of communication problems.

Clear Condition: Verify that communication to the AAA authentication server has been restored.

Condition Clear Alarm: When this condition clears a starAAAAuthServerReachable notification will be generated."
--#SUMMARY "[System] AAA Authentication Server %d (%s) is unreachable"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 38 }

starAAAAuthServerReachable NOTIFICATION-TYPE
OBJECTS { radiusAuthServerIndex, radiusAuthServerAddress }
STATUS current
DESCRIPTION "The Authentication, Authorization and Accounting (AAA) server is now reachable. This can be the result of a system startup, the configuration of a new server, or a previously unreachable server becoming reachable.

Action to be Taken: No Action Required."
--#SUMMARY "[System] AAA Authentication Server %d (%s) is reachable"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 40 }

starAAAAuthServerMisconfigured NOTIFICATION-TYPE
OBJECTS { radiusAuthServerIndex, radiusAuthServerAddress }
STATUS current
DESCRIPTION "The Authentication, Authorization and Accounting (AAA) server has been misconfigured. This server is not usable until this condition is repaired."
Action to be Taken: Examine the system configuration and correct the
misconfiguration. See the user documentation for details on AAA
configuration.

Clear Condition: Verify that communication to the AAA authentication
server has been restored.

Condition Clear Alarm: When this condition clears a starAAAAuthServerReachable
notification will be generated.

---#SUMMARY "[System] AAA Authentication Server %d (%s) is misconfigured"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 41 }

starAAAAccServerUnreachable NOTIFICATION-TYPE
OBJECTS { radiusAccServerIndex, radiusAccServerAddress }
STATUS current
DESCRIPTION
"The Authentication, Authorization and Accounting (AAA) server cannot be
reached.

Probable Cause: The AAA server is down, or there is a network issue
preventing communication with the AAA server.

Actions to be Taken: Restore the AAA server to an operational status;
Verify that the AAA server is reachable by performing a 'ping' operation
from the CLI in the appropriate context. Check the admin logs for
notification of communication problems.

Clear Condition: Verify that communication to the AAA accounting
server has been restored.

Condition Clear Alarm: When this condition clears a starAAAAccServerReachable
notification will be generated.

---#SUMMARY "[System] AAA Accounting Server %d (%s) is unreachable"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 42 }

starAAAAccServerReachable NOTIFICATION-TYPE
OBJECTS { radiusAccServerIndex, radiusAccServerAddress }
STATUS current
DESCRIPTION
"The Authentication, Authorization and Accounting (AAA) server is now
reachable. This can be the result of a system startup, the configuration
of a new server, or a previously unreachable server becoming reachable.

Note that since Accounting servers are not responding to 'hello'-type
messages, it is not always possible to accurately determine when an accounting
server is reachable. A server may be declared 'reachable' when the ST16
is ready to start using the server, but before any acknowledgement is actually
received from the server. Once accounting information actually is sent to the
server a starAAAAccServerUnreachable will be generated if the server does
not properly respond.

Action to be Taken: No Action Required.

---#SUMMARY "[System] AAA Authentication Server %d (%s) is reachable"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY INFORMATIONAL
::- { starentTraps 43 }

starAAA.AccServerMisconfigured NOTIFICATION-TYPE
OBJECTS { radiusAccServerIndex, radiusAccServerAddress }
STATUS current
DESCRIPTION
"The Authentication, Authorization and Accounting (AAA) server has been
misconfigured. This server is not usable until this condition is repaired."

Action to be Taken: Examine the system configuration and correct the
misconfiguration. See the user documentation for details on AAA
configuration.

Clear Condition: Verify that communication to the AAA authentication
server has been restored.

Condition Clear Alarm: When this condition clears a starAAA.AccServerReachable
notification will be generated."
--#SUMMARY "[System] AAA Accounting Server %d (%s) is misconfigured"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::- { starentTraps 44 }

--- Log Message, debugging use only

starLogMsg NOTIFICATION-TYPE
OBJECTS { starLogText }
STATUS current
DESCRIPTION
"A log message. This trap is used only for debugging. This is not applicable to QVPC-SI and QVPC-DI."
--#SUMMARY "[System] Log message: %s"
--#ARGUMENTS {0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::- { starentTraps 45 }

--- Service Traps

starPDSNServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PDSN Service has started"

Action to be Taken: No action required"
--#SUMMARY "[Service PDSN-%s-%s] PDSN service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::- { starentTraps 46 }

starPDSNServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PDSN Service has stopped."

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.
Action to be Taken: If the PDSN service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the PDSN service is operational.

Condition Clear Alarm: A starPDSNServiceStart notification will be generated when the service is restarted

---#SUMMARY "[Service PDSN-%s-%s] PDSN service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 47 }

starHAServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An HA Service has started"

Action to be Taken: No action required"
---#SUMMARY "[Service HA-%s-%s] HA service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 48 }

starHAServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An HA Service has stopped"

Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the PDSN service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the PDSN service is operational.

Condition Clear Alarm: A starHAServiceStart notification will be generated when the service is restarted"

---#SUMMARY "[Service HA-%s-%s] HA service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 49 }

starFAServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An FA Service has started"

Action to be Taken: No action required"
---#SUMMARY "[Service FA-%s-%s] FA service has started"
starFAServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An FA Service has stopped"
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.
Action to be Taken: If the FA service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.
Clear Condition: Verify that the FA service is operational.
Condition Clear Alarm: A starFAServiceStart notification will be generated when the service is restarted"
---#SUMMARY "[FA %s-%s] FA service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 51 }

starCLISessionStart NOTIFICATION-TYPE
OBJECTS { starCLIUsername, starCLIPrivs, starCLITtyname }
STATUS current
DESCRIPTION
"An interactive CLI session has started
A starCLISessionEnd notification will be sent when the CLI session is terminated."
---#SUMMARY "[System] CLI session for %s %s started on %s"
---#ARGUMENTS {1,0,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 52 }

starCLISessionEnd NOTIFICATION-TYPE
OBJECTS { starCLIUsername, starCLIPrivs, starCLITtyname }
STATUS current
DESCRIPTION
"An interactive CLI session has ended.
The CLI session may have been terminated by the CLI user; the session may have expired due to an idle timeout, or a session timeout; or the session may have been terminated by operator intervention."
---#SUMMARY "[System] CLI session for %s %s ended on %s"
---#ARGUMENTS {1,0,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 53 }

starCritTaskFailed NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard, starTaskCPU }
STATUS current
DESCRIPTION
"A critical task has failed and the appropriate recovery steps begun. The card containing the failed task will be restarted; migration/recovery operations will proceed.

Probable Cause: Software error

Actions to be Taken: Examine the admin logs for an indication of the source of the failure.

Clear Condition: Verify that an SPC switchover or PAC/PSC migration completes to recover from this condition.

Condition Clear Alarm: A starCardUp will be generated when the card has successfully restarted.

--#SUMMARY "[Card %d] Task %s/%d on CPU %d has failed"
--#ARGUMENTS {2,0,1,3}
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 54 }

starCardActive NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION
"The card is now active. This is not applicable to QVPC-SI."
--#SUMMARY "[%s-%d] Card is active"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 55 }

starLACServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A LAC Service has started

Action to be Taken: No action required"
--#SUMMARY "[Service LAC-%s-%s] LAC service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 56 }

starLACServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A LAC Service has stopped

Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the LAC service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the LAC service is operational."
Condition Clear Alarm: A starLACServiceStart notification will be generated when
the service is restarted

---#SUMMARY "[Service LAC-%s-%s] LAC service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 57 }

starLACServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A LNS Service has started"

Action to be Taken: No Action Required

---#SUMMARY "[Service LNS-%s-%s] LNS service has started"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 58 }

starLNSServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A LNS Service has stopped"

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the LNS service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the LNS service is operational.

Condition Clear Alarm: A starLNSServiceStart notification will be generated when
the service is restarted

---#SUMMARY "[Service LNS-%s-%s] LNS service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 59 }

starCardDown NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION
"The card is now down."

Probable Cause: The card was shut down by an operator; the card was
removed by an operator; or a hardware or software fault caused the
card to shut down. In the latter case an additional notification is
generated with the specific failure.

Action to be Taken: If the card shutdown was not planned, verify that
the card is present in the system and its card lock is in the locked
position. Check the admin logs for the cause of the card shutdown.

Clear Condition: Verify that an SPC switchover/card migration completes
to recover from the card shutdown.

Condition Clear Alarm: A starCardUp notification is generated when the card is restarted.
   This is not applicable to QVPC-SI.”
---#SUMMARY "[Card %s-%d] Card down"
---#ARGUMENTS (1,0)
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 60 }

-- The Following two traps are using the Standard MIB
-- See rfc2495 and rfc2496
-- ds3Traps OBJECT IDENTIFIER ::= {ds3 15}
-- starDsx3LineStatusChange NOTIFICATION-TYPE
-- ::= { starentTraps 61 }
-- severity INFORMATIONAL
-- This is not applicable to QVPC-SI and QVPC-DI.

-- ds1Traps OBJECT IDENTIFIER ::= {ds1 15}
-- starDsx1LineStatusChange NOTIFICATION-TYPE
-- ::= { starentTraps 62 }
-- severity INFORMATIONAL
-- This is not applicable to QVPC-SI and QVPC-DI.

starGGSNServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
   "A GGSN Service has started
   Action to be Taken: No action required"
---#SUMMARY "[Service GGSN-%s-%s] GGSN service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 63 }

starGGSNServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
   "A GGSN Service has stopped
   Probable Cause: This is typically caused by operator invention. In
   unusual cases it can be caused by the loss of resources (PACs/PSCs) to
   support the running configuration.
   Action to be Taken: If the GGSN service shutdown was not planned,
   examine the admin logs for an indication of the failure. Verify that
   all configured PACs/PSCs are present and running in the system. Check the
   crash logs for an indication of a software failure.
   Clear Condition: Verify that the GGSN service is operational.
   Condition Clear Alarm: A starGGSNServiceStart notification will be generated when
   the service is restarted"
---#SUMMARY "[Service GGSN-%s-%s] GGSN service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 64 }
starLicenseExceeded NOTIFICATION-TYPE
OBJECTS { starLicensedSessions, starCurrentSessions, starServiceType }
STATUS current
DESCRIPTION
"The license session limit has been exceeded; note that a small number of
sessions are permitted beyond the licensed limit.

Probable Cause: The usage of the system has exceeded the capacity of the
license installed; The license installed does not match the identification
of the system; No license is installed

Action to be Taken: Verify that the proper license is installed on the
system; verify that the SPCs present in the system match those identified
in the software license. If required, install an additional higher-capacity license.

Clear Condition: This condition is cleared when usage goes under the licensed limit.

Condition Clear Alarm: This condition is cleared by a starLicenseUnderLimit
notification."
---SUMMARY "[System] License Exceeded for %s service; current sessions %d exceeds license %d"
---ARGUMENTS {2,0,1}
---STATE DEGRADED
---SEVERITY MAJOR
::= { starentTraps 65 }

starSubscriberLimit NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starServiceSubLimit, starServiceSubCurrent, starServiceType }
STATUS current
DESCRIPTION
"The specified service has reached its configured limit for number of subscribers.

Action to be Taken: Verify that the configured subscriber limit is correct.
Configure additional services, or configure the existing service to permit
a larger number of subscribers"
---SUMMARY "[System] License Exceeded for %s service %s-%s; current sessions %d exceeds license %d"
---ARGUMENTS {4,0,1,3,2}
---STATE DEGRADED
---SEVERITY MAJOR
::= { starentTraps 66 }

starSessionRejectNoResource NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceType }
STATUS current
DESCRIPTION
"A session setup was rejected because of a lack of available resources.

Probable Cause: The system has reached its maximum capacity based on the
number of available PACs/PSCs/CPUs/memory.

Actions to be Taken: Examine the system CPU table to determine if there
is abnormal system usage or if the system is reaching its capacity.
If this condition persists, additional PACs/PSCs or PAC/PSC memory may be required.
Note that there is a configuration threshold which can be setup to monitor
the number of NORESOURCE rejects."
---SUMMARY "[System] Session rejected NORESOURCE for %s service of type %d"
---ARGUMENTS {0,1}
---STATE DEGRADED
---SEVERITY MAJOR
::= { starentTraps 67 }
starLongDurTimerExpiry NOTIFICATION-TYPE
  OBJECTS { starSubContext, starSubMSID, starSubName, starSubTimerDuration,
    starSubLongDurTimeoutAction, starSubSetupTime, starSubHomeAddr, starSubHomeAddrv6 }
  STATUS current
  DESCRIPTION
  "The long duration timer has expired for the identified subscriber.

  Note that either starSubHomeAddr or starSubHomeAddrv6 is typically filled in,
as appropriate. The other attribute will be all zero octets.

  Action to be Taken: No action is typically required. If an abnormal
  number of expiries occur, verify that the configuration expiry time
  is correct"  
  --#SUMMARY "[System] context %s subscriber name %s MSID %s timer duration %d timeout action %d setup
time %s home address(ipv4/ipv6) %s"
  --#ARGUMENTS {0,1,3,4,5,6}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 68 }

starClosedRPServiceStart NOTIFICATION-TYPE
  OBJECTS { starServiceVpnName, starServiceServName }
  STATUS current
  DESCRIPTION
  "Closed RP Service has started"
  Action to be Taken: No action required"
  --#SUMMARY "[Service CLOSEDRP-%s-%s] Closed RP service has started"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 69 }

starClosedRPServiceStop NOTIFICATION-TYPE
  OBJECTS { starServiceVpnName, starServiceServName }
  STATUS current
  DESCRIPTION
  "Closed RP Service has stopped"
  Probable Cause: This is typically caused by operator invention. In
  unusual cases it can be caused by the loss of resources (PACs/PSCs) to
  support the running configuration.

  Action to be Taken: If the Closed RP service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
  crash logs for an indication of a software failure.

  Clear Condition: Verify that the Closed RP service is operational.

  Condition Clear Alarm: A starClosedRPServiceStop notification will be generated when
  the service is restarted"
  --#SUMMARY "[Service CLOSEDRP-%s-%s] Closed RP service has stopped"
  --#ARGUMENTS {0,1}
  --#STATE DEGRADED
  --#SEVERITY MAJOR
  ::= { starentTraps 70 }

starGtpcPathFailure NOTIFICATION-TYPE
  OBJECTS { starSessGGSNVpnName, starSessGGSNServName, starSessGGSNPeerAddr }
  STATUS current
**SNMP MIB Reference, StarOS™**  
**Release 21.0**

**STARENT-MIB DEFINITIONS ::= BEGIN**

DESCRIPTION  
"GTP Control Path Failure."
---#SUMMARY "[Service GGSN-%s-%s] GTP control path failure to %s"
---#ARGUMENTS (0,1,2)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 71 }

starGtpuPathFailure NOTIFICATION-TYPE
OBJECTS {starSessGGSNVpnName, starSessGGSNServName, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION  
"GTP Data Path Failure."
---#SUMMARY "[Service GGSN-%s-%s] GTP data path failure to %s"
---#ARGUMENTS (0,1,2)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 72 }

starManagerFailure NOTIFICATION-TYPE
OBJECTS {starTaskFacilityName, starTaskInstance, starTaskCard, starTaskCPU}
STATUS current
DESCRIPTION  
"Software manager Failure.
Probable Cause: A software failure. The failing manager will be restarted.
Action to be Taken: Examine the admin and crash logs for more information about the failure"
---#SUMMARY "[System] Manager %s/%d failure on card %d cpu %d"
---#ARGUMENTS (0,1,2,3)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 73 }

starEISServerAlive NOTIFICATION-TYPE
OBJECTS { starEISServerVPNName, starEISServerAddr }
STATUS current
DESCRIPTION  
"EIS Server alive"
---#SUMMARY "[System] EIS server alive, VPN %d Server Address %s"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 74 }

starEISServerDead NOTIFICATION-TYPE
OBJECTS { starEISServerVPNName, starEISServerAddr }
STATUS current
DESCRIPTION  
"EIS Server down.
Probable Cause: The remote EIS server is down or there is a network error making it unreachable.
Condition Clear Alarm: A starEISServerAlive notification will be generated when this condition is cleared"
---#SUMMARY "[System] EIS server dead, VPN %d Server Address %s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 75 }

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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starCgfAlive NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerPort, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
"GTPP CGF Server Alive."
--#SUMMARY "[System] GTPP CGF server alive, VPN %s Server Address %s/%d"
--#ARGUMENTS (0,2,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 76 }

starCgfDead NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerPort, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
"GTPP CGF Server Dead.
Probable Cause: The remote CGF server is down or there is a network error making it unreachable.

Action to be Taken: Verify that the CGF server is functioning properly; verify network connectivity to the CGF server.

Clear Condition: This condition is cleared when the CGF server becomes reachable.

Condition Clear Alarm: A starCgfServerAlive notification will be generated when this condition is cleared"
--#SUMMARY "[System] GTPP CGF server dead, VPN %s Server Address %s/%d"
--#ARGUMENTS (0,2,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 77 }

starStorageServerAlive NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
"GTPP Storage Server is Alive."
--#SUMMARY "[System] GTPP Storage Server alive, VPN %s Server Address %s"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 78 }

starStorageServerDead NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
"GTPP Storage Server is Dead.
Probable Cause: The remote Storage server is down or there is a network error making it unreachable.

Action to be Taken: Verify that the Storage server is functioning properly; verify network connectivity to the Storage server.

Clear Condition: This condition is cleared when the Storage server becomes reachable.

Condition Clear Alarm: A starStorageServerAlive notification will be generated when this condition is cleared"
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[System] GTPP Storage Server dead, VPN %s Server Address %s"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY CRITICAL
::= { starentTraps 79 }

starGgsnInitiatedUpdtFailed NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNServName, starSessGGSNSubsName,
 starSessGGSNAPNName, starSessGGSNImsi, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
"GGSN Initiated Update PDP Context Response Failed.
Probable Cause: This can happen if there is an inter-SGSN handoff and
the new SGSN is not listed in GGSN service and its PLMN policy is
set to reject unknown SGSNs.

Action to be Taken: List the SGSN address in the GGSN service.
Condition Clear Alarm: NA"
--#SUMMARY "[System] GGSN Initiated Update PDP context response failed for APN %s Imsi %d, VPN %s Server Address %s"
--#ARGUMENTS (3,4,0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 80 }

starCongestion NOTIFICATION-TYPE
OBJECTS { starServiceType, starCongestionPolicy, starCongestionResourceType }
STATUS current
DESCRIPTION
"A congestion condition has occurred.
Probable Cause: This is the result of an operator-configured congestion
threshold being reached. This can be due to high usage of the resource
being monitored which indicates that the IMG is reaching its peak
capacity, or could be caused by the incorrect configuration of the
congestion thresholds.

Actions to be Taken: Verify that the congestion thresholds are correct;
if the congested state is seen repeatedly, or for sustained periods of
time, additional system capacity may need to be brought online.
This system is cleared when the use of the specific resource falls below
the configured limit.
Condition Clear Alarm: A starCongestionClear notification is sent when there
are no congestion conditions for a service type"
--#SUMMARY "[System] Congestion seen for %s service; resource %s, policy %s applied"
--#ARGUMENTS (0,2,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 81 }

starCongestionClear NOTIFICATION-TYPE
OBJECTS { starServiceType }
STATUS current
DESCRIPTION
"A congestion condition has cleared"
--#SUMMARY "[System] Congestion clear for %s service"
--#ARGUMENTS (0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL

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STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 82 }

starServiceLossPTACs NOTIFICATION-TYPE
OBJECTS { starCardMode, starPTACConfig, starPTACActive }
STATUS current
DESCRIPTION
  "A service loss condition has occurred due to PAC/PSC/TAC failure or removal.
Probable cause: Multiple PAC/PSC/TAC cards are no longer available, due to failure, removal, or operator action -- or configuration changes have been made which eliminated the availability of redundant cards.
Action to be Taken: Bring additional PAC/PSC/TAC cards online to match the number of configured cards, or update the configuration to require fewer active PAC/PSC/TAC cards.
Clear Condition: This condition is cleared when the number of active PAC/PSC/TAC cards reaches or exceeds the configured number."
--#SUMMARY "[System] Service Loss - Not enough PAC/PSC/TACs, %d configured, %d active"
--#ARGUMENTS (1,2)
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 83 }

starServiceLossLC NOTIFICATION-TYPE
OBJECTS { starCardType, starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
  "A service loss condition has occurred due to LC failure or removal.
Probable cause: The upper and lower Line Cards (LCs) are both no longer available, due to failure, removal, or operator action.
Action to be Taken: Fix or replace the line cards.
Clear Condition: This condition is cleared when one of the two card becomes active."
--#SUMMARY "[System] Service Loss - (%s) Line Cards %d and %d are both unavailable"
--#ARGUMENTS (0,1,2)
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 84 }

starServiceLossSPIO NOTIFICATION-TYPE
STATUS current
DESCRIPTION
  "A service loss condition has occurred due to SPIO failure or removal.
NOTE: Since the SPIO contains the ports used for SNMP access, this notification cannot normally be delivered as an SNMP trap. The notification will be logged and stored in the historical trap list, and if the system is configured to send INFORM PDUs the notification might be delivered at a later time.
Probable cause: Both SPIOs are no longer available, due to failure, removal, or operator action.
Action to be Taken: Bring at least one SPIO online.
Clear Condition: This condition is cleared when a SPIO is made active"
--#SUMMARY "[System] Service Loss - No SPIO is available"
--#STATE OPERATIONAL

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---#SEVERITY WARNING
--NB: Lower severity than other 'service loss' traps as the SPIO does not carry
     end-user traffic.
::= { starentTraps 85 }

-- IPSP trap

starIPSPAllAddrFree NOTIFICATION-TYPE
OBJECTS { starContextName, starInterfaceName }
STATUS obsolete
DESCRIPTION
   "All IP addresses are now free on the IP Pool Sharing Protocol (IPSP) primary HA.

Probable Cause: IP Pool Sharing Protocol (IPSP) is running between two HAs
     (a primary and a secondary). The primary HA has now released the last address
     that was in use. This presumably is done in preparation for taking the
     primary HA out of server.

User Action: Perform the desired maintenance on the primary HA that required
     taking the device out of service."
---#SUMMARY "[System] IPSP - all IP addresses are now free, context %s interface %s"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 86 }

-- PCF trap

starPCFUnreachable NOTIFICATION-TYPE
OBJECTS { starContextName, starPCFAddress }
STATUS current
DESCRIPTION
   "A PCF that the IMG communicates which is no longer reachable.

Probable Cause: The PCF has failed or is otherwise unavailable, or
     a network connectivity problem makes it unreachable.

Action to be Taken: If the PCF outage was unplanned, restart/reset the
     PCF; verify network connectivity

Clear Condition: The condition is cleared when the PCF address becomes
     reachable, or if the configuration is changes to not use this server.

Condition Clear Alarm: A starPCFReachable notification is generated when
     the pcf address becomes reachable."
---#SUMMARY "[System] PCF Unreachable, VPN %s PCF address %s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 87 }

starDhcpAlive NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerPort, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
   "DHCP Server Alive."
---#SUMMARY "[System] DHCP server alive, VPN %s Server Address %s/%d"
---#ARGUMENTS (0,2,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 88 }
starDhcpDead NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerPort, starSessGGSNPeerAddr }
STATUS current
DESCRIPTION
"DHCP Server Dead.

Probable Cause: The remote DHCP server is down or there is a network error making it unreachable.

Action to be Taken: Verify that the DHCP server is functioning properly; verify network connectivity to the DHCP server.

Clear Condition: The condition is cleared when the DHCP server becomes reachable, or if the configuration is changes to not use this server.

Condition Clear Alarm: A starDhcpAlive notification is generated when the server becomes reachable."
---#SUMMARY "[System] DHCP server dead, VPN %s Server Address %s/%d"
---#ARGUMENTS (0,2,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 89 }

-- NTP traps
starNTPPeerUnreachable NOTIFICATION-TYPE
OBJECTS { starPeerAddress }
STATUS current
DESCRIPTION
"NTP Peer Unreachable.

Probable Cause: The NTP server is down or unavailable, or there is a network connectivity issue that prevents access to the NTP server.

Action to be Taken: Verify that the NTP server is running properly; verify that the connection to the NTP server is functioning.

Clear Condition: This condition is cleared when the NTP server becomes reachable.

Condition Clear Alarm: This condition is cleared by a starNTPPeerReachable notification.""
---#SUMMARY "[System] NTP Peer Unreachable; peer address %s"
---#ARGUMENTS (0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 90 }

starNTPSyncLost NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"NTP Synchronization Lost.

Probable Cause: All configured NTP server are no longer available, or some/all NTP servers have been unconfigured by an operator.

Action to be Taken: Verify that the NTP server(s) are running properly and that the network connections to the NTP servers are available. Check the configured of the NTP servers for correctness. If needed, configure additional NTP servers.

Clear Condition: This condition is cleared when any (one) NTP server becomes reachable.
Condition Clear Alarm: This condition is cleared by a starNTPSyncEstablished notification."

"[System] NTP Sync Lost"
---#STATE OPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 91 }"n

--- L2TP traps
starL2TPtunnelDownPeerUnreachable NOTIFICATION-TYPE
OBJECTS {  starL2TPLocalTunnelID,
           starL2TPPeerTunnelID,
           starL2TPContextName,
           starL2TPServiceName,
           starL2TPServiceTypeName,
           starL2TPLocalAddress,
           starL2TPPeerAddress }
STATUS current
DESCRIPTION
"L2TP tunnel down due to peer unreachable.
Probable Cause: Misconfiguration of the peer router address or inability to route to the peer.
Action to be Taken: Verify the peer address is correct; verify that the peer is operational; verify network connectivity to the peer."
---#SUMMARY "[System] L2TP tunnel down due to peer unreachable, context %s service type %s service name %s local tun id %d peer tun id %d local address %s peer address %s"
---#ARGUMENTS {2,4,3,0,1,5,6}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 92 }"n

--- Card traps again
starCardStandby NOTIFICATION-TYPE
OBJECTS {  starSlotNum,
           starCardType }
STATUS current
DESCRIPTION
"The card is now standby. This is not applicable to QVPC-SI."
---#SUMMARY "[%s-%d] Card is standby"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 93 }"n

starLicenseUnderLimit NOTIFICATION-TYPE
OBJECTS {  starLicensedSessions, starCurrentSessions, starServiceType }
STATUS current
DESCRIPTION
"Usage is now under the licensed session limit."
---#SUMMARY "[System] System under license limit for %s service; current sessions %d license %d"
---#ARGUMENTS {2,0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 94 }"n

--- IPSEC
starIPSECPriTunDown NOTIFICATION-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starIPSECCtxName, starIPSECGrpName, starIPSECTunLocalIpAddr, starIPSECTunRemoteIpAddr }

STATUS current
DESCRIPTION "IPSEC Primary Tunnel Down"
---#SUMMARY "[System] IPSEC primary tunnel down, context %s, group %s, local ip address %s, remote ip address %s"
---#ARGUMENTS (0,1,2,3)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 95 }

starIPSECPrTunUp NOTIFICATION-TYPE
OBJECTS { starIPSECCtxName, starIPSECGrpName, starIPSECTunLocalIpAddr, starIPSECTunRemoteIpAddr }

STATUS current
DESCRIPTION "IPSEC Primary Tunnel Up"
---#SUMMARY "[System] IPSEC primary tunnel up, context %s, group %s, local ip address %s, remote ip address %s"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 96 }

starIPSECSecTunDown NOTIFICATION-TYPE
OBJECTS { starIPSECCtxName, starIPSECGrpName, starIPSECTunLocalIpAddr, starIPSECTunRemoteIpAddr }

STATUS current
DESCRIPTION "IPSEC Secondary Tunnel Down"
---#SUMMARY "[System] IPSEC secondary tunnel down, context %s, group %s, local ip address %s, remote ip address %s"
---#ARGUMENTS (0,1,2,3)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 97 }

starIPSECSecTunUp NOTIFICATION-TYPE
OBJECTS { starIPSECCtxName, starIPSECGrpName, starIPSECTunLocalIpAddr, starIPSECTunRemoteIpAddr }

STATUS current
DESCRIPTION "IPSEC Secondary Tunnel Up"
---#SUMMARY "[System] IPSEC secondary tunnel up, context %s, group %s, local ip address %s, remote ip address %s"
---#ARGUMENTS (0,1,2,3)
---#STATE DEGRADED
---#SEVERITY INFORMATIONAL
::= { starentTraps 98 }

starIPSECTunSwitchFail NOTIFICATION-TYPE
OBJECTS { starIPSECCtxName, starIPSECGrpName }

STATUS current
DESCRIPTION "IPSEC Tunnel Switchover failed or unable to be attempted"
---#SUMMARY "[System] IPSEC tunnel switchover failed, context %s, group %s"
---#ARGUMENTS (0,1)
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 99 }

starIPSECTunSwitchComplete NOTIFICATION-TYPE
OBJECTS { starIPSECCtxName, starIPSECGrpName, starIPSECTunLocalIpAddr, starIPSECTunRemoteIpAddr }

STATUS current
DESCRIPTION "IPSEC Tunnel Switchover complete"
STARENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[System] IPSEC tunnel switchover complete, context %s, group %s, active tunnel: local ip address %s, remote ip address %s"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 100 }

starNwReachServerAlive NOTIFICATION-TYPE
 OBJECTS { starNwReachName, starNwReachSrvrAddr}
 STATUS current
 DESCRIPTION
 "Nw Reacheable Server alive"
--#SUMMARY "[System] Network Reachability server alive, Name %s Server Address %s"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 101 }

starNwReachServerDead NOTIFICATION-TYPE
 OBJECTS { starNwReachName, starNwReachSrvrAddr}
 STATUS current
 DESCRIPTION
 "Nw Reachable Server Dead.
 Probable Cause: The remote server is down or there is a network error making it unreachable.

 A starNwReachServerAlive notification will be generated when this condition is cleared"
--#SUMMARY "[System] Network Reachability server dead, Name %s Server Address %s"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY MAJOR
 ::= { starentTraps 102 }

starStorageServerUnackedGcdrVolPurge NOTIFICATION-TYPE
 OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr }
 STATUS current
 DESCRIPTION
 "GTPP storage server has performed unacked GCDRs volume purge.
 Probable Cause: GTPP storage server has purged unacked GCDRs after hitting the max allowed configured limit on unacked GCDR in the backup database.

 Action to be Taken: Check for the unacked file generated for these GCDRs.
 Clear Condition: There is no clear condition for this notification.
 Condition Clear Alarm: There is no clear alarm for this notification."
--#SUMMARY "[System] GTPP Storage Server has performed unacked GCDRs volume purge. VPN %s Server Address %s"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
 ::= { starentTraps 103 }

starStorageServerUnackedGcdrFileGen NOTIFICATION-TYPE
 OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr }
 STATUS current
 DESCRIPTION
 "GTPP storage server has exported the unacked GCDRs to file from backup db.
 Probable Cause: GTPP storage server has generated and saved all the unacked GCDRs to file.
Action to be Taken: Operator needs to ftp the generated file.

Clear Condition: There is no clear condition for this notification.

Condition Clear Alarm: There is no clear alarm for this notification.

---#SUMMARY "[System] GTPP storage server has exported the unacked GCDRs to file from backup db. VPN
%s Server Address %s"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 104 }

starNTPPeerReachable NOTIFICATION-TYPE
OBJECTS { starPeerAddress }
STATUS current
DESCRIPTION
"NTP Peer Reachable.
Probable Cause: The NTP server is reachable. This could indicate a newly
configured NTP server (including an initial configuration on system startup) or
could indicate a previously unreachable server has become reachable.

Action to be Taken: No action required."
---#SUMMARY "[System] NTP Peer Reachable; peer address %s"
---#ARGUMENTS (0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 105 }

starNTPSyncEstablished NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"NTP Synchronization Established.
Probable Cause: An NTP server is available when previously no server was available.
This could indicate a newly configured NTP server (including an initial configuration on system startup) or
could indicate that one or more previously unreachable server(s) has become reachable.

Action to be Taken: No action required."
---#SUMMARY "[System] NTP Sync Established"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 106 }

starSIPServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SIP service has started

Action to be Taken: No action required"
---#SUMMARY "[Service SIP-%s-%s] SIP service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 107 }

starSIPServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

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STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
"A SIP service has stopped
Action to be Taken: No action required"
--#SUMMARY "[Service SIP-%s-%s] SIP service has stopped"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY MAJOR
::= { starentTraps 108 }

starVIMServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A VIM service has started
Action to be taken: No action required"
--#SUMMARY "[Service VIM-%s-%s] VIM service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 109 }

starVIMServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A VIM service has stopped. This is because of application out-of-service
or if vim is down or no app. server
Action to be taken: No action required"
--#SUMMARY "[Service VIM-%s-%s] VIM service has stopped"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY MAJOR
::= { starentTraps 110 }

starCHATCONFServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A CHAT/CONF service has started
Action to be taken: No action required"
--#SUMMARY "[Service CHAT/CONF-%s-%s] CHAT/CONF service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 111 }

starCHATCONFServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A CHAT/CONF service has stopped. This is because of application out-of-service
or if chatconf is down or no app. server
Action to be taken: No action required"
--#SUMMARY "[Service CHAT/CONF-%s-%s] CHAT/CONF service has stopped"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY MAJOR

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STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 112 }

starSIPRouteNomatch NOTIFICATION-TYPE
OBJECTS { starSIPRouteVpnName, starSIPRouteVmgName, starSIPRouteAsName, starSIPRouteDestPartyNum, starSIPRouteReqNum }
STATUS current
DESCRIPTION
"SIP session has failed since there is no match in the routing table with matching prefix

Action to be taken: Operator has to configure with matching prefix if required"

--#SUMMARY "[Service SIPROUTENOMATCH-%s-%s-%s-%s-%s] SIP Session failed: nomatch in routing table"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 113 }

starL3AddrUnreachable NOTIFICATION-TYPE
OBJECTS { starL3Address, starPortSlot, starPortNum }
STATUS current
DESCRIPTION
"A L3 Address is unreachable through the specific slot and port.

Action to be taken: No action required"

--#SUMMARY "[System] L3 Address %s unreachable through Slot %d/Port %d"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 114 }

starSWUpgradeStart NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"An operator has begun to upgrade the software on the chassis."

--#SUMMARY "[System] Software Upgrade started"
--#STATE DEGRADED
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 115 }

starSWUpgradeComplete NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"An operator-initiated software upgrade has been completed."

--#SUMMARY "[System] Software Upgrade complete"
--#STATE DEGRADED
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 116 }

starSWUpgradeAborted NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"An operator-initiated software upgrade has been aborted."

--#SUMMARY "[System] Software Upgrade started"
--#STATE DEGRADED
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 117 }

--- BGP

starBGPPeerSessionUp NOTIFICATION-TYPE
OBJECTS { starContextName, starBGPPeerIpAddress }
STATUS current
DESCRIPTION

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"The BGP peer session to the specified IP address is operational. This may indicate the initial configuration of a new peer, the initial connectivity after a system restart, or the restoration of connectivity after a starBGPPeerSessionDown event.

Action to be Taken: No action required."

--#SUMMARY "$[System] BGP peer session, vpn %s, address %s, is operational"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 118 }

starBGPPeerSessionDown NOTIFICATION-TYPE
OBJECTS { starContextName, starBGPPeerIpAddress }
STATUS current
DESCRIPTION
"The BGP peer session to the specified IP address is no longer operational.

Probable Cause: The BGP peer is not-operational; the network between the ST16 and the BGP peer is experiencing an outage; LC failure(s) on the ST16.

Action to be Taken: Verify the BGP peer is operational; verify network connectivity to the BGP peer.

Clear Condition Alarm: A starBGPPeerSessionUp is generated when connectivity is reestablished"

--#SUMMARY "$[System] BGP peer session, vpn %s, address %s, is non-operational"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 119 }

-- ICSR

starSRPActive NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress }
STATUS current
DESCRIPTION
"The SRP Chassis Status is now Active.

Action to be Taken: No action is required."

--#SUMMARY "$[System] vpn %s SRP %s is now active"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 120 }

starSRPStandby NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress }
STATUS current
DESCRIPTION
"The SRP Chassis Status is now Standby.

Action to be Taken: No action is required."

--#SUMMARY "$[System] vpn %s SRP %s is now standby"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 121 }

starBGPPeerReachable NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress, starUDPPortNum,
starBGPPeerIpAddress }

DESCRIPTION
"The monitored BGP peer is now Reachable. This notification can represent the initial detection of the peer's state, or the reconnection to a peer after a starBGPPeerDown notification. This attribute is obsolete.

Action to be Taken: No action is required."

---#SUMMARY "[System] vpn %s SRP %s port %d BGP Peer %s is up"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 122 }

starBGPPeerUnreachable NOTIFICATION-TYPE
OBJECTS { starContextName,
    starSRPIpAddress,
    starUDPPortNum,
    starBGPPeerIpAddress }

DESCRIPTION
"The monitored BGP peer is now Unreachable.

Action to be Taken: Verify that the BGP Peer is running and is properly configured. Verify the network link to the BGP Peer. This attribute is obsolete.

Clear Condition: This condition is cleared when communication with the BGP peer is reestablished.

Condition Clear Alarm: This condition is cleared by a starBGPPeerReachable notification."

---#SUMMARY "[System] vpn %s SRP %s port %d BGP Peer %s is unreachable"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 123 }

starSRPAAAReachable NOTIFICATION-TYPE
OBJECTS { starContextName,
    starSRPIpAddress,
    starUDPPortNum }

DESCRIPTION
"The SRP AAA monitor has found a reachable AAA server. This notification can represent the initial detection of an AAA server, or the restoration of reachability after a starSRPAAAUnreachable notification. This notification is only generated if there was previously no reachable AAA server.

Action to be Taken: No action required."

---#SUMMARY "[System] vpn %s SRP %s port %d reports AAA Reachable"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 124 }

starSRPAAAUnreachable NOTIFICATION-TYPE
OBJECTS { starContextName,
    starSRPIpAddress,
    starUDPPortNum }

DESCRIPTION
"The SRP AAA monitor has determined that all AAA servers are unreachable.

::= { starentTraps 125 }

---#SUMMARY "[System] vpn %s SRP %s port %d reports AAA Unreachable"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 126 }
Action to be Taken: Verify the state of the configured AAA Server(s) and restart them if required. Verify the network link to the AAA Server(s). Configure additional AAA Servers if required.

Clear Condition: This condition is cleared when communication with any single AAA service is (re)established.

Condition Clear Alarm: This condition is cleared by a starSRPAAAReachable notification.

--#SUMMARY "[System] vpn %s SRP %s port %d reports AAA Unreachable"
--#ARGUMENTS {0,1,2}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 125 }

starSRPSwitchoverInitiated NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress }
STATUS current
DESCRIPTION
"An SRP (ICSR) Switchover operation has been initiated by an operator.

Action to be Taken: Verify that the switchover was a planned operator action."

--#SUMMARY "[System] SRP Switchover Initiated, vpn %s SRP %s"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 126 }

starSRPCheckpointFailure NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress }
STATUS current
DESCRIPTION
"The system has detected that a checkpoint messaged failed to be sent successfully to the standby HA. If the active HA were to fail, this information will be lost.

Action to be Taken: Verify the communication path to the Standby HA."

--#SUMMARY "[System] vpn %s SRP %s session checkpoint failure"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 127 }

starSRPConfigOutOfSync NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress }
STATUS current
DESCRIPTION
"The system has detected that the standby HA has a different configuration than the active HA. In the event of a failure of the active HA, it is possible that the standby HA is not configured properly to be able to take over.

Action to be Taken: Update the configuration of the standby HA to match the active HA.

Clear Condition: This condition is cleared when the active HA confirms that the standby HA has an identify configuration.

Condition Clear Alarm: This condition is cleared by a starSRPConfigInSync notification."
starSRPConfigInSync NOTIFICATION-TYPE
OBJECTS { starContextName, starSRPIpAddress }
STATUS current
DESCRIPTION
"The system has detected that the standby HA has a matching configuration as the active HA. This notification is generated only after a starSRPConfigOutOfSync notification.

Action to be Taken: No action required."

starGESwitchFailure NOTIFICATION-TYPE
OBJECTS { starSlotNum }
STATUS current
DESCRIPTION
"A failure of an internal Gigabit Ethernet switch has been detected. If it is possible to determine the slot containing the failed switch it is identified in starSlotNum, otherwise starSlotNum is 0.

Action to be Taken: If this condition persists, the identified card needs to be replaced. This is not applicable to QVPC-SI and QVPC-DI."

starSIPRouteServerAvailable NOTIFICATION-TYPE
OBJECTS { starSIPRouteServerVpnName, starSIPRouteServerVmgName, starSIPRouteServerAsName, starSIPRouteServerIpAddr }
STATUS current
DESCRIPTION
"SIP route server is available

Action to be taken: None"

starSIPRouteServerUnavailable NOTIFICATION-TYPE
OBJECTS { starSIPRouteServerVpnName, starSIPRouteServerVmgName, starSIPRouteServerAsName, starSIPRouteServerIpAddr }
STATUS current
DESCRIPTION
"SIP session has failed since the server is unavailable

Action to be taken: Operator has to check the reasons for the unavailability of the server and act accordingly"
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starFMDMaxCallRateReached NOTIFICATION-TYPE
  OBJECTS { starVIMServiceVpnName, starVIMServiceInstanceId, starVIMServiceFMDMaxCallRate,
    starVIMServiceFMDContinuousLoadCount }
  STATUS current
  DESCRIPTION "FMD max call rate reached

Action to be taken: Increase the value of fmd-max-call-rate or set no fmd-max-call-rate

Condition Clear Alarm: This condition is cleared by a starFMDCallRateUnderControl notification"
  ---#SUMMARY "([Service VIM-%s-%d] Number of FMD messages processed per minute reached its limit (%d) continuously for %d measurement periods.)"
  ---#ARGUMENTS (0,1,2,3)
  ---#STATE DEGRADED
  ---#SEVERITY WARNING
  ::= { starentTraps 132 }

starFMDCallRateUnderControl NOTIFICATION-TYPE
  OBJECTS { starVIMServiceVpnName, starVIMServiceInstanceId, starVIMServiceFMDMaxCallRate,
    starVIMServiceFMDContinuousLoadCount }
  STATUS current
  DESCRIPTION "FMD call rate under control

Action to be taken: None"
  ---#SUMMARY "([Service VIM-%s-%d] Number of FMD messages processed per minute, under limit (%d) for %d measurement periods.)"
  ---#ARGUMENTS (0,1,2,3)
  ---#STATE OPERATIONAL
  ---#SEVERITY INFORMATIONAL
  ::= { starentTraps 133 }

starStorageServerCPUBusy NOTIFICATION-TYPE
  OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshPct, starThreshMeasuredPct,
    starGSSClusterName, starGSSClusterNodeName }
  STATUS current
  DESCRIPTION "GTPP Storage Server is experiencing high CPU usage. The usage has exceeded an operator-configure value.

Probable Cause: The amount of information being sent to the Storage Server is approaching the server's capacity; the Storage Server has other tasks running on it which are taking CPU time; a problem with the Storage Server is causing the CPU to be abnormally busy;

Condition Clear Alarm: This condition is cleared by a starStorageServerCPUNormal notification"
  ---#SUMMARY "([System] GTPP Storage Server CPU busy, VPN %s Server Address %s, GTPP Storage Server Cluster %s node %s, CPU usage %d percent (alarm at %d percent))"
  ---#ARGUMENTS (0,1,4,5,3,2)
  ---#STATE OPERATIONAL
  ---#SEVERITY MAJOR
  ::= { starentTraps 134 }

starStorageServerCPUNormal NOTIFICATION-TYPE

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SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshPct, starThreshMeasuredPct,
       starGSSClusterName, starGSSclusterNodeName }
STATUS current
DESCRIPTION
"GTPP Storage Server CPU usage has returned to a normal range.

Note that this is an external server, not part of the ST16."

--#SUMMARY "[System] GTPP Storage Server CPU usage normal, VPN %s Server Address %s, GTPP Storage
Server Cluster %s node %s, CPU usage %d percent (alarm at %d percent)"
--#ARGUMENTS {0,1,4,5,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 136 }

starStorageServerDiskSpaceLow NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshGB, starThreshMeasuredGB,
       starGSSClusterName, starGSSclusterNodeName }
STATUS current
DESCRIPTION
"GTPP Storage Server is experiencing low available disk space. The available
disk space has gone below an operator-configure value.

Note that this is an external server, not part of the ST16.

Probable Cause: The amount of information being sent to the Storage Server
is approaching the server's capacity; the Storage Server has other information
consuming disk space; a problem with the Storage Server is causing less disk
space to be available then normal.

Condition Clear Alarm: If the GTPP Storage Server is configured to run in an 'alarm'
model, this condition is cleared by a starStorageServerDiskSpaceOK notification.
Otherwise the starStorageServerDiskSpaceLow notification will be generated periodically
until the condition is cleared."

--#SUMMARY "[System] GTPP Storage Server Disk space low, VPN %s Server Address %s, GTPP Storage
Server Cluster %s node %s, disk available %d GB (alarm at %d GB)"
--#ARGUMENTS {0,1,4,5,3,2}
--#STATE OPERATIONAL
--#SEVERITY MAJOR
::= { starentTraps 137 }

starStorageServerDiskSpaceOK NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshPct, starThreshMeasuredPct,
       starGSSClusterName, starGSSclusterNodeName }
STATUS current
DESCRIPTION
"GTPP Storage Server available disk space to a normal range.

Note that this is an external server, not part of the ST16."

--#SUMMARY "[System] GTPP Storage Server Disk space OK, VPN %s Server Address %s, GTPP Storage
Server Cluster %s node %s, disk available %d GB (alarm at %d GB)"
--#ARGUMENTS {0,1,4,5,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 138 }

starCardSPOFAlarm NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType }
STATUS current
DESCRIPTION
"The identified card is a Single Point of Failure (SPOF). There is no redundant card
available to take over in the event of a failure.
Probable Cause: This can be caused by an improper configuration, or by the failure or removal of other cards in the system.

Action to be Taken: Install or configure additional redundant cards.

Clear Condition: A starCardSPOFClear notification will be generated is a redundant card becomes available. Notifications like starCardDown could also obsolete this notification. 

--- #SUMMARY "[Card %s-%d] Card is Single Point of Failure (SPOF). This is not applicable to QVPC-SI." 
--- #ARGUMENTS (1,0) 
--- #STATE DEGRADED 
--- #SEVERITY MAJOR 
::= { starentTraps 139 } 

starCardSPOFClear NOTIFICATION-TYPE 
OBJECTS { starSlotNum, starCardType } 
STATUS current 
DESCRIPTION "The identified card is no longer a Single Point of Failure (SPOF)." 
--- #SUMMARY "[Card %s-%d] Card is no longer a Single Point of Failure (SPOF). This is not applicable to QVPC-SI." 
--- #ARGUMENTS (1,0) 
--- #STATE OPERATIONAL 
--- #SEVERITY INFORMATIONAL 
::= { starentTraps 140 } 

starStorageServerOldGcdrPending NOTIFICATION-TYPE 
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshInt, starThreshMeasuredInt, starGSSClusterName, starGSSClusterNodeName } 
STATUS current 
DESCRIPTION "GTPP Storage Server reports that GCDR files have been unprocessed for too long. 

Note that this is an external server, not part of the ST16.

Probable Cause: No action has been taken long for the GCDR files generated by Storage Server. 

Condition Clear Alarm: If the GTPP Storage Server is configured to run in an 'alarm' model, this condition is cleared by a starStorageServerOldGcdrCleared notification. Otherwise the starStorageServerOldGcdrPending notification will be generated periodically. 

--- #SUMMARY "[System] GTPP Storage Server has many unprocessed GCDR files, VPN %s Server Address %s, GTPP Storage Server Cluster %s node %s, Oldest unprocessed GCDR file %d mins. Configured period %d mins" 
--- #ARGUMENTS (0,1,4,5,3,2) 
--- #STATE OPERATIONAL 
--- #SEVERITY WARNING 
::= { starentTraps 141 } 

starStorageServerOldGcdrCleared NOTIFICATION-TYPE 
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshInt, starGSSClusterName, starGSSClusterNodeName } 
STATUS current 
DESCRIPTION "GCDR files on the Storage Server have been processed on the Storage Server. The threshold condition is now clear. 

Note that this is an external server, not part of the ST16."

--- #SUMMARY "[System] All old GCDR files on Storage Server over the configured period of %lu min have been processed. VPN %s Storage Server Address %s, GTPP Storage Server Cluster %s node %s, " 
--- #ARGUMENTS (2,0,1,3,4) 
--- #STATE OPERATIONAL 
--- #SEVERITY INFORMATIONAL 
::= { starentTraps 142 }
starLoginFailure NOTIFICATION-TYPE
OBJECTS { starCLITtyname, starCLIRemoteIpAddrType,
          starCLIRemoteIpAddr, starCLIType }
STATUS  current
DESCRIPTION
   "A login failure occurred attempting to establish a CLI or FTP session."
---#SUMMARY "[System] CLI/FTP login failure from %s/%s, failure starting %s"
---#ARGUMENTS (1,0,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 143 }

starIPSGServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
   "A IP Services Gateway (IPSG) Service has started
Action to be Taken: No action required"
---#SUMMARY "[Service IPSG-%s-%s] IPSG service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 144 }

starIPSGServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
   "A IP Services Gateway (IPSG) Service has stopped.
Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.
Action to be Taken: If the IPSG service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
Crash logs for an indication of a software failure.
Clear Condition: Verify that the IPSG service is operational.
Condition Clear Alarm: A starIPSGServiceStart notification will be generated when
the service is restarted"
---#SUMMARY "[Service IPSG-%s-%s] IPSG service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 145 }

starHAUnreachable NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starServiceFAIpAddr, starServiceHAIpAddr }
STATUS  current
DESCRIPTION
   "A monitored HA is unreachable from the identified FA Service.
Condition Clear Alarm: A starHAUnreachable notification will be generated when the
HA becomes reachable"
---#SUMMARY "[HA %s-%s] HA Unreachable; HA address %s"
---#ARGUMENTS (0,1,3)
---#STATE DEGRADED
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

---#SEVERITY MAJOR
::= { starentTraps 146 }

starHAReachable NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starServiceFAIpAddr, starServiceHAIpAddr }
STATUS current
DESCRIPTION
"A monitored HA is now reachable. A starHAReachable notification is only
generated for monitored HA’s which previously were marked unreachable."
---#SUMMARY "[FA %s-%s] HA Reachable; HA address %s"
---#ARGUMENTS (0,1,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 147 }

starASNGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS obsolete
DESCRIPTION
"A WiMAX ASN Gateway (ASNGW) Service has started
Action to be Taken: No action required"
---#SUMMARY "[Service ASNGW-%s-%s] ASNGW service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 148 }

starASNGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS obsolete
DESCRIPTION
"A WiMAX ASN Gateway (ASNGW) Service has stopped.
Probable Cause: This is typically caused by operator invention. In
unusual cases it may be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the ASNGW service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the ASNGW service is operational.

Condition Clear Alarm: A starASNGWServiceStart notification will be generated when
the service is restarted"
---#SUMMARY "[Service ASNGW-%s-%s] ASNGW service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 149 }

starTaskFailed NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard, starTaskCPU }
STATUS current
DESCRIPTION
"A non-critical task has failed and the appropriate recovery steps begun.
The failing task will be restarted.
Probable Cause: Software error
Actions to be Taken: Examine the admin logs for an indication of the source
of the failure.

Clear Condition: Verify that the task has been restarted.

Condition Clear Alarm: A starTaskRestart notification will be generated when task has successfully restarted."
---#SUMMARY "[Card %d] Task %s/%d on CPU %d has failed"
---#ARGUMENTS (2,0,1,3)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 150 }

starTaskRestart NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard, starTaskCPU }
STATUS current
DESCRIPTION
"A non-critical task has restarted after an earlier failure.

Actions to be Taken: None"
---#SUMMARY "[Card %d] Task %s/%d on CPU %d has been restarted"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 151 }

starCSCFServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An CSCF Service has started

Action to be Taken: No action required"
---#SUMMARY "[Service CSCF-%s-%s] CSCF service has started"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 152 }

starCSCFServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An CSCF Service has stopped

Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the CSCF service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the CSCF service is operational.

Condition Clear Alarm: A starCSCFServiceStart notification will be generated when the service is restarted"
---#SUMMARY "[CSCF %s-%s] CSCF service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 153 }
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starDhcpServiceStarted NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION "A DHCP Service has started

Action to be Taken: No action required"

---#SUMMARY "[System] DHCP service started, VPN %s Service Name %s"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 154 }

starDhcpServiceStopped NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION "A DHCP Service has stopped

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the DHCP service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the DHCP service is operational.

Condition Clear Alarm: A starDHCPServiceStart notification will be generated when
the service is restarted"

---#SUMMARY "[System] DHCP service stopped, VPN %s Service Name %s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 155 }

starContFiltDBError NOTIFICATION-TYPE
OBJECTS { starContFiltCFFilename, starContFiltCFErrorCode }
STATUS current
DESCRIPTION "The Content Filtering OPTCMDB file error displayed with an error code.

Action to be Taken: If no OPTCMDB file is there in the specified directory then
Place a OPTCMDB-FULL file in the directory and give an upgrade command or place
an OPTCMDB file and load the SRDBs by killing them all.

Condition Clear Alarm: This condition is cleared by a starContFiltDBErrorClear
notification"

---#SUMMARY "[System] Content Filtering file %s error code: %s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 156 }

starContFiltDBErrorClear NOTIFICATION-TYPE
OBJECTS { starContFiltCFFilename, starContFiltCFErrorCode }
STATUS current
DESCRIPTION "The Content Filtering OPTCMDB file error removed."
STARENT-MIB DEFINITIONS ::= BEGIN

starBLDBError NOTIFICATION-TYPE
OBJECTS { starBLFilename, starBLErrorCode }
STATUS current
DESCRIPTION "The Blacklisting OPTBLDB file error displayed with an error code.
Action to be Taken: If no or invalid OPTBLDB file is there in the specified directory then
Place a OPTBLDB_FULL file in the directory and give an upgrade command.
Condition Clear Alarm: This condition is cleared by a starBLDBErrorClear
notification"
---#SUMMARY "[System] Blacklisting file %s error code: %s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 158 }

starBLDBErrorClear NOTIFICATION-TYPE
OBJECTS { starBLFilename, starBLErrorCode }
STATUS current
DESCRIPTION "The Blacklisting OPTBLDB file error removed.
Action to be Taken: No action required"
---#SUMMARY "[System] Blacklisting file %s error code: %s cleared"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 159 }

starContFiltDBUpgradeError NOTIFICATION-TYPE
OBJECTS { starContFiltCFUpgradeFilename, starContFiltCFUpgradeErrorCode }
STATUS current
DESCRIPTION "The Content Filtering OPTCMDB file error displayed with an error code.
Action to be Taken: Place a valid OPTCMDB-FULL file or OPTCMDB_INCR file in the
directory and give an upgrade command.
Condition Clear Alarm: This condition is cleared by a starContFiltDBUpgradeErrorClear
notification"
---#SUMMARY "[System] Content Filtering file %s error code: %s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY INFORMATIONAL
::= { starentTraps 160 }

starContFiltDBUpgradeErrorClear NOTIFICATION-TYPE
OBJECTS { starContFiltCFUpgradeFilename, starContFiltCFUpgradeErrorCode }
STATUS current
DESCRIPTION "The Content Filtering OPTCMDB file error removed.
Action to be Taken: No action required"
STARENT-MIB DEFINITIONS ::= BEGIN

starBLDBUpgradeError NOTIFICATION-TYPE
OBJECTS { starBLUpgradeFilename, starBLUpgradeErrorCode }
STATUS current
DESCRIPTION "The Blacklisting OPTBLDB file error displayed with an error code.

Action to be Taken: Place a valid OPTBLDB-FULL file file in the directory and give an upgrade command.

Condition Clear Alarm: This condition is cleared by a starBLDBUpgradeErrorClear notification"

starBLDBUpgradeErrorClear NOTIFICATION-TYPE
OBJECTS { starBLUpgradeFilename, starBLUpgradeErrorCode }
STATUS current
DESCRIPTION "The Blacklisting OPTBLDB file error removed.

Action to be Taken: No action required"

starIPSECDynTunUp NOTIFICATION-TYPE
OBJECTS { starIPSECContextName, starIPSECPolicyName, starIPSECDynPolicyType, starIPSECDynPolicyPayloadType, starIPSECLocalGateway, starIPSECRemoteGateway }
STATUS current
DESCRIPTION "IPSEC Dynamic Tunnel Up.

Action to be Taken: No action required"

starIPSECDynTunDown NOTIFICATION-TYPE
OBJECTS { starIPSECContextName, starIPSECPolicyName, starIPSECDynPolicyType, starIPSECDynPolicyPayloadType, starIPSECLocalGateway, starIPSECRemoteGateway }
STATUS current
DESCRIPTION "IPSEC Dynamic Tunnel Down.

Condition Clear Alarm: a starIPSECDynTunUp notification will be sent when the tunnel is operational again. Note however that a tunnel may go down due to administrative action, or the tunnel may not longer be required, thus a starIPSECDynTunUp may not follow."
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STARENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[System] IPSEC Dynamic Tunnel Down; context %s, policy name %s, policy type %d, payload type %d, local gateway %s, remote gateway %s"
--#ARGUMENTS {0,1,2,3,4,5}
--#STATE DEGRADED
--#SEVERITY MINOR
::= { starentTraps 165 }

starHeartbeat NOTIFICATION-TYPE
STATUS current
DESCRIPTION "Periodic SNMP heartbeat. A starHeartbeat notification can be generated periodically if the system is configured to do so. These notifications serve only to validate that there is communication to external entities which sink SNMP notifications"
--#SUMMARY "[System] SNMP Heartbeat"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 166 }

starOverloadSystem NOTIFICATION-TYPE
OBJECTS { starCongestionResourceType }
STATUS current
DESCRIPTION "A system-wide congestion overload condition has occurred.
Probable Cause: This is the result of an operator-configured congestion overload value reached. This notification indicated a chassis-wide overload condition, typically overall system usage reaching some fraction of capacity.
Once this limit is reached, the configured behavior is taken. This will cause certain older and/or dormant calls to be dropped in favor of newer calls.
Note that this is similar to, but different than, the starCongestion notification. Typically the 'overload' condition will be configured to trigger at an earlier point.
Actions to be Taken: Verify that the congestion overload thresholds are correct; if the congested state is seem repeatedly, or for sustained periods of time, additional system capacity may need to be brought online.
This system is cleared when the use of the specific resource falls below the configured limit.
Condition Clear Alarm: A starOverloadSystemClear notification is sent when the system overload condition is clear"
--#SUMMARY "[System] System Congestion Overload; resource type %s"
--#ARGUMENTS {0}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 167 }

starOverloadSystemClear NOTIFICATION-TYPE
STATUS current
DESCRIPTION "A system-wide congestion overload condition has cleared"
--#SUMMARY "[System] Congestion overload clear"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 168 }

starOverloadService NOTIFICATION-TYPE

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starCongestionResourceType, starServiceVpnName, starServiceServName
STATUS current
DESCRIPTION
"A service-specific congestion overload condition has occurred.
Probable Cause: This is the result of an operator-configured congestion overload value reached. This notification indicated a service-specific overload condition, typically the use of the service reaching some fraction of capacity.
Once this limit is reached, the configured behavior is taken. This will cause certain older and/or dorman calls to be dropped in favor of newer calls.
Note that this is similar to, but different than, the starCongestion notification. Typically the 'overload' condition will be configured to trigger at an earlier point.
Since this is a service-specific notification, it is possible to receive multiple notifications for different services. Each
Actions to be Taken: Verify that the congestion overload thresholds are correct; if the congested state is seen repeatedly, or for sustained periods of time, additional system capacity may need to be brought online.
This system is cleared when the use of the specific resource falls below the configured limit.
Condition Clear Alarm: A starOverloadServiceClear notification is sent when the service-specific overload condition is clear."
---#SUMMARY "[Service %s-%s] System Congestion Overload; resource type %s"
---#ARGUMENTS (1,2,0)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 169 }

starOverloadServiceClear NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A service-specific congestion overload condition has cleared"
---#SUMMARY "[Service %s-%s] Congestion overload clear"
---#ARGUMENTS (1,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 170 }

starStorageServerClusterStateChange NOTIFICATION-TYPE
OBJECTS { starSessGGSVpnName, starSessGGSNPeerAddr, starGSSClusterName, starGSSClusterRgName, starGSSClusterRsName, starGSSClusterNodeState, starGSSClusterPrevOnlineNode }
STATUS current
DESCRIPTION
"GTPP Storage Server cluster state has been changed.
GTPP Storage Server may have gone offline from all the nodes or switchover has been occurred.
Note that this is an external server, not part of the ST16.
Probable Cause: GTPP Storage Server cluster hardware/software component failure or maintenance of GTPP Storage Server is in progress"
---#SUMMARY "[System] GTPP Storage Server cluster state changed, VPN %s Server Address %s, GTPP Storage Server Cluster name %s, Associated resource group name %s and Associated resource name %s, Cluster node state %s, Previous online node name %s"
---#ARGUMENTS {0,1,2,3,4,5,6}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 171 }

starStorageServerClusSwitchOver NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSClusterName, 
starGSSClusterRgName, starGSSClusterFromNode, starGSSClusterToNode } 
STATUS current
DESCRIPTION
"GTPP Storage Server switchover from current online node to next available node in cluster.

Note that this is an external server, not part of the ST16.

Probable Cause: GTPP Storage Server cluster Hardware/Software component failure or maintenance of GTPP Storage Server is in progress"
---SUMMARY "[System] GTPP Storage Server switchover, VPN %s Server Address %s, GTPP Storage Server Cluster name %s, Associated resource group name %s , Switched-over from node %s to node %s"
---#ARGUMENTS (0,1,2,3,4,5)
---#STATE OPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 172 }

starStorageServerClusPathFail NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSDiskPath, starGSSClusterName, 
starGSSClusterNodeName } 
STATUS current
DESCRIPTION
"GTPP Storage Server cluster disk path failure has been occured.

Note that this is an external server, not part of the ST16.

Probable Cause: Fibre cable may have been damaged, fibre cable may have been pulled out or disk fault may have been occured.

Condition Clear Alarm: This condition is cleared by a starStorageServerClusPathOK notification"
---SUMMARY "[System] GTPP Storage Server cluster disk path failure, VPN %s Server Address %s, Cluster Disk Path %s, GTPP Storage Server Cluster %s node %s"
---#ARGUMENTS (0,1,2,3,4)
---#STATE OPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 173 }

starStorageServerClusPathOK NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSDiskPath, starGSSClusterName, 
starGSSClusterNodeName } 
STATUS current
DESCRIPTION
"GTPP Storage Server cluster disk path failure has been restored to ok state.

Note that this is an external server, not part of the ST16"
---SUMMARY "[System] GTPP Storage Server cluster disk path OK, VPN %s Server Address %s, Cluster Disk Path %s, GTPP Storage Server Cluster %s node %s"
---#ARGUMENTS (0,1,2,3,4)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 174 }

starStorageServerClusInterCFail NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSTransportPath, 
starGSSClusterName, starGSSClusterNodeName } 
STATUS current

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STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"GTPP Storage Server cluster transport path (Interconnect) failure has been occured.

Note that this is an external server, not part of the ST16.

Probable Cause: Interconnect interface may have been failed, Interconnect interface cable may
have been pulled out.

Condition Clear Alarm: This condition is cleared by a starStorageServerClusInterCOK
notification"

--#SUMMARY "[System] GTPP Storage Server cluster transport path (Interconnect) failure, VPN %s Server
Address %s, Cluster Transport Path %s, GTPP Storage Server Cluster %s node %s"

--#ARGUMENTS {0,1,2,3,4}

--#STATE OPERATIONAL

--#SEVERITY CRITICAL

::= { starentTraps 175 }

starStorageServerClusInterCOK NOTIFICATION-TYPE

OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSTransportPath,
starGSSClusterName, starGSSClusterNodeName }

STATUS current

DESCRIPTION
"GTPP Storage Server cluster transport path (Interconnect) failure has been restored to
an operational state.

Note that this is an external server, not part of the ST16"

--#SUMMARY "[System] GTPP Storage Server cluster transport path (Interconnect) ok, VPN %s Server
Address %s, Cluster Transport Path %s, GTPP Storage Server Cluster %s node %s"

--#ARGUMENTS {0,1,2,3,4}

--#STATE OPERATIONAL

--#SEVERITY INFORMATIONAL

::= { starentTraps 176 }

starStorageServerClusIntfFail NOTIFICATION-TYPE

OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSIPMPGroupName,
starGSSInterfaceName, starGSSClusterName, starGSSClusterNodeName }

STATUS current

DESCRIPTION
"GTPP Storage Server cluster GE Interface failure has been occured.

Note that this is an external server, not part of the ST16.

Probable Cause: Interface may have been failed, interface cable may have been pulled out.

Condition Clear Alarm: Interface may have been failed, interface cable may have been pulled out.

---SUMMARY "[System] GTPP Storage Server cluster GE Interface failure, VPN %s Server Address %s, IPMP Group name %s and associated interface name %s, GTPP Storage Server Cluster %s node %s"

--#ARGUMENTS {0,1,2,3,4,5}

--#STATE OPERATIONAL

--#SEVERITY MAJOR

::= { starentTraps 177 }

starStorageServerClusIntfOK NOTIFICATION-TYPE

OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSIPMPGroupName,
starGSSInterfaceName, starGSSClusterName, starGSSClusterNodeName }

STATUS current

DESCRIPTION
"GTPP Storage Server cluster GE Interface failure Failure has been restored to ok state.

Note that this is an external server, not part of the ST16"
starStorageServerMemLow NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshMB,
starThreshMeasuredMB, starGSSClusterName, starGSSClusterNodeName }
STATUS  current
DESCRIPTION
"GTPP Storage Server is experiencing a low memory condition.

Note that this is an external server, not part of the ST16.

Probable Cause: The amount of free memory used by Storage Server
is approaching the server's capacity;

Condition Clear Alarm: This condition is cleared by a starStorageServerMemNormal
notification"

starStorageServerMemNormal NOTIFICATION-TYPE
OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starThreshMB,
starThreshMeasuredMB, starGSSClusterName, starGSSClusterNodeName }
STATUS  current
DESCRIPTION
"GTPP Storage Server Memory usage has returned to a normal range.

Note that this is an external server, not part of the ST16.

Action to be Taken: No action required"

starPDIFServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
"A PDIF Service has started"

Action to be Taken: No action required"

starPDIFServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
"A PDIF Service has stopped."

Probable Cause: This is typically caused by operator invention. In rare cases it can be caused by the loss of resources (PACs) to support the running configuration.

Action to be Taken: If the PDIF service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the PDIF service is operational.

Condition Clear Alarm: A starPDIFServiceStart notification will be generated when the service is restarted

---SUMMARY "[Service PDIF-%s-%s] PDIF service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 182 }

starSessMgrRecoveryComplete NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starFetchedFromAAAMgr, starPriorToAudit, starPassedAudits, starCallsRecovered, starAllCallLines, starElapsedMs }
STATUS current
DESCRIPTION "A Sess Mgr Recovery Complete

Probable Cause: This is typically caused by session manager task fails and successfully completed recovery.

Action to be Taken: None"
---SUMMARY "[System] Session Manager task recovery completed, in %d (ms) fetched from aaamgr %d calls recovered %d passed audit %d prior to audit %d all call lines %d on Slot Number %d Cpu Number %d"
---#ARGUMENTS {7,2,3,4,5,6,0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 183 }

starDiameterPeerDown NOTIFICATION-TYPE
OBJECTS { starDiameterVpnName, starDiameterPeerAddr, starDiameterEndpointName }
STATUS current
DESCRIPTION "A diameter peer is down.

Problem Cause: The diameter peer has failed, or a network connectivity prevents reaching the peer.

Condition Clear Alarm: The starDiameterPeerUp notification will be generated when the peer is up"
---SUMMARY "[VPN %s] Diameter Peer %s endpoint %s is down"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 184 }

starDiameterPeerUp NOTIFICATION-TYPE
OBJECTS { starDiameterVpnName, starDiameterPeerAddr, starDiameterEndpointName }
STATUS current
DESCRIPTION "A diameter peer is up. This notification is only generated for peers which have previously been declared down."
---SUMMARY "[VPN %s] Diameter Peer %s endpoint %s is up"
---#ARGUMENTS {0,1,2}
STARENT-MIB DEFINITIONS ::= BEGIN

starDiameterServerUnreachable NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starDiameterPeerAddr, starDiameterEndpointName }
STATUS current
DESCRIPTION "A diameter server is down.

Problem Cause: The diameter server has failed, or a network connectivity prevents reaching the server.

Condition Clear Alarm: A starDiameterServerReachable notification will be generated when the server is reachable"
--#SUMMARY "[VPN %s] Diameter Server %s endpoint %s is unreachable"
--#ARGUMENTS (0,1,2)
--#STATE DEGRADED
--#SEVERITY MAJOR
 ::= { starentTraps 185 }

starDiameterServerReachable NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starDiameterPeerAddr, starDiameterEndpointName }
STATUS current
DESCRIPTION "A diameter server is up. This notification is only generated for servers which have previously been declared unreachable."
--#SUMMARY "[VPN %s] Diameter Server %s endpoint %s is reachable"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 186 }

starCDRFileRemoved NOTIFICATION-TYPE
OBJECTS { starCDRFilename }
STATUS current
DESCRIPTION "A Charging Data Record (CDR) file has been deleted from the system due to a lack of available storage space. When required, the system deletes old files to make space for new files. This notification is only generated when specifically enabled on the system.

Probable Cause: CDR files are not being moved off the system, or these files are not being deleted after they have been transferred."
--#SUMMARY "[System] CDR file %s removed"
--#ARGUMENTS (0)
--#STATE OPERATIONAL
--#SEVERITY MAJOR
 ::= { starentTraps 187 }

starCSCFPeerServerReachable NOTIFICATION-TYPE
OBJECTS { starCSCFPeerServerVpnName, starCSCFPeerServerSvcName, starCSCFPeerServerListName }
STATUS current
DESCRIPTION "A peer server is reachable"
--#SUMMARY "[CSCF %s-%s] CSCF Peer Server %s Reachable"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 188 }

starCSCFPeerServerUnreachable NOTIFICATION-TYPE

::= { starentTraps 189 }

END
OBJECTS { starCSCFPeerServerVpnName, starCSCFPeerServerSvcName, starCSCFPeerServerListName }
STATUS current
DESCRIPTION
"A peer server is unreachable"
--#SUMMARY "[CSCF %s-%s] CSCF Peer Server %s UnReachable"
--#ARGUMENTS (0,1,2)
--#STATE DEGRADED
--#SEVERITY MINOR
::= { starentTraps 190 }

starDHCPV6ServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SGSN Service has started
Action to be Taken: No action required"
--#SUMMARY "[Service DHCP V6 %s-%s] DHCP V6 service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 191 }

starCLIConfigMode NOTIFICATION-TYPE
OBJECTS { starCLIUsername, starCLIContext }
STATUS current
DESCRIPTION
"An interactive CLI session has enter 'configuration' mode for the specified context. This CLI user can thus potentially start issuing configuration commands which will impact the overall system configuration.

Note that this notification is not enabled by default; it is only generated if the system is specifically configured to enable it."
--#SUMMARY "[System] CLI session entered configuration mode for context %s, CLI user %s"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 192 }

starDHCPV6ServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A DHCPV6 Service has stopped.
Clear Condition: Verify that the DHCPV6 service is operational.
Condition Clear Alarm: A starDHCPV6ServiceStart notification will be generated when the service is restarted"
--#SUMMARY "[Service DHCPV6 %s-%s] DHCPV6 service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 193 }

starSGSNServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SGSN Service has started
Action to be Taken: No action required"
--#SUMMARY "[Service SGSN %s-%s] SGSN service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
starSGSNServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION "A SGSN Service has stopped.
Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the SGSN service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
 crash logs for an indication of a software failure.

Clear Condition: Verify that the SGSN service is operational.

Condition Clear Alarm: A starSGSNServiceStart notification will be generated when
the service is restarted"

--#SUMMARY "[Service SGSN %s-%s] SGSN service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 195 }

starM3UAPCUnavailable NOTIFICATION-TYPE
OBJECTS {
        starSS7rdId,
        starSS7Pc,
        starSS7M3UAPsId,
        starSS7CauseString
    }
STATUS  current
DESCRIPTION "M3UA Route to the Point code becomes unavailable.
Possible reason:
1. Received destination unavailable (DUNA) message or
2. SCTP association is down or
3. Remote peer server is down

Condition Clear Alarm: A starM3UAPCAvailable notification will be generated when
the remote peer identified by the point code becomes reachable"

--#SUMMARY "{ss7-routing-domain %d} m3ua point-code %d through peer-server %d unavailable cause %s"
--#ARGUMENTS (0,1,2,3)
--#STATE DEGRADED
--#SEVERITY MINOR
::= { starentTraps 196 }

starM3UAPCAvailable NOTIFICATION-TYPE
OBJECTS {
        starSS7rdId,
        starSS7Pc,
        starSS7M3UAPsId,
        starSS7CauseString
    }
STATUS  current
DESCRIPTION "M3UA Route to the Point code becomes available."
Possible reason:
1. Received destination available (DAVA) message.
2. SCTP association is up
3. Remote peer server is up

starM3UAPCAvailable is generated only when a previous starM3UAPCUnavailable is generated.

"-
-#SUMMARY "[ss7-routing-domain %d] m3ua point-code %d through peer-server %d available cause %s"
-#ARGUMENTS (0,1,2,3)
-#STATE OPERATIONAL
-#SEVERITY INFORMATIONAL
::= { starentTraps 197 }

-- Thresholds

starThreshCPUUtilization NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The overall CPU utilization for the identified processor has exceeded for configured
threshold value for the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCPUUtilization notification will be generated when the measured
value falls below the threshold."
-#SUMMARY "[Card] Threshold: CPU utilization threshold for card %d CPU %d threshold %d%% measured %d%%"
-#ARGUMENTS (0,1,2,3)
-#STATE OPERATIONAL
-#SEVERITY WARNING
::= { starentTraps 200 }

starThreshClearCPUUtilization NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
-#SUMMARY "[Card] Threshold: CPU utilization threshold clear card %d for CPU %d threshold %d%% measured %d%%"
-#ARGUMENTS (0,1,2,3)
-#STATE OPERATIONAL
-#SEVERITY INFORMATIONAL
::= { starentTraps 201 }

starThreshCPUMemory NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The amount of available memory for the identified processor has fallen below the
configured threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCPUMemory notification will be generated when the measured
value falls below the threshold."
-#SUMMARY "[Card %d] Threshold: CPU memory threshold for CPU %d; measured %d threshold %d"
-#ARGUMENTS (0,1,3,2)
-#STATE OPERATIONAL
**STARENT-MIB DEFINITIONS ::= BEGIN**

```plaintext
--#SEVERITY WARNING
::={ starentTraps 202 }

starThreshClearCPUMemory NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[Card %d] Threshold: CPU memory threshold CLEAR for CPU %d; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 203 }

starThreshLicense NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct, starServiceType }
STATUS current
DESCRIPTION
"The percentage available, licensed subscribers has fallen below the configured threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a
starThreshClearLicense notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: license threshold for service %s threshold %d%% measured %d%%"
--#ARGUMENTS {2,0,1}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 204 }

starThreshClearLicense NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct, starServiceType }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: license threshold for service %s threshold %d%% measured %d%%"
--#ARGUMENTS {2,0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 205 }

starThreshSubscriberTotal NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of subscribers is above the configured threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a
starThreshClearSubscriberTotal notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: subscriber total threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 206 }

starThreshClearSubscriberTotal NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
```

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STARENT-MIB DEFINITIONS ::= BEGIN

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starThreshSubscriberActive NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of active subscribers is above the configured threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearSubscriberActive notification will be generated when the measured value falls below the threshold."

SUMMARY "[System] Threshold: active subscribers threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--STATE OPERATIONAL
--SEVERITY WARNING
::= { starentTraps 207 }

starThreshClearSubscriberActive NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."

SUMMARY "[System] Threshold: subscriber total threshold CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
::= { starentTraps 207 }

starThreshPortRxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The Rx utilization of the port has exceeded the configured threshold value during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPortRxUtil notification will be generated when the measured value falls below the threshold."

SUMMARY "[System] Threshold: port rx utilization threshold on slot %d port %d threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--STATE OPERATIONAL
--SEVERITY WARNING
::= { starentTraps 208 }

starThreshClearPortRxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The threshold condition is now clear."

SUMMARY "[System] Threshold: port rx utilization threshold clear on slot %d port %d threshold %d%% measured %d%%"

::= { starentTraps 208 }

::= { starentTraps 209 }

::= { starentTraps 210 }

::= { starentTraps 209 }

::= { starentTraps 210 }

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STARENT-MIB DEFINITIONS ::= BEGIN

--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 211 }

starThreshPortTxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The Tx utilization of the port has exceeded the configured threshold value during
the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearPortTxUtil notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: port tx utilization threshold on slot %d port %d threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 212 }

starThreshClearPortTxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: port tx utilization threshold clear on slot %d port %d threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 213 }

starThreshPortHighActivity NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"High activity on the port has exceeded the configured
threshold value during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearPortHighActivity notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: port high activity threshold on slot %d port %d threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 214 }

starThreshClearPortHighActivity NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: port high activity threshold clear on slot %d port %d threshold %d%% measured %d%%"
STARENT-MIB DEFINITIONS ::= BEGIN

--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 215 }

starThreshAAAAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of AAA authentication failures has exceeded the configured threshold
during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearAAAAuthFail notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: AAA authentication failures threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 216 }

starThreshClearAAAAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: AAA authentication failures threshold CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 217 }

starThreshAAAAuthFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage of AAA authentication requests which failed has exceeded the configured threshold
during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearAAAAuthFailRate notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: AAA authentication failure rate threshold for threshold %d%% measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 218 }

starThreshClearAAAAuthFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: AAA authentication failure rate threshold clear for threshold %d%%
measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL

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STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY INFORMATIONAL
::= { starentTraps 219 }

starThreshAAAAcctFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of AAA accounting failures has exceeded the configured threshold
during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearAAAAcctFail notification will be generated when the measured
value falls below the threshold.

--#SUMMARY "[System] Threshold: AAA accounting failures threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 220 }

starThreshClearAAAAcctFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: AAA accounting failures threshold CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 221 }

starThreshAAAAcctFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage of AAA accounting requests which failed has exceeded the configured threshold
during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearAAAAcctFailRate notification will be generated when the measured
value falls below the threshold.

--#SUMMARY "[System] Threshold: AAA accounting failure rate threshold for threshold %d%% measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 222 }

starThreshClearAAAAcctFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: AAA accounting failure rate threshold clear for threshold %d%%
measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 223 }

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starThreshAAAretryRate NOTIFICATION-TYPE
  OBJECTS { starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION
  "The percentage of AAA requests which has to be retried has exceeded the configured threshold
during the current monitoring period.

  Probable Cause: This is a user configurable threshold.

  If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearAAAretryRate notification will be generated when the measured
value falls below the threshold."
  --#SUMMARY "[System] Threshold: AAA retry rate threshold for threshold %d%% measured %d%%"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 224 }

starThreshClearAAAretryRate NOTIFICATION-TYPE
  OBJECTS { starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: AAA retry rate threshold clear for threshold %d%% measured %d%%"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 225 }

starThreshCallSetup NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
  "The number of call setup operations has exceeded the configured threshold during the
current monitoring period.

  Probable Cause: This is a user configurable threshold.

  If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCallSetup notification will be generated when the measured
value falls below the threshold."
  --#SUMMARY "[System] Threshold: call setups threshold; measured %d threshold %d"
  --#ARGUMENTS {1,0}
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 226 }

starThreshClearCallSetup NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: call setups threshold CLEAR; measured %d threshold %d"
  --#ARGUMENTS {1,0}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 227 }

starThreshCallSetupFailure NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
"The number of call setup operations which failed has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearCallSetupFailure notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: call setup failures threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 228 }

starThreshClearCallSetupFailure NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
---#SUMMARY "[System] Threshold: call setup failures threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 229 }

starThreshCallRejectNoResource NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The number of call setup operations which were rejected due to a no resource condition has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearCallRejectNoResource notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[System] Threshold: calls rejects for no resource condition threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 230 }

starThreshClearCallRejectNoResource NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
---#SUMMARY "[System] Threshold: calls rejects for no resource condition threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 231 }

starThreshPacketsFilteredDropped NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The number of user data packets filtered has exceeded the configured threshold for the current monitoring period."
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPacketsFilteredDropped notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: user packets filtered threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 232 }

starThreshClearPacketsFilteredDropped NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: user packets filtered threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 233 }

starThreshPacketsForwarded NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of user data packets forwarded has exceeded the configured threshold for the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPacketsForwarded notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: user packets forwarded threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 234 }

starThreshClearPacketsForwarded NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: user packets forwarded threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 235 }

starThreshSessCPUThroughput NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshMB, starThreshMeasuredMB }
STATUS current
DESCRIPTION
"The total session throughput for the specified processor has exceeded the configured threshold for the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearSessCPUThroughput notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: user sessions CPU throughput; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 236 }
value falls below the threshold.

--#SUMMARY "[Card %d] Threshold: CPU throughput threshold on CPU %d; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 236 }

starThreshClearSessCPUThroughput NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshMB, starThreshMeasuredMB } STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[Card %d] Threshold: CPU throughput threshold CLEAR on CPU %d; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 237 }

starThreshIPPoolAvail NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolGroup, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION "The available IP pool addresses in a context has fallen below the configured threshold."
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearIPPoolAvail notification will be generated when the measured value falls below the threshold.

--#SUMMARY "[System] Threshold: IP Pool availability threshold for context %s pool group %s threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 238 }

starThreshClearIPPoolAvail NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolGroup, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION "The threshold condition is now clear."

--#SUMMARY "[System] Threshold: IP Pool availability threshold clear for context %s pool group %s threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 239 }

starThreshCPUUtilization10Sec NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION "The CPU utilization of 10 second measurement for the identified processor has exceeded for configured threshold value for the current monitoring period."

--#SUMMARY "[Card] Threshold: 10 Second Average utilization for card %d CPU %d threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 240 }
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshClearCPUUtilization10Sec NOTIFICATION-TYPE
  OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION "The threshold condition is now clear."
  --SUMMARY "[Card] Threshold: 10 Second Average utilization clear for card %dCPU %d threshold %d%% measured %d%%"
  --ARGUMENTS {0,1,2,3}
  --STATE OPERATIONAL
  --SEVERITY INFORMATIONAL
  ::= { starentTraps 241 }

starThreshCPULoad NOTIFICATION-TYPE
  OBJECTS { starCPUSlot, starCPUNumber, starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION "The CPU load for the identified processor has exceeded for configured threshold value for the current monitoring period."
  --SUMMARY "[Card %d] Threshold: CPU Load for CPU %d; measured %d threshold %d"
  --ARGUMENTS {0,1,3,2}
  --STATE OPERATIONAL
  --SEVERITY WARNING
  ::= { starentTraps 242 }

starThreshClearCPULoad NOTIFICATION-TYPE
  OBJECTS { starCPUSlot, starCPUNumber, starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION "The threshold condition is now clear."
  --SUMMARY "[Card %d] Threshold: CPU Load CLEAR for CPU %d; measured %d threshold %d"
  --ARGUMENTS {0,1,3,2}
  --STATE OPERATIONAL
  --SEVERITY INFORMATIONAL
  ::= { starentTraps 243 }

starThreshCPUMemUsage NOTIFICATION-TYPE
  OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION "The CPU mem usage for the identified processor has exceeded for configured threshold value for the current monitoring period."
  --SUMMARY "[Card] Threshold: CPU Memory Usage for card %d CPU %d threshold %d%% measured %d%%"
  --ARGUMENTS {0,1,2,3}
  --STATE OPERATIONAL
  --SEVERITY WARNING
  ::= { starentTraps 244 }

starThreshClearCPUMemUsage NOTIFICATION-TYPE
  OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION "The threshold condition is now clear."
  --SUMMARY "[Card] Threshold: Memory Usage clear for card %d CPU %d threshold %d%% measured %d%%"
  --ARGUMENTS {0,1,2,3}
  --STATE OPERATIONAL
  --SEVERITY INFORMATIONAL
  ::= { starentTraps 245 }

starThreshPDSNSessions NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION

STARENT-MIB DEFINITIONS ::= END
"The total number of PDSN sessions is above the configured threshold value."
---#SUMMARY "[System] Threshold: Total PDSN Sessions; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 246 }

starThreshClearPDSNSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total PDSN Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 247 }

starThreshGGSNSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of GGSN sessions is above the configured threshold value."
---#SUMMARY "[System] Threshold: Total GGSN Sessions; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 248 }

starThreshClearGGSNSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total GGSN Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 249 }

starThreshHASessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of HA sessions is above the configured threshold value."
---#SUMMARY "[System] Threshold: Total HA Sessions; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 250 }

starThreshClearHASessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total HA Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 251 }
starThreshLNSSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of L2TP LNS sessions is above the configured threshold value."
---#SUMMARY "[System] Threshold: Total L2TP LNS Sessions; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 252 }

starThreshClearLNSSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total L2TP LNS Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 253 }

starThreshPerServicePDSNSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of PDSN sessions in a service is above the configured threshold value."
---#SUMMARY "[System] Threshold: Per Service PDSN Sessions, context %s service name %s; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 254 }

starThreshClearPerServicePDSNSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Per Service PDSN Sessions CLEAR, context %s service name %s; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 255 }

starThreshPerServiceGGSNSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of GGSN sessions in a service is above the configured threshold value."
---#SUMMARY "[System] Threshold: Per Service GGSN Sessions, context %s service name %s; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 256 }

starThreshClearPerServiceGGSNSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
STARDENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[System] Threshold: Per Service GGSN Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 257 }

starThreshPerServiceHASessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of HA sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service HA Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 258 }

starThreshClearPerServiceHASessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service HA Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 259 }

starThreshPerServiceLNSSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of L2TP LNS sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service L2TP LNS Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 260 }

starThreshClearPerServiceLNSSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service L2TP LNS Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 261 }

starThreshIPPoolHold NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The percentage IP pool addresses in HOLD state in a context has gone above the configured threshold"
STARIENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[System] Threshold: IP Pool Address in Hold State for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 262 }

starThreshClearIPPoolHold NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: IP Pool Address in Hold State clear for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 263 }

starThreshIPPoolUsed NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage IP pool addresses in USED state in a context has gone above the configured threshold"'
--#SUMMARY "[System] Threshold: IP Pool Address in Used State for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 264 }

starThreshClearIPPoolUsed NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: IP Pool Address in Used State clear for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 265 }

starThreshIPPoolRelease NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage IP pool addresses in RELEASE state in a context has gone above the configured threshold"'
--#SUMMARY "[System] Threshold: IP Pool Address in Release State for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 266 }

starThreshClearIPPoolRelease NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
starThreshIPPoolFree NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage IP pool addresses in HOLD state in a context has gone below the configured
threshold"
--#SUMMARY "[System] Threshold: IP Pool Address in Free State for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 267 }

starThreshClearIPPoolFree NOTIFICATION-TYPE
OBJECTS { starIPPoolContext, starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: IP Pool Address in Free State clear for context %s pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 268 }

starThreshAAAAcctArchive NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The AAA accounting archive size has gone above the configured
threshold"
--#SUMMARY "[System] Threshold: AAA Accounting Archive Size; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 270 }

starThreshClearAAAAcctArchive NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: AAA Accounting Archive Size CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 271 }

starThreshPortSpecRxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS deprecated
DESCRIPTION
"The Rx utilization of the port has exceeded the configured threshold value during
the current monitoring period."
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPortSpecRxUtil notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: port rx utilization threshold on card %d port %d; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 272 }

starThreshClearPortSpecRxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS deprecated
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: port rx utilization threshold CLEAR on card %d port %d; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 273 }

starThreshPortSpecTxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS deprecated
DESCRIPTION
"The Tx utilization of the port has exceeded the configured threshold value during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPortSpecTxUtil notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: port tx utilization threshold on card %d port %d; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 274 }

starThreshClearPortSpecTxUtil NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starThreshPct, starThreshMeasuredPct }
STATUS deprecated
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: port tx utilization threshold CLEAR on card %d port %d; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 275 }

starThreshHACallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The per-context HA call setup rate (calls per second) has gone above the configured threshold

Probable Cause: This is a user configurable threshold."
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearHACallSetupRate notification will be generated when the measured value falls below the threshold."

---#SUMMARY "[VPN %s] Threshold: HA Per-Context Call Setup Rate; measured %d (cps) threshold %d (cps)"
---#ARGUMENTS (0,2,1)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 276 }

starThreshClearHACallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[VPN %s] Threshold: HA Per-Context Call Setup Rate CLEAR; measured %d (cps) threshold %d (cps)"
---#ARGUMENTS (0,2,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 277 }

starThreshHASvcCallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The per-service HA Call setup rate (calls per second) has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearHASvcCallSetupRate notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Call Setup Rate; measured %d (cps) threshold %d (cps)"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 278 }

starThreshClearHASvcCallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Call Setup Rate CLEAR; measured %d (cps) threshold %d (cps)"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 279 }

starThreshHASvcRegReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The per-service HA Reg Reply Error count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearHASvcRegReplyError notification will be generated when the measured value falls below the threshold."

294
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Reg Reply Error; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::: { starentTraps 280 }

starThreshClearHASvcRegReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Reg Reply Error CLEAR; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::: { starentTraps 281 }

starThreshHASvcReregReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The per-service HA Rereg Reply Error count has gone above the configured threshold.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearHASvcReregReplyError notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Rereg Reply Error; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::: { starentTraps 282 }

starThreshClearHASvcReregReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Rereg Reply Error CLEAR; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::: { starentTraps 283 }

starThreshHASvcDeregReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The per-service HA Dereg Reply Error count has gone above the configured threshold.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearHASvcDeregReplyError notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Dereg Reply Error; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::: { starentTraps 284 }
starThreshClearHASvcDeregReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service Dereg Reply Error CLEAR; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 285 }

starThreshFASvcRegReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service FA Reg Reply Error count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearFASvcRegReplyError notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service FA-%s-%s] Threshold: FA Per-Service Reg Reply Error; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 286 }

starThreshClearFASvcRegReplyError NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[Service FA-%s-%s] Threshold: FA Per-Service Reg Reply Error CLEAR; measured %d threshold %d"
---#ARGUMENTS (0,1,3,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 287 }

starThreshPDSCallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Context PDSN Call Setup Rate (calls per second) has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDSCallSetupRate notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[VPN %s] Threshold: PDSN Per-Context Call Setup Rate; measured %d (cps) threshold %d (cps)"
---#ARGUMENTS (0,2,1)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 288 }

starThreshClearPDSCallSetupRate NOTIFICATION-TYPE
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STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starServiceVpnName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[VPN %s] Threshold: PDSN Per-Context Call Setup Rate CLEAR; measured %d (cps) threshold %d (cps)"
--#ARGUMENTS (0,2,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 289 }

starThreshPDSNSvcCallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service PDSN Call Setup Rate (calls per second) has gone above the configured threshold.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDSNSvcCallSetupRate notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service Call Setup Rate; measured %d (cps) threshold %d (cps)"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 290 }

starThreshClearPDSNSvcCallSetupRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service Call Setup Rate CLEAR; measured %d (cps) threshold %d (cps)"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 291 }

starThreshPDSNSvcAllRRFPFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service PDSN All RRP Failure count has gone above the configured threshold.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDSNSvcAllRRFPFailure notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service All RRP Failure; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 292 }

starThreshClearPDSNSvcAllRRFPFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }

297
starThreshPDSNSvcA11RRQMsgDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service PDSN A11 RRQ Msg Discard count has gone above the configured threshold Probable Cause: This is a user configurable threshold. If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDSNSvcA11RRQMsgDiscard notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service A11 RRQ Msg Discard; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 293 }

starThreshClearPDSNSvcA11RRQMsgDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear." "[Service PDSN-%s-%s] Threshold: PDSN Per-Service A11 RRQ Msg Discard CLEAR; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 294 }

starThreshPDSNSvcA11RACMsgDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service PDSN A11 RAC Msg Discard count has gone above the configured threshold Probable Cause: This is a user configurable threshold. If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDSNSvcA11RACMsgDiscard notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service A11 RAC Msg Discard; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 295 }

starThreshClearPDSNSvcA11RACMsgDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear." "[Service PDSN-%s-%s] Threshold: PDSN Per-Service A11 RAC Msg Discard CLEAR; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 296 }

starThreshClearPDSNSvcA11RACMsgDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service All RAC Msg Discard CLEAR; measured %d threshold %d"

---#ARGUMENTS (0,1,3,2)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 297 }

starThreshPDSNSvcAllPPPSendDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service PDSN All PPP Send Discard count has gone above the configured threshold

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDSNSvcAllPPPSendDiscard notification will be generated when the measured value falls below the threshold."

---SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service All PPP Send Discard CLEAR; measured %d threshold %d"

---#ARGUMENTS (0,1,3,2)
---STATE OPERATIONAL
---SEVERITY WARNING
::= { starentTraps 298 }

starThreshClearPDSNSvcAllPPPSendDiscard NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---SUMMARY "[Service PDSN-%s-%s] Threshold: PDSN Per-Service All PPP Send Discard CLEAR; measured %d threshold %d"

---#ARGUMENTS (0,1,3,2)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 299 }

starThreshAAAMgrQueue NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The Per-AAA Manager internal request queue usage has gone above the configured threshold

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearAAAMgrQueue will be generated when the measured value falls below the threshold."

---SUMMARY "[System] Threshold: AAA Mgr internal request queue for AAA Manager %d threshold %d%% measured %d%%"

---#ARGUMENTS (0,1,2)
---STATE OPERATIONAL
---SEVERITY WARNING
::= { starentTraps 300 }

starThreshClearAAAMgrQueue NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---SUMMARY "[System] Threshold: AAA Mgr internal request queue clear for AAA Manager %d threshold %d%% measured %d%%"
starThreshAAAAcctArchiveQueue1 NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The Per-Sessmgr Archive queue usage is above the configured threshold percentage"
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearAAAAcctArchiveQueue-1 notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: Sessmgr Archive Queue for SessMgr instance %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 505 }

starThreshClearAAAAcctArchiveQueue1 NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Sessmgr Archive Queue clear for SessMgr instance %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 506 }

starThreshAAAAcctArchiveQueue2 NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The Sessmgr Archive queue usage is above the configured threshold percentage"
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearAAAAcctArchiveQueue-2 notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: Sessmgr Archive Queue for Sessmgr instance %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 507 }

starThreshClearAAAAcctArchiveQueue2 NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Sessmgr Archive Queue clear for Sessmgr instance %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY INFORMATIONAL
::= { starentTraps 508 }

starThreshAAAAct acct ArchiveQueue3 NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The Sessmgr Archive queue usage is above the configured threshold percentage"

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearAAAActArchiveQueue3 notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: Sessmgr Archive Queue for Sessmgr instance %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 509 }

starThreshClearAAAAct acct ArchiveQueue3 NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: Sessmgr Archive Queue Clear for Sessmgr instance %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 510 }

starThreshDnsLookupSrvFailure NOTIFICATION-TYPE
OBJECTS { starContextName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Total number of DNS SRV lookup failures is above the configured threshold value."

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearDnsLookupSrvFailure notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: DNS SRV lookup failure; context %s measured %d threshold %d"
--#ARGUMENTS (0,2,1)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 511 }

starThreshClearDnsLookupSrvFailure NOTIFICATION-TYPE
OBJECTS { starContextName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: DNS SRV lookup failure CLEAR; context %s measured %d threshold %d"
--#ARGUMENTS (0,2,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 512 }

starThreshCPUOrbsWarn NOTIFICATION-TYPE

301
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The ORBs task has exceeded the CPU usage configured as a warning"
---#SUMMARY "[System] Threshold: ORBs process CPU warning on card %d CPU %d threshold %d%% measured %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 302 }

starThreshClearCPUOrbsWarn NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: ORBs process CPU warning clear on card %d CPU %d threshold %d%% measured %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 303 }

starThreshCPUOrbsCritical NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The ORBs task has exceeded the CPU usage configured as a critical error"
---#SUMMARY "[System] Threshold: ORBs process CPU critical on card %d CPU %d threshold %d%% measured %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 304 }

starThreshClearCPUOrbsCritical NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: ORBs process CPU critical clear on card %d CPU %d threshold %d%% measured %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 305 }

starThreshRPSetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The RP call setup failure rate has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: RP Setup failure rate for threshold %d%% measured %d%%"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 306 }

starThreshClearRPSetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: RP Setup failure rate clear for threshold %d%% measured %d%%"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 307 }

starThreshPPPSsetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The PPP call setup failure rate has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: PPP Setup failure rate for threshold %d%% measured %d%%"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 308 }

starThreshClearPPPSsetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: PPP Setup failure rate clear for threshold %d%% measured %d%%"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 309 }

starThreshStorageUtilization NOTIFICATION-TYPE
OBJECTS { starStorageSlot, starStorageName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The utilization of a mass storage device has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: Mass storage device usage on card %d storage device %s threshold %d%% measured %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 310 }

starThreshClearStorageUtilization NOTIFICATION-TYPE
OBJECTS { starStorageSlot, starStorageName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: Mass storage device usage clear on card %d storage device %s threshold %d%% measured %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 311 }

starThreshDCCAProtocolErrors NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of DCCA Protocol Errors has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: DCCAProtocol Errors; %d measured threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 312 }
starThreshClearDCCAProtocolErrors NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: DCCA Protocol Errors CLEAR; %d measured threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 313 }

starThreshDCCABadAnswers NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of DCCA BadAnswers has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: DCCA BadAnswers; %d measured threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 314 }

starThreshClearDCCABadAnswers NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: DCCA BadAnswers CLEAR; %d measured threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 315 }

starThreshDCCAUnknownRatingGroup NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of DCCA UnknownRatingGroup has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: DCCA UnknownRatingGroup; %d measured threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 316 }

starThreshClearDCCAUnknownRatingGroup NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
---#SUMMARY "[System] Threshold: DCCA UnknownRatingGroup CLEAR; %d measured threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 317 }

starThreshDCCARatingFailed NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of DCCA RatingFailed has exceeded the configured threshold"
---#SUMMARY "[System] Threshold: DCCA RatingFailed; %d measured threshold %d"
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**STARENT-MIB DEFINITIONS ::= BEGIN**

```plaintext
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 318 }

starThreshClearDCCARatingFailed NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
--#SUMMARY "[System] Threshold: DCCA RatingFailed CLEAR; %d measured threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 319 }

starThreshIPSECIKERequests NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of IPSEC IKE requests seen for this HA service has exceeded the configured
threshold.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearIPSECIKERequests notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service IPSEC IKE Requests; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 320 }

starThreshClearIPSECIKFails NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
--#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service IPSEC IKE Failures CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 321 }

starThreshIPSECIKFails NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of IPSEC IKE failures seen for this HA service has exceeded the configured
threshold.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearIPSECIKFails notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service IPSEC IKE Failures; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
```

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starThreshClearIPSECIKEFailures NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
--#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service IPSEC IKE Failures CLEAR; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 323 }

starThreshIPSECIKEFailRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The rate of IPSEC IKE failures (as a percentage of total requests) seen for this HA service has exceeded the configured threshold.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearIPSECIKEFailRate notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[Service] Threshold: HA Per-Service IPSEC IKE Failure Rate for context %s service %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 324 }

starThreshClearIPSECIKEFailRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
--#SUMMARY "[Service] Threshold: HA Per-Service IPSEC IKE Failure Rate clear for context %s service %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 325 }

starThreshIPSECTunSetup NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of IPSEC tunnels setup over the last measurement period for this HA service has exceeded the configured threshold.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearIPSECTunSetup notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[Service HA-%s-%s] Threshold: HA Per-Service IPSEC Tunnels Setup; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL

--#SEVERITY WARNING
::= { starentTraps 326 }

starThreshClearIPSECTunSetup NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
--#SUMMARY "[(Service HA-%s-%s) Threshold: HA Per-Service IPSEC Tunnels Setup CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 327 }

starThreshIPSECTunEstabl NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The current number of IPSEC tunnels established for this HA service has exceeded the configured threshold.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearIPSECTunEstabl notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[(Service HA-%s-%s) Threshold: HA Per-Service IPSEC Tunnels Established; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 328 }

starThreshClearIPSECTunEstabl NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"
--#SUMMARY "[(Service HA-%s-%s) Threshold: HA Per-Service IPSEC Tunnels Established CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 329 }

starThreshIPSECCallReqRej NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of IPSEC Rejected Call Requests has exceeded the configured threshold.
Probable Cause: This is a user configurable threshold. Reject Call Requests indicate that an IPSEC Manager has reached its maximum allowable number of IPSEC tunnels.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearIPSECTunnelsTotal notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[(Service HA-%s-%s) Threshold: HA Per-Service IPSEC Reject Call Requests CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 330 }

starThreshClearIPSECcallReqRej NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear"
--#SUMMARY "([Service HA-%s-%s] Threshold: HA Per-Service IPSEC Rejected Call Requests CLEAR; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 331 }

starThreshCSCFSvcRouteFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service CSCF Route failure count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCSCFSvcRouteFailure notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "([Service CSCF-%s-%s] Threshold: CSCF Per-Service Route failure; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 332 }

starThreshClearCSCFSvcRouteFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "([Service CSCF-%s-%s] Threshold: CSCF Per-Service Route failure CLEAR; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 333 }

starThreshContFiltRating NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The number of Content Filtering Rating operations performed has gone above
the configured threshold.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearContFiltRating notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "([System] Threshold: Content Filtering 'ratings'; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 334 }

308
starThreshClearContFiltRating NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: Content Filtering 'ratings' CLEAR; measured %d threshold %d"
  --#ARGUMENTS (1,0)
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 335 }

starThreshContFiltBlock NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
  "The number of Content Filtering Block operations performed has gone above
  the configured threshold.

  Probable Cause: This is a user configurable threshold.

  If the thresholding subsystem is configured to run in an 'alarm' model,
  a starThreshClearContFiltBlock notification will be generated when the measured
  value falls below the threshold."
  --#SUMMARY "[System] Threshold: Content Filtering 'blocks'; measured %d threshold %d"
  --#ARGUMENTS (1,0)
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 336 }

starThreshClearContFiltBlock NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: Content Filtering 'blocks' CLEAR; measured %d threshold %d"
  --#ARGUMENTS (1,0)
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 337 }

starThreshCDRFileSpace NOTIFICATION-TYPE
  OBJECTS { starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION
  "The CDR file space usage is above the configured threshold percentage

  Probable Cause: This is a user configurable threshold.

  If the thresholding subsystem is configured to run in an 'alarm' model,
  a starThreshClearCDRFileSpaceOverLimit notification will be generated when the measured
  value falls below the threshold."
  --#SUMMARY "Threshold: CDR File space for threshold %d%% measured %d%%"
  --#ARGUMENTS (0,1)
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 338 }

starThreshClearCDRFileSpace NOTIFICATION-TYPE
  OBJECTS { starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "Threshold: CDR File space clear for threshold %d%% measured %d%%"
STARENT-MIB DEFINITIONS ::= BEGIN

--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 339 }

starThreshEDRFileSpace NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The EDR file space usage is above the configured threshold percentage
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearEDRFileSpaceOverLimit notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "Threshold: EDR File space for threshold %d%% measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 340 }

starThreshClearEDRFileSpace NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "Threshold: EDR File space clear for threshold %d%% measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 341 }

starThreshPDIFCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The chassis-wide count of current PDIF sessions has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearPDIFCurrSess notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: PDIF Current Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 342 }

starThreshClearPDIFCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: PDIF Current Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 343 }

starThreshPDIFCurrActSess NOTIFICATION-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The chassis-wide count of current PDIF active sessions has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDIFCurrActiveSess notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: PDIF Current Active Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 344 }

starThreshClearPDIFCurrActSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: PDIF Current Active Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 345 }

starThreshCDRFlowControl NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of Charging Data Record (CDR) records which have been discarded at an ACSMGR
due to flow control has gone above the configured threshold.

Probable Cause: This is a user configurable threshold. This threshold potentially
indicates an overload condition due which prevents processes CDR messages at the same rate as
the incoming packets."

--#SUMMARY "[System] Threshold: Total num of CDR records discarded by due to flow control; measured
%d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 346 }

starThreshClearCDRFlowControl NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: Total number of CDR records discarded due to clow control CLEAR;
measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 347 }

starThreshASNGWSessTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The ASNGW session timeout has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGW sessTimeout notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[System] Threshold: ASNGW Session Timeout; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 348 }

starThreshClearASNGW sessTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThresholdedInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear."
---#SUMMARY "[System] Threshold: ASNGW Session Timeout CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 349 }

starThreshASNGW sessSetupTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThresholdedInt }
STATUS obsolete
DESCRIPTION "The ASNGW session setup timeout has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGW sessSetupTimeout notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[System] Threshold: ASNGW Session Setup Timeout; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 350 }

starThreshClearASNGW sessSetupTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThresholdedInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear."
---#SUMMARY "[System] Threshold: ASNGW Session Setup Timeout CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 351 }

starThreshASNGW Auth Fail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThresholdedInt }
STATUS obsolete
DESCRIPTION "The number of ASNGW authentication failures has exceeded the configured threshold during the current monitoring period.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGW Auth Fail notification will be generated when the measured value falls below the threshold."
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STARENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[System] Threshold: ASNGW authentication failures threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 352 }

starThreshClearASNGWAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: ASNGW authentication failures threshold CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 353 }

starThreshASNGWR6InvNai NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The number of ASNGW R6 Invalid Nai has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGWR6InvNai notification will be generated when the measured value falls below the threshold. This trap is obsolete."
--#SUMMARY "[System] Threshold: ASNGW R6 Invalid NAI threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 354 }

starThreshClearASNGWR6InvNai NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear. This trap is obsolete."
--#SUMMARY "[System] Threshold: ASNGW R6 Invalid NAI threshold CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 355 }

starThreshASNGWMaxEAPRetry NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The number of ASNGW Maximum EAP Retry has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGWMaxEAPRetry notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: ASNGW Maximum EAP Retry threshold; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING

::= { starentTraps 356 }
::= { starentTraps 356 }

starThreshClearASNGWMaxEAPRetry NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: ASNGW Maximum EAP Retry threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 357 }

starThreshASNGWNNWEntryDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The number of ASNGW Network Entry Denial has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGWNNWEntryDenial notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[System] Threshold: ASNGW Network Entry Denial threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 358 }

starThreshClearASNGWNNWEntryDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: ASNGW Network Entry Denial threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 359 }

starThreshASNGWHandoffDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The number of ASNGW Handoff Denial has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshASNGWHandoffDenial notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[System] Threshold: ASNGW Handoff Denial threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 360 }

starThreshClearASNGWHandoffDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

  status obsolete
  description
  "The threshold condition is now clear."
  --#summary "; measured %d threshold %d"
  --#arguments {1,0}
  --#state operational
  --#severity warning
  ::= { starentTraps 361 }

starThreshSGSNSessions NOTIFICATION-TYPE
  objects { starThreshInt, starThreshMeasuredInt }
  status current
  description
  "The total number of SGSN sessions is above the configured threshold value."
  --#summary "; measured %d threshold %d"
  --#arguments {1,0}
  --#state operational
  --#severity warning
  ::= { starentTraps 362 }

starThreshClearSGSNSessions NOTIFICATION-TYPE
  objects { starThreshInt, starThreshMeasuredInt }
  status current
  description
  "The threshold condition is now clear."
  --#summary "; measured %d threshold %d"
  --#arguments {1,0}
  --#state operational
  --#severity informational
  ::= { starentTraps 363 }

starThreshPerServiceSGSNSessions NOTIFICATION-TYPE
  objects { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
  status current
  description
  "The total number of SGSN sessions in a service is above the configured threshold value."
  --#summary "; measured %d threshold %d"
  --#arguments {0,1,3,2}
  --#state operational
  --#severity warning
  ::= { starentTraps 364 }

starThreshClearPerServiceSGSNSessions NOTIFICATION-TYPE
  objects { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
  status current
  description
  "The threshold condition is now clear."
  --#summary "; measured %d threshold %d"
  --#arguments {0,1,3,2}
  --#state operational
  --#severity informational
  ::= { starentTraps 365 }

starThreshSGSNPdpSessions NOTIFICATION-TYPE
  objects { starThreshInt, starThreshMeasuredInt }
  status current
  description
  "The total number of SGSN PDP sessions is above the configured threshold value."
  --#summary "; measured %d threshold %d"
  --#arguments {1,0}
  --#state operational

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```snmp
--#SEVERITY WARNING
::= { starentTraps 366 }

starThreshClearSGSNpdpSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total SGSN PDP Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 367 }

starThreshPerServiceSGSNpdpSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of SGSN PDP sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service SGSN PDP Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 368 }

starThreshClearPerServiceSGSNpdpSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service SGSN PDP Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 369 }

starThreshFWDosAttack NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The cumulative number of FW Dos-Attacks has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearFWDosAttack notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: Firewall 'Dos-Attack'; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 370 }

starThreshClearFWDosAttack NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Firewall 'Dos-Attack' CLEAR; measured %d threshold %d"
```
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starThreshFWDropPacket NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt } 
STATUS current
DESCRIPTION
"The cumulative number of FW Dropped Packets has exceeded the configured
threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearFWDropPacket notification will be generated when the
measured value falls below the threshold."

--#SUMMARY "[System] Threshold: Firewall 'Drop-Packet'; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING 
::= { starentTraps 371 }

starThreshClearFWDropPacket NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt } 
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: Firewall 'Drop-Packet' CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL 
::= { starentTraps 372 }

starThreshFWDenyRule NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt } 
STATUS current
DESCRIPTION
"The cumulative number of FW Deny-Rules has exceeded the configured
threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearFWDenyRule notification will be generated when the
measured value falls below the threshold."

--#SUMMARY "[System] Threshold: Firewall 'Deny-Rule'; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING 
::= { starentTraps 373 }

starThreshClearFWDenyRule NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt } 
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: Firewall 'Deny-Rule' CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL 
::= { starentTraps 374 }

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STARENT-MIB DEFINITIONS ::= BEGIN

starThreshFWNoRule NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The cumulative number of FW No Rules has exceeded the configured
threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearFWNoRule notification will be generated when the
measured value falls below the threshold."
---#SUMMARY "[System] Threshold: Firewall 'No-Rule'; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
 ::= { starentTraps 376 }

starThreshClearFWNoRule NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Firewall 'No-Rule' CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 377 }

starThreshPHSGWSessTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The PHSGW session timeout has gone above the configured threshold

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshPHSGWSessTimeout notification will be generated when the measured
value falls below the threshold."
---#SUMMARY "[System] Threshold: PHSGW Session Timeout; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
 ::= { starentTraps 378 }

starThreshClearPHSGWSessTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: PHSGW Session Timeout CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 379 }

starThreshPHSGWSessSetupTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The PHSGW session setup timeout has gone above the configured threshold

"
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshPHSGWSeessSetupTimeout notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: PHSGW Session Setup Timeout; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 380 }

starThreshClearPHSGWSeessSetupTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: PHSGW Session Setup Timeout CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 381 }

starThreshPHSGWAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The number of PHSGW authentication failures has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshPHSGWAuthFail notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: PHSGW authentication failures threshold; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 382 }

starThreshClearPHSGWAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: PHSGW authentication failures threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 383 }

starThreshPHSGWMaxEAPRetry NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The number of PHSGW Maximum EAP Retry has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
starThreshPHSGWMaxEAPRetry notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: PHSGW Maximum EAP Retry threshold; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 384 }

starThreshClearPHSGWMaxEAPRetry NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[System] Threshold: PHSGW Maximum EAP Retry threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 385 }

starThreshPHSGWNWEntryDenial notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: PHSGW Network Entry Denial threshold; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 386 }

starThreshClearPHSGWNWEntryDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[System] Threshold: PHSGW Network Entry Denial threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 387 }

starThreshPHSGWHandoffDenial notification will be generated when the measured value falls below the threshold.

---#SUMMARY "[System] Threshold: PHSGW Handoff Denial threshold; measured %d threshold %d"
---#ARGUMENTS {1,0}
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshClearPHSGWHandoffDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: PHSGW Handoff Denial threshold CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 388 }

starThreshASNGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The total number of ASNGW sessions is above the configured threshold value."
--#SUMMARY "[System] Threshold: Total ASNGW Sessions; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 389 }

starThreshClearASNGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The total number of ASNGW sessions is above the configured threshold value."
--#SUMMARY "[System] Threshold: Total ASNGW Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 390 }

starThreshPerServiceASNGWSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The total number of ASNGW sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service ASNGW Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 391 }

starThreshClearPerServiceASNGWSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service ASNGW Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 392 }

starThreshPHSPCessSetupTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }

END
STATUS obsolete
DESCRIPTION
"The PHSPC session setup timeout has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a
starThreshPHSPCSessSetupTimeout notification will be generated when the measured
value falls below the threshold."
---#SUMMARY "[System] Threshold: PHSPC Session Setup Timeout; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 394 }

starThreshClearPHSPCSessSetupTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: PHSPC Session Setup Timeout CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 395 }

starThreshPHSPCSleepModeTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The PHSPC idle mode timeout has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a
starThreshPHSPCSleepModeTimeout notification will be generated when the measured
value falls below the threshold."
---#SUMMARY "[System] Threshold: PHSPC Idle Mode Timeout; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 396 }

starThreshClearPHSPCSleepModeTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: PHSPC Idle Mode Timeout CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 397 }

starThreshPHSPCSmEntryDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The number of PHSPC sm entry denial has exceeded the configured threshold
during the current monitoring period.

Probable Cause: This is a user configurable threshold."
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshPHSPCSmEntryDenial notification will be generated when the measured value falls below the threshold.

---SUMMARY "[System] Threshold: PHSPC Sm Entry Denial threshold; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING

::= { starentTraps 398}

starThreshClearPHSPCSmEntryDenial NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: PHSPC Sm Entry Denial threshold CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL

::= { starentTraps 399}

starThreshSGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of SGW sessions is above the configured threshold value.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearSGWSessions notification will be generated when the measured value falls below the threshold."

---SUMMARY "[System] Threshold: Total SGW Sessions; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY WARNING

::= { starentTraps 408}

starThreshClearSGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total SGW Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL

::= { starentTraps 409}

starThreshPGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of PGW sessions is above the configured threshold value.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPGWSessions notification will be generated when the measured value falls below the threshold."

---SUMMARY "[System] Threshold: Total PGW Sessions; measured %d threshold %d"
---#ARGUMENTS {1,0}
---#STATE OPERATIONAL
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 410 }

starThreshClearPGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--SUMMARY "[System] Threshold: Total PGW Sessions CLEAR; measured %d threshold %d"
--ARGUMENTS {1,0}
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
::= { starentTraps 411 }

starThreshLMASessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of LMA sessions is above the configured threshold value."
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearLMASessions notification will be generated when the measured
value falls below the threshold."
--SUMMARY "[System] Threshold: Total LMA Sessions; measured %d threshold %d"
--ARGUMENTS {1,0}
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
::= { starentTraps 412 }

starThreshClearLMASessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--SUMMARY "[System] Threshold: Total LMA Sessions CLEAR; measured %d threshold %d"
--ARGUMENTS {1,0}
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
::= { starentTraps 413 }

starThreshMAGSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of MAG sessions is above the configured threshold value."
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearMAGSessions notification will be generated when the measured
value falls below the threshold."
--SUMMARY "[System] Threshold: Total MAG Sessions; measured %d threshold %d"
--ARGUMENTS {1,0}
--STATE OPERATIONAL
--SEVERITY WARNING
::= { starentTraps 414 }

starThreshClearMAGSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total MAG Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 415 }

starThreshFNGCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The chassis-wide count of current FNG sessions has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearFNGCurrSess notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: FNG Current Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 416 }

starThreshClearFNGCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: FNG Current Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 417 }

starThreshFNGCurrActSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The chassis-wide count of current FNG active sessions has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearFNGCurrActiveSess notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: FNG Current Active Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 418 }

starThreshClearFNGCurrActSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: FNG Current Active Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 419 }

starThreshPHSGWEAPOLAuthFailure NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The number of PHSGW EAPOL Auth Failure has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshPHSGWEAPOLAuthFailure notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: PHSGW EAPOL Auth Failure threshold; measured %d threshold %d"
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 420 }

starThreshClearPHSGWEAPOLAuthFailure NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."

--#SUMMARY "[System] Threshold: PHSGW EAPOL Auth Failure threshold CLEAR; measured %d threshold %d"
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 421 }

starThreshPHSGWMaxEAPOLRetry NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The number of PHSGW Max EAPOL retry has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshPHSGWMaxEAPOLRetry notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: PHSGW max EAPOL retry threshold; measured %d threshold %d"
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 422 }

starThreshClearPHSGWMaxEAPOLRetry NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS obsolete
DESCRIPTION "The threshold condition is now clear."

--#SUMMARY "[System] Threshold: PHSGW max EAPOL retry threshold CLEAR; measured %d threshold %d"
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 423 }

starThreshHSGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }

::= { starentTraps 419 }


STATUS current
DESCRIPTION
"The total number of HSGW sessions is above the configured threshold value."

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearHSGWSessions notification will be generated when the measured value falls below the threshold."

---#SUMMARY "[System] Threshold: Total HSGW Sessions; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 424 }

starThreshClearHSGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[System] Threshold: Total HSGW Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 425 }

starThreshPDGCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The chassis-wide count of current PDG sessions has gone above the configured threshold"

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearPDGCurrSess notification will be generated when the measured value falls below the threshold."

---#SUMMARY "[System] Threshold: PDG Current Sessions; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 426 }

starThreshClearPDGCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[System] Threshold: PDG Current Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 427 }

starThreshPDGCurrActSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The chassis-wide count of current PDG active sessions has gone above the configured threshold"

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearPDGCurrActiveSess notification will be generated when the measured
value falls below the threshold.

---SUMMARY "[System] Threshold: PDG Current Active Sessions; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 428 }

starThreshClearPDGCurrActiveSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---SUMMARY "[System] Threshold: PDG Current Active Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 429 }

starThreshNATPortChunks NOTIFICATION-TYPE
OBJECTS { starIPPoolContext,starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The NAT port chunks utilization of NAT pool is above the configured
threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearNATPortChunks notification will be generated when the measured
value exceeds the threshold."

---SUMMARY "[System] Threshold: NAT port chunk utilization in context %s for pool %s threshold %d%%
measured %d%%"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 430 }

starThreshClearNATPortChunks NOTIFICATION-TYPE
OBJECTS { starIPPoolContext,starIPPoolName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---SUMMARY "[System] Threshold: NAT port chunk utilization threshold clear in context %s pool %s
threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 431 }

starThreshGPRSSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of GPRS sessions is above the configured threshold value."

---SUMMARY "[System] Threshold: Total GPRS Sessions; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 432 }

starThreshClearGPRSSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total GPRS Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 433 }

starThreshPerServiceGPRSSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of GPRS sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service GPRS Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 434 }

starThreshClearPerServiceGPRSSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service GPRS Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 435 }

starThreshGPRSPdpSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of GPRS PDP sessions is above the configured threshold value."
--#SUMMARY "[System] Threshold: Total GPRS PDP Sessions; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 436 }

starThreshClearGPRSPdpSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total GPRS PDP Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 437 }

starThreshPerServiceGPRSPdpSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of GPRS PDP sessions in a service is above the configured threshold value."
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshClearPerServiceGPRSPdpSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

starThreshMMESessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of subscribers is above the configured threshold value.

Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearMMESessions notification will be generated when the measured value falls below the threshold."

starThreshClearMMESessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

starThreshMMEAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of subscribers is above the configured threshold value.

Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearMMEAuthFail notification will be generated when the measured value falls below the threshold."

END --#SUMMARY "[System] Threshold: Per Service GPRS PDP Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 438 }

starThreshClearPerServiceGPRSPdpSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: Per Service GPRS PDP Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 439 }

starThreshMMESessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of subscribers is above the configured threshold value.

Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearMMESessions notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: Session total threshold measured %d threshold %d"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 440 }

starThreshClearMMESessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

--#SUMMARY "[System] Threshold: Total MME Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 441 }

starThreshMMEAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of subscribers is above the configured threshold value.

Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearMMEAuthFail notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: MME Auth Fail measured %d threshold %d"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL

END
starThreshClearMMEAuthFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total MME Auth Fail CLEAR; measured %d threshold %d"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 442 }

starThreshMMEAttachFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of subscribers is above the configured threshold value.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearMMEAttachFail notification will be generated when the measured
value falls below the threshold."
---#SUMMARY "[System] Threshold: MME AttachFail measured %d threshold %d"
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 443 }

starThreshClearMMEAttachFail NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total MME Attach Fail CLEAR; measured %d threshold %d"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 444 }

starThreshCSCFSvcRegRcvdRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service CSCF Registration Per Interval count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCSCFSvcRegRcvdRate notification will be generated when the measured
value falls below the threshold."
---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Registrations Per Interval; measured %d threshold %d"
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 445 }

starThreshClearCSCFSvcRegRcvdRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Registrations Per Interval CLEAR;
measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 447 }

starThreshCSCFSvcTotalActiveReg NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service CSCF Total Active Registrations count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCSCFSvcTotalActiveReg notification will be generated when the measured
value falls below the threshold."

---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Total Active Registrations; measured %d
threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 448 }

starThreshClearCSCFSvcTotalActiveReg NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Total Active Registrations CLEAR;
measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 449 }

starThreshCSCFSvcInviteRcvdRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service CSCF Calls Per Interval count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCSCFSvcInviteRcvdRate notification will be generated when the measured
value falls below the threshold."

---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Calls Per Interval; measured %d
threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 450 }

starThreshClearCSCFSvcInviteRcvdRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Calls Per Interval CLEAR; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 451 }

starThreshCSCFSvcTotalActiveCalls NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service CSCF Total Active Calls count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearCSCFSvcTotalActiveCalls notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Total Active Calls; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 452 }

starThreshClearCSCFSvcTotalActiveCalls NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."

---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 453 }

starThreshCSCFSvcTotalCallFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Per-Service CSCF Total Call Failure count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearCSCFSvcTotalCallFailure notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Total Call Failure; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 454 }

starThreshClearCSCFSvcTotalCallFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshCSCFSvcErrorNoResource NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service CSCF No resource failure count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearCSCFSvcErrorNoResource notification will be generated when the measured value falls below the threshold."

starThreshClearCSCFSvcErrorNoResource NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."

starThreshCSCFSvcErrorTcp NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service CSCF Tcp failure count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearCSCFSvcErrorTcp notification will be generated when the measured value falls below the threshold."

starThreshClearCSCFSvcErrorTcp NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshCSCFSvcErrorPresence NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service CSCF Presence failure count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCSCFSvcErrorPresence notification will be generated when the measured
value falls below the threshold."
--SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Presence failure; measured %d threshold
%d"
--ARGUMENTS (0,1,3,2)
--STATE OPERATIONAL
--SEVERITY WARNING
::= { starentTraps 459 }

starThreshClearCSCFSvcErrorPresence NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Presence failure CLEAR; measured %d threshold
%d"
--ARGUMENTS (0,1,3,2)
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
::= { starentTraps 460 }

starThreshCSCFSvcErrorRegAuth NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The Per-Service CSCF Reg-Auth failure count has gone above the configured threshold
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearCSCFSvcErrorRegAuth notification will be generated when the measured
value falls below the threshold."
--SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Reg-Auth failure; measured %d threshold
%d"
--ARGUMENTS (0,1,3,2)
--STATE OPERATIONAL
--SEVERITY WARNING
::= { starentTraps 461 }

starThreshClearCSCFSvcErrorRegAuth NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."

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STARIENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[Service CSCF-%s-%s] Threshold: CSCF Per-Service Reg-Auth failure CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 463 }

starThreshBGPRoutes NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The Total number of BGP routes is above the configured threshold value.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearBGPRoutes notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: maximum routes for context %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 464 }

starThreshClearBGPRoutes NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: maximum routes clear for context %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 465 }

starThreshPCCPolicySessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of PCC-Policy sessions is above the configured threshold value."
--#SUMMARY "[System] Threshold: Total PCC-Policy Sessions; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 466 }

starThreshClearPCCPolicySessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total PCC-Policy Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 467 }

starThreshPerServicePCCPolicySessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of PCC-Policy sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service PCC-Policy Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 468 }

clearPerServicePCCPolicySessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service PCC-Policy Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 469 }

clearPCCQuotaSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of PCC-Quota sessions is above the configured threshold value."
--#SUMMARY "[System] Threshold: Total PCC-Quota Sessions; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 470 }

clearPCCQuotaSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total PCC-Quota Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 471 }

clearPerServicePCCQuotaSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of PCC-Quota sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service PCC-Quota Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 472 }

clearPerServicePCCQuotaSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service PCC-Quota Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
TRAPDEFINITIONS ::= BEGIN

STARThreshPCCAFSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of PCC-AF sessions is above the configured threshold value."
--#SUMMARY "[System] Threshold: Total PCC-AF Sessions; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starTraps 473 }

STARThreshClearPCCAFSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total PCC-AF Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starTraps 474 }

STARThreshPerServicePCCAFSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The total number of PCC-AF sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service PCC-AF Sessions, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starTraps 475 }

STARThreshClearPerServicePCCAFSessions NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service PCC-AF Sessions CLEAR, context %s service name %s; measured %d threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starTraps 476 }

STARThreshNPUUtilization NOTIFICATION-TYPE
OBJECTS { starNPUSlot, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The overall NPU utilization for the identified processor has exceeded for
configured threshold value for the current monitoring period.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearNPUUtilization notification will be generated when the measured
value falls below the threshold. This is not applicable to QVPC-SI and QVPC-DI."
--#SUMMARY "[Card] Threshold: NPU utilization threshold for card %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)

::= { starTraps 477 }

END
StarThreshClearNPUtilization NOTIFICATION-TYPE
OBJECTS { starNPUSlot, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The threshold condition is now clear. This is not applicable to QVPC-SI and QVPC-DI."
--#SUMMARY "[Card] Threshold: NPU utilization threshold clear for card %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::: { starTraps 478 }

StarThreshClearDnsLookupFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The total number of DNS lookup failures is above the configured threshold value.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearDnsLookupFailure notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: DNS lookup failure for context %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::: { starTraps 479 }

StarThreshClearDnsLookupFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: DNS lookup failure clear for context %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::: { starTraps 480 }

StarThreshDiameterRetryRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The percentage of Diameter requests which has to be retried has exceeded the configured threshold during the current monitoring period.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearDiameterRetryRate notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: Diameter retry rate threshold for threshold %d%% measured %d%%"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::: { starTraps 481 }

StarThreshClearDiameterRetryRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Diameter retry rate threshold for threshold %d%% measured %d%%"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::: { starTraps 482 }

StarThreshDiameterRetryRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Diameter retry rate threshold clear for threshold %d%% measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 483 }

starThreshHNBGWnbSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The chassis-wide count of current HNBGW HNB sessions has gone above the configured threshold"
--#SUMMARY "[System] Threshold: HNBGW HNB Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 484 }

starThreshClearHNBGWnbSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: HNBGW HNB Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 485 }

starThreshHNBGWuSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The chassis-wide count of current HNBGW UE sessions has gone above the configured threshold"
--#SUMMARY "[System] Threshold: HNBGW UE Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 486 }

starThreshClearHNBGWuSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: HNBGW UE Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 487 }

starThreshHNBGW1uSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
STARENT-MIB DEFINITIONS ::= BEGIN

starThreshClearHNBGWuSess NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
    "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: HNBGW IU Sessions CLEAR; measured %d threshold %d"
  --#ARGUMENTS {1,0}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 489 }

starThreshClearPerServicePDGSessions NOTIFICATION-TYPE
  OBJECTS { starThreshInt, starThreshMeasuredInt }
  STATUS current
  DESCRIPTION
    "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: Per Service PDG Sessions CLEAR; measured %d threshold %d"
  --#ARGUMENTS {1,0}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 492 }

starThreshSystemCapacity NOTIFICATION-TYPE
  OBJECTS { starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION
    "The System resource capacity has exceeded the configured threshold"
  --#SUMMARY "[System] Threshold: System Resource Capacity for threshold %d%% measured %d%%"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 493 }

starThreshClearSystemCapacity NOTIFICATION-TYPE
  OBJECTS { starThreshPct, starThreshMeasuredPct }
  STATUS current
  DESCRIPTION
    "The threshold condition is now clear for system capacity."
  --#SUMMARY "[System] Threshold: System Resource Capacity Clear for threshold %d%% measured %d%%"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 494 }

END
starThreshTpoRtoTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The total number of TPO RTO timeouts is above the configured threshold value.
  Probable Cause: This is a user configurable threshold.
  If the thresholding subsystem is configured to run in an 'alarm' model,
  a starThreshClearTpoRtoTimeout notification will be generated when the measured value falls below the threshold."
  --#SUMMARY "[System] Threshold: TPO RTO timeouts; measured %d threshold %d"
  --#ARGUMENTS {1,0}
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 495 }

starThreshClearTpoRtoTimeout NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: TPO RTO timeouts CLEAR; measured %d threshold %d"
  --#ARGUMENTS {1,0}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 496 }

starThreshTpoDnsFailure NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
  "The total number of TPO DNS query failure is above the configured threshold value.
  Probable Cause: This is a user configurable threshold.
  If the thresholding subsystem is configured to run in an 'alarm' model,
  a starThreshClearTpoDnsFailure notification will be generated when the measured value falls below the threshold."
  --#SUMMARY "[System] Threshold: TPO DNS query failure for threshold %d%% measured %d%%"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY WARNING
  ::= { starentTraps 497 }

starThreshClearTpoDnsFailure NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
  "The threshold condition is now clear."
  --#SUMMARY "[System] Threshold: TPO DNS query failure clear for threshold %d%% measured %d%%"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 498 }

starThreshTpoLowCompressionGain NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The total number of TPO low compression gain is above the configured threshold value.
  Probable Cause: This is a user configurable threshold.
  If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearTpoLowCompressionGain notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: TPO TPO low compression gain; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 499 } starThreshClearTpoLowCompressionGain NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
 "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: TPO low compression gain CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 500 } starThreshEPDGCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
 "The chassis-wide count of current EPDG sessions has gone above the configured threshold"

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearEPDGCurrSess notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[System] Threshold: EPDG Current Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 501 } starThreshClearEPDGCurrSess NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
 "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: EPDG Current Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 502 } starThreshCardTemperatureNearPowerOffLimit NOTIFICATION-TYPE
OBJECTS { starSlotNum, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
 "On the certain card, the distance between the poweroff/reset point and current temperature on card is smaller than the setted threshold, during the current monitoring period."

Probable Cause: This is a user configurable threshold.

Possible reason to cause this alarm:
  1) External temperature is too high;
  2) One or more fan failures;
  3) Blockages the prevent fan air inflow/outflow.

If the thresholding subsystem is configured to run in an 'alarm' model, a
starThreshClearCardTemperaturePowerOffLimit notification will be generated when the measured temperature falls, making the distance between the poweroff/reset point and current temperature larger than the setted threshold."
---#SUMMARY "[Card] Threshold: Card temperature near power off limit alarm for slot number %d threshold %d measured %d"
---#ARGUMENTS (0,1,2)
---#STATE OPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 503 }

starThreshClearCardTemperaturePowerOffLimit NOTIFICATION-TYPE
OBJECTS (starSlotNum, starThreshInt, starThreshMeasuredInt)
STATUS current
DESCRIPTION
"On the certain card, the distance between the poweroff/reset point and current temperature on card is larger than the setted clear point."
---#SUMMARY "[Card] Threshold: Card temperature near power off limit clear for slot number %d threshold %d measured %d"
---#ARGUMENTS (0,1,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 504 }

starThreshHENBGWHenbSessions NOTIFICATION-TYPE
OBJECTS (starThreshInt, starThreshMeasuredInt)
STATUS current
DESCRIPTION
"The total number of HENBGW Henb sessions is above the configured threshold value. Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearHENBGWHenbSessions notification will be generated when the measure value falls below the threshold."  
---#SUMMARY "[System] Threshold: Total HENBGW Henb Sessions; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 513 }

starThreshClearHENBGWHenbSessions NOTIFICATION-TYPE
OBJECTS ( starThreshInt, starThreshMeasuredInt )
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Total HENBGW Henb Sessions CLEAR; measured %d threshold %d"
---#ARGUMENTS (1,0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 514 }

starThreshHENBGWUeSessions NOTIFICATION-TYPE
OBJECTS ( starThreshInt, starThreshMeasuredInt )
STATUS current
DESCRIPTION
"The total number of HENBGW UE sessions is above the configured threshold value. Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearHENBGWUeSessions
notification will be generated when the measure value falls below the threshold.

--#SUMMARY "[System] Threshold: Total HENBGW Sessions; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 515 }

starThreshClearHENBGWUESessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total HENBGW UE Sessions CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 516 }

starThreshHENBGWPagingMessages NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of HENBGW Paging Messages received is above the configured threshold value.
Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a
starThreshClearHENBGWPagingMessages
notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: Total HENBGW Paging Messages; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 517 }

starThreshClearHENBGWPagingMessages NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Total HENBGW Paging Messages CLEAR; measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 518 }

starThreshPerServiceSAMOGSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The total number of SAMOG sessions in a service is above the configured threshold value."
--#SUMMARY "[System] Threshold: Per Service SAMOG Sessions, measured %d threshold %d"
--#ARGUMENTS {1,0}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 519 }

starThreshClearPerServiceSAMOGSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: Per Service SAMOG Sessions CLEAR, measured %d threshold %d"
**STARENT-MIB DEFINITIONS ::= BEGIN**

```plaintext
--#ARGUMENTS (1,0)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 520 }

starThreshNATPktDrop NOTIFICATION-TYPE
 OBJECTS { starIPPoolContext,starIPPoolName, starThreshPct, starThreshMeasuredPct }
 STATUS current
 DESCRIPTION
 "The NAT packet drops from a NAT pool is above the configured threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshNATPktDrop notification will be generated when the measured
value exceeds the threshold."
--#SUMMARY "[System] Threshold: NAT Pkt Drop in context %s for pool %s threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starentTraps 521 }

starThreshClearNATPktDrop NOTIFICATION-TYPE
 OBJECTS { starIPPoolContext,starIPPoolName, starThreshPct, starThreshMeasuredPct }
 STATUS current
 DESCRIPTION
 "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: NAT Pkt Drop threshold clear in context %s pool %s threshold %d%%
measured %d%%"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 522 }

starThreshFabricEGQDiscards NOTIFICATION-TYPE
 OBJECTS { starSlotNum, starThreshDeviceNum, starThreshMeasuredInt, starThreshInt, starThreshPeriodInt }
 STATUS current
 DESCRIPTION
 "The number of EGQDiscards observed during configured threshold and interval exceeded.
Probable Cause: Possible FAP or FE issue. Collect more data by running .show fabric health.
command."
--#SUMMARY "Threshold EGQDiscards slot %d device %d measured %d threshold %d per %d sec"
--#ARGUMENTS (0,1,2,3,4)
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
 ::= { starentTraps 523 }

starThreshClearFabricEGQDiscards NOTIFICATION-TYPE
 OBJECTS { starSlotNum, starThreshDeviceNum, starThreshMeasuredInt, starThreshInt }
 STATUS current
 DESCRIPTION
 "The threshold condition is now clear."
--#SUMMARY "Threshold EGQDiscards slot %d device %d threshold CLEAR measured %d threshold %d"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
 ::= { starentTraps 524 }

starGILANServiceStart NOTIFICATION-TYPE
 OBJECTS { starServiceVpnName, starServiceServName }
 STATUS current
```

---

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DESCRIPTION

"A GILAN Service has started"

Action to be Taken: No action required"

--#SUMMARY "[Service GILAN-%s-%s] GILAN service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL  ::=  { starentTraps 525 }

starGILANServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION

"A GILAN Service has stopped"

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the GILAN service shutdown was not planned,
examine the admin logs for an indication of the failure. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the GILAN service is operational.

Condition Clear Alarm: A starGILANServiceStart notification will be generated when
the service is restarted"

--#SUMMARY "[Service GILAN-%s-%s] GILAN service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::=  { starentTraps 526 }

starThreshEPDGIKEV2SetupAttempts NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION

"The number of IKEv2 Setup attempts requests seen for this ePDG service has exceeded the
configured threshold."

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshEPDGIKEV2SetupAttempts notification will be generated when the measured
value falls below the threshold."

--#SUMMARY "[Service ePDG-%s-%s] Threshold: ePDG Per-Service IKEv2 Setup Attempts; measured %d
threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::=  { starentTraps 527 }

starThreshClearEPDGIKEV2SetupAttempts NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION

"The threshold condition is now clear"

--#SUMMARY "[Service ePDG-%s-%s] Threshold: ePDG Per-Service IKEv2 Setup Attempts CLEAR; measured %d
threshold %d"
--#ARGUMENTS (0,1,3,2)
--#STATE OPERATIONAL
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STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY INFORMATIONAL
::= { starentTraps 528 }

starThreshEPDGIKEV2AuthFailures NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The number of IKEv2 Authentication Failures seen for this ePDG service has exceeded the configured threshold.

  Probable Cause: This is a user configurable threshold.

  If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshEPDGIKEV2AuthFailures notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[Service ePDG-%s-%s] Threshold: IKEv2 Per-Service IKEv2 Authentication Failures; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 529 }

starThreshClearEPDGIKEV2AuthFailures NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The threshold condition is now clear"

--#SUMMARY "[Service ePDG-%s-%s] Threshold: IKEv2 Per-Service IKEv2 Authentication Failures CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 530 }

starThreshEPDGIKEV2SetupSuccess NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The number of IKEv2 Setup Success seen for this ePDG service has exceeded the configured threshold.

  Probable Cause: This is a user configurable threshold.

  If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshEPDGIKEV2SetupSuccess notification will be generated when the measured value falls below the threshold."

--#SUMMARY "[Service ePDG-%s-%s] Threshold: IKEv2 Per-Service IKEv2 Setup Success; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 531 }

starThreshClearEPDGIKEV2SetupSuccess NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
  "The threshold condition is now clear"

--#SUMMARY "[Service ePDG-%s-%s] Threshold: IKEv2 Per-Service IKEv2 Setup Success CLEAR; measured %d threshold %d"
--#ARGUMENTS {0,1,3,2}

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starThreshEPDGIKEV2SetupFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The number of IKEv2 Setup Failure seen for this ePDG service has exceeded the configured threshold.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshEPDGIKEV2SetupFailure notification will be generated when the measured value falls below the threshold."

-- SUMMARY "[Service ePDG-%s-%s] Threshold: ePDG Per-Service IKEv2 Setup Failure; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY WARNING
: : : { starentTraps 532 }

starThreshClearEPDGIKEV2SetupFailure NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear"

-- SUMMARY "[Service ePDG-%s-%s] Threshold: ePDG Per-Service IKEv2 Setup Failure CLEAR; measured %d threshold %d"
---#ARGUMENTS {0,1,3,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
: : : { starentTraps 534 }

starThreshEPDGIKEV2SetupFailureRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The rate of IKEv2 Setup failures (as a percentage of total requests) seen for this ePDG service has exceeded the configured threshold.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshEPDGIKEV2SetupFailureRate notification will be generated when the measured value falls below the threshold."

-- SUMMARY "[Service ePDG-%s-%s] Threshold: ePDG Per-Service IKEv2 Setup Failure Rate; measured %d%% threshold %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY WARNING
: : : { starentTraps 535 }

starThreshClearEPDGIKEV2SetupFailureRate NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear"

-- SUMMARY "[Service ePDG-%s-%s] Threshold: ePDG Per-Service IKEv2 Setup Failure Rate CLEAR; measured %d%% threshold %d%%"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY INFORMATIONAL ::= { starentTraps 536 }

starThreshLagRxUtil NOTIFICATION-TYPE
OBJECTS { starLAGGroup, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION
"The Rx utilization of port on a lag group has exceeded the configured threshold value during
the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearLagRxUtil notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: lag ports rx utilization threshold for lag group id %d threshold %d%%
measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING ::= { starentTraps 537 }

starThreshClearLagRxUtil NOTIFICATION-TYPE
OBJECTS { starLAGGroup, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: lag ports rx utilization threshold clear for lag group id %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL ::= { starentTraps 538 }

starThreshLagTxUtil NOTIFICATION-TYPE
OBJECTS { starLAGGroup, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION
"The Tx utilization of port on a lag group has exceeded the configured threshold value during
the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearLagTxUtil notification will be generated when the measured
value falls below the threshold."
--#SUMMARY "[System] Threshold: lag ports tx utilization threshold for lag group id %d threshold %d%%
measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING ::= { starentTraps 539 }

starThreshClearLagTxUtil NOTIFICATION-TYPE
OBJECTS { starLAGGroup, starThreshPct, starThreshMeasuredPct } STATUS current
DESCRIPTION
"The threshold condition is now clear."
--#SUMMARY "[System] Threshold: lag ports tx utilization threshold clear for lag group id %d threshold %d%% measured %d%%"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL

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STARENT-MIB DEFINITIONS ::= BEGIN

-- SEVERITY INFORMATIONAL ::= { starentTraps 540 }

-- Non Thresholds Range 2

starOSPFNeighborDown NOTIFICATION-TYPE
OBJECTS { starContextName, starInterfaceName, starInterfaceIPAddress, starOSPFNeighborRouterID, starOSPFFromState, starOSPFToState }
STATUS current
DESCRIPTION "An OSPF neighbor is down.

Condition Clear Alarm: A starOSPFNeighborFull notification will be generated when the neighbor
is restored."

--#SUMMARY "{VPN %s] OSPF Neighbor down, interface %s/%s, OSPF Neighbor %s, transitioned from state
%s to %s"

--#ARGUMENTS (0,1,2,3,4,5)
--#STATE DEGRADED
--#SEVERITY MINOR
 ::= { starentTraps 1001 }

starOSPFNeighborFull NOTIFICATION-TYPE
OBJECTS { starContextName, starInterfaceName, starInterfaceIPAddress, starOSPFNeighborRouterID }
STATUS current
DESCRIPTION "An OSPF neighbor is full. A starOSPFNeighborFull notification is only sent for neighbors
which had previous been declared down via a starOSPFNeighborDown notification."

--#SUMMARY "{VPN %s] OSPF Neighbor full, interface %s/%s, OSPF Neighbor %s"

--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 1002 }

starM3UAPSDown NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7M3UAPsId }
STATUS current
DESCRIPTION "The M3UA Peer Server is unavailable.

Possible reason: All related Peer Server Processes(PSPs) are in the ASP-DOWN state for this Peer
Server.

Condition Clear Alarm: A starM3UAPSActive notification will be generated when
the Peer Server becomes reachable as at least one PSP is in ASP-ACTIVE state"

--#SUMMARY "{ss7-routing-domain %d] peer-server-%d is down"

--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
 ::= { starentTraps 1004 }

starM3UAPSActive NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7M3UAPsId }
STATUS current
DESCRIPTION "Peer Server is available and application traffic is active. This state implies that at
least one PSP is in the ASP-ACTIVE state.

starM3UAPSActive is only generated for Application Services which were previously declared down via a
starM3UAPSDown notification"

--#SUMMARY "{ss7-routing-domain %d] peer-server-%d is active"

--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL

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starM3UAPSPDown NOTIFICATION-TYPE
OBJECTS {
    starSS7rdId,
    starSS7M3UAPsId,
    starSS7M3UAPspId,
    starSS7CauseString
}
STATUS current
DESCRIPTION
"An ASP Down message received from the remote M3UA peer indicates the adaptation layer at the remote
M3UA peer
is NOT ready to receive DATA, SSNM, RKM or ASPTM messages
Possible reason:
1. SCTP association is down or
2. Remote peer server process is down
Condition Clear Alarm: A starM3UAPSPUp notification will be generated when
the remote ASP becomes available"
---#SUMMARY "[ss7-routing-domain %d] peer-server %d peer-server-process %d is down cause %s"
---#ARGUMENTS (0,1,2,3)
---#STATE DEGRADED
---#SEVERITY MINOR
 ::= { starentTraps 1006 }

starM3UAPSPUp NOTIFICATION-TYPE
OBJECTS {
    starSS7rdId,
    starSS7M3UAPsId,
    starSS7M3UAPspId,
    starSS7CauseString
}
STATUS current
DESCRIPTION
"An ASP Up message received from the remote M3UA peer indicates that the
adaptation layer at the remote peer is ready to receive any ASPSM/ASPTM messages for all
Routing Keys that the ASP is configured to serve
starM3UAPSPUp is generated only when previous starM3UAPSPDown was generated"
---#SUMMARY "[ss7-routing-domain %d] peer-server %d peer-server-process %d is active cause %s"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 1007 }

starSCCPSspRcvd NOTIFICATION-TYPE
OBJECTS { starSccpNwId, starSS7Pc, starSccpSsn }
STATUS current
DESCRIPTION
"Subsystem prohibited received from a peer. The receiving node needs to update the translation
tables so that traffic could be re routed to a
backup system if available
Condition Clear: A starSCCPSspClear notification will be generated when this condition is cleared."
---#SUMMARY "[sccp-network %d] dpc-%d ssn-%d prohibited"
---#ARGUMENTS (0,1,2)
---#STATE DEGRADED
---#SEVERITY MAJOR
 ::= { starentTraps 1008 }

starSCCPSspClear NOTIFICATION-TYPE
STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starSccpNwId, starSS7Pc, starSccpSsn }  
STATUS current  
DESCRIPTION  
"Subsystem available received from a peer. This indicates a previously prohibited node is now available. Receiving node needs to update its translation tables.  
A starSCCPssClear notification is only generated for peers which had previously generated a starSCCPssClear notification"  
---#SUMMARY "[sccp-network %d] dpc-%d ssn-%d allowed"  
---#ARGUMENTS (0,1,2)  
---#STATE OPERATIONAL  
---#SEVERITY INFORMATIONAL  
::= { starentTraps 1009 }

starSGSNRNCReset NOTIFICATION-TYPE  
OBJECTS { starSessSGSNVpnName, starSessSGSNServName, starSessSGSNMcc, starSessSGSNMnc, starSessSGSNRncId }  
STATUS current  
DESCRIPTION  
"SGSN has received an Radio Network Controller(RNC) reset event. SGSN will clean up all the Iu connections with the RNC.  
This event is not generated when we get RNC Reset the first time system boots up. This trap is generated only on subsequent reset events"  
---#SUMMARY "[Service SGSN %s-%s] RNC Reset event received ; MCC %s MNC %s RncId %d"  
---#ARGUMENTS (0,1,2,3,4)  
---#STATE OPERATIONAL  
---#SEVERITY INFORMATIONAL  
::= { starentTraps 1010 }

starSGSNHLRReset NOTIFICATION-TYPE  
OBJECTS { starSessSGSNVpnName, starSessSGSNServName, starSessSGSNHlrNum }  
STATUS current  
DESCRIPTION  
"Home Location register(HLR) reset event received. SGSN will mark all the subscribers served by this HLR so that the subscription record can be fetched again on subsequent user activity"  
---#SUMMARY "[Service SGSN %s-%s] HLR Reset event received ; HLR Number %s"  
---#ARGUMENTS (0,1,2)  
---#STATE OPERATIONAL  
---#SEVERITY INFORMATIONAL  
::= { starentTraps 1011 }

starSGSNGtpcPathFailure NOTIFICATION-TYPE  
OBJECTS { starSGTPVpnName, starSGTPServName, starSGTPPeerAddr, starSGTPPeerPort, starSGTPSelfAddr, starSGTPSelfPort }  
STATUS current  
DESCRIPTION  
"No response received from peer GPRS Serving Node(GSN) as several messages have timed out. The control path towards the peer GSN is down.  
Possible reason: Remote GSN is down  
Condition Clear Alarm: A starSGSNGtpcPathFailureClear notification will be generated when the control path towards the peer GSN is available"  
---#SUMMARY "[Service SGTP %s-%s] GTP control path failure. peer-end-point %s:%d , self-end-point %s:%d"  
---#ARGUMENTS (0,1,2,3,4,5)  
---#STATE DEGRADED  
---#SEVERITY MAJOR  
::= { starentTraps 1012 }

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starSGSNGtpcPathFailureClear NOTIFICATION-TYPE
OBJECTS (starSGTPvpnName, starSGTPservName, starSGTPPeerAddr, starSGTPPeerPort, starSGTPSelfAddr, starSGTPSelfPort)
STATUS current
DESCRIPTION "The path to the peer GSN which was down is now available
A starSGSNGtpcPathFailureClear notification is only generated for GSNs which had previously generated a starSGSNGtpcPathFailure notification"
---SUMMARY "[Service SGTP %s-%s] GTP control path active peer-end-point %s:%d, self-end-point %s:%d"
---ARGUMENTS {0,1,2,3,4,5}
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1013 }

starSGSNGtpuPathFailure NOTIFICATION-TYPE
OBJECTS (starSGTPvpnName, starSGTPservName, starSGTPPeerAddr, starSGTPPeerPort, starSGTPSelfAddr, starSGTPSelfPort)
STATUS current
DESCRIPTION "No response received for ECHO request sent from SGSN. Data path failure detected towards peer GPRS Serving Node(GSN) or Radio Network Controller(RNC).
Check if the peer RNC or GSN is up

Possible reason: Remote GSN is down

Condition Clear Alarm: A starSGSNGtpuPathFailureClear notification will be generated when the data path to the remote GSN becomes available"
---SUMMARY "[Service SGTP %s-%s] GTP data path failure peer-end-point %s:%d, self-end-point %s:%d"
---ARGUMENTS {0,1,2,3,4,5}
---STATE DEGRADED
---SEVERITY MAJOR
::= { starentTraps 1014 }

starSGSNGtpuPathFailureClear NOTIFICATION-TYPE
OBJECTS (starSGTPvpnName, starSGTPservName, starSGTPPeerAddr, starSGTPPeerPort, starSGTPSelfAddr, starSGTPSelfPort)
STATUS current
DESCRIPTION "The data path toward peer GSN or RNC is now available
A starSGSNGtpuPathFailureClear notification is only sent for peers which had previously generated a starSGSNGtpuPathFailure notification."
---SUMMARY "[Service SGTP %s-%s] GTP data path is available peer-end-point %s:%d, self-end-point %s:%d"
---ARGUMENTS {0,1,2,3,4,5}
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1015 }

starMTP3LinkOutOfService NOTIFICATION-TYPE
OBJECTS (starSS7rdId, starSS7MTP3LinkSetId, starSS7MTP3LinkId)
STATUS current
DESCRIPTION "Message Transfer Part(MTP3) link out of service.

Possible reason:
1. Physical link is down or
2. Layer 2 (SSCOP/MTP2) is down
3. Operator action - link deactivated."
Condition Clear Alarm: A starMTP3LinkInService notification will be generated when the link comes back in service
---#SUMMARY "[ss7-routing-domain %d] linkset-%d link-%d out of service"
---#ARGUMENTS (0,1,2)
---#STATE DEGRADED
---#SEVERITY MINOR
::= { starentTraps 1016 }

starMTP3LinkInService NOTIFICATION-TYPE
OBJECTS {starSS7rdId,starSS7MTP3LinkSetId, starSS7MTP3LinkId}
STATUS current
DESCRIPTION
"Message Transfer Part(MTP3) link is in service."
---#SUMMARY "[ss7-routing-domain %d] linkset-%d link-%d in service"
---#ARGUMENTS (0,1,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1017 }

starMTP3LinkSetUnAvailable NOTIFICATION-TYPE
OBJECTS {starSS7rdId,starSS7MTP3LinkSetId}
STATUS current
DESCRIPTION
"Message Transfer Part(MTP3) linkset Unavailable
Possible reason:
1. All the links in the linkset is down.
2. Operator action - linkset deactivated.
Condition Clear Alarm: A starMTP3LinkSetAvailable notification will be generated when the previously down linkset is available"
---#SUMMARY "[ss7-routing-domain %d] linkset-%d unavailable"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1018 }

starMTP3LinkSetAvailable NOTIFICATION-TYPE
OBJECTS {starSS7rdId, starSS7MTP3LinkSetId}
STATUS current
DESCRIPTION
"Message Transfer Part(MTP3) linkset Available.
A starMTP3LinkSetAvailable notification is only generated for linksets which previously generated a starMTP3LinkSetUnavailable notification"
---#SUMMARY "[ss7-routing-domain %d] linkset-%d available"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1019 }

starSCTPAssociationFail NOTIFICATION-TYPE
OBJECTS {starSS7rdId, starSS7M3UAPsId, starSS7M3UAPspId}
STATUS current
DESCRIPTION
"M3UA Stream Control Transmission Protocol(SCTP) association establishment failure.
Possible reason: The peer is down. or network reachability to the remote server is down or the end point configuration is not correct at our end.
Condition Clear Alarm: A starSCTPAssociationEstablished notification will be generated when the previously failed association is successfully established again"
---#SUMMARY "[ss7-routing-domain %d] peer-server-%d peer-server-process-%d association down"
---#ARGUMENTS (0,1,2)
---#STATE DEGRADED
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

--SEVERITY MAJOR
::= { starentTraps 1020 }

starSCTPAssociationEstablished NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7M3UAPsId, starSS7M3UPspId }
STATUS current
DESCRIPTION
"M3UA Stream Control Transmission Protocol (SCTP) association establishment ok. Previously there was
a failure to establish the same association
A starM3UAStreamControlTransmissionProtocolEstablished notification is only generated for peers which previously
generated a starM3UAStreamControlTransmissionProtocolEstablished notification"

--SUMMARY "[ss7-routing-domain %d] peer-server-%d peer-server-process-%d association up"
--ARGUMENTS (0,1,2)
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
::= { starentTraps 1021 }

starSCTPPathDown NOTIFICATION-TYPE
OBJECTS {
  starSS7rdId,
  starSS7M3UAPsId,
  starSS7M3UPspId,
  starSS7SCTPSelfAddr,
  starSS7SCTPSelfPort,
  starSS7SCTPPeerAddr,
  starSS7SCTPPeerPort,
  starSS7CauseString
}
STATUS current
DESCRIPTION
"Stream Control Transmission Protocol (SCTP) path down.
Possible reason: The peer is down. or network reachability to the remote server is down or the end
point configuration is not correct at our end.
Condition Clear Alarm: A starSCTPPathUp notification will be generated when the previously down path
becomes usable"

--SUMMARY "[ss7-routing-domain %d] peer-server-%d peer-server-process-%d self-end-point %s:%d peer-
end-point %s:%d sctp path down cause %s"
--ARGUMENTS (0,1,2,3,4,5,6,7)
--STATE DEGRADED
--SEVERITY MINOR
::= { starentTraps 1022 }

starSCTPPathUp NOTIFICATION-TYPE
OBJECTS {
  starSS7rdId,
  starSS7M3UAPsId,
  starSS7M3UPspId,
  starSS7SCTPSelfAddr,
  starSS7SCTPSelfPort,
  starSS7SCTPPeerAddr,
  starSS7SCTPPeerPort,
  starSS7CauseString
}
STATUS current
DESCRIPTION
"Stream Control Transmission Protocol (SCTP) path up.
A starSCTPPathUp notification is only generated for peers which had previously generated a
starSCTPPathDown notification"

--SUMMARY "[ss7-routing-domain %d] peer-server-%d peer-server-process-%d self-end-point %s:%d peer-
end-point %s:%d sctp path up cause %s"
--ARGUMENTS (0,1,2,3,4,5,6,7)
STAR MIB DEFINITIONS ::= BEGIN

-- STATE OPERATIONAL
-- SEVERITY INFORMATIONAL
::= { starentTraps 1023 }

starPortDown NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starPortType }
STATUS current
DESCRIPTION
"Port status is Down. This notification is only generated for physical port.

Action to be Taken: No action required. The cause for the port down should be investigated."
--#SUMMARY "[Card] Port status is down Slot %d Port %d port type %s"
--#ARGUMENTS (0,1,2)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1024 }

starPortUp NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starPortType }
STATUS current
DESCRIPTION
"Port status is up. This notification is only generated for physical port and a
'starPortDown' notification was previously generated.

Action to be Taken: No action required"
--#SUMMARY "[Card] Port status is up Slot %d Port %d port type %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1025 }

-- BS trap

starBSReachable NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starPeerAddress }
STATUS current
DESCRIPTION
"The Base Station is reachable now. This can be result of Base Station Startup, etc.

Action to be Taken: No Action Required"
--#SUMMARY "[ASNGW Service %s-%s] Base Station Reachable, Base Station address %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1026 }

starBSUnreachable NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starPeerAddress }
STATUS current
DESCRIPTION
"A Base Station that the IMG communicates with is no longer reachable.
Probable Cause: The Base Station has failed or is otherwise unavailable, or
a network connectivity problem makes it unreachable.

Action to be Taken: If the Base Station outage was unplanned, restart/reset the
Base Station; verify network connectivity.

Condition Clear Alarm: This condition is cleared by a starBSReachable notification."
--#SUMMARY "[ASNGW Service %s-%s] Base Station Unreachable, Base Station address %s"
--#ARGUMENTS (0,1,2)
--#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1027 }  

starSystemStartup NOTIFICATION-TYPE
OBJECTS { starChassisType, starChassisDescription, starChassisSWRevision }
STATUS current
DESCRIPTION
"The system has completed a reboot/startup"
---#SUMMARY "[Chassis] System Startup, Cisco %s chassis, '%s', SW Revision %s"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1028 }  

starMTP3PCUnavailable NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7Pc, starSS7MTP3LinkSetId}
STATUS current
DESCRIPTION
"Message Transfer Part(MTP3) Route to the Point code becomes unavailable. Possible reason:
1. Associated linkset (all links within this linkset) becomes unavailable, hence route to the point code also becomes unavailable through this linkset.
2. Remote peer is down
Condition Clear Alarm: A starMTP3PCAvailable notification will be generated when the remote peer identified by the point code becomes reachable"
---#SUMMARY "[ss7-routing-domain %d] mtp3 point code-%d through linkset-%d unavailable"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY MINOR
::= { starentTraps 1029 }  

starMTP3PCAvailable NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7Pc, starSS7MTP3LinkSetId}
STATUS current
DESCRIPTION
"Message Transfer Part(MTP3) Route to the Point code becomes available. Possible reason:
1. Associated linkset (one of the links in the linkset) becomes available.
2. Remote peer is up
starMTP3PCAvailable is generated only when a previous starMTP3PCUnavailable is generated."
---#SUMMARY "[ss7-routing-domain %d] mtp3 point code-%d through linkset-%d available"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1030 }  

starSS7PCUnavailable NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7Pc}
STATUS current
DESCRIPTION
"SS7 Point code is unavailable, all the routes to this point code is unavailable. Possible reason:
1. All the routes (both M3UA and MTP3) to this point code becomes unavailable.
Condition Clear Alarm: A starSS7PCAvailable notification will be generated when"
the remote peer identified by the point code becomes reachable"

---SUMMARY "[ss7-routing-domain %d] point code-%d unavailable"
---ARGUMENTS (0,1)
---STATE DEGRADED
---SEVERITY MINOR
::= { starentTraps 1031 }

starSS7PCAvailable NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7Pc }
STATUS current
DESCRIPTION
"SS7 Point code is available, one of the routes to this point code is available.

Possible reason:
1. One of the routes (either M3UA or MTP3) to this point code becomes available.

starSS7PCAvailable is generated only when a previous starSS7PCUnavailable is generated.
"
---SUMMARY "[ss7-routing-domain %d] point code-%d available"
---ARGUMENTS (0,1)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1032 }

starASNPCServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS obsolete
DESCRIPTION
"A WiMAX ASN Paging Controller (ASNPC) Service has started

Action to be Taken: No action required"
---SUMMARY "[Service ASNPC-%s-%s] ASNPC service has started"
---ARGUMENTS (0,1)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1033 }

starASNPCServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS obsolete
DESCRIPTION
"A WiMAX ASN Paging Controller (ASNPC) Service has stopped.

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the ASNPC service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the ASNPC service is operational.

Condition Clear Alarm: A starASNPCServiceStart notification will be generated when
the service is restarted"
---SUMMARY "[Service ASNPC-%s-%s] ASNPC service has stopped"
---ARGUMENTS (0,1)
---STATE DEGRADED
---SEVERITY MAJOR
::= { starentTraps 1034 }
**starDiameterCapabilitiesExchangeFailure** NOTIFICATION-TYPE  
OBJECTS { starDiameterVpnName, starDiameterPeerAddr, starDiameterEndpointName, starDiameterECode}  
STATUS current  
DESCRIPTION  
"Capability negotiations has failed and connections are down.  
Problem Cause: Due to an error in Capability Exchange Answer received from the peer  
the connections have been torn down.  
---SUMMARY "[VPN %s] Capability exchange for %s endpoint %s failed. Cause Code: %d"  
---STATE DEGRADED  
---SEVERITY MAJOR  
::= { starentTraps 1035 }

**starDiameterCapabilitiesExchangeSuccess** NOTIFICATION-TYPE  
OBJECTS { starDiameterVpnName, starDiameterPeerAddr, starDiameterEndpointName}  
STATUS current  
DESCRIPTION  
"A diameter server is up. This notification is only generated for servers which  
have previously been declared unreachable."  
---SUMMARY "[VPN %s] Capability exchange for %s endpoint %s is a success"  
---STATE Operational  
---SEVERITY INFORMATIONAL  
::= { starentTraps 1036 }

**starSRPConnDown** NOTIFICATION-TYPE  
OBJECTS { starContextName, starSRPIpAddress }  
STATUS current  
DESCRIPTION  
"The connection to the standby SRP system is down. While this connection is down, the  
active system is operating without a standby and would be unable to perform an SRP  
switchover.  
Action to be Taken: Verify that the standby system is operational; verify the network  
between systems is operational.  
Clear Condition: This condition is cleared when the active system is reconnected to the  
standby SRP system.  
Condition Clear Alarm: A starSRPConnUp notification is generated when this condition is clear"  
---SUMMARY "[System] SRP Connection Down, SRP standby vpn %s address %s"  
---ARGUMENTS {0,1}  
---STATE DEGRADED  
---SEVERITY MAJOR  
::= { starentTraps 1037 }

**starSRPConnUp** NOTIFICATION-TYPE  
OBJECTS { starContextName, starSRPIpAddress }  
STATUS current  
DESCRIPTION  
"The connection to the standby SRP system is now up. This notification is only generated  
if a starSRPConnDown had previously been generated."  
---SUMMARY "[System] SRP Connection Up, SRP standby vpn %s address %s"  
---ARGUMENTS {0,1}  
---STATE OPERATIONAL  
---SEVERITY INFORMATIONAL  
::= { starentTraps 1038 }

**starDiameterIpv6PeerDown** NOTIFICATION-TYPE
OBJECTS { starDiameterVpnName, starDiameterPeerAddrIpv6, starDiameterEndpointName }

DESCRIPTION
"A diameter peer is down. This diameter peer is reached using an IPv6 address.

For IPv4-connected diameter peers, a starDiameterPeerDown notification would be generated.

Problem Cause: The diameter peer has failed, or a network connectivity prevents reaching the peer.

Condition Clear Alarm: A starDiameterPeerUp notification will be generated when the peer is up."

--#SUMMARY "[VPN %s] Diameter Peer %s endpoint %s is down"
--#ARGUMENTS {0,1,2}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1039 }

starDiameterIpv6PeerUp NOTIFICATION-TYPE
OBJECTS { starDiameterVpnName, starDiameterPeerAddrIpv6, starDiameterEndpointName }

DESCRIPTION
"A diameter peer is up. This diameter peer is reached using an IPv6 address. This notification is only generated for peers which have previously been declared down.

For IPv4-connected diameter peers, a starDiameterPeerUp notification would be generated."

--#SUMMARY "[VPN %s] Diameter Peer %s endpoint %s is up"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1040 }

starIPMSServerUnreachable NOTIFICATION-TYPE
OBJECTS { starIPMSServerVpnName, starIPMSServerAddr }

DESCRIPTION
"An IPMS server is unreachable.

Probable Cause: The IPMS server has failed, or a network connectivity issue prevents reaching the server.

Condition Clear Alarm: A starIPMSServerReachable notification will be generated when the server becomes reachable."

--#SUMMARY "[VPN %s] IPMS Server %s is unreachable"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MINOR
::= { starentTraps 1041 }

starIPMSServerReachable NOTIFICATION-TYPE
OBJECTS { starIPMSServerVpnName, starIPMSServerAddr }

DESCRIPTION
"An IPMS server is reachable. A starIPMSServerReachable notification is only generated for servers which had previously been declared unreachable."

--#SUMMARY "[VPN %s] IPMS Server %s is reachable"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1042 }
starCertShortLifetime NOTIFICATION-TYPE
OBJECTS { starCertSerialNumber, starCertIssuer, starCertExpiryTime }
STATUS current
DESCRIPTION
"A certificate is approaching its expiration. The certificate is still valid, but should be updated with a new certificate.

Action to be Taken: A new certificate should be created and configured on the system."
---SUMMARY "[System] Certificate short lifetime, certificate serial number %s, expiration date %s"
---ARGUMENTS (0,2)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1043 }

starCertExpired NOTIFICATION-TYPE
OBJECTS { starCertSerialNumber, starCertIssuer, starCertExpiryTime }
STATUS current
DESCRIPTION
"A certificate has expired. The certificate is no longer valid.

Action to be Taken: A new certificate should be created and configured on the system.

Condition Clear Alarm: A starCertValid notification is sent when a new, valid, certificate is configured."
---SUMMARY "[System] Certificate expired, certificate serial number %s, expiration date %s"
---ARGUMENTS (0,2)
---STATE NONOPERATIONAL
---SEVERITY CRITICAL
::= { starentTraps 1044 }

starCertValid NOTIFICATION-TYPE
OBJECTS { starCertSerialNumber, starCertIssuer, starCertExpiryTime }
STATUS current
DESCRIPTION
"A valid certificate has been configured. This notification is only generated if a starCertExpired had been previously generated."
---SUMMARY "[System] Certificate valid, certificate serial number %s, expiration date %s"
---ARGUMENTS (0,2)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1045 }

starFTPPushFail NOTIFICATION-TYPE
OBJECTS { starFTPServVpnName, starFTPServIpAddr, starFileName, starFileApplication }
STATUS current
DESCRIPTION
"An FTP push operation has failed for the specified file to the specified server."
---SUMMARY "[System] FTP file push failure; server %s/%s, file %s (application %s)"
---ARGUMENTS ( 0,1,2,3 )
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1046 }

starFTPServSwitch NOTIFICATION-TYPE
OBJECTS { starFTPServVpnName, starFTPServIpAddr, starFTPServIpAddr, starFileApplication }
STATUS current
DESCRIPTION
"An FTP server switchover has been performed; that is, the system has determined that an external FTP server is unreachable, and is not using an alternate FTP server."
---SUMMARY "[System] FTP Server switchover; from server %s/%s to %s/%s (application %s)"
---ARGUMENTS ( 0,1,0,2,3 )
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1047 }

starSDHSectionDown NOTIFICATION-TYPE
OBJECTS { starSDHSlot, starSDHPort, starSDHOperState }
STATUS current
DESCRIPTION
"The SDH interface on this port is down. The starSDHOperState identifies the specific issue.

Probable Cause:

Action to be Taken:

Condition Clear Alarm: This condition is cleared by a starSDHSectionUp notification,
---#SUMMARY "[Port %d-%d] SDH Down, operstate %x"
---#ARGUMENTS {0,1,2}
---#STATE NONOPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 1048 }

starSDHSectionUp NOTIFICATION-TYPE
OBJECTS { starSDHSlot, starSDHPort }
STATUS current
DESCRIPTION
"The SDH interface on this port is now up. A starSDHSectionUp notification is only generated if a starSDHSectionDown was previously generated for this port."
---#SUMMARY "[Port %d-%d] SDH Up"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1049 }

starSDHPathHopDown NOTIFICATION-TYPE
OBJECTS { starSDHPathSlot, starSDHPathPort, starSDHPathNum, starSDHPathOperState }
STATUS current
DESCRIPTION
"The identified SDH Path is down. The value of starSDHPathOperState identifies the specific failure bits."
---#SUMMARY "[Port %d-%d] SDH Path down, path %d, operstate %x"
---#ARGUMENTS {0,1,2,3}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1050 }

starSDHPathHopUp NOTIFICATION-TYPE
OBJECTS { starSDHPathSlot, starSDHPathPort, starSDHPathNum }
STATUS current
DESCRIPTION
"The identified SDH Path is up."
---#SUMMARY "[Port %d-%d] SDH Path up, path %d"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1051 }

starE1TribDown NOTIFICATION-TYPE
OBJECTS { starE1TribSlot, starE1TribPort, starE1TribPath, starE1TribTug2, starE1TribTu12, starE1TribOperStateLOP }
STATUS current
DESCRIPTION
"The identified E1 Tributary on this port is down. The value of starE1TribOperStateLOP identifies
the specific failure bits.

Probable Cause:

Action to be Taken:

Condition Clear Alarm: This condition is cleared by a starSDHLopDown notification,

---#SUMMARY "([Port %d-%d] E1 Tributary down, path %d, E1 tributary %d/%d, LOP operstate %x"
---#ARGUMENTS (0,1,2,3,4,5)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1052 }

starSDHLopUp NOTIFICATION-TYPE
OBJECTS { starE1TribSlot, starE1TribPort, starE1TribPath, starE1TribTug2, starE1TribTul2 }
STATUS current
DESCRIPTION
"The identified E1 Tributary on this port is now up.  A starE1TributaryUp notification is
only generated if a starSDHLopDown was previously generated for this E1 tributary."
---#SUMMARY "([Port %d-%d] E1 Tributary up, path %d, E1 tributary %d/%d"
---#ARGUMENTS (0,1,2,3,4)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1053 }

starIMSUEServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A IMSUE Service has started

Action to be Taken: No action required"
---#SUMMARY "([Service IMSUE-%s-%s] IMSUE service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1054 }

starIMSUEServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A IMSUE Service has stopped.

Probable Cause: This is typically caused by operator invention.  In
rare cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the IMSUE service shutdown was not planned,
examine the admin logs for an indication of the failure.  Verify that
all configured PACs are present and running in the system.  Check the

Clear Condition: Verify that the IMSUE service is operational.

Condition Clear Alarm: A starIMSUEServiceStart notification will be
generated when the service is restarted"
---#SUMMARY "([Service IMSUE-%s-%s] IMSUE service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1055 }
starSS7PCCongested NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7Pc, starSS7CongLevel, starSS7LocalCong}
STATUS current
DESCRIPTION
"SS7 Point code is congested, all the routes to this point-code is congested.

Possible reason:
1. All the routes (both M3UA and MTP3) to this Point Code have become congested.

Condition Clear Alarm: A starSS7PCCongestionCleared notification will be generated when the congestion gets cleared for any one of the routes

---#SUMMARY "[ss7-routing-domain %d] point code-%d %d congested level-%d"
---#ARGUMENTS {0,1,2,3}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1056 }

starSS7PCCongestionCleared NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7Pc, starSS7CongLevel, starSS7LocalCong}
STATUS current
DESCRIPTION
"SS7 Point code Congestion gets cleared, one of the routes to this point-code is cleared from congestion.

Possible reason:
1. One of the routes (either M3UA or MTP3) to this Point Code has resumed from congestion.

starSS7PCCongestionCleared is generated only when a previous starSS7PCCongested is generated.

---#SUMMARY "[ss7-routing-domain %d] point code-%d %d congestion cleared level-%d"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1057 }

starPHSGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS obsolete
DESCRIPTION
"A PHS-GW Service has started

Action to be Taken: No action required"
---#SUMMARY "[Service PHG-GW-%s-%s] PHS-GW service has started"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1058 }

starPHSGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS obsolete
DESCRIPTION
"A PHS-GW Service has stopped.

Probable Cause: This is typically caused by operator invention. In rare cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the PHS-GW service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the PHS-GW service is operational.

Condition Clear Alarm: A starPHSGWServicestart notification will be generated when the service is restarted

---#SUMMARY "[Service PHS-GW-%s-%s] PHS-GW service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1059 }

starGPRSservicestart NOTIFICATION-TYPE
OBJECTS { starServiceturnonName, starServiceturnonName }
STATUS current
DESCRIPTION
"A GPRS Service has started
Action to be Taken: No action required"
---#SUMMARY "[Service GPRS %s-%s] GPRS service has started"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1060 }

starGPRSservicestop NOTIFICATION-TYPE
OBJECTS { starServiceturnonName, starServiceturnonName }
STATUS current
DESCRIPTION
"A GPRS Service has stopped.
Probable Cause:
In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration. This can also happen due to some misconfiguration of the service parameters.

Action to be Taken: If the GPRS service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the GPRS service is operational.

Condition Clear Alarm: A starGPRSservicestart notification will be generated when the service is restarted"
---#SUMMARY "[Service GPRS %s-%s] GPRS service has stopped"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1061 }

starGPRSNiseDown NOTIFICATION-TYPE
OBJECTS { starGPRSNsei }
STATUS current
DESCRIPTION
"Network Service Entity (NSE) is down.

Possible reason:
The Last NSVC (Network Service virtual circuit in the NSE) is down.

Condition Clear Alarm: A starGPRSNiseUp will be generated when at least one NSVC in the NSE comes up"

---#SUMMARY "[nsei %d] NSE down "
---#ARGUMENTS (0)
STARENT-MIB DEFINITIONS ::= BEGIN

starGPRSnsUp NOTIFICATION-TYPE
OBJECTS { starGPRSNsei }
STATUS current
DESCRIPTION "Network Service Entity (NSE) is up.
Possible reason:
The First NSVC(Network Service virtual circuit in the NSE is up.
starGPRSnsUp is generated only when a previous starGPRSnsDown has been generated"

--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1062 }

starGPRSnsDown NOTIFICATION-TYPE
OBJECTS { starGPRSNsei, starGPRSnsvci }
STATUS current
DESCRIPTION "Network Service Entity Virtual Circuit (NSVC) is down.
Possible reasons:
1) NS_ALIVE heartbeat messages sent from the Serving GPRS support Node (SGSN) were not acknowledged by the Base Station Subsystem(BSS) for a configured number of maximum retries.
This trap is generated only when an NSVC goes down due to reasons other than physical port failure. A separate trap is generated for a physical port failure event.
Condition Clear Alarm: A starGPRSnsvUp will be generated when the NSVC comes up"

--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1063 }

starGPRSsvcUp NOTIFICATION-TYPE
OBJECTS { starGPRSNsei, starGPRSsvc }
STATUS current
DESCRIPTION "An Network Service Entity Virtual Circuit (NSVC) comes up
An starGPRSsvcUp trap is generated only when a previous starGPRSsvcDown was generated"

--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1064 }

starGPRSsvcDown NOTIFICATION-TYPE
OBJECTS { starGPRSNsei, starGPRSsvc }
STATUS current
DESCRIPTION "Base Station Subsystem (BSS) GPRS (General Packet Radio Service) Protocol (BSSGP) Virtual Circuit (BVC) is Down."
Possible reason:
1) ALL Network Service Entity Virtual Circuit (NSVC) associated with this BVC are down

Condition Clear Alarm: A starGPRSBvcUp will be generated when the BVC is available

---#SUMMARY "[nsei %d] bvci %d BVC is down"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1066 }

starGPRSBvcUp NOTIFICATION-TYPE
OBJECTS { starGPRSNsei, starGPRSBvci }
STATUS current
DESCRIPTION
"Base Station Subsystem (BSS) GPRS (General Packet Radio Service) Protocol (BSSGP) Virtual Circuit (BVC) is Up

Possible reasons:
1) Atleast one NSVC associated with the BVC becomes available.

starGPRSBvcUp is generated only when a previous starGPRSBvcDown has been generated.
"
---#SUMMARY "[nsei %d] bvci %d BVC Up"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1067 }

starSDHE1TribDown NOTIFICATION-TYPE
OBJECTS { starE1TribSlot, starE1TribPort, starE1TribPath, starE1TribTug2, starE1TribTul2, starE1TribOperState }
STATUS current
DESCRIPTION
"The identified E1 Tributary on this port is down.

Probable Cause:

Action to be Taken:

Condition Clear Alarm: This condition is cleared by a starSDHTugUp notification,"
---#SUMMARY "[Port %d-%d] E1 Tributary down, path %d, E1 tributary %d/%d, operstate %x"
---#ARGUMENTS (0,1,2,3,4,5)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1068 }

starSDHE1TribUp NOTIFICATION-TYPE
OBJECTS { starE1TribSlot, starE1TribPort, starE1TribPath, starE1TribTug2, starE1TribTul2 }
STATUS current
DESCRIPTION
"The identified E1 Tributary on this port is up."
---#SUMMARY "[Port %d-%d] E1 Tributary up, path %d, E1 tributary %d/%d"
---#ARGUMENTS (0,1,2,3,4)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1069 }

starSDHFracE1LMIDown NOTIFICATION-TYPE
OBJECTS { starFractE1TribSlot, starFractE1TribPort, starFractE1TribPath, starFractE1TribTug2, starFractE1TribTul2, starFractE1TribTimeslots }
STARENT-MIB DEFINITIONS ::= BEGIN

  starSDHFractE1LMIUp NOTIFICATION-TYPE
  OBJECTS {
    starFractE1TribSlot,
    starFractE1TribPort,
    starFractE1TribPath,
    starFractE1TribTug2,
    starFractE1TribTu12,
    starFractE1TribTimeslots
  }

  starPHSPCServiceStart NOTIFICATION-TYPE
  OBJECTS { starServiceVpnName, starServiceServName }
  STATUS obsolete
  DESCRIPTION
    "A PHS-PC Service has started"
    --#SUMMARY "[Service PHS-PC-%s-%s] PHS-PC service has started"
    --#ARGUMENTS (0,1)
    --#STATE OPERATIONAL
    --#SEVERITY INFORMATIONAL
    ::= { starentTraps 1072 }  

  starPHSPCServiceStop NOTIFICATION-TYPE
  OBJECTS { starServiceVpnName, starServiceServName }
  STATUS obsolete
  DESCRIPTION
    "A PHS-PC Service has stopped."
    Probable Cause: This is typically caused by operator invention. In rare cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.
    Action to be Taken: If the PHS-PC service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs are present and running in the system. Check the crash logs for an indication of a software failure.
    Clear Condition: Verify that the PHS-PC service is operational.
    Condition Clear Alarm: A starPHSPCServiceStart notification will be generated when the service is restarted"
    --#SUMMARY "[Service PHS-PC-%s-%s] PHS-PC service has stopped"
    --#ARGUMENTS (0,1)
    --#STATE DEGRADED
    --#SEVERITY MAJOR

END
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STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 1073 }

starM3UAPSPCongested NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7M3UAPsId, starSS7M3UAPspId, starSS7Pc, starSS7CongLevel}
STATUS current
DESCRIPTION "Peer Server Process (PSP) link is congested, when the congestion queue size rises above the threshold limit.

Possible reason:
1. No Stream Control Transmission Protocol (SCTP) Acknowledgement from peer end due to packet loss
2. Acknowledgement with zero window size

Condition Clear Alarm: A starM3UAPSPCongestionCleared notification will be generated when the congestion queue size goes below the threshold limit
"

--#SUMMARY "[ss7-routing-domain %d] peer-server-%d peer-server-porcess-%d (point-code-%d) congested"
--#ARGUMENTS {0,1,2,3}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1074 }

starM3UAPSPCongestionCleared NOTIFICATION-TYPE
OBJECTS { starSS7rdId, starSS7M3UAPsId, starSS7M3UAPspId, starSS7Pc, starSS7CongLevel}
STATUS current
DESCRIPTION "Peer Server Process (PSP) link Congestion gets cleared, when the congestion queue size goes below the threshold limit.
starM3UAPSPCongestionCleared is generated only when a previous starM3UAPSPCongested is generated.
"

--#SUMMARY "[ss7-routing-domain %d] peer-server-%d peer-server-porcess-%d (point-code-%d) congestion cleared"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1075 }

starStorageFailed NOTIFICATION-TYPE
OBJECTS { starStorageSlot, starStorageName }
STATUS current
DESCRIPTION "The specified storage device has failed. This storage device is now out of service and cannot be used to store additional data.

This notification is currently only generated for failures on the hard drive attached to the SMC card.

Probable Cause: A hardware failure on the device; a hardware failure on the card to which the device is attached.

Action to be Taken: Replace the card

Condition Clear Alarm: A starCardRemoved notification will be generated when the card is removed from the chassis."

--#SUMMARY "[Slot-%d] Storage device %s failed"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1076 }

starRaidFailed NOTIFICATION-TYPE
OBJECTS { starStorageName }

::= { starentTraps 1077 }

STAREND-MIB DEFINITIONS ::= BEGIN
STATUS current
DESCRIPTION
"The specified raid array has failed. The raid array can no longer be used to
store data.

Probable Cause: Hardware failure(s) on the devices within the raid array;
Hardware failure(s) on the card(s) to which the devices are attached;
the removal of the cards containing devices in the array; operator action
which disabled the raid array.

Condition Clear Alarm: a starRaidStarted notification will be generated when the
raid array is online.

---#SUMMARY "[System] Raid array %s failed"
---#ARGUMENTS (0)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1077 }

starRaidStarted NOTIFICATION-TYPE
OBJECTS { starStorageName }
STATUS current
DESCRIPTION
"The specific raid array has resumed operation. This notification is only generated
if a starRaidFailed notification was previously generated for this array."

---#SUMMARY "[System] Raid array %s started"
---#ARGUMENTS (0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1078 }

starRaidDegraded NOTIFICATION-TYPE
OBJECTS { starStorageName, starStorageSlot, starStorageName }
STATUS current
DESCRIPTION
"The specified raid array is running in a degraded state. This typically means
one of the member devices has failed or become unavailable. The raid array
continues to function and can read/store data, but may not be operating in
a redundant manner.

Probable Cause: Hardware failure(s) on the devices within the raid array;
Hardware failure(s) on the card(s) to which the devices are attached;
the removal of the cards containing devices in the array; operator action
which disabled the raid array.

The first variable binding, starStorageName is indicating the raid array
name; The second variable binding, starStorageSlot is the disk card number,
in which the fail happens; The third varbind, which is also the second
starStorageName, is the name of the disk that the fail happens.

Condition Clear Alarm: a starRaidRecovered notification will be generated when the
raid array is fully recovered.

---#SUMMARY "[System] Raid array %s degraded; slot/device %d/%s unavailable"
---#ARGUMENTS (0,1,2)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1079 }

starRaidRecovered NOTIFICATION-TYPE
OBJECTS { starStorageName, starStorageSlot, starStorageName }
STATUS current
DESCRIPTION
"The specific raid array has been recovered and is running in its normal,
redundant state. This notification is only generated if a starRaidDegraded
notification was previously generated for this array. As to the variable bindings, please refer to the trap starRaidDegraded.

"--#SUMMARY "[System] Raid array %s recovered; slot/device %s/%s added to array"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATION
::= { starentTraps 1080 }

starPGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A Packet Data Network Gateway (PGW) Service has started.

Action to be Taken: No action required"
--#SUMMARY "[Service PGW-%s-%s] PGW service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATION
::= { starentTraps 1081 }

starPGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A Packet Data Network Gateway (PGW) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSGs) to support the running configuration.

Action to be Taken: If the PGW service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSGs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the PGW service is operational.

Condition Clear Alarm: A starPGWServiceStart notification will be generated when the service is restarted"
--#SUMMARY "[Service PGW-%s-%s] PGW service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1082 }

starSGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A Serving Gateway (SGW) Service has started.

Action to be Taken: No action required"
--#SUMMARY "[Service SGW-%s-%s] SGW service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATION
::= { starentTraps 1083 }

starSGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

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starSGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An Evolved GPRS Tunneling Protocol (EGTP) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.

Action to be Taken: If the EGTP service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the EGTP service is operational.

Condition Clear Alarm: A starEGTPServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service EGTP-%s-%s] EGTP service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1086 }

starLMAServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

STATUS current
DESCRIPTION
"A Serving Gateway (SGW) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.

Action to be Taken: If the SGW service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the SGW service is operational.

Condition Clear Alarm: A starSGWServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service SGW-%s-%s] SGW service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1084 }
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STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
"A Local Mobility Anchor (LMA) Service has started.
Action to be Taken: No action required"
--#SUMMARY "[Service LMA-%s-%s] LMA service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATION ::= { starentTraps 1087 }

starLMAServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A Local Mobility Anchor (LMA) Service has stopped.
Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.
Action to be Taken: If the LMA service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the crash logs for an indication of a software failure.
Clear Condition: Verify that the LMA service is operational.
Condition Clear Alarm: A starLMAServiceStart notification will be generated when the service is restarted"
--#SUMMARY "[Service LMA-%s-%s] LMA service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR ::= { starentTraps 1088 }

starMAGServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A Mobile Access Gateway (MAG) Service has started.
Action to be Taken: No action required"
--#SUMMARY "[Service MAG-%s-%s] MAG service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATION ::= { starentTraps 1089 }

starMAGServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A MAG Service has stopped.
Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.
Action to be Taken: If the MAG service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the MAG service is operational.

Condition Clear Alarm: A starMAGServiceStart notification will be generated when the service is restarted

---#SUMMARY “[Service MAG-%s-%s] MAG service has stopped”
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1090 }

starMMEServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
“A Mobility Management Entity (MME) Service has started.

Action to be Taken: No action required”
---#SUMMARY “[Service MME-%s-%s] MME service has started”
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATION
::= { starentTraps 1091 }

starMMEServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
“A Mobility Management Entity (MME) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.

Action to be Taken: If the MME service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the MME service is operational.

Condition Clear Alarm: A starMMEServiceStart notification will be generated when the service is restarted

---#SUMMARY “[Service MME-%s-%s] MME service has stopped”
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1092 }

starHSGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
“A HRPD Serving Gateway (HSGW) Service has started.

Action to be Taken: No action required”
---#SUMMARY “[Service HSGW-%s-%s] HSGW service has started”
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATION
::= { starentTraps 1093 }
starHSGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A HRPD Serving Gateway (HSGW) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.

Action to be Taken: If the HSGW service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the HSGW service is operational.

Condition Clear Alarm: A starHSGWServiceStart notification will be generated when the service is restarted"
--#SUMMARY "[Service HSGW-%s-%s] HSGW service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1094 }

starCPUBusyClear NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION
"The CPU is no longer busy."
--#SUMMARY "[Card %d] CPU %d is no longer experiencing very high usage"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1095 }

starCPUMemoryLowClear NOTIFICATION-TYPE
OBJECTS { starCPUSlot, starCPUNumber }
STATUS current
DESCRIPTION
"The CPU is no longer experiencing a low memory condition."
--#SUMMARY "[Card %d] CPU %d is no longer low on available memory"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1096 }

-- FNG Service

starFNGServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A FNG Service has started
Action to be Taken: No action required"
--#SUMMARY "[Service FNG-%s-%s] FNG service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1097 }

starFNGServiceStop NOTIFICATION-TYPE
A FNG Service has stopped.  
Probable Cause: This is typically caused by operator invention. In rare cases it can be caused by the loss of resources (PACs) to support the running configuration.

Action to be Taken: If the FNG service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the FNG service is operational.

Condition Clear Alarm: A startFNGServiceStart notification will be generated when the service is restarted

--#SUMMARY "[Service FNG-%s-%s] FNG service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1098 }

starManagerRestart NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard, starTaskCPU }
STATUS current
DESCRIPTION
"The identified manager task has been restarted."
--#SUMMARY "[System] Manager %s/%d restarted on %d/%d"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1099 }

starConfigurationUpdate NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"The configuration of the chassis has been changed. This notification is generated based on a periodic polling of the chassis; it is not real-time generated based on individual changes. The configuration change could have been made via CLI sessions, CORBA management operations, or other methods.

This notification is not generated by default; it is only generated if the configuration polling mechanism is specifically enabled."
--#SUMMARY "[System] System configuration updated"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1100 }

-- PDG Service

starPDGServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PDG Service has started
Action to be Taken: No action required"
--#SUMMARY "[Service PDG-%s-%s] PDG service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 1101 }

starPDGServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PDG Service has stopped.
Probable Cause: This is typically caused by operator invention. In
rare cases it can be caused by the loss of resources (PACs) to
support the running configuration.

Action to be Taken: If the PDG service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs are present and running in the system. Check the
.crash logs for an indication of a software failure.

Clear Condition: Verify that the PDG service is operational.

Condition Clear Alarm: A starPDGServiceStart notification will be generated when
the service is restarted"

--#SUMMARY "[Service PDG-%s-%s] PDG service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1102 }

starDynPkgLoadError NOTIFICATION-TYPE
OBJECTS { starDynPkgFilename, starDynCFErrorCode }
STATUS current
DESCRIPTION
"The Dynamic rater package error displayed with an error code.

Action to be Taken: If no or invalid rater.pkg file is there in the specified directory then
place a rater_f.pkg file in the directory and give an upgrade command or place a valid
Rater.pkg file and load the SRDBs by killing them all.

Condition Clear Alarm: This condition is cleared by a starDynPkgLoadErrorClear
notification"

--#SUMMARY "[System] Dynamic Rater package %s error code: %s"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1103 }

starDynPkgLoadErrorClear NOTIFICATION-TYPE
OBJECTS { starDynPkgFilename, starDynCFErrorCode }
STATUS current
DESCRIPTION
"The Dynamic rater package error removed.

Action to be Taken: No action required"

--#SUMMARY "[System] Dynamic Rater package %s error code: %s cleared"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1104 }

starDynPkgUpgradeError NOTIFICATION-TYPE
OBJECTS { starDynPkgUpgradeFilename, starDynCFUpgradeErrorCode }
STATUS current

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DESCRIPTION
"The Dynamic rater package error displayed with an error code.

Action to be Taken: Place a valid rater_f.pkg file in the directory and give an upgrade command.

Condition Clear Alarm: This condition is cleared by a starDynPkgUpgradeErrorClear notification
---#SUMMARY "[System] Dynamic Rater package %s error code: %s"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY INFORMATIONAL
::= { starentTraps 1105 }

starDynPkgUpgradeErrorClear  NOTIFICATION-TYPE
OBJECTS { starDynPkgUpgradeFilename, starDynCFUpgradeErrorCode }
STATUS  current
DESCRIPTION
"The Dynamic Rater package error removed.

Action to be Taken: No action required"
---#SUMMARY "[System] Dynamic Rater package %s error code: %s cleared"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1106 }

starCSCFPeerServerUnavailable NOTIFICATION-TYPE
OBJECTS { starCSCFPeerServerVpnName, starCSCFPeerServerSvcName, starCSCFPeerServerName }
STATUS  current
DESCRIPTION
"Peer server is unavailable"
---#SUMMARY "[CSCF %s-%s] CSCF Peer Server %s Unavailable"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1107 }

starCSCFPeerServerOutofService NOTIFICATION-TYPE
OBJECTS { starCSCFPeerServerVpnName, starCSCFPeerServerSvcName, starCSCFPeerServerName }
STATUS  current
DESCRIPTION
"Peer server is out-of-service"
---#SUMMARY "[CSCF %s-%s] CSCF Peer Server %s Out-of-service"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY CRITICAL
::= { starentTraps 1108 }

starCSCFPeerServerInService NOTIFICATION-TYPE
OBJECTS { starCSCFPeerServerVpnName, starCSCFPeerServerSvcName, starCSCFPeerServerName }
STATUS  current
DESCRIPTION
"Peer server unavailable and/or out of service condition cleared"
---#SUMMARY "[CSCF %s-%s] CSCF Peer Server %s Available and In Service"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1109 }

starServiceLossPTACsClear NOTIFICATION-TYPE
OBJECTS { starCardMode }
STATUS  current
DESCRIPTION
"Service Loss condition is no longer valid for PAC/PSC/TACs."

---#SUMMARY "[System] Service Loss condition clear for cardmode %s"
---#ARGUMENTS {0}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1110 }

starServiceLossLCClear NOTIFICATION-TYPE
OBJECTS { starCardType, starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"Service Loss condition is no longer valid for LC."

---#SUMMARY "[System] Service Loss condition clear because one of the two %s cards (%d, %d) is active now"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1111 }

starEgtpcPathFailure NOTIFICATION-TYPE
OBJECTS { starEGTPVpnName, starEGTPServName, starEGTPInterfaceType,
starEGTPSelfAddr, starEGTPPeerAddr, starEGTPPeerOldRstCnt, starEGTPPeerNewRstCnt, starEGTPPeerSessCnt,
starEGTPFailureReason }
STATUS current
DESCRIPTION
"EGTP Control Path Failure. No response received for GTPV2 request sent from MME or SGW or PGW.
Possible reason: Remote peer MME or SGW or PGW is down
Condition Clear Alarm: A StarEgtpcPathFailureClear notification will be generated when
the control path to the remote peer MME or SGW or PGW becomes available"

---#SUMMARY "[Service GTPV2-%s-%s] EGTP control path failure interface type %s, self address %s,
peer address %s, peer old restart counter %d, peer new restart counter %d, peer session count %d,
failure reason %s"
---#ARGUMENTS {0,1,2,3,4,5,6,7,8}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1112 }

starEgtpcPathFailureClear NOTIFICATION-TYPE
OBJECTS { starEGTPVpnName, starEGTPServName, starEGTPInterfaceType, starEGTPSelfAddr,
starEGTPPeerAddr, starEGTPPeerOldRstCnt, starEGTPPeerSessCnt }
STATUS current
DESCRIPTION
"EGTP Control Path Failure condition is no longer valid."

---#SUMMARY "[Service GTPV2-%s-%s] EGTP control path failure condition clear for interface type %s,
self address %s, peer address %s, peer restart counter %d, peer session count %d"
---#ARGUMENTS {0,1,2,3,4,5,6}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1113 }

starCscfSessResourceCongestion NOTIFICATION-TYPE
OBJECTS { starSmgrId, starCongestionPolicy, starCscfSessCongestionResourceType }
STATUS current
DESCRIPTION
"A congestion condition has occurred at Session Manager for Cscf Service.
Probable Cause: This is the result of an operator-configured congestion
threshold being reached for Cscf Service at Session Manager. This can be due to high
usage of the resource being monitored which indicates that the
IMG is reaching its peak capacity, or could be caused by the incorrect configuration of the congestion thresholds.

Actions to be Taken: Verify that the congestion thresholds are correct; if the congested state is seen repeatedly, or for sustained periods of time, additional system capacity may need to be brought online.

This system is cleared when the use of the specific resource falls below the configured limit.

Condition Clear Alarm: A starCscfSessResourceCongestionClear notification is sent when there are no congestion conditions for cscf service in that Session Manager Instance

---SUMMARY "[System] Cscf Congestion seen for sessmgr-%d; resource %s, policy %s applied"
---#ARGUMENTS (0,2,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1114 }

starCscfSessResourceCongestionClear NOTIFICATION-TYPE
OBJECTS { starSmgrId }
STATUS current
DESCRIPTION
"A congestion condition has cleared at Session Manager for Cscf service"
---SUMMARY "[System] Cscf Congestion clear for sessmgr-%d"
---#ARGUMENTS (0)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1115 }

starOSPFv3NeighborDown NOTIFICATION-TYPE
OBJECTS { starContextName, starInterfaceName, starInterfaceIPAddress, starOSPFNeighborRouterID, starOSPFFromState, starOSPFToState }
STATUS current
DESCRIPTION
"An OSPFv3 neighbor is down.

Condition Clear Alarm: A starOSPFv3NeighborFull notification will be generated when the neighbor is restored.”
---SUMMARY "[VPN %s] OSPFv3 Neighbor down, interface %s/%s, OSPFv3 Neighbor %s, transitioned from state %s to %s"
---#ARGUMENTS (0,1,2,3,4,5)
---#STATE DEGRADED
---#SEVERITY MINOR
::= { starentTraps 1116 }

starOSPFv3NeighborFull NOTIFICATION-TYPE
OBJECTS { starContextName, starInterfaceName, starInterfaceIPAddress, starOSPFNeighborRouterID }
STATUS current
DESCRIPTION
"An OSPFv3 neighbor is full.  A starOSPFv3NeighborFull notification is only sent for neighbors which had previous been declared down via a starOSPFv3NeighborDown notification.”
---SUMMARY "[VPN %s] OSPFv3 Neighbor full, interface %s/%s, OSPFv3 Neighbor %s"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1117 }

starServiceLossSPIOClear NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"Service Loss condition is no longer valid for SPIO.”
---SUMMARY "[System] Service Loss condition clear for SPIO"
---#STATE OPERATIONAL
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STARENT-MIB DEFINITIONS ::= BEGIN

---#SEVERITY INFORMATIONAL
::= { starentTraps 1118 }

starEgtpuPathFailure NOTIFICATION-TYPE
 OBJECTS { starEgTPVpnName, starEgTPServName, starEGTPSelfAddr, starEGTPPeerAddr, starEGTPSelfPort,
          starEGTPPeerPort, starEGTPPeerSessCnt }
 STATUS current
 DESCRIPTION
 "No response received for GTP-U ECHO requests. Data path failure detected towards peer EPC Node.

Check if the peer RNC or GSN is up
Possible reason: Remote EPC node is down
Condition Clear Alarm: A starEgtpuPathFailureClear notification will be generated when the
data path towards the peer node is available"
---#SUMMARY "[Service GTPU-%s-%s] EGTPU path failure self address %s, peer address %s, self port %d,
peer port %d, peer session count %d"
---#ARGUMENTS {0,1,2,3,4,5,6}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1119 }

starEgtpuPathFailureClear NOTIFICATION-TYPE
 OBJECTS { starEgTPVpnName, starEgTPServName, starEGTPSelfAddr, starEGTPPeerAddr, starEGTPSelfPort,
          starEGTPPeerPort }
 STATUS current
 DESCRIPTION
 "The data path to the peer EPC node which was down is now available
A starEgtpuPathFailureClear notification is only generated for nodes which had previously
generated a starEgtpuPathFailure notification"
---#SUMMARY "[Service GTPU-%s-%s] EGTPU path failure condition clear for self address %s, peer address
%s self port %d, peer port %d"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1120 }

starStorageServerCDRLoss NOTIFICATION-TYPE
 OBJECTS { starSessGGSNVpnName, starSessGGSNPeerAddr, starGSSCDRLossConfigured,
          starGSSCDRLossMeasured, starGSSClusterName, starGSSClusterNodeName }
 STATUS current
 DESCRIPTION
 "GTPP Storage Server is experiencing CDR Loss greater than the configured threshold value at the
GSS.
Note that this is an external server, not part of the ST16."
---#SUMMARY "[System] GTPP Storage Server CDR Loss, VPN %s Server Address %s, GTPP Storage Server
Cluster %s node %s, CDR Lost %d (alarm at %d )"
---#ARGUMENTS {0,1,4,5,3,2}
---#STATE OPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 1121 }

starHNBGWServiceStart NOTIFICATION-TYPE
 OBJECTS { starServiceVpnName, starServiceServName }
 STATUS current
 DESCRIPTION
 "A Home Node B Gateway (HNB GW) Service has started.
Action to be Taken: No action required"
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**STARENT-MIB DEFINITIONS ::= BEGIN**

```
--#SUMMARY "[Service HNBGW-%s-%s] HNB GW service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATION
::= { starentTraps 1122 }

starHNBGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A Home Node B Gateway (PGN) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In
rare cases it can be caused by the loss of resources (PSCs) to support
the running configuration.

Action to be Taken: If the HNB GW service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the HNB GW service is operational.

Condition Clear Alarm: A starHNBGWServiceStart notification will be
generated when the service is restarted"
--#SUMMARY "[Service HNBGW-%s-%s] HNB GW service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1123 }

starSystemReboot NOTIFICATION-TYPE
OBJECTS { starChassisType, starChassisDescription, starChassisSWRevision }
STATUS current
DESCRIPTION
"The system has rebooted by the operator. If successful, a subsequent
starSystemStartup trap is typically generated.

Action to be Taken: No action required. If the reboot was not scheduled the
admin logs can be examined to determine who invoked the reboot operation."
--#SUMMARY "[Chassis] System Reboot, Starent %s chassis, '%s', SW Revision %s"
--#ARGUMENTS {0,1,2}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1124 }

starLicenseAboutToExpire NOTIFICATION-TYPE
OBJECTS { starLicenseKey, starLicenseExpiryDate, starLicenseDaysRemaining }
STATUS current
DESCRIPTION
"A license is about to expire.

Action to be Taken: A new license should be created and configured on the system
before the grace period is over."
--#SUMMARY "[System] License is about to expire for license with key %d, expiration date %s with %d
day to expire."
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 1125 }

starLicenseExpired NOTIFICATION-TYPE
OBJECTS { starLicenseKey, starLicenseExpiryDate, starLicenseDaysAfterExpiry }
```
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STARENT-MIB DEFINITIONS ::= BEGIN

STATUS current
DESCRIPTION
   "A license is in the grace period and should be updated with a new license.
   Action to be Taken: A new license should be created and configured on the system."
   --#SUMMARY "[System] License expired for license with key %d, expiration date %s and it has been %d
   day the license has expired."
   --#ARGUMENTS (0,1,2)
   --#STATE NONOPERATIONAL
   --#SEVERITY CRITICAL
::= { starentTraps 1126 }

-- PCC-Policy Service

starPCCPolicyServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
   "A PCC-Policy Service has started
   Action to be Taken: No action required"
   --#SUMMARY "[Service PCC-Policy-%s-%s] PCC-Policy service has started"
   --#ARGUMENTS (0,1)
   --#STATE OPERATIONAL
   --#SEVERITY INFORMATIONAL
::= { starentTraps 1127 }

starPCCPolicyServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
   "A PCC-Policy Service has stopped.
   Probable Cause: This is typically caused by operator invention. In
   rare cases it can be caused by the loss of resources (PACs/PSCs) to
   support the running configuration.
   Action to be Taken: If the PCC-Policy service shutdown was not planned,
   examine the admin logs for an indication of the failure. Verify that
   all configured PACs/PSCs are present and running in the system. Check
   the crash logs for an indication of a software failure.
   Clear Condition: Verify that the PCC-Policy service is operational.
   Condition Clear Alarm: A starPCCPolicyServiceStart notification will
   be generated when the service is restarted"
   --#SUMMARY "[Service PCC-Policy-%s-%s] PCC-Policy service has stopped"
   --#ARGUMENTS (0,1)
   --#STATE DEGRADED
::= { starentTraps 1128 }

-- PCC-Quota Service

starPCCQuotaServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
   "A PCC-Quota Service has started
   Action to be Taken: No action required"
   --#SUMMARY "[Service PCC-Quota-%s-%s] PCC-Quota service has started"
   --#ARGUMENTS (0,1)
   --#STATE OPERATIONAL
   --#SEVERITY INFORMATIONAL

384
STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 1129 }

starPCCQuotaServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PCC-Quota Service has stopped.
Probable Cause: This is typically caused by operator invention. In rare cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the PCC-Quota service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the PCC-Quota service is operational.

Condition Clear Alarm: A starPCCQuotaServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service PCC-Quota-%s-%s] PCC-Quota service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1130 }

-- PCC-AF Service

starPCCAFServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PCC-AF Service has started
Action to be Taken: No action required"

--#SUMMARY "[Service PCC-AF-%s-%s] PCC-AF service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1131 }

starPCCAFServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A PCC-AF Service has stopped.
Probable Cause: This is typically caused by operator invention. In rare cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the PCC-AF service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the PCC-AF service is operational.

Condition Clear Alarm: A starPCCAFServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service PCC-AF-%s-%s] PCC-AF service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED

385
STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY MAJOR ::= { starentTraps 1132 }

--SPR Failures

starSPRServerUnreachable NOTIFICATION-TYPE
OBJECTS { starSPRServerIpAddr }
STATUS current
DESCRIPTION
"The Subscriber Profile Repository (SPR) server cannot be reached.
Probable Cause: The SPR server is down, or there is a network issue
preventing communication with the SPR server.
Actions to be Taken: Restore the SPR server to an operational status;
Verify that the SPR server is reachable by performing a 'ping' operation
from the CLI in the appropriate context. Check the admin logs for
notification of communication problems.
Clear Condition: Verify that communication to the SPR authentication
server has been restored.
Condition Clear Alarm: When this condition clears a starSPRServerReachable
notification will be generated."
--#SUMMARY "[System] SPR Server %s is unreachable"
--#ARGUMENTS {0}
--#STATE DEGRADED
--#SEVERITY MAJOR ::= { starentTraps 1133 }

starSPRServerReachable NOTIFICATION-TYPE
OBJECTS { starSPRServerIpAddr }
STATUS current
DESCRIPTION
"The Subscriber Profile Repository (SPR) server is now reachable.
This can be the result of a system startup, the configuration
of a new server, or a previously unreachable server becoming reachable.
Action to be Taken: No Action Required."
--#SUMMARY "[System] SPR Server %s is reachable"
--#ARGUMENTS {0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL ::= { starentTraps 1134 }

starGSServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A GS Service has started
Action to be Taken: No action required"
--#SUMMARY "[Service GS %s-%s] GS service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL ::= { starentTraps 1135 }

starGSServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A GS Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the GS service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the GS service is operational.

Condition Clear Alarm: A starGSServiceStart notification will be generated when the service is restarted"

```
--#SUMMARY "[Service GS %s-%s] GS service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
 ::= { starentTraps 1136 }
```

starMAPServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A MAP Service has started
Action to be Taken: No action required"

```
--#SUMMARY "[Service MAP %s-%s] MAP service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 1137 }
```

starMAPServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A MAP Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the MAP service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the MAP service is operational.

Condition Clear Alarm: A starMAPServiceStop notification will be generated when the service is restarted"

```
--#SUMMARY "[Service MAP %s-%s] MAP service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
 ::= { starentTraps 1138 }
```

starIUPSServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An IUPS Service has started
Action to be Taken: No action required"

```
--#SUMMARY "[Service IUPS %s-%s] IUPS service has started"
```
STARENT-MIB DEFINITIONS ::= BEGIN

--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1139 }

starIUPSServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An IUPS Service has stopped."
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the IUPS service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the IUPS service is operational.

Condition Clear Alarm: A starIUPSServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service IUPS %s-%s] IUPS service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
 ::= { starentTraps 1140 }

starSGTPServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SGTP Service has started"
Action to be Taken: No action required"

--#SUMMARY "[Service SGTP %s-%s] SGTP service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 1141 }

starSGTPServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SGTP Service has stopped."
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the SGTP service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the SGTP service is operational.

Condition Clear Alarm: A starSGTPServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service SGTP %s-%s] SGTP service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
STARENT-MIB DEFINITIONS ::= BEGIN

--#SEVERITY MAJOR
::= { starentTraps 1142 }

starEPDGServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A EPDG Service has started
Action to be Taken: No action required"
--#SUMMARY "[Service EPDG-%s-%s] EPDG service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1143 }

starEPDGServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A EPDG Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the EPDG service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the EPDG service is operational.

Condition Clear Alarm: A starEPDGServiceStart notification will be generated when the service is restarted"
--#SUMMARY "[Service EPDG-%s-%s] EPDG service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1144 }

starApsCommandSuccess NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starPortNum, starPortType }
STATUS current
DESCRIPTION
"APS Command Success Status."
--#SUMMARY "APS Command Success for card %d card type %d port %d port type %d"
--#ARGUMENTS (0,1,2,3)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1145 }

starApsCommandFailure NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starPortNum, starPortType }
STATUS current
DESCRIPTION
"APS Command Failure Status."
--#SUMMARY "APS Command Failure for card %d card type %d port %d port type %d"
--#ARGUMENTS (0,1,2,3)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1146 }

END --#SNMP MIB Reference, StarOS™ Release 21.0
starApsSwitchSuccess NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starPortNum, starPortType }
STATUS current
DESCRIPTION
   "APS Switch Success Status."
   --#SUMMARY "APS Switch Command Status for card %d card type %d port %d port type %d"
   --#ARGUMENTS (0,1,2,3)
   --#STATE DEGRADED
   --#SEVERITY MAJOR
::= { starentTraps 1147 }

starApsSwitchFailure NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starPortNum, starPortType }
STATUS current
DESCRIPTION
   "APS Switch Failure Status."
   --#SUMMARY "APS Switch Command Failure Status for card %d card type %d port %d port type %s"
   --#ARGUMENTS (0,1,2,3)
   --#STATE DEGRADED
   --#SEVERITY MAJOR
::= { starentTraps 1148 }

starApsModeMismatch NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starPortNum }
STATUS current
DESCRIPTION
   "APS Mode Mismatch Status."
   --#SUMMARY "APS Mode Mismatch for card %d card type %s port %d"
   --#ARGUMENTS (0,1,2)
   --#STATE DEGRADED
   --#SEVERITY MAJOR
::= { starentTraps 1149 }

starApsChannelMismatch NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starSlotNum }
STATUS current
DESCRIPTION
   "APS Channel Mismatch Status."
   --#SUMMARY "APS Channel Mismatch for card %d card type %s port %d"
   --#ARGUMENTS (0,1,2)
   --#STATE DEGRADED
   --#SEVERITY MAJOR
::= { starentTraps 1150 }

starApsByteMismatch NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starSlotNum }
STATUS current
DESCRIPTION
   "APS Byte Mismatch Status."
   --#SUMMARY "APS Byte Mismatch for card %d card type %s for card %d"
   --#ARGUMENTS (0,1,2)
   --#STATE DEGRADED
   --#SEVERITY MAJOR
::= { starentTraps 1151 }

starApsFeProtLineFailure NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
   "APS FE Protocol Line Failure Status."
   --#SUMMARY "APS FE Port Line Failure Status for card %d card type %s from card %d to card %d"
   --#ARGUMENTS (0,1,2,3)
STARENT-MIB DEFINITIONS ::= BEGIN

starApsLossOfRedundancy NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"APS Loss of Redundancy Status."
--#SUMMARY "APS Loss of Redundancy for card %d card type %s from card %d to card %d"
--#ARGUMENTS (0,1,2,3)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1152 }

starApsLossOfRedundancyClear NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"APS Loss of Redundancy Clear Status."
--#SUMMARY "APS Redundancy Restored for card %d card type %s from card %d to card %d"
--#ARGUMENTS (0,1,2,3)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1153 }

starHNBGWSGSNRanapReset NOTIFICATION-TYPE
OBJECTS { starSessHNBGWpName, starSessHNBGWservName, starSessHNBGWpSNwName, starSessHNBGWsGsnPtCd }
STATUS current
DESCRIPTION
"RANAP Reset Received from SGSN"
--#SUMMARY "[Service HNBGW %s-%s PS Network %s] Received RANAP Reset from SGSN %d"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1155 }

starHNBGWMSCRanapReset NOTIFICATION-TYPE
OBJECTS { starSessHNBGWpName, starSessHNBGWservName, starSessHNBGWcSNwName, starSessHNBGWmCSPtCd }
STATUS current
DESCRIPTION
"RANAP Reset Received from MSC"
--#SUMMARY "[Service HNBGW %s-%s CS Network %s] Received RANAP Reset from MSC %d"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1156 }

starALCAPNodeReset NOTIFICATION-TYPE
OBJECTS { starSessALCAPvName, starSessALCAPservName, starSessALCAPaAL2NodeName }
STATUS current
DESCRIPTION
"ALCAP Node Reset Received from MGW"
--#SUMMARY "[Service ALCAP %s-%s] AAL2 Node %s Received ALCAP Node Reset"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1157 }

starALCAPPathReset NOTIFICATION-TYPE
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starSessALCAPVpnName, starSessALCAPServName, starSessALCAPAAL2NodeName, starSessALCAPPathId }
STATUS current
DESCRIPTION
"ALCAP Path Reset Received from MGW"

--#SUMMARY "[Service ALCAP %s-%s] AAL2 Node %s Path %d Received ALCAP Path Reset"
--#ARGUMENTS (0,1,2,3)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1158 }

starALCAPPathBlock NOTIFICATION-TYPE
OBJECTS { starSessALCAPVpnName, starSessALCAPServName, starSessALCAPPathId }
STATUS current
DESCRIPTION
"ALCAP Block Received from MGW"

--#SUMMARY "[Service ALCAP %s-%s] Path %d Received ALCAP Block"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1159 }

starALCAPPathUnBlock NOTIFICATION-TYPE
OBJECTS { starSessALCAPVpnName, starSessALCAPServName, starSessALCAPPathId }
STATUS current
DESCRIPTION
"ALCAP Un Block Received from MGW"

--#SUMMARY "[Service ALCAP %s-%s] Path %d Received ALCAP Un Block"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1160 }

starSGSServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SGS Service has started
Action to be Taken: No action required"

--#SUMMARY "[Service SGS-%s-%s] SGS service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1161 }

starSGSServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A SGS Service has stopped.
Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.
Action to be Taken: If the SGS service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the

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crash logs for an indication of a software failure.

Clear Condition: Verify that the SGS service is operational.

Condition Clear Alert: A starSGSServiceStart notification will be generated when
the service is restarted

--#SUMMARY "[Service SGS-%s-%s] SGS service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1162 }

starSgsnGnMsgDelay NOTIFICATION-TYPE
OBJECTS { starSGTPVpnName, starSGTPServName, starSGTPPeerAddr }
STATUS current
DESCRIPTION
"Messaging Dealy seen towards GGSN as many messages sent to that GGSN did
not receive response within a certain time"

--#SUMMARY "[Service SGTP %s-%s] SGSN Gn Message delay towards GGSN %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1163 }

starSgsnGnMsgDelayClear NOTIFICATION-TYPE
OBJECTS { starSGTPVpnName, starSGTPServName, starSGTPPeerAddr }
STATUS current
DESCRIPTION
"The delay seen towards GGSN is no longer seen as message responses are received in time as expected"

--#SUMMARY "[Service SGTP %s-%s] Clear SGSN Gn Message delay towards GGSN %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1164 }

starBNGServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A BNG Service has started

Action to be Taken: No action required"

--#SUMMARY "[Service BNG-%s-%s] BNG service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1165 }

starBNGServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A BNG Service has stopped.

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the BNG service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
crash logs for an indication of a software failure.

Clear Condition: Verify that the BNG service is operational.

Condition Clear Alarm: A starBNGServiceStart notification will be generated when
the service is restarted

--#SUMMARY "[Service BNG-%s-%s] BNG service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1166 }

starMMES1AssocFail NOTIFICATION-TYPE
OBJECTS { starMMES1AssocVpnName, starMMES1AssocServName, starMMES1AssocENBID }
STATUS current
DESCRIPTION "An S1 Association between an MME service and an eNodeB has failed.

Action to be Taken: If the shutdown of the eNodeB was not planned, determine the health/status of the eNodeB. If available, verify the health of the network between the two elements.

Clear Condition: The condition is cleared with the S1 Association is reestablished.

Condition Clear Alarm: A starMMES1AssocEstab notification will be generated when the S1 association is re-established"
--#SUMMARY "[S1 Association %s-%s-%s] Association Failed"
--#ARGUMENTS (0,1,2)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1167 }

starMMES1AssocSetup NOTIFICATION-TYPE
OBJECTS { starMMES1AssocVpnName, starMMES1AssocServName, starMMES1AssocENBID }
STATUS current
DESCRIPTION "An S1 Association between an MME service and an eNodeB has been established. Normally a starMMES1AssocSetup notification would be generated only for an associated which had previously failed, but optionally this notification can be generated for any association setup."
--#SUMMARY "[S1 Association %s-%s-%s] Association Setup"
--#ARGUMENTS (0,1,2)
--#STATE DEGRADED
--#SEVERITY INFORMATIONAL
::= { starentTraps 1168 }

--MVG Traps

starMVGPeerDown NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starPeerAddress, starMVGEndpointName, starMVGCauseCode, starMVGProtocolType }
STATUS current
DESCRIPTION "A MVG peer is down.

Problem Cause: The MVG peer has failed, or a network connectivity prevents reaching the peer.

Condition Clear Alarm: A starMVGPeerUp notification will be generated when
STARENT-MIB DEFINITIONS ::= BEGIN

starMVGPeerUp NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starPeerAddress, starMVGEndpointName, starMVGCauseCode, starMVGProtocolType }
STATUS current
DESCRIPTION "A MVG peer is up. This notification is only generated for peers which have previously been declared down."
--#SUMMARY "[VPN %s] MVG Peer %s endpoint %s is up"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1170 }

starPCCNtfyIntfPeerUnreachable NOTIFICATION-TYPE
OBJECTS { starPCCNtfyIntfPeerName }
STATUS current
DESCRIPTION "The IPCF Event Notification Interface peer cannot be reached."
Probable Cause: The Event Notification server on SPR is down Or the IP-address/port configuration does not match with the server.
Actions to be Taken: Check the Event notification server on SPR and ensure it is running. Ensure that IP-address port combination on IPCF match the server side configurations.
Clear Condition: Verify that the Event notification interface status on boxer is up.
Condition Clear Alarm: When this condition clears a starNtfyIntfPeerReachable notification will be generated.
--#SUMMARY "[System] Event Notification Peer (%s) is unreachable"
--#ARGUMENTS {0}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1173 }

starPCCNtfyIntfPeerReachable NOTIFICATION-TYPE
OBJECTS { starPCCNtfyIntfPeerName }
STATUS current
DESCRIPTION "The Notification Interface peer can be reached."
Action to be Taken: No Action Required.
--#SUMMARY "[System] Event Notification Peer (%s) is reachable"
--#ARGUMENTS {0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1174 }

starIPSecNodePeerDown NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starPeerAddress }
STATUS current
DESCRIPTION "A Node Service peer has stopped responding."
Problem Cause: The IPSec Node peer has failed, or a network connectivity prevents reaching the peer.
Condition Clear Alarm: A starIPSecNodePeerUp notification will be generated when the peer is up
--#SUMMARY "[Service %s-%s] IPSec Node peer %s is down"
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1175 }

starIPSecNodePeerUp NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starPeerAddress }
STATUS current
DESCRIPTION
"A Node Service peer is back online
Action to be Taken: No action required"
--#SUMMARY "[Service %s-%s] IPSec Node peer %s is up"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1176 }

starApsRemoteResponseFail NOTIFICATION-TYPE
OBJECTS { starSlotNum, starCardType, starPortSlot }
STATUS current
DESCRIPTION
"APS Remote Response Fail."
--#SUMMARY "APS Remote Response Fail for card %d type %s port %d"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1177}

starCdrPurged NOTIFICATION-TYPE
OBJECTS {starSessGGSNVpnName,starSessGGSNAPNName,starSessGTPPGroupName}
STATUS current
DESCRIPTION
"CDRs purged"
--#SUMMARY "[System] CDRs purged for context %s in apn %s for gtp pp group%d"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1178 }

starLocalUserAdded NOTIFICATION-TYPE
OBJECTS {
    starCLIContext,
    starCLIUsername,
    starCLITtyname,
    starCLIRemoteIpAddrType,
    starCLIRemoteIpAddr,
    starCLIDatabaseUsername,
    starCLIPrivs
}
STATUS current
DESCRIPTION
"A local user was added to the system.
Probable Cause: A command was issued which resulted in a new user
being added to the local user database. If this was not a planned
action then further investigation is advised."
--#SUMMARY "[System] Security: Context %s User %s %s from IP %s added user %s with %s privileges to
the local database"
--#ARGUMENTS {0,1,2,3,4,5}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1180 }

starLocalUserRemoved NOTIFICATION-TYPE
OBJECTS {
    starCLIContext,
    starCLIUsername,
    starCLITtyname,
    starCLIRemoteIpAddrType,
    starCLIRemoteIpAddr,
    starCLIDatabaseUsername
}
STATUS  current
DESCRIPTION
"A local user was removed from the system.  
Probable Cause: A command was issued which resulted in an existing  
user being removed from the local user database.  If this was not 
a planned action then further investigation is advised."
--#SUMMARY "[System] Security: Context %s User %s %s from IP %s removed user %s from the local  
database"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1181 }

starLocalUserPrivilegeChanged NOTIFICATION-TYPE
OBJECTS {
    starCLIUsername,
    starCLITtyname,
    starCLIRemoteIpAddrType,
    starCLIRemoteIpAddr,
    starCLIDatabaseUsername,
    starCLIPrivs
}
STATUS  current
DESCRIPTION
"A local user's privileges were modified.  
Probable Cause: A command was issued which resulted in an existing  
user's privileges being modified.  If this was not a planned action 
then further investigation is advised."
--#SUMMARY "[System] Security: User %s %s from IP %s changed user %s privilege to %s in the local  
database"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1182 }

starOsShellAccessed NOTIFICATION-TYPE
OBJECTS {
    starCLIContext,
    starCLIUsername,
    starCLITtyname,
    starCLIRemoteIpAddrType,
    starCLIRemoteIpAddr
}
STATUS  current
DESCRIPTION
"A user has accessed the OS shell.  
Probable Cause: A command was issued which resulted in a user's  
access to the operating system shell.  If this activity was not 
anticipated, then further investigation should be performed."
--#SUMMARY "[System] Security: Context %s User %s %s from IP %s has gained access to the OS shell"
starTestModeEntered NOTIFICATION-TYPE
OBJECTS {
  starCLIContext,
  starCLIUsername,
  starCLITtyname,
  starCLIRemoteIpAddrType,
  starCLIRemoteIpAddr
}
STATUS  current
DESCRIPTION
"A user has entered the StarOS Test Mode. Probable Cause: A command was issued which resulted in a user entering the CLI test command mode. The test command mode is only intended for maintenance and diagnostic activity and could result in major service disruptions. If this action was not intentional, the user should exit from test mode."
--#SUMMARY "[System] Security: Context %s User %s %s from IP %s has entered test mode"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1183 }

starLicenseFeaturesModified NOTIFICATION-TYPE
OBJECTS {
  starCLIContext,
  starCLIUsername,
  starCLITtyname,
  starCLIRemoteIpAddrType,
  starCLIRemoteIpAddr
}
STATUS  current
DESCRIPTION
"A user has manually modified the StarOS license feature set through the CLI. Probable Cause: A command was issued which resulted in a user modifying the set of license features available to the user. This capability was only intended for maintenance and diagnostic activity and could result in major service disruptions. If this action was not intentional, the user should restore the original license feature set."
--#SUMMARY "[System] Security: Context %s User %s %s from IP %s has modified the license feature set"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1184 }

starHiddenAccessEnabled NOTIFICATION-TYPE
OBJECTS {
  starCLIContext,
  starCLIUsername,
  starCLITtyname,
  starCLIRemoteIpAddrType,
  starCLIRemoteIpAddr
}
STATUS  current
DESCRIPTION
"An administrator has explicitly enabled the use of hidden test commands. Probable Cause: A command was configured which resulted in users having access to the specific test commands which may have been previously"
unavailable. If this action was not intentional, the user should disable
access to the hidden test commands."
---#SUMMARY "[System] Security: Context %s User %s %s from IP %s has enabled access to hidden test
commands"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 1186 }

starHiddenAccessDisabled NOTIFICATION-TYPE
OBJECTS {
  starCLICContext,
  starCLIUsername,
  starCLITtyname,
  starCLIRemoteIpAddrType,
  starCLIRemoteIpAddr
}
STATUS current
DESCRIPTION
"An administrator has explicitly disabled the use of hidden test commands.
Probable Cause: A command was configured which resulted in users no longer
having access to specific test commands which may have been previously
available. If this action was not intentional, the user should re-enable
access to the hidden test commands."
---#SUMMARY "[System] Security: Context %s User %s %s from IP %s has disabled access to hidden test
commands"
---#ARGUMENTS {0,1,2,3}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 1187 }

starLawfulInterceptChanged NOTIFICATION-TYPE
OBJECTS { starCLIUsername, starCLIUsername }
STATUS current
DESCRIPTION
"Original Lawful Intercept configured by Admin: %s is changed by Admin: %s"
---#SUMMARY "Original Lawful Intercept configured by Admin: %s is changed by Admin: %s"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1188 }

starMMES1PathFail NOTIFICATION-TYPE
OBJECTS { starMMES1PathVpnName, starMMES1PathServName, starMMES1PathENBID, starMMES1PathSelfAddr,
           starMMES1PathSelfPort, starMMES1PathPeerAddr, starMMES1PathPeerPort }
STATUS current
DESCRIPTION
"An S1 Path between an MME service and an eNodeB has failed.
Action to be Taken: If the shutdown of the eNodeB was not planned,
determine the health/status of the eNodeB. If available, verify the
health of the network between the two elements.
Clear Condition: The condition is cleared with the S1 Path is
reestablished.

Condition Clear Alarm: A starMMES1PathEstab notification will be generated
when the S1 path is re-established"
---#SUMMARY "[S1 Path %s-%s-%s] Path Failed for self endpoint %s:%d peer endpoint %s:%d"
---#ARGUMENTS {0,1,2,3,4,5,6}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1189 }
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STARENT-MIB DEFINITIONS ::= BEGIN

starMMES1PathSetup NOTIFICATION-TYPE
OBJECTS { starMMES1PathVpnName, starMMES1PathServName, starMMES1PathENBID, starMMES1PathSelfAddr,
starMMES1PathSelfPort, starMMES1PathPeerAddr, starMMES1PathPeerPort }

STATUS  current

DESCRIPTION
"An S1 Path between an MME service and an eNodeB has been
established. Normally a starMMES1PathSetup notification would be
generated only for a path which had previously failed, but
optionally this notification can be generated for any path
setup."

--#SUMMARY "[S1 Path %s-%s-%s] Path Setup for self endpoint %s:%d peer endpoint %s:%d"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1190 }

starSAEGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

STATUS  current

DESCRIPTION
"A SAEGW Service has started

Action to be Taken: No action required"

--#SUMMARY "[Service SAEGW-%s-%s] SAEGW service has started"
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1191 }

starSAEGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

STATUS  current

DESCRIPTION
"A SEAGW Service has stopped.

Probable Cause: This is typically caused by operator invention. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the SAEGW service shutdown was not planned,
examine the admin logs for an indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check the
.crash logs for an indication of a software failure.

Clear Condition: Verify that the SEAGW service is operational.

Condition Clear Alarm: A starSAEGWServiceStart notification will be
generated when the service is restarted"

--#SUMMARY "[Service SAEGW-%s-%s] SAEGW service has stopped"
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1192 }

starHenbgwAccessServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

STATUS  current

DESCRIPTION
"A HENBGW Access Service has started
Action to be Taken: No action required"

---#SUMMARY "[Service HenbgwAccess-%s-%s] HENBGW Access service has started"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1193 }

starHenbgwAccessServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A HENBGW Access Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the HENBGW Access service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the HENBGW Access service is operational.

Condition Clear Alarm: A starHenbgwAccessServiceStart notification will be generated when the service is restarted"

---#SUMMARY "[Service HenbgwAccess-%s-%s] HENBGW Access service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1194 }

starHenbgwNetworkServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A HENBGW Network Service has started

Action to be Taken: No action required"

---#SUMMARY "[Service HenbgwNetwork-%s-%s] HENBGW Network service has started"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1195 }

starHenbgwNetworkServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"A HENBGW Network Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the HENBGW Network service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the HENBGW Network service is operational.

Condition Clear Alarm: A starHenbgwNetworkServiceStart notification will be
starAAAArchiveStarted NOTIFICATION-TYPE
OBJECTS {starTaskInstance}
STATUS current
DESCRIPTION
"Archive started"
--#SUMMARY "[System] AAA Archive started for sessmgr instance %d"
--#ARGUMENTS {1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1197 }

starECSTotalDNSLearntIPv4Threshold NOTIFICATION-TYPE
OBJECTS {starECSTotalDNSLearntIPThresholdInstance, starECSTotalDNSLearntIPThresholdconfigured, starECSTotalDNSLearntIPThresholdmeasured}
STATUS current
DESCRIPTION
"DNS Learnt IPv4 entries exceed the threshold limit (high water mark) configured. For IPv4 Max IP entries = 512,00
Alarm Cleared when the IPv4 entries go below the Lower Water Mark configured"
--#SUMMARY "[ACSMgr Instance %d] Threshold-%d Measured value-%d"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1198 }

starECSTotalDNSLearntIPv4ThresholdClear NOTIFICATION-TYPE
OBJECTS {starECSTotalDNSLearntIPThresholdInstance, starECSTotalDNSLearntIPThresholdconfigured, starECSTotalDNSLearntIPThresholdmeasured}
STATUS current
DESCRIPTION
"DNS Learnt IPv4 entries reach below the threshold limit (lower water mark) configured."
--#SUMMARY "[ACSMgr Instance %d] Threshold-%d Measured value-%d"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1199 }

starECSTotalDNSLearntIPv6Threshold NOTIFICATION-TYPE
OBJECTS {starECSTotalDNSLearntIPThresholdInstance, starECSTotalDNSLearntIPThresholdconfigured, starECSTotalDNSLearntIPThresholdmeasured}
STATUS current
DESCRIPTION
"DNS Learnt IPv6 entries exceed the threshold limit (high water mark) configured. For IPv6 Max IP entries = 256,00
Alarm Cleared when the IPv6 entries go below the Lower Water Mark configured"
--#SUMMARY "[ACSMgr Instance %d] Threshold-%d Measured value-%d"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1200 }

starECSTotalDNSLearntIPv6ThresholdClear NOTIFICATION-TYPE
OBJECTS {starECSTotalDNSLearntIPThresholdInstance, starECSTotalDNSLearntIPThresholdconfigured, starECSTotalDNSLearntIPThresholdmeasured}
STATUS current
DESCRIPTION
"DNS Learnt IPv6 entries reach below the threshold limit (lower water mark) configured."
--#SUMMARY "[ACSMgr Instance %d] Threshold-%d Measured value-%d"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1201 }
DESCRIPTION
"DNS Learnt IPv6 entries reach below the threshold limit (lower water mark) configured."
---#SUMMARY "[ACSMgr Instance %d] Threshold-%d Measured value-%d"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1201 }

starIPSecNodeIpv6PeerDown NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starPeerAddressIpv6 }
STATUS current
DESCRIPTION
"A Node Service peer has stopped responding. This peer is reached using an IPv6 address.

For IPv4-connected peers, a starIPSecNodePeerDown notification would be generated.

Problem Cause: The IPSec Node peer has failed, or a network connectivity prevents reaching the peer.

Condition Clear Alarm: A starIPSecNodeIpv6PeerUp notification will be generated when
the peer is up"
---#SUMMARY "[Service %s-%s] IPSec Node peer %s is down"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1202 }

starIPSecNodeIpv6PeerUp NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName, starPeerAddressIpv6 }
STATUS current
DESCRIPTION
"A Node Service peer is back online. This peer is reached using an IPv6 address.

For IPv4-connected peers, a starIPSecNodePeerUp notification would be generated.

Action to be Taken: No action required"
---#SUMMARY "[Service %s-%s] IPSec Node peer %s is up"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY INFORMATIONAL
::= { starentTraps 1203 }

starLAGroupDown NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starLAGPartner }
STATUS current
DESCRIPTION
"LAG group status is Down. This notification is only generated for master physical port and
a previous 'starLAGroupUp' notification was previously generated.

Action to be Taken: No action required. The cause for the LAG down should be investigated."
---#SUMMARY "[Port] LAG group status is down Slot %d Port %d Partner %s"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1204 }

starLAGroupUp NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starLAGPartner }
STATUS current
DESCRIPTION
"LAG group status is up. This notification is only generated for master physical port.
Action to be Taken: No action required

---#SUMMARY "[Port] LAG group status is up Slot %d Port %d Partner %s"
---#ARGUMENTS (0,1,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1205 }

starVLRAssocDown NOTIFICATION-TYPE
OBJECTS { starSGSServiceVpnName, starSGSServiceServName, starVLRName, starVLRIpAddr1, starVLRIpAddr2, starVLRPortNum }
STATUS current
DESCRIPTION
"A VLR Association is down."
Problem Cause: The VLR Association has failed, or a network connectivity prevents reaching the VLR.
Condition Clear Alarm: A starVLRAssocUp notification will be generated when the VLR association is up

---#SUMMARY "[ VLR Association %s-%s-%s] is down; End point Addr1: %s Addr2: %s Port: %d"
---#ARGUMENTS (0,1,2,3,4,5)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1206 }

starVLRAssocUp NOTIFICATION-TYPE
OBJECTS { starSGSServiceVpnName, starSGSServiceServName, starVLRName, starVLRIpAddr1, starVLRIpAddr2, starVLRPortNum }
STATUS current
DESCRIPTION
"A VLR Association is up. This notification is only generated for Association which have previously been declared down."
---#SUMMARY "[ VLR Association %s-%s-%s] is up; End point Addr1: %s Addr2: %s Port %d"
---#ARGUMENTS (0,1,2,3,4,5)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1207 }

starVLRAllAssocDown NOTIFICATION-TYPE
OBJECTS { starSGSServiceVpnName, starSGSServiceServName }
STATUS current
DESCRIPTION
"All the VLR Associations are down."
Problem Cause: All the VLR Associations has failed, or network connectivity prevents reaching the VLRs.
Condition Clear Alarm: A starVLRAllAssocUp notification will be generated when all the VLR associations are up"

---#SUMMARY "All VLR Associations are down %s-%s"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1208 }

starVLRAllAssocDownClear NOTIFICATION-TYPE
OBJECTS { starSGSServiceVpnName, starSGSServiceServName }
STATUS current
DESCRIPTION
"VLR at least one association is up. This notification is only generated for all the Association which have previously been declared down."
SNMP MIB Reference, StarOS™
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STARENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "VLR at least one association is up %s-%s"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1209 }

starEnhancedCongestion NOTIFICATION-TYPE
OBJECTS { starServiceType, starCongestionPolicy, starCongestionResourceType, starCongestionType,
starCongestionActionProfileName}
STATUS current
DESCRIPTION
"A congestion condition has occurred.

Probable Cause: This is the result of an operator-configured congestion threshold being reached. This can be due to high usage of the resource being monitored which indicates that the IMG is reaching its peak capacity, or could be caused by the incorrect configuration of the congestion thresholds.

Actions to be Taken: Verify that the congestion thresholds are correct; if the congested state is seem repeatedly, or for sustained periods of time, additional system capacity may need to be brought online.

This system is cleared when the use of the specific resource falls below the configured limit.

Condition Clear Alarm: A starCongestionClear notification is sent when there are no congestion conditions for a service type"
--#SUMMARY "[System] Congestion seen for %s service; resource %s, policy %s applied, %s threshold exceeded, action profile %s"
--#ARGUMENTS {0,2,1,3,4}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1210 }

starEnhancedCongestionClear NOTIFICATION-TYPE
OBJECTS { starServiceType, starCongestionType }
STATUS current
DESCRIPTION
"A congestion condition has cleared."
--#SUMMARY "[System] Congestion cleared for service %s threshold %s"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1211 }

starSGSNRNCNoResetAck NOTIFICATION-TYPE
OBJECTS { starSessSGSNVpnName, starSessSGSServName, starSessSGSNServName, starSessSGSNMcc, starSessSGSNMnc, starSessSGSNRncId}
STATUS current
DESCRIPTION
"SGSN has not received an Radio Network Controller (RNC) reset-ack event. This event is generated on expiry of all retransmission for RNC Reset and non-receipt of Reset-Ack."
--#SUMMARY "[Service SGSN %s-%s] RNC Reset Ack event not received ; MCC %s MNC %s RncId %d"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1212 }

starThreshSAEGWSessions NOTIFICATION-TYPE
OBJECTS { starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION

"The total number of SAEGW sessions is above the configured threshold value.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThresholdClearSAEGWSessions notification will be generated when the measured value falls below the threshold"

---#SUMMARY "ThresholdSAEGWSessions threshold %d measured value %d"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 1213 }

starThresholdClearSAEGWSessions NOTIFICATION-TYPE
OBJECTS { starThresholdInt, starThresholdMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "ThresholdClearSAEGWSessions threshold %d measured value %d"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATION
::= { starentTraps 1214 }

starSGSNRMCPUWarn NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
       starTaskCPU, starThresholdInt, starThresholdMeasuredInt }
STATUS current
DESCRIPTION
"The CPU usage is going in Warning level. This event is generated when current CPU usage reaches 90% of allocated limit. Condition Clear Alarm: A starSGSNRMCPUWarnClear notification is sent when there CPU usage reaches 50% of allocated limit after warning"

---#SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 1215 }

starSGSNRMCPUWarnClear NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
       starTaskCPU, starThresholdInt, starThresholdMeasuredInt }
STATUS current
DESCRIPTION
"The CPU usage is coming back to normal once warned. This event is generated when current CPU usage reaches 50% of allocated limit after warning."

---#SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1216 }

starSGSNRMMemWarn NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
       starTaskCPU, starThresholdInt, starThresholdMeasuredInt }
STATUS current
DESCRIPTION
"The Memory usage for the proclet is going in Warning level. This event is generated when current Memory usage exceeds allocated limit.

Condition Clear Alarm: A starSGSNRMMemWarnClear notification is sent when current Memory usage reaches below 95% of allocated limit once warned."

---SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---ARGUMENTS (0,1,2,3,4,5)
---STATE OPERATIONAL
---SEVERITY WARNING
::= { starentTraps 1217 }

starSGSNRMMemWarnClear NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
starTaskCPU, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Memory usage for the proclet is coming back to normal once warned. This event is generated when current Memory usage reaches below 95% of allocated limit once warned."

---SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---ARGUMENTS (0,1,2,3,4,5)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1218 }

starRMCPUOver NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
starTaskCPU, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The CPU usage is going in Overload level. This event is generated when current CPU usage reaches 50% more of allocated limit."

Condition Clear Alarm: A starRMCPUOverClear notification is sent when current CPU usage reaches 50% of allocated limit after over"

---SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---ARGUMENTS (0,1,2,3,4,5)
---STATE OPERATIONAL
---SEVERITY WARNING
::= { starentTraps 1219 }

starRMCPUOverClear NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
starTaskCPU, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The CPU usage is going back to normal level. This event is generated when current CPU usage reaches 50% of allocated limit after over."

---SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---ARGUMENTS (0,1,2,3,4,5)
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starentTraps 1220 }

starSGSNRMMemOver NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
starTaskCPU, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Memory usage of the task is going in Overload level."

---SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---ARGUMENTS (0,1,2,3,4,5)
---STATE OPERATIONAL
---SEVERITY WARNING
::= { starentTraps 1221 }

starSGSNRMMemOver NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starTaskCard,
starTaskCPU, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Memory usage of the task is going in Overload level."

---SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
---ARGUMENTS (0,1,2,3,4,5)
---STATE OPERATIONAL
---SEVERITY WARNING
::= { starentTraps 1222 }
This event is generated when current Memory usage reached twice allocated limit.

```--#SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
--#ARGUMENTS {0,1,2,3,4,5}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1221 }
```

`starSGSNRMMemOverClear` NOTIFICATION-TYPE

```OBJECTS { starTaskFacilityName, starTaskInstanceId, starTaskCard, starTaskCPU, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The Memory usage for a proclet reached normal after overload. This event is generated when current Memory usage reaches 95% of allocated limit once overloaded."

```--#SUMMARY "[SGSN Facility %s-%d] Card %d CPU %d allocated %d used %d"
--#ARGUMENTS {0,1,2,3,4,5}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1222 }
```

`starSessMgrFlowCount` NOTIFICATION-TYPE

```OBJECTS {
  starSessMgrFlowInstId,
  starSessMgrFlowPDNNo,
  starSessMgrFlowMemUsage,
  starSessMgrFlowCounter,
  starSessMgrTotalFlowCount
}
STATUS current
DESCRIPTION
"Session Manager Flows counting, This event is generated when number of flows in a session manager instance goes beyond configured threshold, it will also print number of PDN, Memory usage and sess manager instance number."

```--#SUMMARY "[Session Manager Instance %d] is Having Total number of PDNs %d with Memory Usage %d and Max Flows per Session %d, Total used Flows %d"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1223 }
```

`starSessMgrFlowCountClear` NOTIFICATION-TYPE

```OBJECTS {
  starSessMgrFlowInstId,
  starSessMgrFlowPDNNo,
  starSessMgrFlowMemUsage,
  starSessMgrFlowCounter,
  starSessMgrTotalFlowCount
}
STATUS current
DESCRIPTION
"Clear Session Manager Flows Counting Trap, This event is generated when number of flows in a session manager instance goes below configured threshold, it will also print number of PDN, Memory usage and sess manager instance number."

```--#SUMMARY "[Session Manager Instance %d] is Having Total number of PDNs %d with Memory Usage %d and Max Flows per Session %d, Total used Flows %d"
--#ARGUMENTS {0,1,2,3,4}
```
STARENT-MIB DEFINITIONS ::= BEGIN

--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1224 }

starStorageFound NOTIFICATION-TYPE
OBJECTS { starStorageSlot, starStorageName }  
STATUS current
DESCRIPTION
"The specified storage device is found and mounted successfully on the card. This notification only generated to the storage device for which "starStorageNotFound" notification was generated"

--#SUMMARY "[Slot-%d] Storage device is found and mounted on %s"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1225 }

starStorageNotFound NOTIFICATION-TYPE
OBJECTS { starStorageSlot, starStorageName }  
STATUS current
DESCRIPTION
"The specified storage device not found on the card. This notification is currently only generated for failures to access the specified storage device on the card. Probable Cause: The storage device is not accessible on the card.

Action to be Taken: Verify the storage device on the card is attached correctly.

Condition Clear Alarm: A starStorageFound notification will be generated when the device is mounted on the card."

--#SUMMARY "[Slot-%d] Storage device %s is not mounted or present"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1226 }

starHENBGWMMESCTPAssocDown NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }  
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association is down.
Problem Cause: The HENBGW MME SCTP Association has failed, or a network connectivity prevents reaching the MME.

Condition Clear Alarm: A starHENBGWMMESCTPAssocUp notification will be generated when the HENBGW MME SCTP association is up."

--#SUMMARY "[ HENBGW MME Association %s-%s-%s-%s ] is down; End pointAddr: %s Port %d"
--#ARGUMENTS {0,1,2,3,4,5}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1227 }

starHENBGWMMESCTPAssocUp NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }  
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association is up. This notification is only generated for Association which have previously been declared down, optionally this notification can be generated for any association up."

::= { starentTraps 1228 }

starHENBGWMMESCTPAssocUp NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }  
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association is up. This notification is only generated for Association which have previously been declared down, optionally this notification can be generated for any association up."

::= { starentTraps 1228 }

starHENBGWMMESCTPAssocUp NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }  
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association is up. This notification is only generated for Association which have previously been declared down, optionally this notification can be generated for any association up."

::= { starentTraps 1228 }

starHENBGWMMESCTPAssocUp NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }  
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association is up. This notification is only generated for Association which have previously been declared down, optionally this notification can be generated for any association up."

::= { starentTraps 1228 }

starHENBGWMMESCTPAssocUp NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }  
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association is up. This notification is only generated for Association which have previously been declared down, optionally this notification can be generated for any association up."
SNMP MIB Reference, StarOS™
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STARENT-MIB DEFINITIONS ::= BEGIN

---#SUMMARY "[HENBGW MME Association %s-%s-%s-%s] is up; End pointAddr: %s Port %d"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1228 }

starHENBGWMMESCTPAllAssocDown NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName }
STATUS current
DESCRIPTION
"All the HENBGW MME SCTP Associations are down. 
Problem Cause: All the HENBGW MME SCTP Associations has failed, or network connectivity prevents reaching the MMEs. 
Condition Clear Alarm: A starHENBGWMMESCTPAllAssocDownClear notification will be generated when at least one HENBGW MME SCTP association is up."

---#SUMMARY "All HENBGW MME SCTP Associations are down %s-%s"
---#ARGUMENTS {0,1}
---#STATE NONOPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 1229 }

starHENBGWMMESCTPAllAssocDownClear  NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName }
STATUS current
DESCRIPTION
"HENBGW MME SCTP at least one association is up. This notification is only generated for all the Association which have previously been declared down."

---#SUMMARY "HENBGW MME SCTP at least one association is up %s-%s"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1230 }

starNPDBConnectionDown NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starNwReachSrvrAddr }
STATUS current
DESCRIPTION
"A NPDB connection is down. 
Probable Cause: This is typically caused when NPDB server resets the socket. 
Action to be Taken: Check if the NDPB Server is running. 
Clear Condition: Verify that PING PONG messages are exchanged with the NPDB Server. 
Condition Clear Alarm: A startNPDBConnectionUp notification will be generated when the service is restarted"

---#SUMMARY "[CSCF Task %s/%d] Connection to NPDB server %s is down"
---#ARGUMENTS {0,1,2}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1231 }

starNPDBConnectionUp NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starNwReachSrvrAddr }
STATUS current
DESCRIPTION
"A NPDB connection is up. 
Action to be Taken: No action required"

---#SUMMARY "[CSCF Task %s/%d] Connection to NPDB server %s is up"

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Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starNPUMissedARPFrames NOTIFICATION-TYPE
OBJECTS { starNPUSlotNumber, starNPUCPUNumber, starNPUNPUNumber }
STATUS current
DESCRIPTION "This trap will be raised when NPU misses the ARP and packets route to kernel. This will print the slot number CPU number and NPU number"

--#SUMMARY "[Slot-%d] CPU %d NPU %d are routed through the kernel"
--#ARGUMENTS {0,1,2}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1232 }

starNPUMissedARPFramesClear NOTIFICATION-TYPE
OBJECTS { starNPUSlotNumber, starNPUCPUNumber, starNPUNPUNumber }
STATUS current
DESCRIPTION "This clear trap will be raised when NPU misses the ARP and packets route to kernel recovers. This will print the slot number CPU number and NPU number"

--#SUMMARY "[Slot-%d] CPU %d NPU %d are routed through the kernel"
--#ARGUMENTS {0,1,2}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1233 }

starChassisCrashListFull NOTIFICATION-TYPE
OBJECTS { starChassisCrashList }
STATUS current
DESCRIPTION "Chassis crash list is reached full. This notification is generated when no more space is left to store the crash list and reached to disk limit."

--#SUMMARY "[System] Chassis Crash List is %s"
--#ARGUMENTS {0}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1234 }

starSessMgrCSCFServRecComplete NOTIFICATION-TYPE
OBJECTS {starServiceVpnName, starServiceServName, starTaskInstance, starCPUSlot, starCPUNumber}
STATUS current
DESCRIPTION "Indicates that the CSCF Service had completed recovery. This trap is generated when all the calls are recovered and the listen socket becomes active to accept packets"

--#SUMMARY "[Service CSCF %s-%s] CSCF Service Recovery Complete For Sessmgr Instance %d on %d/%d"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1235 }

starECSreadressServerDown NOTIFICATION-TYPE
OBJECTS { starPeerAddress, starUDPPortNum}
STATUS current
DESCRIPTION
"Server from readdress server list is detected down
This notification is generated when there are consecutive failures for server."
---#SUMMARY "ECS Readdress server-list server %s:%d going down"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 1237 } starECSreaddressServerUp NOTIFICATION-TYPE
 OBJECTS { starPeerAddress, starUDPPortNum}
 STATUS current
 DESCRIPTION
 "Server from readdress server list is detected up
This notification is generated when after deadtime server is detected up."
---#SUMMARY "ECS Readdress server-list server %s:%d is up"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 1238 } starCdrHDDStart NOTIFICATION-TYPE
 OBJECTS {starServiceVpnName,starSessGTPPGroupName}
 STATUS current
 DESCRIPTION
 "CDRs are being written to the HDD"
---#SUMMARY "[System] CDRs are being written to the HDD for context %s for gtpp group%s"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 1239 } starCdrStreamingStart NOTIFICATION-TYPE
 OBJECTS {starServiceVpnName,starSessGTPPGroupName}
 STATUS current
 DESCRIPTION
 "CDR streaming is started"
---#SUMMARY "[System] CDR streaming is started for context %s for gtpp group%s"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 1240 } starCdrStreamingComplete NOTIFICATION-TYPE
 OBJECTS {starServiceVpnName,starSessGTPPGroupName}
 STATUS current
 DESCRIPTION
 "CDR streaming is completed"
---#SUMMARY "[System] CDR streaming is completed for context %s for gtpp group%s"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
 ::= { starentTraps 1241 } starVLRDown NOTIFICATION-TYPE
 OBJECTS { starSGSServiceVpnName, starSGSServiceServName, starVLRName }
 STATUS current
 DESCRIPTION
 "A VLR is down.
Problem Cause: The VLR has failed, or a network connectivity prevents reaching the VLR.
Condition Clear Alarm: A starVLRUp notification will be generated when the VLR is up"
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

  --#SUMMARY "[ VLR %s-%s-%s] is down"
  --#ARGUMENTS {0,1,2}
  --#STATE DEGRADED
  --#SEVERITY MAJOR
  ::= { starentTraps 1242 }

starVLRUp NOTIFICATION-TYPE
OBJECTS { starSGSServiceVpnName, starSGSServiceServName, starVLRName }  
STATUS current
DESCRIPTION
  "A VLR is up. This notification is only generated for VLRs
  which have previously been declared down."

  --#SUMMARY "[ VLR %s-%s-%s] is up"
  --#ARGUMENTS {0,1,2}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 1243 }

starPCFReachable NOTIFICATION-TYPE
OBJECTS { starContextName, starPCFAddress }  
STATUS current
DESCRIPTION
  "A PCF that the IMG communication is reachable."

  --#SUMMARY "[System] PCF Reachable, VPN %s PCF address %s"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 1244 }

starLIRcvryError NOTIFICATION-TYPE
OBJECTS { starLIRcvryErrType, starLIRcvryErrString }  
STATUS current
DESCRIPTION
  "This trap will be raised when Lawful Intercepts cannot be saved or recovered
to/from backup. This will print the type of error and error string"

  --#SUMMARY "Lawful Intercept Recovery Error %d: %s"
  --#ARGUMENTS {0,1}
  --#STATE DEGRADED
  --#SEVERITY MAJOR
  ::= { starentTraps 1245 }

starLIRcvryComplete NOTIFICATION-TYPE
STATUS current
DESCRIPTION
  "This trap will be raised when Lawful Intercepts are successfully recovered"

  --#SUMMARY "Lawful Intercepts are recovered successfully"
  --#STATE DEGRADED
  --#SEVERITY INFORMATIONAL
  ::= { starentTraps 1246 }

starCGWServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }  
STATUS current
DESCRIPTION
  "A Serving Gateway (CGW) Service has started.

  Action to be Taken: No action required"

  --#SUMMARY "[Service CGW-%s-%s] CGW service has started"
  --#ARGUMENTS {0,1}
  --#STATE OPERATIONAL

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STARENT-MIB DEFINITIONS ::= BEGIN

---#SEVERITY INFORMATION
::: { starentTraps 1247 }

starCGWServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
"A Serving Gateway (CGW) Service has stopped.

Probable Cause: This is typically caused by operator intervention. In rare cases it can be caused by the loss of resources (PSCs) to support the running configuration.

Action to be Taken: If the CGW service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the CGW service is operational.

Condition Clear Alarm: A starCGWServiceStart notification will be generated when the service is restarted"

---#SUMMARY "[Service CGW-%s-%s] CGW service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::: { starentTraps 1248 }

starMMENewConnectionsDisallowed NOTIFICATION-TYPE
OBJECTS { starMMEInitialDisallowReason, starImsimgrInstId }
STATUS  current
DESCRIPTION
"The demultiplexer on the MME chassis has reached a condition where new connections are being dropped/rejected on MME services due to the specified reason. Please note that this is the initial trigger for this condition. More reasons/triggers may be activated later i.e. after the trap has been sent. These are not indicated via a new trap.

Action to be Taken: If this is not intentional (i.e not driven by policy/configuration), cross-check IMSImgr counters using the reason provided.

Clear Condition: The condition is cleared when new connections at the MME are re-allowed.

Condition Clear Alarm: A starMMENewConnectionsAllowed notification will be generated when the condition is cleared."

---#SUMMARY "New connections being dropped/rejected at MME chassis %s due to reason %s"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::: { starentTraps 1249 }

starMMENewConnectionsAllowed NOTIFICATION-TYPE
STATUS  current
DESCRIPTION
"The MME chassis is now accepting new connections again. All conditions causing MME to disallow new connections have cleared."

---#SUMMARY "New connections now being allowed at MME chassis %s"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::: { starentTraps 1250 }

starSAMOSsServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS  current
DESCRIPTION
"A SAMOG Service has started

Action to be Taken: No action required"

---#SUMMARY "[Service SAMOG-%s-%s] SAMOG service has started"
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1251 }

starSAMOGServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION "A SAMOG Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.
Action to be Taken: If the SAMOG service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.
Clear Condition: Verify that the SAMOG service is operational.
Condition Clear Alarm: A starSAMOGServiceStart notification will be generated when the service is restarted"

---#SUMMARY "[Service SAMOG-%s-%s] SAMOG service has stopped"
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1252 }

starCardSwitchoverStart NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS current
DESCRIPTION "A management card (SPC/MMIO) switchover operation has begun. The first varbind identifies from which management card switchover started. The second varbind identifies to which management card switchover is planned to switch. Switchover can cause a momentary loss of communication through the management interface (SPIO incase of ASR5000), it is possible that this trap will not be successfully delivered.
Probable Cause: This is typically caused by an operator action; it can also represent the system recovering from a software or hardware fault.
Action to be Taken: If the management card switchover was unplanned, the admin logs should be examined for the cause of the switchover. If the cause was a software failure, the system crash logs should be examined.
Clear Condition: Verify the management card switchover completed successfully.
Clear Condition Alarm: A starCardSPCSwitchoverComplete is generated when the switchover operation has completed. This is not applicable to QVPC-SI."

---#SUMMARY "Card Switchover start from card %d to card %d"
---#STATE DEGRADED

---#ARGUMENTS {0,1}
starCardSwitchoverComplete NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"A management card (SPC/MMIO) switchover has completed successfully. The first varbind identifies from which management card switchover started. The second varbind identifies to which management card switchover is completed.

Action to be Taken: If the management card switchover was unplanned, the admin logs should be examined for the cause of the switchover. If the cause was a software failure, the system crash logs should be examined. This is not applicable to QVPC-SI."
--#SUMMARY "Card Switchover completed from card %d to card %d"
--#ARGUMENTS {0,1}  
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1254 }

starCardSwitchoverFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"A management card (SPC/MMIO) switchover operation has failed. The first varbind identifies from which management card switchover started. The second varbind identifies to which management card switchover is failed.

Probable Cause: The management card being switched to was removed or reset before the switchover completed; the switchover operation was terminated by an operator; or a software or hardware failure on another management card.

Action to be Taken: Verify that both management cards have the card locks in the locked position; examine the admin logs for the cause of the failure. If the cause was a software failure, the system crash logs should be examined.

Clear Condition: The management card in question will be reset; a starCardUp notification will be generated when the card is operational again. This is not applicable to QVPC-SI."
--#SUMMARY "Card Switchover failed from card %d to card %d"
--#ARGUMENTS {0,1}  
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starentTraps 1255 }

starCardMigrateStart NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"A data processing card (PAC/PSC/DPC) Migration operation has begun. The first varbind identifies from which data processing card migration has started. The second varbind identifies to which data processing card migration is planned to migrate."
Probable Cause: This is typically caused by an operator action; it can also represent the system recovering from a software or hardware fault.

A starCardMigrateComplete is generated when the migration is completed. This is not applicable to QVPC-SI."

---#SUMMARY "Card Migration started from card %d to card %d"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1256 }

starCardMigrateComplete NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"A data processing card (PAC/PSC/DPC) Migration operation has successfully completed. The first varbind identifies from which data processing card migration has started. The second varbind identifies to which data processing card migration has completed. This is not applicable to QVPC-SI."
---#SUMMARY "Card Migration completed from card %d to card %d"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1257 }

starCardMigrateFailed NOTIFICATION-TYPE
OBJECTS { starSlotNum, starSlotNum }
STATUS current
DESCRIPTION
"A data processing card (PAC/PSC/DPC) Migration operation has failed. The first varbind identifies from which data processing card migration has started. The second varbind identifies to which data processing card migration has failed to migrate.

Probable Cause: The data processing card being migrated to was removed or reset before the migration completed; the migration operation was terminated by an operator; or a software or hardware failure on another data processing card involved in the migration operation.

The data processing card in question will be reset; a starCardUp notification will be generated when the card is operational again. This is not applicable to QVPC-SI."
---#SUMMARY "Card Migration failed from card %d to card %d"
---#ARGUMENTS (0,1)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1258 }

starTechSuppPasswdChanged NOTIFICATION-TYPE
OBJECTS { starCLIContext, starCLIUsername, starCLITtyname, starCLIRemoteIpAddrType, starCLIRemoteIpAddr }
STATUS current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"A user has changed the StarOS tech-support password.  
Probable Cause: A command was issued which resulted in a user 
changing the tech-support password value. The tech-support 
password is used to gain access to the CLI test-commands. 
These CLI test commands are only intended for maintenance 
and diagnostic activity and could result in major service 
disruptions. If this action was unintended, the user should 
notify the Cisco TAC group to reset the tech-support password."

--#SUMMARY "[System] Security: context %s user %s ttyname %s address type %s remote ip address %s"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1259 }

starPMIPPathFailure NOTIFICATION-TYPE
OBJECTS { starPMIPvPNName, 
starPMIPServName, 
starPMIPSelAddrType, 
starPMIPSelAddr, 
starPMIPPeerAddrType, 
starPMIPPeerAddr, 
starPMIPPeerOldRstCnt, 
starPMIPPeerNewRstCnt, 
starPMIPPeerSessCnt, 
starPMIPFailureReason
}
STATUS current
DESCRIPTION
"PMIP Path Failure. 
Possible reason: This trap will be triggered by MAGMGR/HAMGR when path failure or node restart 
is detected."

--#SUMMARY "[Service PMIP-%s-%s] path failure, self address %s, peer address %s, peer old restart 
counter %d, peer new restart counter %d, peer session count %d, failure reason %s"
--#ARGUMENTS {0,1,3,5,6,7,8,9}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1260 }

starPMIPPathFailureClear NOTIFICATION-TYPE
OBJECTS { starPMIPvPNName, 
starPMIPServName, 
starPMIPSelAddrType, 
starPMIPSelAddr, 
starPMIPPeerAddrType, 
starPMIPPeerAddr
}
STATUS current
DESCRIPTION
"PMIP Control Path Failure condition is no longer valid."

--#SUMMARY "[Service PMIP-%s-%s] path failure condition clear for self address %s, peer address %s"
--#ARGUMENTS {0,1,3,5}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1261 }

starHENBGWMMEStCPAssocDestAddrDown NOTIFICATION-TYPE
OBJECTS { starHENBGWSvcVpName, starHENBGWSvcServName, starHENBGWSvcLogENBId, 
starHENBGWSvcMMEStCSvName, starHENBGWSvcPeerAddr, starHENBGWSvcPeerPort }
STATUS current
DESCRIPTION
"A HENBGW MME SCTP Association Destination Address is down.
Problem Cause: One of destination MME SCTP address is not reachable or removed.

Condition Clear Alarm: A starHENBGWMMESCTPAssocDestAddrUp notification will be generated when the HENBGW MME SCTP association destination address is reachable again"

---#SUMMARY "[ HENBGW MME Association %s-%s-%s-%s] destination address:%s is down; Port %d"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1262 }

starHENBGWMMESCTPAssocDestAddrUp NOTIFICATION-TYPE
OBJECTS { starHENBGWServiceVpnName, starHENBGWServiceServName, starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName, starHENBGWServicePeerAddr, starHENBGWServicePeerPort }
STATUS current
DESCRIPTION "A HENBGW MME SCTP Association Destination Address is up.
This notification is only generated for Association Destination Address which have previously been declared down."
---#SUMMARY "[ HENBGW MME Association %s-%s-%s-%s] destination address:%s is up; Port %d"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1263 }

starMRMEServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION "A Multi Radio Management (MRME) Service has started.
Action to be Taken: No action required"
---#SUMMARY "[Service MRME-%s-%s] MRME service has started"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1264 }

starMRMEServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION "A Multi Radio Management (MRME) Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.
Action to be Taken: If the MRME service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.
Clear Condition: Verify that the MRME service is operational.
Condition Clear Alarm: A starMRMEServiceStart notification will be generated when the service is restarted"
---#SUMMARY "[Service MRME-%s-%s] MRME service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
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STARENT-MIB DEFINITIONS ::= BEGIN

::= { starentTraps 1265 }

starSLSServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An SLS Service has started"

--#SUMMARY "[Service SLS-%s-%s] SLS service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1266 }

starSLSServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An SLS Service has stopped.
Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration. Action to be Taken: If the SLS service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure. Clear Condition: Verify that the SLS service is operational.
Condition Clear Alarm: A starSLSServiceStart notification will be generated when the service is restarted"

--#SUMMARY "[Service SLS-%s-%s] SLS service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1267 }

starESMLCAssocDown NOTIFICATION-TYPE
OBJECTS { starSLSServiceVpnName, starSLSServiceServName, starESMLCId, starESMLCIpAddr1, starESMLCIpAddr2, starESMLCPortNum }
STATUS current
DESCRIPTION
"An ESMLC Association is down.
Problem Cause: The ESMLC Association has failed, or a network connectivity prevents reaching the ESMLC.
Condition Clear Alarm: A starESMLCAssocUp notification will be generated when the ESMLC association is up"

--#SUMMARY "[ ESMLC Association %s-%s-%d] is down; End point Addr1: %s Addr2: %s Port: %d"
--#ARGUMENTS {0,1,2,3,4,5}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1268}

starESMLCAssocUp NOTIFICATION-TYPE
OBJECTS { starSLSServiceVpnName, starSLSServiceServName, starESMLCId, starESMLCIpAddr1, starESMLCIpAddr2, starESMLCPortNum }
STATUS current
starESMLCAllAssocDown NOTIFICATION-TYPE
OBJECTS { starSLSServiceVpnName, starSLSServiceServName }  
STATUS current
DESCRIPTION "All the ESMLC Associations are down.

Problem Cause: All the ESMLC Associations has failed, or network connectivity prevents reaching the ESMLCs.

Condition Clear Alarm: An starESMLCAllAssocUp notification will be generated when all the ESMLC associations are up"

starESMLCAllAssocDownClear NOTIFICATION-TYPE
OBJECTS { starSLSServiceVpnName, starSLSServiceServName }  
STATUS current
DESCRIPTION "At least one ESMLC associations is up. This notification is only generated for all the Association which have previously been declared down."

starSBCServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }  
STATUS current
DESCRIPTION "An SBC Service has started

Action to be Taken: No action required"

starSBCServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }  
STATUS current
DESCRIPTION "An SBC Service has stopped.

Probable Cause: This is typically caused by operator intervention, when a critical parameter associated with sbc-service is changed/removed. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the SBC service shutdown was not planned,
examine the admin logs for any indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check for any sbc-service related configuration errors by running show configuration errors section sbc-service. Note that sbc-service should be associated to an mme-service to be operationally up. In case the associated mme-service is down, sbc-service is also stopped. Also check the crash logs for any indication of a software failure.

--#SUMMARY "[Service SBc-%s-%s] SBC service has stopped"
--#ARGUMENTS {0,1}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1273 }

starCBCAssocDown NOTIFICATION-TYPE
OBJECTS { starSBCServiceVpnName, starSBCServiceServName, starPeerId, starPeerIpAddr, starPeerPortNum }

STATUS current
DESCRIPTION "A CBC Association is down.
Problem Cause: SCTP connection between MME and CBC has been brought down - could be for any of the following reasons -
  i) network connectivity between MME and CBC is broken.
  ii) CBC has gracefully terminated the SCTP association with MME.
  iii) MME has gracefully terminated the SCTP association with CBC, typically due to operation intervention that would have effected sbc-service.
Action to be taken - In case the SCTP association between MME and CBC is abnormally closed, check for network connectivity between MME and CBC.
Condition Clear Alarm: In case the association termination was abnormal, A starPeerAssocUp notification will be generated when the CBC association is up"

--#SUMMARY "[ CBC Association %s-%d] is down; End point Addr: %s Port: %d"
--#ARGUMENTS {0,1,2,3,4}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1274 }

starCBCAssocUp NOTIFICATION-TYPE
OBJECTS { starSBCServiceVpnName, starSBCServiceServName, starPeerId, starPeerIpAddr, starPeerPortNum }

STATUS current
DESCRIPTION "A CBC Association is up."
--#SUMMARY "[ CBC Association %s-%d] is up; End point Addr: %s Port %d"
--#ARGUMENTS {0,1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1275 }

starBfdSessUp NOTIFICATION-TYPE
OBJECTS { starContextName, starBfdSrcAddressType, starBfdSrcAddress, starBfdDestAddressType, starBfdDestAddress, starBfdLocalDisc, starBfdRemDisc, starPhyPortId }

STATUS current
STARENT-MIB DEFINITIONS ::= BEGIN

DESCRIPTION
"The BFD Session to the specified IP address is operational.
 This may indicate the initial configuration of a new neighbor,
 the initial connectivity after a system restart, or the
 restoration of connectivity after a starBFDSessDown event.

 Action to be Taken: No action required."

--#SUMMARY "[System] BFD Session, vpn %s SrcAddr %s DstAddr %s, PhyPortId %d is operational"
--#ARGUMENTS {0,2,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1276 }

starBFDSessDown NOTIFICATION-TYPE
OBJECTS { starContextName,
    starBfdSrcAddressType,
    starBfdSrcAddress,
    starBfdDstAddressType,
    starBfdDstAddress,
    starBfdLocalDisc,
    starBfdRemDisc,
    starBfdSessDiagCode,
    starPhyPortId }

STATUS current
DESCRIPTION
"The BFD Session to the specified IP address is no longer
 operational.

 Probable Cause: The BFD Session is not-operational;
 the network between the ASR5x00 and the BFD Neighbor is
 experiencing an outage; Look into the Diagnostic Code for
 further details.

 Action to be Taken: Verify the BFD Session is operational;
 verify network connectivity to the BFD Neighbor.

 Clear Condition Alarm: A starBFDSessUp is generated when
 connectivity is reestablished"

--#SUMMARY "[System] BFD Session, vpn %s SrcAddr %s DstAddr %s, PhyPortId %d is not operational and
 Diagnostic Code is %d"
--#ARGUMENTS {0,2,4,7}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1277 }

starSRPSwitchoverOccured NOTIFICATION-TYPE
OBJECTS { starContextName,
    starSRPIpAddress,
    starSRPSwitchReason }

STATUS current
DESCRIPTION
"An SRP (ICSR) Switchover Occurred.
 Chassis has transitioned from Active to Standby State or
 Chassis has transitioned from Standby to PendingActive State.

 Action to be Taken: Verify Active and Standby Chassis States of ICSR pair."

--#SUMMARY "[System] SRP Switchover Occurred, vpn %s SRP %s Switchover Reason: %d"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1278 }

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STARENT-MIB DEFINITIONS ::= BEGIN

starHENBGWMMEOverloadStart NOTIFICATION-TYPE
OBJECTS {starHENBGWServiceVpnName, starHENBGWServiceServName,
          starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName,
          starHENBGWServicePeerAddr, starHENBGWServicePeerPort,
          starHENBGWServiceTLRI}

STATUS current
DESCRIPTION
"A HENBGW MME Overload Start message received.
Condition Clear Alarm:  A starHENBGWMMEOverloadStop notification will be generated
when the HENBGW MME overload stop message received."

--#SUMMARY "[HENBGW MME %s-%s-%s-%s] received overload start message with traffic load reduction
indication percentage %. End pointAddr: %s Port %d"

--#ARGUMENTS {0,1,2,3,6,4,5}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= {starentTraps 1279}

starHENBGWMMEOverloadStop NOTIFICATION-TYPE
OBJECTS {starHENBGWServiceVpnName, starHENBGWServiceServName,
          starHENBGWServiceLogicalENBId, starHENBGWServiceMMEServName,
          starHENBGWServicePeerAddr, starHENBGWServicePeerPort}

STATUS current
DESCRIPTION
"A HENBGW MME Overload Stop message received.  This notification is only generated for the
MME which have previously been generated overload start message, optionally this notification
can be generated for any overload stop message received from MME."

--#SUMMARY "[HENBGW MME %s-%s-%s-%s] received overload stop message.  End pointAddr: %s Port %d"

--#ARGUMENTS {0,1,2,3,4,5}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= {starentTraps 1280}

starNpudriverECCError NOTIFICATION-TYPE
OBJECTS {starSlotNum}

STATUS current
DESCRIPTION
" A double bit ECC error occured.
Action to be taken - RMA this card."

--#SUMMARY "A double bit ECC error occured on slot %d"

--#ARGUMENTS {0}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= {starentTraps 1281}

starGTPCRLFOverThreshold NOTIFICATION-TYPE
OBJECTS {starGTPCRLFSessMgrInst, starGTPCRLFVPNName,
          starGTPCRLFVPNId, starGTPCRLFContextName,
          starGTPCRLFCurrAppTPS}

STATUS current
DESCRIPTION
" GTP RLF Status update - GTP RLF Over Threshold."

--#SUMMARY "GTP RLF Status update - GTP RLF Over Threshold - Sessmgr Instance: %d Context: %s Context
ID: %d RLF template name: %s Current Applied TPS: %d"

--#ARGUMENTS {0,1,2,3,4}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= {starentTraps 1282}

starGTPCRLFOverLimit NOTIFICATION-TYPE
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STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starGTPCRLFSessMgrInst,
starGTPCRLFVVPNName,
starGTPCRLFVPNId,
starGTPCRLFContextName,
starGTPCRLFCurrAppDelayTol }

STATUS current
DESCRIPTION
" GTP RLF Status update - GTP RLF Over Limit."
--#SUMMARY "GTP RLF Status update - GTP RLF Over Limit - Sessmgr Instance: %d Context: %s Context ID: %d RLF template name: %s Current Applied Delay Tolerance: %d"
--#ARGUMENTS {0,1,2,3,4}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1283 }

starGTPCRLFOverThresholdClear NOTIFICATION-TYPE
OBJECTS { starGTPCRLFSessMgrInst,
starGTPCRLFVVPNName,
starGTPCRLFVPNId,
starGTPCRLFContextName }

STATUS current
DESCRIPTION
" GTP RLF Status update - GTP RLF Over Threshold Cleared."
--#SUMMARY "GTP RLF Status update - GTP RLF Over Threshold Cleared - Sessmgr Instance: %d Context: %s Context ID: %d RLF template name: %s"
--#ARGUMENTS {0,1,2,3}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1284 }

starGTPCRLFOverLimitClear NOTIFICATION-TYPE
OBJECTS { starGTPCRLFSessMgrInst,
starGTPCRLFVVPNName,
starGTPCRLFVPNId,
starGTPCRLFContextName }

STATUS current
DESCRIPTION
" GTP RLF Status update - GTP RLF Over Limit Cleared."
--#SUMMARY "GTP RLF Status update - GTP RLF Over Limit Cleared - Sessmgr Instance: %d Context: %s Context ID: %d RLF template name: %s"
--#ARGUMENTS {0,1,2,3}
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1285 }

starS102ServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

STATUS current
DESCRIPTION
"An S102 Service has started

Action to be Taken: No action required"
--#SUMMARY "[Service S102-%s-%s] CSCF service has started"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1286 }

starS102ServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }

STATUS current
DESCRIPTION
"An S102 Service has stopped

Action to be Taken: No action required"
--#SUMMARY "[Service S102-%s-%s] CSCF service has stopped"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1286 }

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Probable Cause: This is typically caused by operator invention. In unusual cases it can be caused by the loss of resources (PACs/PSCs) to support the running configuration.

Action to be Taken: If the S102 service shutdown was not planned, examine the admin logs for an indication of the failure. Verify that all configured PACs/PSCs are present and running in the system. Check the crash logs for an indication of a software failure.

Clear Condition: Verify that the S102 service is operational.

Condition Clear Alarm: A starS102ServiceStart notification will be generated when the service is restarted

---SUMMARY "[S102 %s-%s] S102 service has stopped"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1287 }

starBGPPeerSessionIPv6Up NOTIFICATION-TYPE
OBJECTS { starContextName, starBGPPeerIpv6Address }
STATUS current
DESCRIPTION
"The BGP peer session to the specified IP v6 address is operational. This may indicate the initial configuration of a new peer, the initial connectivity after a system restart, or the restoration of connectivity after a starBGNPeerSessionDown event.

Action to be Taken: No action required.

---SUMMARY "[System] BGP peer session, vpn %s, address %s, is operational"
---#ARGUMENTS {0,1}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1288 }

starBGPPeerSessionIPv6Down NOTIFICATION-TYPE
OBJECTS { starContextName, starBGPPeerIpv6Address }
STATUS current
DESCRIPTION
"The BGP peer session to the specified IP v6 address is no longer operational.

Probable Cause: The BGP peer is not-operational; the network between the ST16 and the BGP peer is experiencing an outage; LC failure(s) on the ST16.

Action to be Taken: Verify the BGP peer is operational; verify network connectivity to the BGP peer.

Clear Condition Alarm: A starBGPPeerSessionUp is generated when connectivity is reestablished"

---SUMMARY "[System] BGP peer session, vpn %s, address %s, is non-operational"
---#ARGUMENTS {0,1}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1289 }

starMMEMBMBSServiceStart NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName }
STATUS current
DESCRIPTION
"An MME-EMBM Service has started

Action to be Taken: No action required"
STARENT-MIB DEFINITIONS ::= BEGIN

--#SUMMARY "[Service MME-EMBMS-%s-%s] MME-EMBMS service has started"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1290 }

starMMEEMBMSsServiceStop NOTIFICATION-TYPE
OBJECTS { starServiceVpnName, starServiceServName } STATUS current
DESCRIPTION
"An MME-EMBMS Service has stopped.
Probable Cause: This is typically caused by operator intervention, when a
critical parameter associated with mme-embms-service is changed/removed. In
unusual cases it can be caused by the loss of resources (PACs/PSCs) to
support the running configuration.

Action to be Taken: If the MME-EMBMS service shutdown was not planned,
examine the admin logs for any indication of the failure. Verify that
all configured PACs/PSCs are present and running in the system. Check for
any mme-embms-service related configuration errors by running show configuration errors
section mme-embms-service. Also check the crash logs for any indication of a software failure."

--#SUMMARY "[Service MME-EMBMS-%s-%s] MME-EMBMS service has stopped"
--#ARGUMENTS (0,1)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1291 }

starMCEAssocDown NOTIFICATION-TYPE
OBJECTS { starMMEEMBMSsServiceVpnName, starMMEEMBMSsServiceServName , starMMEEMBMSPeerId, starMMEEMBMSPeerIpAddr, starMMEEMBMSPeerPortNum } STATUS current
DESCRIPTION
"An MCE Association is down.
Problem Cause: SCTP connection between MME and MCE has been brought down - could be for any of
the
following reasons -
  i) network connectivity between MME and MCE is broken.
  ii) MCE has gracefully terminated the SCTP association with MME.
  iii) MME has gracefully terminated the SCTP association with MCE, typically due to
operation intervention that would have effected mme-embms-service.

Action to be taken - In case the SCTP association between MME and MCE is abnormally
closed, check for network connectivity between MME and MCE.

Condition Clear Alarm: In case the association termination was abnormal, A
starPeerAssocUp notification will be generated when the MCE association is up"

--#SUMMARY "[ MCE Association %s-%d] is down; End point Addr: %s Port: %d"
--#ARGUMENTS (0,1,2,3,4)
--#STATE DEGRADED
--#SEVERITY MAJOR
::= { starentTraps 1292 }

starMCEAssocUp NOTIFICATION-TYPE
OBJECTS {starMMEEMBMSsServiceVpnName, starMMEEMBMSsServiceServName , starMMEEMBMSPeerId, starMMEEMBMSPeerIpAddr, starMMEEMBMSPeerPortNum }
STATUS current
DESCRIPTION
"A MCE Association is up."
--#SUMMARY "[ MCE Association %s-%d] is up; End point Addr: %s Port %d"
--#ARGUMENTS (0,1,2,3,4)
--#STATE OPERATIONAL

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starIuBcTcpConnDown NOTIFICATION-TYPE
OBJECTS { starCBSServiceVpnName, starIuBcSelfIpAddr, starIuBcSelfPortNum, starIuBcPeerIpAddr, starIuBcPeerPortNum, starIuBcTcpConnCauseStr}
STATUS current
DESCRIPTION
"A TCP connection at IuBc interface is down.
Problem Cause: TCP connection between HNBGW and CBC server has been brought down - could be for any of the following reasons -
  i) network connectivity between HNBGW and CBC server is broken.
  ii) CBC Server has gracefully terminated the TCP connection with HNBGW.
  iii) HNBGW has gracefully terminated the TCP connection with CBC server, typically due to operation intervention that would have effected cbs-service.

Action to be taken - In case the TCP connection between HNBGW and CBC server is abnormally closed, check for network connectivity between HNBGW and CBC server.

Condition Clear Alarm: In case the connection termination was abnormal, A IuBcTCPConnUp notification will be generated when the TCP connection is up"

---#SUMMARY "[ TCP Connection %s-%s-%d] is down; Peer IP Addr: %s Port: %d with cause %s"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1294}

starIuBcTcpConnUp NOTIFICATION-TYPE
OBJECTS { starCBSServiceVpnName, starIuBcSelfIpAddr, starIuBcSelfPortNum, starIuBcPeerIpAddr, starIuBcPeerPortNum, starIuBcTcpConnCauseStr}
STATUS current
DESCRIPTION
"A TCP Connection is up."

---#SUMMARY "[ TCP Connection %s-%s-%d] is up; Peer IP Addr: %s Port: %d with cause %s"
---#ARGUMENTS {0,1,2,3,4,5}
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1295}

starSessCapReached NOTIFICATION-TYPE
OBJECTS { starTaskInstance, starTaskCard, starTaskCPU }
STATUS current
DESCRIPTION
"Session manager will start rejecting new calls as the capacity reached."

---#SUMMARY "Session manager instance %d card %d cpu %d"
---#ARGUMENTS {0,1,2}
---#STATE OPERATIONAL
---#SEVERITY CRITICAL
::= { starentTraps 1298}

starSerdesLanePermDown NOTIFICATION-TYPE
OBJECTS { starSlotNum, starDeviceNum, starSerdesNum }
STATUS current
DESCRIPTION
"A serdes lanes is a high speed serial link between a FAP(chip on an MIO/DPC/DPC2/MIO2) and an FE(chip on an FSC card). When a serdes lane has errors, we calibrate it to get optimized Rx parameters. If we attempt to calibrate a lane more than 5 times, it is taken offline. By taking it offline we no longer use it so we are eliminating
potential traffic loss."
---#SUMMARY "SERDES lane is Down on local: slot %d device %d serdes lane index %d, Remote: slot %d device %d serdes lane index %d"
---#ARGUMENTS (0,1,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1303 }

starLAGGroupDownDueToMinlink NOTIFICATION-TYPE
OBJECTS { starPortSlot, starPortNum, starLAGGroup, starLAGMinlink }
STATUS current
DESCRIPTION
"LAG group status is Down due to links in LAG group falls below minlink. This notification is only generated for master physical port and a previous 'starLAGGroupUp' notification was previously generated.

Action to be Taken: No action required. The cause for the LAG down should be investigated."
---#SUMMARY "[Port] LAG group (%d) status is down due to minlink: Slot %d Port %d minlink %d"
---#ARGUMENTS (3,0,1,4)
---#STATE DEGRADED
---#SEVERITY MAJOR
::= { starentTraps 1299 }

starThreshAllFramedRoutes NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"All framed routes crosses user defined threshold."
---#SUMMARY "facility vpnmgr context %s vrfname %s framed routes threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1304 }

starThreshAllFramedRoutesClear NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"All framed routes crosses user defined threshold cleared."
---#SUMMARY "facility vpnmgr context %s vrfname %s framed routes threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1305 }

starThreshAllTotalRoutes NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"All total routes crosses user defined threshold."
---#SUMMARY "facility vpnmgr context %s vrfname %s total routes threshold %d measured %d"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1306 }

starThreshAllTotalRoutesClear NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"All total routes crosses user defined threshold cleared."
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STARENT-MIB DEFINITIONS ::= BEGIN

starThreshVRFFramedRoutes NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"Total number of VRF framed routes crosses user defined threshold."
--#SUMMARY "facility vpnmgr context %s vrfname %s framed routes threshold %d%% measured %d%%"
--#ARGUMENTS {0,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1308 }

starThreshVRFFramedRoutesClear NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"Total number of VRF framed routes crosses user defined threshold cleared."
--#SUMMARY "facility vpnmgr context %s vrfname %s framed routes threshold %d%% measured %d%%"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1309 }

starThreshVRFTotalRoutes NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"Total number of VRF total routes crosses user defined threshold."
--#SUMMARY "facility vpnmgr context %s vrfname %s total routes threshold %d measured %d"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1310 }

starThreshVRFTotalRoutesClear NOTIFICATION-TYPE
OBJECTS { starContextName, starVRFName, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"Total number of VRF total routes crosses user defined threshold cleared."
--#SUMMARY "facility vpnmgr context %s vrfname %s total routes threshold %d measured %d"
--#ARGUMENTS {0,1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1311 }

starStatFilesizeExceeded NOTIFICATION-TYPE
OBJECTS { starStatFilesizeLimit, starStatFilesizeMeasured }
STATUS current
DESCRIPTION
"Actual Bulkstat filesize crosses 80% user defined Bulkstat filesize."
--#SUMMARY "Filesize exceeded for facility bulkstat: filesize limit %d filesize measured %d"
--#ARGUMENTS {0,1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1312 }

starStatFilesizeClear NOTIFICATION-TYPE
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

OBJECTS { starStatFilesizeLimit, starStatFilesizeMeasured}
STATUS current
DESCRIPTION "Actual Bulkstat filesize crosses 80% user defined Bulkstat filesize condition cleared."
"Filesize condition for facility bulkstat cleared: filesize limit %d filesize measured %d"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1313 }

starThreshLMASetupBindingUpdateDenyRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The percentage of LMA setup binding update deny rate which failed has exceeded the configured threshold during the current monitoring period."
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearLMASetupBindingUpdateDenyRate notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: LMA setup binding update deny rate threshold for threshold %d%% measured %d%%"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1314 }

starThreshClearLMASetupBindingUpdateDenyRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The threshold condition is now clear."
--#SUMMARY "[System] Threshold: LMA setup binding update deny rate threshold clear for threshold %d%% measured %d%%"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1315 }

starThreshMAGSetupBindingUpdateDenyRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION "The percentage of MAG setup binding update deny rate which failed has exceeded the configured threshold during the current monitoring period."
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearMAGSetupBindingUpdateDenyRate notification will be generated when the measured value falls below the threshold."
--#SUMMARY "[System] Threshold: MAG setup binding update deny rate threshold for threshold %d%% measured %d%%"
--#ARGUMENTS (0,1)
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starentTraps 1316 }

431
starThreshClearMAGSetupBindingUpdateDenyRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: MAG setup binding update deny rate threshold clear for threshold %d%% measured %d%%"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1317 }

starThreshEGTPCS2BSetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage of EGTPC S2B setup fail rate which failed has exceeded the configured threshold during the current monitoring period.

Probable Cause: This is a user configurable threshold.

If the thresholding subsystem is configured to run in an 'alarm' model, a starThreshClearEGTPC S2B SetupFailRate notification will be generated when the measured value falls below the threshold."
---#SUMMARY "[System] Threshold: EPDG setup fail rate threshold for threshold %d%% measured %d%%"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 1318 }

starThreshClearEGTPCS2BSetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: EGTPC S2B setup fail rate threshold clear for threshold %d%% measured %d%%"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1319 }

starThreshSNXDisconnectReason NOTIFICATION-TYPE
OBJECTS { starDiscReasons, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold when exceeded the configured values for a given disconnect-reason, trap will be raised."
---#SUMMARY "[System] Threshold: Session Manager disconnect-reason %s threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1320 }

starThreshClearSNXDisconnectReason NOTIFICATION-TYPE
OBJECTS { starDiscReasons, starThreshInt, starThreshMeasuredInt }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: Session Manager threshold clear for disconnect-reason %s threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2)
starTetheringTACDatabaseUpgradeFailureStatus NOTIFICATION-TYPE
  OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
           starTetheringDatabaseUpgradeComment }
  STATUS current
  DESCRIPTION
  "Tethering TAC Database Upgrade Failure Status.
  Condition Clear Alarm: This condition is cleared by starTetheringTACDatabaseUpgradeSuccessStatus
  notification."
  ---#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
  ---#ARGUMENTS (0,1,2)
  ---#STATE OPERATIONAL
  ---#SEVERITY MAJOR
  ::= { starentTraps 1321 }

starTetheringTACDatabaseUpgradeSuccessStatus NOTIFICATION-TYPE
  OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
           starTetheringDatabaseUpgradeComment }
  STATUS current
  DESCRIPTION
  "Tethering TAC Database Upgrade Failure Success.
  Action to be taken: No action required"
  ---#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
  ---#ARGUMENTS (0,1,2)
  ---#STATE OPERATIONAL
  ---#SEVERITY INFORMATIONAL
  ::= { starentTraps 1322 }

starTetheringOSDatabaseUpgradeFailureStatus NOTIFICATION-TYPE
  OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
           starTetheringDatabaseUpgradeComment }
  STATUS current
  DESCRIPTION
  "Tethering OS Database Upgrade Failure Status.
  Condition Clear Alarm: This condition is cleared by starTetheringOSDatabaseUpgradeSuccessStatus
  notification."
  ---#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
  ---#ARGUMENTS (0,1,2)
  ---#STATE OPERATIONAL
  ---#SEVERITY MAJOR
  ::= { starentTraps 1323 }

starTetheringOSDatabaseUpgradeSuccessStatus NOTIFICATION-TYPE
  OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
           starTetheringDatabaseUpgradeComment }
  STATUS current
  DESCRIPTION
  "Tethering OS Database Upgrade Failure Success.
  Action to be taken: No action required"
  ---#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
  ---#ARGUMENTS (0,1,2)
  ---#STATE OPERATIONAL
  ---#SEVERITY INFORMATIONAL
  ::= { starentTraps 1324 }

starTetheringV6OSDatabaseUpgradeFailureStatus NOTIFICATION-TYPE
  OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
           starTetheringDatabaseUpgradeComment }
  STATUS current
  DESCRIPTION
  "Tethering V6 OS Database Upgrade Failure Status.
  Action to be taken: No action required"
  ---#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
  ---#ARGUMENTS (0,1,2)
  ---#STATE OPERATIONAL
  ---#SEVERITY INFORMATIONAL
  ::= { starentTraps 1325 }
DESCRIPTION
"Tethering V6OS Database Upgrade Failure Status.
Condition Clear Alarm: This condition is cleared by starTetheringV6OSDatabaseUpgradeSuccessStatus
notification."
--#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY MAJOR
 ::= { starentTraps 1326 }

starTetheringV6OSDatabaseUpgradeSuccessStatus NOTIFICATION-TYPE
OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
starTetheringDatabaseUpgradeComment }
STATUS current
DESCRIPTION
"Tethering V6OS Database Upgrade Failure Success.
Action to be taken: No action required"
--#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 1327 }

starTetheringUADatabaseUpgradeFailureStatus NOTIFICATION-TYPE
OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
starTetheringDatabaseUpgradeComment }
STATUS current
DESCRIPTION
"Tethering V6OS Database Upgrade Failure Status.
Condition Clear Alarm: This condition is cleared by starTetheringUADatabaseUpgradeSuccessStatus
notification."
--#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY MAJOR
 ::= { starentTraps 1328 }

starTetheringUADatabaseUpgradeSuccessStatus NOTIFICATION-TYPE
OBJECTS { starTetheringDatabasePreDBVersion, starTetheringDatabaseUpgradeDBVersion,
starTetheringDatabaseUpgradeComment }
STATUS current
DESCRIPTION
"Tethering UA Database Upgrade Failure Success.
Action to be taken: No action required"
--#SUMMARY "Pre-DB Version %s Upgrade Version %s, Comment: %s"
--#ARGUMENTS (0,1,2)
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starentTraps 1329 }

starThreshEGTPCS5SetupFailRate NOTIFICATION-TYPE
OBJECTS { starThreshPct, starThreshMeasuredPct }
STATUS current
DESCRIPTION
"The percentage of EGTPC S5 setup fail rate which failed has exceeded the configured threshold
during the current monitoring period.
Probable Cause: This is a user configurable threshold.
If the thresholding subsystem is configured to run in an 'alarm' model,
a starThreshClearEGTPCS5SetupFailRate notification will be generated when the measured
value falls below the threshold."
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

---#SUMMARY "[System] Threshold: EGTPC S5 setup failure rate threshold for threshold %d%% measured %d%%"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY WARNING
::= { starentTraps 1330 }

starThresholdClearEGTPCS5SetupFailRate NOTIFICATION-TYPE
OBJECTS { starThresholdPct, starThresholdMeasuredPct }
STATUS current
DESCRIPTION
"The threshold condition is now clear."
---#SUMMARY "[System] Threshold: EGTPC S5 setup failure rate threshold clear for threshold %d%% measured %d%%"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1331 }

starDdfReload NOTIFICATION-TYPE
OBJECTS { starSlotNum, starDdfDev }
STATUS current
DESCRIPTION
"DDF MCDMA Engine Reloaded due to CRC Error. This is not applicable to QVPC-SI and QVPC-DI."
---#SUMMARY "A DDF reload occured on slot %d"
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 1332 }

starHdRaidMgmtCardSwitchover NOTIFICATION-TYPE
OBJECTS { starSlotNum, starHdRaidMgmtCardSwitchoverCause }
STATUS current
DESCRIPTION
"Management Card Switchover due to unrecoverable HDRaid error."
---#SUMMARY "Management Card switchover happened from slot %d due to unrecoverable HDRaid error %s."
---#ARGUMENTS (0,1)
---#STATE OPERATIONAL
---#SEVERITY MAJOR
::= { starentTraps 1333 }

starThresholdLSLogsVolume NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starThresholdInt, starThresholdMeasuredInt }
STATUS current
DESCRIPTION
"When any facility and instance generate event-logs more than the configured amount of threshold for a configured amount of time, will trigger a trap."
---#SUMMARY "[System] Threshold: facility %s instance %d is generating overwhelming logs, threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2,3)
---#STATE OPERATIONAL
---#SEVERITY INFORMATIONAL
::= { starentTraps 1334 }

starThresholdClearLSLogsVolume NOTIFICATION-TYPE
OBJECTS { starTaskFacilityName, starTaskInstance, starThresholdInt, starThresholdMeasuredInt }
STATUS current
DESCRIPTION
"When any facility and instance generate event-logs less than the clear threshold, will trigger clear trap."
---#SUMMARY "[System] Threshold: facility %s instance %d overwhelming logs threshold clear for threshold %d%% measured %d%%"
---#ARGUMENTS (0,1,2,3)
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starentTraps 1335 }

-- Conformance Information

starentMIBConformance OBJECT IDENTIFIER ::= { starentMIB 3 }
starentMIBGroups OBJECT IDENTIFIER ::= { starentMIBConformance 1 }
starentMIBCompliances OBJECT IDENTIFIER ::= { starentMIBConformance 2 }

-- Compliance Statements

starentMIBCompliance2 MODULE-COMPLIANCE
STATUS current
DESCRIPTION
"The compliance statement for ..."

MODULE
MANDATORY-GROUPS { starChassisGroup,
starAlertGroup,
starAlertTrapGroup,
starTrapGroup }
::= { starentMIBCompliances 2 }

starChassisGroup OBJECT-GROUP
OBJECTS { starChassisCriticalCO,
starChassisMajorCO,
starChassisMinorCO,
starChassisAudibleAlarm,
starChassisUTCTime,
starChassisLocalTime,
starChassisType,
starChassisAction,
starTimeTicks,
starChassisDescription,
starChassisSWRevision,
starChassisPeakCpuUsage,
starChassisPeakMemoryUsage,
-- slot table
starSlotType,
starCardType,
starCardOperState,
starCardAdminState,
starCardRevision,
starCardLastStateChange,
starCardMode,
starCardPacStandbyPriority,
starCardLock,
starCardHaltIssued,
starCardRebootPending,
starCardUsable,
starCardSinglePOF,
starCardAttachment,
starCardTemperature,
starSlotNumPorts,
starSlotAction,
starSlotVoltageState,
starSlotNumCPU,
starSlotPartNumber,
starSlotPartRevision,


STARENT-MIB DEFINITIONS ::= BEGIN

starSlotSerialNumber,
starSlotCLEICode,
starSlotCiscoModelName,
starSlotCiscoHardwareRev,
starSlotCiscoSerialNumber,
starDeviceNum,
starSerdesNum,
starSlotMappingType,
starSlotMappingRCCNum,
starSlotMappingToSlot,
-- NPU table
starNPUSlot,
-- fan table
starFanNum,
starFanLocation,
starFanStatus,
starFanSpeed,
-- log table
starLogCurSize,
starLogMaxSize,
starLogText,
-- power table
starPowerState,
-- cpu table
starCPUUser,
starCPUUsage,
starCPUIdle,
starCPUIO,
starCPUIRQ,
starCPULoad1Min,
starCPULoad5Min,
starCPULoad15Min,
starCPUMemTotal,
starCPUMemUsed,
starCPUNumProcesses,
starCPUmemCached,
-- Session In Progress
starSessInProgCalls,
starSessInProgActiveCalls,
starSessInProgDormantCalls,
starSessInProgArrived,
starSessInProgArrived,
starSessInProgLCPNeg,
starSessInProgLCPUp,
starSessInProgAuthenticateing,
starSessInProgAuthenticated,
starSessInProgIPCUP,
starSessInProgIPConn,
starSessInProgMIPConn,
starSessInProgDisc,
-- Session
starSessMgrCount,
starSessTtlArrived,
starSessTtlRejected,
starSessTtlConnected,
starSessTtlAuthSucc,
starSessTtlAuthFail,
starSessTtlLCPUp,
starSessTtlIPCPUp,
starSessTtlSrcViol,
starSessTtlKeepFail,
starSessTtlOctForwarded,
starSessTtlRPFragAccept,
starSessTtlRPFragAcceptInterPDSN,

-- NPU table

starNPUSlot,
STARIENT-MIB DEFINITIONS ::= BEGIN

starSessCurrPPPSessions,
starSessTtlTxBytes,
starSessTtlRxBytes,
starSessTtlSIPxxBytes,
starSessTtlSIPxxBytesRev1,
starSessTtlMIPTxxBytes,
starSessTtlMIPTxxBytesRev1,
starSessTtlOctForwardedGB,
starSessTtlOctForwardedGBRev1,

-- AAA
starAAAMgrCount,
starAAATtlRequests,
starAAATtlAuthRequests,
starAAATtlAcctRequests,
starAAACurRequests,
starAAACurAuthRequests,
starAAACurAcctRequests,
starAAATtlAcctSess,
starAAACurAcctSess,
starAAATtlAuthSuccess,
starAAATtlAuthFailure,

-- All
starAllMgrCount,
starAllTtlTtlArrived,
starAllTtlTtlRejected,
starAllTtlTtlDemultiplexed,
starAllTtlTtlDereg,
starAllCurActive,

-- HA
starHAMgrCount,
starHATtlTtlArrived,
starHATtlTtlRejected,
starHATtlTtlDemultiplexed,
starHATtlTtlDereg,
starHACurActive,

-- FA
starFAMgrCount,
starFATtlTtlArrived,
starFATtlTtlRejected,
starFATtlTtlDemultiplexed,
starFATtlTtlDereg,
starFACurActive,

-- Service Managers
starServiceVpnName,
starServiceServName,
starServiceSubLimit,
starServiceSubCurrent,
starServiceType,
starServiceFAIpAddr,
starServiceHAIpAddr,

-- CLI
starCLITtyname,
starCLIPrivs,
starCLIType,
starCLIRemoteIpAddrType,

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starCLIRemoteIpAddr,
starCLIContext,
-- Tasks
  starTaskFacilityName,
  starTaskCard,
  starTaskCPU,
-- PPP Stats
  starPPPStatVpnName,
  starPPPStatServName,
  starPPPStatInit,
  starPPPStatReneg,
  starPPPStatSuccess,
  starPPPStatFailed,
  starPPPStatReleased,
  starPPPStatReleasedLocal,
  starPPPStatReleasedRemote,
  starPPPStatLcpFailMaxRetry,
  starPPPStatLcpFailOption,
  starPPPStatIpcpFailMaxRetry,
  starPPPStatIpcpFailOption,
  starPPPStatCcpFail,
  starPPPStatAuthFail,
  starPPPStatLcpEntered,
  starPPPStatAuthEntered,
  starPPPStatIpcpEntered,
  starPPPStatRenegPdsn,
  starPPPStatRenegMobil,
  starPPPStatRenegAddrMismatch,
  starPPPStatRenegOther,
  starPPPStatChapAuthAttempt,
  starPPPStatPapAuthAttempt,
  starPPPStatMSChapAuthAttempt,
  starPPPStatChapAuthFail,
  starPPPStatPapAuthFail,
  starPPPStatMSChapAuthFail,
  starPPPStatStacComp,
  starPPPStatMppcComp,
  starPPPStatDeflComp,
  starPPPStatFscErrs,
  starPPPStatUnknProto,
  starPPPStatBadAddr,
  starPPPStatBadCtrl,
  starPPPStatVjComp,
  starPPPStatDiscLcpRemote,
  starPPPStatDiscRpRemote,
  starPPPStatDiscAdmin,
  starPPPStatDiscIdleTimeout,
  starPPPStatDiscAbsTimeout,
  starPPPStatDiscPPPKeepalive,
  starPPPStatDiscNoResource,
  starPPPStatDiscMisc,
  starPPPStatFailedReneg,
  starPPPStatLcpFailUnknown,
  starPPPStatIpcpFailUnknown,
  starPPPStatAuthAbort,
  starPPPStatLowerLayerDisc,
  starPPPStatLcpSuccess,
  starPPPStatAuthSuccess,
  starPPPStatRenegLowerLayerHandoff,
  starPPPStatRenegParamUpdate,
  starPPPStatChapAuthSuccess,
  starPPPStatPapAuthSuccess,
  starPPPStatMSChapAuthSuccess,
STARENT-MIB DEFINITIONS ::= BEGIN

starPPPStatChapAuthAbort,
starPPPStatPapAuthAbort,
starPPPStatMSChapAuthAbort,
starPPPStatSessSkipAuth,
starPPPStatNegComp,
starPPPStatCCPNegFailComp,
starPPPStatDiscLocalLowerLayer,
starPPPStatDiscAddFlowFail,
starPPPStatDiscMaxRetriesLCP,
starPPPStatDiscMaxRetriesIPCP,
starPPPStatDiscMaxSetupTimer,
starPPPStatDiscInvalidDestVpn,
starPPPStatDiscOptNegFailLCP,
starPPPStatDiscOptNegFailIPCP,
starPPPStatDiscNoRemoteIpAddr,
starPPPStatDiscCallDetectFail,
starPPPStatDiscRemoteDiscUpLayer,
starPPPStatDiscLongDuraTimeout,
starPPPStatDiscAuthFail,
starPPPStatLCPEchoTotalReq,
starPPPStatLCPEchoReqResent,
starPPPStatLCPEchoReqRecved,
starPPPStatLCPEchoReqTimeout,
starPPPStatRecvErrBadCtrlField,
starPPPStatRecvErrBadPacketLen,
starPPPStatRemoteTerm,
starPPPStatMiscFail,

-- MIPHA Stats
starMIPHAStatVpnID,
starMIPHAStatVpnName,
starMIPHAStatServName,
starMIPHAStatDisconnects,
starMIPHAStatExpiry,
starMIPHAStatDereg,
starMIPHAStatAdminDrop,
starMIPHAStatRegRecvTotal,
starMIPHAStatRegRecvInitial,
starMIPHAStatRegRecvRenew,
starMIPHAStatRegRecvDereg,
starMIPHAStatRegAcceptTotal,
starMIPHAStatRegAcceptReg,
starMIPHAStatRegAcceptRenew,
starMIPHAStatRegAcceptDereg,
starMIPHAStatRegDeniedTotal,
starMIPHAStatRegDeniedInitial,
starMIPHAStatRegDeniedRenew,
starMIPHAStatRegDeniedDereg,
starMIPHAStatRegReplyTotal,
starMIPHAStatRegReplyAcceptReg,
starMIPHAStatRegReplyAcceptDereg,
starMIPHAStatRegReplyDenied,
starMIPHAStatRegReplyBadReq,
starMIPHAStatRegReplyMismatchID,
starMIPHAStatRegReplyAdminProhib,
starMIPHAStatRegReplyUnspecErr,
starMIPHAStatRegReplyNoResource,
starMIPHAStatRegReplyMnAuthFail,
starMIPHAStatRegReplyFAAuthFail,
starMIPHAStatRegReplySimulBind,
starMIPHAStatRegReplyUnknownHA,
starMIPHAStatRegReplyRevTunUnav,
starMIPHAStatRegReplyRevTunMand,
STARENT-MIB DEFINITIONS ::= BEGIN

starMIPHAStatRegReplyEncapUnav,
starMIPHAStatRegReplySendError,
starMIPHAStatFARevolutions,
starMIPHAStatRegAcceptHO,
starMIPHAStatRegDeniedHO,
starMIPHAStatRegDiscardTotal,

-- MIPFA Stats
starMIPFAStatVpnID,
starMIPFAStatVpnName,
starMIPFAStatServName,
starMIPFAStatAdvertSend,
starMIPFAStatDiscSend,
starMIPFAStatDiscDiscAdmin,
starMIPFAStatAuthAttempt,
starMIPFAStatAuthSuccess,
starMIPFAStatAuthFailure,
starMIPFAStatRegRecvTotal,
starMIPFAStatRegRecvInitial,
starMIPFAStatRegRecvRenewal,
starMIPFAStatRegRecvDereg,
starMIPFAStatRegAcceptTotal,
starMIPFAStatRegAcceptInitial,
starMIPFAStatRegAcceptRenewal,
starMIPFAStatRegAcceptDereg,
starMIPFAStatRegDenTotal,
starMIPFAStatRegDenInitial,
starMIPFAStatRegDenRenewal,
starMIPFAStatRegDenDereg,
starMIPFAStatRegDiscardTotal,
starMIPFAStatRegDiscardInitial,
starMIPFAStatRegDiscardRenewal,
starMIPFAStatRegDiscardDereg,
starMIPFAStatRegRelayedTotal,
starMIPFAStatRegRelayedInitial,
starMIPFAStatRegRelayedRenewal,
starMIPFAStatRegRelayedDereg,
starMIPFAStatRegAuthFailTotal,
starMIPFAStatRegAuthFailInitial,
starMIPFAStatRegAuthFailRenewal,
starMIPFAStatRegAuthFailDereg,
starMIPFAStatRegDenPDSNTotal,
starMIPFAStatRegDenPSNInitial,
starMIPFAStatRegDenPSNRenewal,
starMIPFAStatRegDenPSNRenewal,
starMIPFAStatRegDenPDSNDereg,
starMIPFAStatRegDenHATotal,
starMIPFAStatRegDenHAInitial,
starMIPFAStatRegDenHARenewal,
starMIPFAStatRegDenHDereg,
starMIPFAStatRegDenPDSNUnspec,
starMIPFAStatRegDenPDSNTimeout,
starMIPFAStatRegDenPDSNAdmin,
starMIPFAStatRegDenPDSNResources,
starMIPFAStatRegDenPDSNNoAuth,
starMIPFAStatRegDenPDSNNoId,
starMIPFAStatRegDenPDSNTooLong,
starMIPFAStatRegDenPDSNBadReq,
starMIPFAStatRegDenPDSNEncapUnav,
starMIPFAStatRegDenPDSNRevTunUnav,
starMIPFAStatRegDenPDSNRevTunMand,
starMIPFAStatRegDenHAAuth,
starMIPFAStatRegDenHABadReq,
starMIPFAStatRegDenHAMismatchID,
STARENT-MIB DEFINITIONS ::= BEGIN

starMIPFAStatRegDenHASimulBind,
starMIPFAStatRegDenHAUnknownHA,
starMIPFAStatRegDenHARevRunUnavail,
starMIPFAStatRegRplRcvvTotal,
starMIPFAStatRegRplRcvvTotalRly,
starMIPFAStatRegRplRcvErrors,
starMIPFAStatRegRplRcvInitial,
starMIPFAStatRegRplRcvInitialRly,
starMIPFAStatRegRplRcvRenewal,
starMIPFAStatRegRplRcvRenewalRly,
starMIPFAStatRegRplRcvDereg,
starMIPFAStatRegRplRcvDeregRly,
starMIPFAStatRegRplSentTotal,
starMIPFAStatRegRplSentAcceptReg,
starMIPFAStatRegRplSentAcceptDereg,
starMIPFAStatRegRplSentBadReq,
starMIPFAStatRegRplSentTooLong,
starMIPFAStatRegRplSentMnAuthFail,
starMIPFAStatRegRplSentHAAuthFail,
starMIPFAStatRegRplSentAdminProhib,
starMIPFAStatRegRplSentNoResources,
starMIPFAStatRegRplSentRevTunUnav,
starMIPFAStatRegRplSentRevTunMnd,
starMIPFAStatRegRplSentRevTunRly,
starMIPFAStatRegRplSentSendErrors,
starMIPFAStatRegDenPDSNBadReply,
starMIPFAStatRegDenPDSNMissNAI,
starMIPFAStatRegDenPDSNMissHomeAgent,
starMIPFAStatRegDenPDSNMissHomeAddr,
starMIPFAStatRegDenPDSNUnknChallenge,
starMIPFAStatRegDenPDSNSMissChallenge,
starMIPFAStatRegDenPDSNStyleUnavail,
starMIPFAStatRegDenPDSNNetUnreach,
starMIPFAStatRegDenPDSNHAHostUnreach,
starMIPFASstatRegDenPDSNHAHostUnreach,
starMIPFASstatRegDenPDSNHAHostUnreach,
starMIPFASstatRegDenPDSNHAHostUnreach,
starMIPFASstatRegDenPDSNInvCOA,
starMIPFAStatRegSentIniTotal,
starMIPFAStatRegSentIniResend,
starMIPFAStatRegSentRenewTotal,
starMIPFAStatRegSentDeregTotal,
starMIPFAStatRegSentDeregResend,
starMIPFASstatRegRplSentMNTooDistant,
starMIPFASstatRegRplSentInvCOA,
starMIPFASstatRegRplSentHAHostUnreach,
starMIPFASstatRegRplSentHAHostUnreach,
starMIPFASstatRegRplSentHAHostUnreach,
starMIPFASstatRegRplSentRegTimeout,
-- RP stats
starRPStatVpnID,
starRPStatVpnName,
starRPStatServName,
SNMP MIB Reference, StarOS™
Release 21.0

STARENT-MIB DEFINITIONS ::= BEGIN

starRPRegRecvTotal,
starRPRegAcceptTotal,
starRPRegDeniedTotal,
starRPRegDiscardTotal,
starRPRegAcceptInitial,
starRPRegAcceptInterPDSN,
starRPRegDeniedInitial,
starRPRegAcceptRenew,
starRPRegDeniedRenew,
starRPRegAcceptDereg,
starRPRegDeniedDereg,
starRPRegSendError,
starRPRegHashError,
starRPRegDecodeError,
starRPRegUnhandled,
starRPRegAirlinkSeqError,
starRPRegDenyUnspec,
starRPRegDenyAdminProhib,
starRPRegDenyNoResource,
starRPRegDenyAuth,
starRPRegDenyMismatchID,
starRPRegDenyBadRequest,
starRPRegDenyUnknownPDSN,
starRPRegDenyRevTunUnav,
starRPRegDenyRevTunReq,
starRPRegDenyUnrecogVend,
starRPRegUpdTotal,
starRPRegUpdAccept,
starRPRegUpdDenied,
starRPRegUpdUnack,
starRPRegUpdTrans,
starRPRegUpdRetrans,
starRPRegUpdReceived,
starRPRegUpdDiscard,
starRPRegUpdSendError,
starRPRegUpdUplyrInit,
starRPRegUpdOther,
starRPRegUpdHandoff,
starRPRegUpdDeniedUnspec,
starRPRegUpdDeniedAdminProhib,
starRPRegUpdDeniedAuth,
starRPRegUpdDeniedMismatchID,
starRPRegUpdDeniedBadRequest,
starRPRegSecViolations,
starRPRegSecBadAuth,
starRPRegSecBadID,
starRPRegSecBadSpi,
starRPRegSecMissingMnHAAuth,
starRPRegSecMissingRegUpdate,
starRPRegRecvInitial,
starRPRegAcceptActvStartIntraPDSN,
starRPRegAcceptActvStopIntraPDSN,
starRPRegRecvRenew,
starRPRegActvStartRenew,
starRPRegActvStopRenew,
starRPRegRecvDereg,
starRPRegAcceptActvStopDereg,
starRPDiscSessAbsent,
starRPDiscNoMemory,
starRPDiscMalformed,
starRPDiscAuthFail,
starRPDiscInternalBounce,
starRPDiscInpQueueExceeded,
STARENT-MIB DEFINITIONS ::= BEGIN

starRPDiscMismatchedId,
starRPDiscInvPacketLen,
starRPDiscMisc,
   starRP1xTxBytes,
starRP1xRxBytes,
starRP1xTxPackets,
starRP1xRxPackets,
starRPDoTxBytes,
starRPDoRxBytes,
starRPDoTxPackets,
starRPDoRxPackets,

--
starSubContext,
starSubTimerDuration,
starSubLongDurTimeoutAction,
starSubSetupTime,
starSubHomeAddr,
starSubHomeAddrv6,
--
starEISServerVPNName,
--
starThreshMeasuredPct,
starThreshPct,
   starThreshMeasuredInt,
starThreshInt,
   starThreshMeasuredMB,
starThreshMB,
starThreshMeasuredGB,
starThreshGB,
-- Port
starPortType,
starPortTypeDescr,
starPortAdminState,
starPortOperState,
starPortOperMode,
starPortLinkState,
starRedundantPortSlot,
starRedundantPortNum,
starPortRxBytes,
starPortTxBytes,
starPortRxFrames,
starPortTxFrames,
starPortRxDiscards,
starPortTxDiscards,
starPortRxErrors,
starPortTxErrors,
-- IP Pool
starIPPoolVpnID,
starIPPoolContext,
starIPPoolGroup,
starIPPoolName,
starIPPoolType,
starIPPoolState,
starIPPoolStartAddr,
starIPPoolMaskorEndAddr,
starIPPoolPriority,
starIPPoolUsed,
starIPPoolHold,
starIPPoolRelease,
starIPPoolFree,
-- IP Pool group

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STARENT-MIB DEFINITIONS ::= BEGIN

starIPPoolGroupName,
starIPPoolGroupVpnName,
starIPPoolGroupUsed,
starIPPoolGroupHold,
starIPPoolGroupRelease,
starIPPoolGroupFree,
starIPPoolGroupPctUsed,
starIPPoolGroupAvail,
starLicensedSessions,
starCurrentSessions,
starDiameterVpnName,
starDiameterPeerAddr,
starDiameterEndpointName,
starDiameterPeerAddrIpv6,
starInterfaceIPAddress,
starOSPFNeighborRouterID,
starOSPFFromState,
starOSPFToState,
starDiameterECode,
starGSSCDRLossConfigured,
starGSSCDRLossMeasured,
-- GGSN
starSessGSSNVpnName,
starSessGSSNServName,
starSessGSSNPeerPort,
starSessGSSNPeerAddr,
starSessGSSNImsi,
starSessGSSNSubsName,
starSessGSSNAPNName,
starSessGTPPPoolGroupName,
-- L2TP
starL2TPContextName,
starL2TPServiceName,
starL2TPServiceTypeName,
starL2TPLocalAddress,
starL2TPPeerAddress,
-- SUB1
starSessSub1Context,
starSessSub1NAI,
starSessSub1MSID,
starSessSub1IpAddr,
starSessSub1LastResult,
starSessSub1ServiceName,
starSessSub1HAIpAddr,
starSessSub1PeerIpAddr,
starSessSub1InPackets,
starSessSub1InPacketsDropped,
starSessSub1InBytes,
starSessSub1OutPackets,
starSessSub1OutPacketsDropped,
starSessSub1OutBytes,
starSessSub1Activity,
starSessSub1State,
starSessSub1CallID,
starSessSub1ConnectTime,
starSessSub1CallDuration,
starSessSub1TimeIdle,
starSessSub1AccessType,
starSessSub1AccessTech,
starSessSub1LinkStatus,
starSessSub1NetworkType,
starSessSub1CarrierID,
starSessSub1ESN,
STARENT-MIB DEFINITIONS ::= BEGIN

starSessSub1GMTimezoneOffset,
starSessSub1SessMgr,
starSessSub1RemoteIPAddr,
starSessSub1Card,
starSessSub1CPU,
starSessSub1TimeIdleLeft,
starSessSub1TimeLeft,
starSessSub1TimeLongDurLeft,
starSessSub1LongDurAction,
starSessSub1AlwaysOn,
starSessSub1PPoolName,
starSessSub1VLANID,
starSessSub1LNSIPAddr,
starSessSub1ProxyMIP,
starSessSub1GGSMIP,
starSessSub1HomeAgentIPAddr,
starSessSub1LocalIPAddr,
starSessSub1FAServiceName,
starSessSub1FAVFPName,
starSessSub1SourceVPN,
starSessSub1DestVPN,
starSessSub1AAAVPN,
starSessSub1AAADomain,
starSessSub1AAAScr,
starSessSub1AAAScrstop,
starSessSub1AAain,
starSessSub1AcctSessionID,
starSessSub1AAARadiusGroup,
starSessSub1AAARadiusAuthServerIPAddr,
starSessSub1AAARadiusAcctServerIPAddr,
starSessSub1NASIPAddr,
starSessSub1NexthopIPAddr,
starSessSub1ActiveInACL,
starSessSub1ActiveOutACL,
starSessSub1ECSRulebase,
starSessSub1InPlcyGrp,
starSessSub1OutPlcyGrp,
starSessSub1DownTrafPolState,
starSessSub1DownCommDataRate,
starSessSub1DownPeakDataRate,
starSessSub1DownBurstSize,
starSessSub1DownExceedAction,
starSessSub1DownViolateAction,
starSessSub1DownExceed,
starSessSub1DownViolate,
starSessSub1UpTrafPolState,
starSessSub1UpCommDataRate,
starSessSub1UpPeakDataRate,
starSessSub1UpBurstSize,
starSessSub1UpExceedAction,
starSessSub1UpViolateAction,
starSessSub1UpExceed,
starSessSub1UpViolate,
starSessSub1L3TunnelingState,
starSessSub1L3TunLocalIPAddr,
starSessSub1L3TunRemoteIPAddr,
starSessSub1AddrViaDHCP,
starSessSub1DHCPServName,
starSessSub1DHCPServIPAddr,
starSessSub1AccessLinkIPFrag,
starSessSub1IgnoreDFBit,
starSessSub1MIPGratARPMode,
starSessSub1ExtInlSrvrProc,
starSessSub1ExtInlSrvrIngrIPAddr,
starSessSub1ExtInlSrvrIngrVLANTag,
starSessSub1ExtInlSrvrEgrIPAddr,
starSessSub1ExtInlSrvrEgrVLANTag,
starSessSub1ExtInlSrvrVPNName,
starSessSub1RadAcctMode,
starSessSub1InBytesDropped,
starSessSub1OutBytesDropped,
starSessSub1PeakBPSTx,
starSessSub1PeakBPSRx,
starSessSub1AveBPSTx,
starSessSub1AveBPSRx,
starSessSub1SustBPSTx,
starSessSub1SustBPSRx,
starSessSub1PeakPSTx,
starSessSub1PeakPSRx,
starSessSub1AvePSTx,
starSessSub1AvePSRx,
starSessSub1SustPSTx,
starSessSub1SustPSRx,
starSessSub1ActivePct,
starSessSub1IPv4BadHdr,
starSessSub1IPv4TtlExceeded,
starSessSub1IPv4FragSent,
starSessSub1IPv4FragFail,
starSessSub1IPv4InACLDrop,
starSessSub1IPv4OutACLDrop,
starSessSub1IPv4InCSSDownDrop,
starSessSub1IPv4OutCSSDownDrop,
starSessSub1IPv4OutXOFFDropPkt,
starSessSub1IPv4OutXOFFDropByte,
starSessSub1IPv4SrcViol,
starSessSub1IPv4ProxyDNSRedir,
starSessSub1IPv4SrcProxyDNSPThru,
starSessSub1IPv4ProxyDNSDrop,
starSessSub1IPv4SrcViolNoAcct,
starSessSub1IPv4SrcViolIgnored,
starSessSub1ExtInlSrvrTxPkt,
starSessSub1ExtInlSrvrRxPkt,
starSessSub1IPv4ICMPDropPkt,
starSessSub1TunnelType,
starSessSub1IPSECTunDownDropPkt,
starSessSub1IPSECFowID,
starSessSub1DormancyTotal,
starSessSub1HandoffTotal,
starSessSub1AccessFlows,
starSessSub1TFT,
starSessSub1NASPort,
starSessSub1AcctSessionID,
starSessSub1CorrID,
starSessSub1L2TPPeerIPAddr,
starSessSub1IPv4EarlyPDUGen,
starIPSECContextName,
starIPSECGroupName,
starIPSECTunLocalIpAddr,
starIPSECTunRemoteIpAddr,
starIPSECPolicyName,
starIPSECDynPolicyType,
starIPSECDynPolicyPayloadType,
starIPSECLocalGateway,
starIPSECRemoteGateway,
STARENT-MIB DEFINITIONS ::= BEGIN

-- SIPRoute
starSIPRouteVpnName,
starSIPRouteVmgName,
starSIPRouteAsName,
starSIPRouteDestPartyNum,
starSIPRouteReqNum,

-- SIPRouteServer
starSIPRouteServerVpnName,
starSIPRouteServerVmgName,
starSIPRouteServerAsName,
starSIPRouteServerIpAddr,

-- VIMService
starVIMServiceVpnName,
starVIMServiceFMDMaxCallRate,
starVIMServiceFMDContinuousLoadCount,

-- GSS
starGSSClusterName,
starGSSClusterNodeName,
starGSSClusterRgName,
starGSSClusterRsName,
starGSSClusterNodeState,
starGSSClusterFrevOnlineNode,
starGSSClusterFrmcNode,
starGSSClusterToNode,
starGSSDiskPath,
starGSSTransportPath,
starGSSIPMMPgroupName,
starGSSInterfaceName,

-- RP Service Option
starRPServiceOptionCalls,

-- PCF Status
starPCFStatVpnName,
starPCFStatRxPkts,
starPCFStatTxPkts,
starPCFStatRxBytes,
starPCFStatTxBytes,
starPCFStatTotalSessions,
starPCFStatCurrentSessions,
starPCFStatCurrentActiveSessions,
starPCFStatCurrentDormantSessions,
starPCFStatCurrentSIPConnected,
starPCFStatCurrentMIPConnected,
starPCFStatCurrentPMIPConnected,
starPCFStatCurrentL2TPPLACConnected,

-- PCF Service Stats
starPCFVpnID,
starPCFVpnName,
starPCFServName,
starPCFReqRcvd,
starPCFReqAccepted,
starPCFReqDenied,
starPCFReqDiscarded,
starPCFInitialRqrRcvd,
starPCFInitialRqrAccepted,
starPCFIntraPDSNActiveHORqrAccepted,
starPCFIntraPDSNDormantHORqrAccepted,
starPCFInterPDSNNORqrAccepted,
starPCFInitialRqrDenied,
starPCFInitialRqrDiscarded,
starPCFRenewRqrRcvd,
starPCFRenewRqrAccepted,
STARENT-MIB DEFINITIONS ::= BEGIN

starPCFRenewActiveRrqAccepted,
starPCFRenewDormantRrqAccepted,
starPCFRenewRrqDenied,
starPCFRenewRrqDiscarded,
starPCFDeregRrqCvd,
starPCFDeregRrqAccepted,
starPCFDeregDormantRrqAccepted,
starPCFDeregRrqDenied,
starPCFDeregRrqDiscarded,
starPCFIntraPDSNAActiveAnidHORrqAccepted,
starPCFIntraPDSNdormantAnidHORrqAccepted,
starPCFDeniedUnSpeReason,
starPCFDeniedAdmProh,
starPCFDeniedInsufResource,
starPCFDeniedMobNodeAuthFail,
starPCFDeniedIdentMismatch,
starPCFDeniedPoorformedReq,
starPCFDeniedUnknownPDSAddr,
starPCFDeniedRevTunnelUnavail,
starPCFDeniedRevTunnelRequire,
starPCFDeniedUnrecogVendorId,
starPCFDeniedSessionClosed,
starPCFDeniedBanSessionInfoUnavail,
starPCFRegUdpTransmitted,
starPCFRegUdpAccepted,
starPCFRegUpdateRpLifetimeExpiry,
starPCFRegUpdateUpperLayerInitiated,
starPCFRegUpdateOtherReason,
starPCFRegUpdateHORlease,
starPCFRegUpdateSessmgrDied,
starPCFAuxA10ConnectionsSetup,
starPCFSessionsDenied,
starPCFSessionsInit,
starPCFSessionsReneg,
starPCFDiscLcpRemote,
starPCFDiscRpRemote,
starPCFDiscRpLocal,
starPCFDiscMaxlcpRetr,
starPCFDiscMaxipv6cpRetr,
starPCFDiscMaxlcpRetr,
starPCFDiscAuthFail,
starPCFDiscSessSetupTimeout,
starPCFDiscFlowAddFail,
starPCFDiscInvDestContext,
starPCFDiscLcpOptFail,
starPCFDiscIpcoxOptFail,
starPCFDiscIpv6cpOptFail,
starPCFDiscNoRemIpAddr,
starPCFDiscDetectionFail,
starPCFDiscMisc,
starPCFCurrentSessions,
starPCFSessionsSetup,
starPCFSessionsRelease,
starPCFCurrentRevaSessions,
starPCFRevaSessionsSetup,
starPCFRevaSessionsRelease,
-- PDIF System
starPDIFSysStatus,
starPDIFSysNumService,
starPDIFSysSessCurrent,
starPDIFSysSessCurrActive,
starPDIFSysSessCurrDormant,
starPDIFSysSessTtlSetup,
STARENT-MIB DEFINITIONS ::= BEGIN

starPDIFSysChildSACurrent,  -- PDIF Service
starPDIFVpnID,
starPDIFVpnName,
starPDIFServName,
starPDIFStatus,
starPDIFSessCurrent,
starPDIFSessRemain,
starPDIFSessCurrentActive,
starPDIFSessCurrentDormant,
starPDIFSessCurrentIpv6Active,
starPDIFSessCurrentIpv6Dormant,
starPDIFSessCurrentIpv4Active,
starPDIFSessCurrentIpv4Dormant,
starPDIFBindIpAddress,
starPDIFBindIpPort,
starPDIFBindSlot,
starPDIFBindPort,
  -- SGSN Service
starSessSGSNVpnName,
starSessSGSNServName,
starSessSGSNMcc,
starSessSGSNMnc,
starSessSGSNBccId,
starSessSGSNHlrNum,
  -- SS7Rd
starSS7Pc,
starSS7M3UApSId,
starSS7M3UApPapId,
starSS7MTP3LinkSetId,
starSS7MTP3LinkId,
starSS7SCFSPeaddr,
starSS7SCTPSPeeraddr,
starSS7SCTPSelfPort,
starSS7SCTPFeaddrPort,
  -- SCCF
starSCCFserv,
  -- SGTF Serv
starSGTFVpnName,
starSGTServName,
starSGTSPselfAddr,
starSGTPpeerAddr,
starSGTPSelfPort,
starSGTPFeaddrPort,
  -- IPMS
starIPMSServerVpnName,
  -- Certs
starCertExpiryTime,
starCertIssuer,
  -- Files
starFileApplication,
  -- FTP Servers
starFTPServVpnName,
    -- CSCF Peer Server
starCSCFPeerServerVpnName,
starCSCFPeerServerSvcName,
starCSCFPeerServerListName,
starCSCFPeerServerName,
starCSCFPeerServerState,
  -- SDH/E1
starSDHOperState,
starSDHPathOperState,

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STARENT-MIB DEFINITIONS ::= BEGIN

starE1TribOperStateLOP,
starE1TribOperState,
starFractE1TribTimeslots,

--GPRSServ
starGPRSSNsvci,
starGPRSBvci,

--Storage
starStorageDeviceType,

-- PDG System
starPDGSysStatus,
starPDGSysNumService,
starPDGSysSessCurrent,
starPDGSysSessCurrActive,
starPDGSysSessCurrDormant,
starPDGSysSessTtlSetup,
starPDGSysChildSACurrent,

-- PDG Service
starPDGVpnID,
starPDGVpnName,
starPDGServName,
starPDGStatus,
starPDGSessCurrent,
starPDGSessRemain,
starPDGSessCurrentActive,
starPDGSessCurrentDormant,
starPDGSessCurrentIpv6Active,
starPDGSessCurrentIpv6Dormant,
starPDGSessCurrentIpv4Active,
starPDGSessCurrentIpv4Dormant,
starPDGBindIpAddress,
starPDGBindIpPort,
starPDGBindSlot,
starPDGBindPort,

--EGTPServ

-- PDG System
starPDGSysStatus,
starPDGSysNumService,
starPDGSysSessCurrent,
starPDGSysSessCurrActive,
starPDGSysSessCurrDormant,
starPDGSysSessTtlSetup,
starPDGSysChildSACurrent,

-- PDG Service
starPDGVpnID,
starPDGVpnName,
starPDGServName,
starPDGStatus,
starPDGSessCurrent,
starPDGSessRemain,
starPDGSessCurrentActive,
starPDGSessCurrentDormant,
starPDGSessCurrentIpv6Active,
starPDGSessCurrentIpv6Dormant,
starPDGSessCurrentIpv4Active,
starPDGSessCurrentIpv4Dormant,
starPDGBindIpAddress,
starPDGBindIpPort,
starPDGBindSlot,
starPDGBindPort,

--EGTPServ

starEGTPVpnName,
starEGTPServName,
starEGTPInterfaceType,
STARENT-MIB DEFINITIONS ::= BEGIN

starEGTPSelfPort,
starEGTPSelfAddr,
starEGTPPeerPort,
starEGTPPeerAddr,
starEGTPPeerOldRstCnt,
starEGTPPeerNewRstCnt,
starEGTPPeerSessCnt,
starEGTPPeerOldRstCnt,
starEGTPFailureReason,
starLicenseKey,
starLicenseExpiryDate,
starLicenseDaysRemaining,
starLicenseDaysAfterExpiry,
-- FNG System
starFNGSysStatus,
starFNGSysNumService,
starFNGSysSessCurrent,
starFNGSysSessCurrActive,
starFNGSysSessCurrDormant,
starFNGSysSessTtlSetup,
starFNGSysChildSACurrent,
-- FNG Service
starFNGVpnID,
starFNGVpnName,
starFNGServName,
starFNGstatus,
starFNGSessCurrent,
starFNGSessCurrentActive,
starFNGSessCurrentDormant,
starFNGSessCurrentIpv6Active,
starFNGSessCurrentIpv6Dormant,
starFNGSessCurrentIpv4Active,
starFNGSessCurrentIpv4Dormant,
starFNGBindIpAddress,
starFNGBindIpAddress,
starFNGBindSlot,
starFNGBindPort,
-- MME S1 Assoc
starMMES1AssocVpnName,
starMMES1AssocServName,
-- MME S1 Path
starMMES1PathVpnName,
starMMES1PathServName,
starMMES1PathSelfAddr,
starMMES1PathSelfPort,
starMMES1PathPeerAddr,
starMMES1PathPeerPort,
-- SPR Server
starSPRServerIpAddr,
-- HNBSGW Service
starSessHNBSGWVpnName,
starSessHNBSGWservName,
starSessHNBSGWCsNwName,
starSessHNBSGWPsNwName,
starSessHNBSGWgsnPtCd,
starSessHNBSGWmscPtCd,
-- HENBGW Service
starHENBGWServiceVpnName,
starHENBGWServiceServName,
starHENBGWServiceLogicalENBId,
starHENBGWServiceMMEServName,
STARENT-MIB DEFINITIONS ::= BEGIN

starHENBGServicPeerAddr,
starHENBGServicPeerPort,
starHENBGServiceTLRI,
-- ALCAP Service
starSessALCAPVpnName,
starSessALCAPServName,
starSessALCAPAAL2NodeName,
starSessALCAPPathId,
-- MVG Service
starMVGEpointName,
starMVGCauseCode,
starMVGProtocolType,
starPCCNtfyIntfPeerName,
-- PMIP --
starPMIPVpnName,
starPMIPServName,
starPMIPSelfAddrType,
starPMIPSelfAddr,
starPMIPPeerAddrType,
starPMIPPeerAddr,
starPMIPPeerOldRstCnt,
starPMIPPeerNewRstCnt,
starPMIPPeerSessCnt,
starPMIPFailureReason,
-- CBS Service
starCBSServiceVpnName,
starIuBcSelfPortNum,
starIuBcSelfIpAddr,
starIuBcPeerPortNum,
starIuBcPeerIpAddr,
starIuBcTcpConnCauseStr,
-- RLF --
starGTPCRLFSessMgrInst,
starGTPCRLFVpnName,
starGTPCRLFVpnId,
starGTPCRLFContextName,
starGTPCRLFCurrAppTPS,
starGTPCRLFCurrAppDelayTol

}  

STATUS current
DESCRIPTION
"A collection of objects providing information about a chassis"
::= { starentMIBGroups 1 }

starAlertGroup OBJECT-GROUP
OBJECTS { starMaxAlertsPerTime,
starWindowTime,
starAlertSendingEnabled }

STATUS current
DESCRIPTION
"A collection of objects to control the rate at which traps can be generated"
::= { starentMIBGroups 3 }

starAlertTrapGroup NOTIFICATION-GROUP
NOTIFICATIONS { starAlertsDisabled,
starAlertsEnabled }

STATUS current
DESCRIPTION
"A collection of traps related to trap thresholding"
::= { starentMIBGroups 4 }

starTrapGroup NOTIFICATION-GROUP
NOTIFICATIONS { starCardTempOverheat,
STARENT-MIB DEFINITIONS ::= BEGIN

starCardTempOK,  
starCardRebootRequest,  
starCardUp,  
starCardVoltageFailure,  
starCardRemoved,  
starCardInserted,  
starCardBootFailed,  
starCardMismatch,  
starCardPACMigrateStart,  
starCardPACMigrateComplete,  
starCardPACMigrateFailed,  
starCardSPCSwitchoverStart,  
starCardSPCSwitchoverComplete,  
starCardSPCSwitchoverFailed,  
starFanFailed,  
starFanRemoved,  
starFanInserted,  
starCPUBusy,  
starCPUMemoryLow,  
starCPUMemoryFailed,  
starCPUFailed,  
starCPUWatchDogExpired,  
starNPUPRPoolExhausted,  
starPowerFilterUnitFailed,  
starPowerFilterUnitUnavail,  
starPowerFilterUnitAvail,  
starAlertsDisabled,  
starAlertsEnabled,  
starAAAAuthServerUnreachable,  
starAAAAuthServerReachable,  
starAAAAuthServerMisconfigured,  
starAAACCServerUnreachable,  
starAAACCServerReachable,  
starAAACCServerMisconfigured,  
starLogMsg,  
starPDSNServiceStart,  
starPDSNServiceStop,  
starHAServiceStart,  
starHAServiceStop,  
starFAServiceStart,  
starFAServiceStop,  
starCLISessionStart,  
starCLISessionEnd,  
starCritTaskFailed,  
starCardActive,  
starLACServiceStart,  
starLACServiceStop,  
starLNSServiceStart,  
starLNSServiceStop,  
starCardDown,  
starGGSNServiceStart,  
starGGSNServiceStop,  
starLicenseExceeded,  
starSubscriberLimit,  
starSessionRejectNoResource,  
starSIPServiceStart,  
starSIPServiceStop,  
starVIMServiceStart,  
starVIMServiceStop,  
starCHATCONFServiceStart,  
starCHATCONFServiceStop,  
starSIPRouteNomatch,
starL3AddrUnreachable,
starSWUpgradeStart,
starSWUpgradeComplete,
starSWUpgradeAborted,
starBGPPeerSessionUp,
starBGPPeerSessionDown,
starSRPActive,
starSRPStandby,
starBGPPeerReachable,
starBGPPeerUnreachable,
starSRPPAAReachable,
starSRPAAAUnreachable,
starSRPSwitchoverInitiated,
starSRPCheckpointFailure,
starSRPConfigOutOfSync,
starSRPConfigInSync,
starGESwitchFailure,
starSIPRouteServerAvailable,
starSIPRouteServerUnavailable,
starFMDMaxCallRateReached,
starFMDCallRateUnderControl,
starStorageServerCPUBusy,
starStorageServerCPUNormal,
starStorageServerDiskSpaceLow,
starStorageServerDiskSpaceOK,
starCardSPOFAlarm,
starCardSPOFClear,
starStorageServerOldGcdrPending,
starStorageServerOldGcdrCleared,
starLoginFailure,
starIPSGServiceStart,
starIPSGServiceStop,
starHAUnreachable,
starHAREachable,
starASNGWServiceStart,
starASNGWServiceStop,
starTaskFailed,
starTaskRestart,
starCSCFSERVICEStart,
starCSCFSERVICEStop,
starPHSGWServiceStart,
starPHSGWServiceStop,
starPHSPCServiceStart,
starPHSPCServiceStop,
starIPSECDynTunUp,
starIPSECDynTunDown,
starHeartbeat,
starOverloadSystem,
starOverloadSystemClear,
starOverloadService,
starOverloadServiceClear,
starStorageServerClusterStateChange,
starStorageServerClusSwitchOver,
starStorageServerClusPathFail,
starStorageServerClusPathOK,
starStorageServerClusInterCFail,
starStorageServerClusInterCOK,
starStorageServerClusIntfFail,
starStorageServerClusIntfOK,
starStorageServerMemLow,
starStorageServerMemNormal,
starLongDurTimerExpire,
starClosedRPSERVICEStart,
STARNT-MIB DEFINITIONS ::= BEGIN

starClosedRPServiceStop,
starGtpcPathFailure,
starGtpuPathFailure,
starManagerFailure,
starEISServerAlive,
starEISServerDead,
starCgAlive,
starCgDead,
starCdrPurged,
starAAAArchiveStarted,
starIPSecNodeIpv6PeerDown,
starIPSecNodeIpv6PeerUp,
starVLRAssocDown,
starVLRAssocUp,
starVLRAllAssocDown,
starVLRAllAssocDownClear,
starVLRDown,
starVLRUp,
starStorageServerAlive,
starStorageServerDead,
starGgsnInitiatedUpdtFailed,
starCongestion,
starCongestionClear,
starCscfSessResourceCongestion,
starCscfSessResourceCongestionClear,
starServiceLossPTACs,
starServiceLossLC,
starServiceLossSPIO,
starIPSPAllAddrFree,
starPCFUnreachable,
starPCFReachable,
starLIRcervyError,
starLIRcervyComplete,
starCGWServiceStart,
starCGWServiceStop,
starDhcpAlive,
starDhcpDead,
starDhcpServiceStarted,
starDhcpServiceStopped,
starNTPPeerUnreachable,
starNTPSyncLost,
starL2TPTunnelDownPeerUnreachable,
starCardStandby,
starLicenseUnderLimit,
starIPSECBriTunDown,
starIPSECBriTunUp,
starIPSECSecTunDown,
starIPSECSecTunUp,
starIPSECTunSwitchFail,
starIPSECTunSwitchComplete,
starNwReachServerAlive,
starNwReachServerDead,
starStorageServerUnackedGcdrVolFurge,
starStorageServerUnackedGcdrFileGen,
starNTPPeerReachable,
starNTPSyncEstablished,
starContFiltDBError,
starContFiltDBErrorClear,
starBLDBError,
starBLDBErrorClear,
starContFiltDBUpgradeError,
starContFiltDBUpgradeErrorClear,
STARENT-MIB DEFINITIONS ::= BEGIN

starBLDBUpgradeError,  
starBLDBUpgradeErrorClear,  
starDynPkgLoadError,  
starDynPkgLoadErrorClear,  
starDynPkgUpgradeError,  
starDynPkgUpgradeErrorClear,  
starPDIFServiceStart,  
starPDIFServiceStop,  
starSessMgrRecoveryComplete,  
starSessMgrFlowCount,  
starSessMgrFlowCountClear,  
starDiameterPeerDown,  
starDiameterPeerUp,  
starDiameterServerUnreachable,  
starDiameterServerReachable,  
starDiameterCapabilitiesExchangeSuccess,  
starDiameterCapabilitiesExchangeFailure,  
starCDRFileRemoved,  
starCSCFPeerServerReachable,  
starCSCFPeerServerUnreachable,  
starCSCFPeerServerUnavailable,  
starCSCFPeerServerOutofService,  
starCSCFPeerServerInService,  
starCLICfgMode,  
starSGSNServiceStart,  
starSGSNServiceStop,  
starM3UAPCUnAvailable,  
starM3UAPCAvailable,  
starECSTotalDNSLearntIPv4Threshold,  
starECSTotalDNSLearntIPv4ThresholdClear,  
starECSTotalDNSLearntIPv6Threshold,  
starECSTotalDNSLearntIPv6ThresholdClear,  
starM3UAPSDown,  
starM3UAPSAvailable,  
starM3UAPSPDown,  
starM3UAPSPUp,  
starSCCPSpspRcvd,  
starSCCPSpspClear,  
starSGSNRNCReset,  
starSGSNHLRReset,  
starSS7GtpcPathFailure,  
starSS7GtpcPathFailureClear,  
starSS7GtpuPathFailure,  
starSS7GtpuPathFailureClear,  
starMTF3LinkOutOfService,  
starMTF3LinkInService,  
starMTF3LinkSetUnavailable,  
starMTF3LinkSetAvailable,  
starSCTPAssociationFail,  
starSCTPAssociationEstablished,  
starSCTPPathDown,  
starSCTPPathUp,  
starMTF3PCUnavailable,  
starMTF3PCAvailable,  
starSS7PCUnavailable,  
starSS7PCAvailable,  
starSS7PCCongested,  
starSS7PCCongestionCleared,  
starM3UAPSPCongested,  
starM3UAPSPCongestionCleared,  
starStorageFailed,  
starRaidFailed,  
starRaidStarted,
starRaidDegraded,
starRaidRecovered,
starHENBGWMMESCTPAssocDown,
starHENBGWMMESCTPAssocUp,
starHENBGWMMESCTPAAllAssocDown,
starHENBGWMMESCTPAAllAssocUp,
starECSreaddressServerDown,
starECSreaddressServerUp,
starStorageFound,
starStorageNotFound,
starThreshCPUUtilization,
starThreshClearCPUUtilization,
starThreshCPUUtilization10Sec,
starThreshClearCPUUtilization10Sec,
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starThreshLNSSessions,
starThreshClearLNSSessions,
starThreshPerServicePDSNSessions,
starThreshClearPerServicePDSNSessions,
starThreshPerServicePDGSessions,
starThreshClearPerServicePDGSessions,
starThreshPerServiceGGSNSessions,
starThreshClearPerServiceGGSNSessions,
starThreshPerServiceHASessions,
starThreshClearPerServiceHASessions,
starThreshPerServiceLNSSessions,
starThreshClearPerServiceLNSSessions,
starThreshIPPoolHold,
starThreshClearIPPoolHold,
starThreshIPPoolUsed,
starThreshClearIPPoolUsed,
starThreshIPPoolRelease,
starThreshClearIPPoolRelease,
starThreshIPPoolFree,
starThreshClearIPPoolFree,
starThreshAAAAAcctArchive,
starThreshClearAAAAAcctArchive,
starThreshPortSpecRxUtil,
starThreshClearPortSpecRxUtil,
starThreshPortSpecTxUtil,
starThreshClearPortSpecTxUtil,
starThreshHACallSetupRate,
starThreshClearHACallSetupRate,
starThreshHASvcCallSetupRate,
starThreshClearHASvcCallSetupRate,
starThreshHASvcRegReplyError,
starThreshClearHASvcRegReplyError,
starThreshHASvcReregReplyError,
starThreshClearHASvcReregReplyError,
starThreshHASvcDeregReplyError,
starThreshClearHASvcDeregReplyError,
starThreshFASvcRegReplyError,
starThreshClearFASvcRegReplyError,
starThreshPDSNCallSetupRate,
starThreshClearPDSNCallSetupRate,
starThreshPDSNSvcCallSetupRate,
starThreshClearPDSNSvcCallSetupRate,
starThreshPDSNSvcAll1RRPFailure,
starThreshClearPDSNSvcAll1RRPFailure,
starThreshPDSNSvcAll1RRQMsgDiscard,
starThreshClearPDSNSvcAll1RRQMsgDiscard,
starThreshPDSNSvcAll1RACMsgDiscard,
starThreshClearPDSNSvcAll1RACMsgDiscard,
starThreshPDSNSvcAll1PPPSendDiscard,
starThreshClearPDSNSvcAll1PPPSendDiscard,
starThreshAAAAMgrQueue,
starThreshClearAAAAMgrQueue,
starThreshAAAAAcctArchiveQueue1,
starThreshClearAAAAAcctArchiveQueue1,
starThreshAAAAAcctArchiveQueue2,
starThreshClearAAAAAcctArchiveQueue2,
starThreshAAAAAcctArchiveQueue3,
starThreshClearAAAAAcctArchiveQueue3,
starThresholdDnsLookupSrvFailure,
starThreshClearDnsLookupSrvFailure,
starThreshCPUOrbsWarn,
starThreshClearCPUOrbsWarn,
starThreshCPUOrbsCritical,

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starThreshClearCPUOrbsCritical,
starThreshRPSetupFailRate,
starThreshClearRPSetupFailRate,
starThreshPPPSetupFailRate,
starThreshClearPPPSetupFailRate,
starThreshStorageUtilization,
starThreshClearStorageUtilization,
starThreshDCCAProtocolErrors,
starThreshClearDCCAProtocolErrors,
starThreshDCCABadAnswers,
starThreshClearDCCABadAnswers,
starThreshDCCAUknownRatingGroup,
starThreshClearDCCAUknownRatingGroup,
starThreshDCCARatingFailed,
starThreshClearDCCARatingFailed,
starThreshIPSECIKERequests,
starThreshClearIPSECIKERequests,
starThreshIPSECIKEFailures,
starThreshClearIPSECIKEFailures,
starThreshIPSECIKEFailRate,
starThreshClearIPSECIKEFailRate,
starThreshIPSECTunSetup,
starThreshClearIPSECTunSetup,
starThreshIPSECTunEstabl,
starThreshClearIPSECTunEstabl,
starThreshIPSECAllReqRej,
starThreshEPDGIKEV2SetupAttempts,
starThreshClearEPDGIKEV2SetupAttempts,
starThreshEPDGIKEV2AuthFailures,
starThreshClearEPDGIKEV2AuthFailures,
starThreshEPDGIKEV2SetupSuccess,
starThreshClearEPDGIKEV2SetupSuccess,
starThreshEPDGIKEV2SetupFailure,
starThreshClearEPDGIKEV2SetupFailure,
starThreshEPDGIKEV2SetupFailureRate,
starThreshClearEPDGIKEV2SetupFailureRate,
starThreshCSCFSvcRouteFailure,
starThreshClearCSCFSvcRouteFailure,
starThreshCSCFSvcRegRcvdRate,
starThreshClearCSCFSvcRegRcvdRate,
starThreshCSCFSvcTotalActiveReg,
starThreshClearCSCFSvcTotalActiveReg,
starThreshCSCFSvcInviteRcvdRate,
starThreshClearCSCFSvcInviteRcvdRate,
starThreshCSCFSvcTotalActiveCalls,
starThreshClearCSCFSvcTotalActiveCalls,
starThreshCSCFSvcTotalCalls,
starThreshClearCSCFSvcTotalCalls,
starThreshCSCFSvcErrorNoResource,
starThreshClearCSCFSvcErrorNoResource,
starThreshCSCFSvcErrorTcp,
starThreshClearCSCFSvcErrorTcp,
starThreshCSCFSvcErrorPresence,
starThreshClearCSCFSvcErrorPresence,
starThreshCSCFSvcErrorRegAuth,
starThreshClearCSCFSvcErrorRegAuth,
starThreshContFiltRating,
starThreshClearContFiltRating,
starThreshContFiltBlock,
starThreshClearContFiltBlock,
starThreshCDRFileSpace,
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starThreshClearCDRFileSpace,
starThreshEDRFileSpace,
starThreshClearEDRFileSpace,
starThreshPFDFcurrSess,
starThreshClearPFDFcurrSess,
starThreshPFDFcurrActSess,
starThreshClearPFDFcurrActSess,
starThreshCDRFlowControl,
starThreshSGSNsessions,
starThreshClearSGSNsessions,
starThreshPerServiceSGSNsessions,
starThreshClearPerServiceSGSNsessions,
starThreshSGSNpdpSessions,
starThreshClearSGSNpdpSessions,
starThreshPerServiceSGSNpdpSessions,
starThreshClearPerServiceSGSNpdpSessions,
starThreshClearCDRFlowControl,
starThreshASNGWSessTimeout,
starThreshClearASNGWSessTimeout,
starThreshASNGWSessSetupTimeout,
starThreshClearASNGWSessSetupTimeout,
starThreshASNGWAuthFail,
starThreshClearASNGWAuthFail,
starThreshASNGWMaxEAPretry,
starThreshClearASNGWMaxEAPretry,
starThreshASNGWNNWEntryDenial,
starThreshClearASNGWNNWEntryDenial,
starThreshASNGWHandoffDenial,
starThreshClearASNGWHandoffDenial,
starThreshPHSGWSetup hoDenial,
starThreshClearPHSGWSetup hoDenial,
starThreshClearASNGWSessSetupTimeout,
starThreshClearPHSGWSessSetupTimeout,
starThreshClearASNGWSessTimeout,
starThreshClearPHSGWSessTimeout,
starThreshPHSGWAuthFail,
starThreshClearPHSGWAuthFail,
starThreshPHSGWMaxEAPretry,
starThreshClearPHSGWMaxEAPretry,
starThreshPHSGWNNWEntryDenial,
starThreshClearPHSGWNNWEntryDenial,
starThreshPHSGWHandoffDenial,
starThreshClearPHSGWHandoffDenial,
starThreshASNGWsessions,
starThreshClearASNGWsessions,
starThreshPerServiceASNGWsessions,
starThreshClearPerServiceASNGWsessions,
starThreshPHSPCSetup hoDenial,
starThreshClearPHSPCSetup hoDenial,
starThreshPHSPCSessSetupTimeout,
starThreshClearPHSPCSessSetupTimeout,
starThreshPHSPCSleepModeDenial,
starThreshClearPHSPCSleepModeDenial,
starThreshPHSPCSmEntryDenial,
starThreshClearPHSPCSmEntryDenial,
starThreshSGWSessions,
starThreshClearSGWSessions,
starThreshFGWSessions,
starThreshClearFGWSessions,
starThreshLMASessions,
starThreshClearLMASessions,
starThreshMGASessions,
starThreshClearMGASessions,
starThreshHGWsessions,
starThreshClearHGWsessions,
starThreshHNBGWHenbSessions,
starThreshClearHNBGWHenbSessions,
starThreshHENBGWUESessions,
starThreshClearHENBGWUESessions,
starThreshHENBGWPagingMessages,
starThreshClearHENBGWPagingMessages,
starThreshPHSGWEAPOLAuthFailure,
starThreshClearPHSGWEAPOLAuthFailure,
starThreshPHSGWMaxEAPOLRetry,
starThreshClearPHSGWMaxEAPOLRetry,
starThreshFWDosAttack,
starThreshClearFWDosAttack,
starThreshFWDropPacket,
starThreshClearFWDropPacket,
starThreshFWDenyRule,
starThreshFWNooRule,
starThreshClearFWNooRule,
starSRPCOnnDown,
starSRPCOnnUp,
starThreshNATPortChunks,
starThreshClearNATPortChunks,
starThreshFWDosAttack,
starThreshFWDropPacket,
starThreshClearFWDropPacket,
starThreshGPRSSessions,
starThreshClearGPRSSessions,
starThreshPerServiceGPRSSessions,
starThreshClearPerServiceGPRSSessions,
starThreshGPRSWdpSessions,
starThreshClearGPRSWdpSessions,
starThreshPerServiceGPRSWdpSessions,
starThreshClearPerServiceGPRSWdpSessions,
starThreshFWDenyRule,
starThreshClearFWDenyRule,
starThreshFWNooRule,
starThreshClearFWNooRule,
starThreshBGPRoutes,
starThreshClearBGPRoutes,
starThreshNPbUtilization,
starThreshClearNPbUtilization,
starThreshEPDGCurrSess,
starThreshClearEPDGCurrSess,
starSRPCOnnDown,
starSRPCOnnUp,
starPortDown,
starPortUp,
starOSPFNeighborDown,
starOSPFNeighborFull,
starBSREachable,
starBSUnreachable,
starSystemStartup,
starASNPCServiceStart,
starASNPCServiceStop,
starDiameterIpv6PeerDown,
starDiameterIpv6PeerUp,
starIPMServerUnreachable,
starIPMServerReachable,
starCertShortLifetime,
starCertExpired,
starCertValid,
starFTPPushFail,
starFTPServSwitch,
starSDHSectionDown,
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starSDHSectionUp,
starSDHPathHopDown,
starSDHPathHopUp,
starSDHLopDown,
starSDHLopUp,
starSDHE1TribDown,
starSDHE1TribUp,
starSDHFractE1LMIDown,
starSDHFractE1LMIUp,
starGPRSServiceStart,
starGPRSServiceStop,
starGPRSNseDown,
starGPRSNseUp,
starGPRSNsvcDown,
starGPRSNsvcUp,
starGPRSBvcDown,
starGPRSBvcUp,
starPDGServiceStart,
starPDGServiceStop,
starThreshPDGCurrSess,
starThreshClearPDGCurrSess,
starThreshPDGCurrActSess,
starThreshClearPDGCurrActSess,
starFGWServiceStart,
starFGWServiceStop,
starSGWServiceStart,
starSGWServiceStop,
starEGTPServiceStart,
starEGTPServiceStop,
starLMAServiceStart,
starLMAServiceStop,
starMAGServiceStart,
starMAGServiceStop,
starMMEServiceStart,
starMMEServiceStop,
starHSGWServiceStart,
starHSGWServiceStop,
starCPUBusyClear,
starCPUMemoryLowClear,
starManagerRestart,
starConfigurationUpdate,
starFNGServiceStart,
starFNGServiceStop,
starThreshFNGCurrSess,
starThreshClearFNGCurrSess,
starThreshFNGCurrActSess,
starThreshClearFNGCurrActSess,
starEgtpcPathFailure,
starEgtpcPathFailureClear,
starEgtpuPathFailure,
starEgtpuPathFailureClear,
starServiceLossSPIClear,
starHNBGWServiceStart,
starHNBGWServiceStop,
starSystemReboot,
starServiceLossPTACsClear,
starServiceLossLCClear,
starOSPFv3NeighborDown,
starOSPFv3NeighborFull,
starLicenseAboutToExpire,
starLicenseExpired,
starStorageServerCDRLoss,
starPCCPolicyServiceStart,
STARENT-MIB DEFINITIONS ::= BEGIN

starPCCPolicyServiceStop,
starPCCQuotaServiceStart,
starPCCQuotaServiceStop,
starPCCAFServiceStart,
starPCCAFServiceStop,
starThreshPCCPolicySessions,
starThreshClearPCCPolicySessions,
starThreshPerServicePCCPolicySessions,
starThreshClearPerServicePCCPolicySessions,
starThreshPCCQuotaSessions,
starThreshClearPCCQuotaSessions,
starThreshPerServicePCCQuotaSessions,
starThreshClearPerServicePCCQuotaSessions,
starThreshPCCAFSessions,
starThreshClearPCCAFSessions,
starThreshPerServicePCCAFSessions,
starThreshClearPerServicePCCAFSessions,
starSPRServerUnreachable,
starSPRServerReachable,
starGSServiceStart,
starGSServiceStop,
starMAPServiceStart,
starMAPServiceStop,
starIUPSServiceStart,
starIUPSServiceStop,
starSGTPServiceStart,
starSGTPServiceStop,
starEPDGSERVICEStart,
starEPDGSERVICEStop,
starApsCommandSuccess,
starApsCommandFailure,
starApsSwitchSuccess,
starApsSwitchFailure,
starApsModeMismatch,
starApsChannelMismatch,
starApsByteMismatch,
starApsPeProtLineFailure,
starApsLossOfRedundancy,
starApsLossOfRedundancyClear,
starSGSServiceStart,
starSGSServiceStop,
starSgsnGnMsgDelay,
starSgsnGnMsgDelayClear,
starBNGServiceStart,
starBNGServiceStop,
starHenbgwAccessServiceStart,
starHenbgwAccessServiceStop,
starHenbgwNetworkServiceStart,
starHenbgwNetworkServiceStop,
starThreshDmsLookupFailure,
starThreshClearDmsLookupFailure,
starThreshDiameterRetryRate,
starThreshClearDiameterRetryRate,
starMMES1AssocFail,
starMMES1AssocSetup,
starMMES1PathFail,
starMMES1PathSetup,
starHNBGWSGSMRanapReset,
starHNBGWMSGRanapReset,
starALCAPNodeReset,
starALCAPPathReset,
starALCAPPathBlock,
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starCBCAssocUp,
starBFDSSessUp,
starBFDSSessDown,
starThreshFabricEGQDiscards,
starThreshNATPktDrop,
starThreshClearNATPktDrop,
starThreshClearFabricEGQDiscards,
starHENBGWMMEOverloadStart,
starHENBGWMMEOverloadStop,
starBGPPeerSessionIPv6Up,
starBGPPeerSessionIPv6Down,
starMMEEMBMSServiceStart,
starMMEEMBMSServiceStop,
starMCEAssocDown,
starMCEAssocUp,
starIUbcTcpConnDown,
starIUbcTcpConnUp,
starGILANSServiceStart,
starGILANSServiceStop,
starGTPCRLFOverThreshold,
starGTPCRLFOverLimit,
starGTPCRLFOverThresholdClear,
starGTPCRLFOverLimitClear

} STATUS current
DESCRIPTION
“A collection of objects which represent required notifications.”
::= { starentMIBGroups 5 }

starTrapObsoleteGroup NOTIFICATION-GROUP
NOTIFICATIONS { starCardReset,
starCardFailed,
starCardRCCFailed,
starCardSWFailed,
starCardFailureLEDOn,
starCardFailureLEDOff,
starLogThreshold,
starThreshASNGWR6InvNai,
starThreshClearASNGWR6InvNai

} STATUS obsolete
DESCRIPTION
“A collection of objects which represent obsolete notifications.”
::= { starentMIBGroups 6 }

starChassisObsoleteGroup OBJECT-GROUP
OBJECTS { starRPRegAcceptIntraPDSN,
starSlotVoltage1dot5,
starSlotVoltage1dot5LowThresh,
starSlotVoltage1dot5HighThresh,
starSlotVoltage1dot8,
starSlotVoltage1dot8LowThresh,
starSlotVoltage1dot8HighThresh,
starSlotVoltage2dot5,
starSlotVoltage2dot5LowThresh,
starSlotVoltage2dot5HighThresh,
starSlotVoltage3dot3,
starSlotVoltage3dot3LowThresh,
starSlotVoltage3dot3HighThresh,
starSlotVoltage5dot0,
starSlotVoltage5dot0LowThresh,
starSlotVoltage5dot0HighThresh

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STARENT-LESS-MIB DEFINITIONS ::= BEGIN

}  
STATUS obsolete  
DESCRIPTION  
"A collection of objects which are obsolete."  
::= { starentMIBGroups 7 }  
END

STARENT-LESS-MIB DEFINITIONS ::= BEGIN

IMPORTS  
MODULE-IDENTITY,  
NOTIFICATION-TYPE,  
OBJECT-TYPE,  
Integer32  
FROM SNMPv2-SMI  
DisplayString  
FROM SNMPv2-TC  
MODULE-COMPLIANCE,  
OBJECT-GROUP,  
NOTIFICATION-GROUP  
FROM SNMPv2-CONF  
starentMIB  
FROM STARENT-MIB;

-- Assume  
-- starLESSMIB is the main subtree for new mib development.

starLESSMIB    MODULE-IDENTITY  
LAST-UPDATED    "200909160000Z"  
ORGANIZATION    "Starent Networks Corporation"  
CONTACT-INFO  
"  
Email:     support@starentnetworks.com  
Web:       www.starentnetworks.com  
Postal:    Starent Networks Corporation  
30 International Place  
Tewksbury, MA  01876  
Tel:       (978) 646-9090"  

DESCRIPTION  
"This MIB module manages starent LESS devices.  
Acronyms and terms:  
LESS   Local External Storage Server"  

REVISION       "2009091600000Z"  
DESCRIPTION  
"Initial version of this MIB module"  
::= {starentMIB 101}

--  
-- starLESSMIB  
--
starLESSMIBObjects OBJECT IDENTIFIER ::= { starLESSMIB 1 }
starLESSMIBTraps OBJECT IDENTIFIER ::= { starLESSMIB 2 }

starLESSMIBConformances OBJECT IDENTIFIER ::= { starLESSMIB 3 }
starLESSMIBGroups OBJECT IDENTIFIER ::= { starLESSMIBConformances 1 }
starLESSMIBCompliances OBJECT IDENTIFIER ::= { starLESSMIBConformances 2 }

--
-- starLESSMIBObjects Information
--

starLESSNotifRaisedTime OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "This object indicates the time when this notification was generated. This will be current system's time in seconds."
::= { starLESSMIBObjects 1 }

starLESSNotifInfo OBJECT-TYPE
SYNTAX DisplayString (SIZE (1..64))
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "A textual description of Less notification, which contains additional information (more than the type of alarm).
If the text of the message exceeds 64 bytes, the message be truncated to 63 bytes and a '*' character will be appended to indicate the message has been truncated."
::= { starLESSMIBObjects 2 }

--
-- object starLESSInstance will not be used in Generic LESS
--

starLESSInstance OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "L-ESS Application Instance no."
::= { starLESSMIBObjects 3 }

starLESSNodeName OBJECT-TYPE
SYNTAX DisplayString (SIZE (1..64))
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "L-ESS Application node name."
::= { starLESSMIBObjects 4 }

--
-- object starLESSApplicationType will not be used in Generic LESS
STARENT-LESS-MIB DEFINITIONS ::= BEGIN

--

starLESSApplicationType OBJECT-TYPE
SYNTAX     INTEGER {
    unknown(0),
    pull(1),
    push(2),
    transfer(3)
}
MAX-ACCESS accessible-for-notify
STATUS     current
DESCRIPTION    
"L-ESS Application Type (pull / push / transfer).
Pull (1) is L-ESS Pull application
Push (2) is L-ESS Push application
Transfer (3) is L-ESS Transfer application"
 ::= { starLESSMIBObjects 5 }

starLESSThreshInt OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION    
"This object indicates configured value of a thresholded parameter."
 ::= { starLESSMIBObjects 6 }

starLESSThreshMeasuredInt OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION    
"This object indicates measured value of a thresholded parameter."
 ::= { starLESSMIBObjects 7 }

starLESSRuleBaseName OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..64))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION    
"The object indicates the name of the rulebase present in filename."
 ::= { starLESSMIBObjects 8 }

starLESSSTXName OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..64))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION    
"The object indicates the name of the STX."
 ::= { starLESSMIBObjects 9 }

starLESSStartofMissedRange OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..15))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION    

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"Begin of the range within which L-ESS has missed files."
::= { starLESSMIBObjects 10}

starLESSEndofMissedRange OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..15))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "End of the range within which L-ESS has missed files."
::= { starLESSMIBObjects 11}

--
-- object starLESSFileType will not be used in Generic LESS
--

starLESSFileType OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..3))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "The object indicates the name of the rulebase present in filename."
::= { starLESSMIBObjects 12}

starLESSRemoteHostName OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..64))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "The object indicates the name of the STX."
::= { starLESSMIBObjects 13}

starLESSMountPoint OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..64))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "Mount point where disk is mounted."
::= { starLESSMIBObjects 14}

starLESSHostName OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..64))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "L-ESS Application source/destination name."
::= { starLESSMIBObjects 15}

starLESSPath OBJECT-TYPE
SYNTAX      DisplayString (SIZE (1..255))
MAX-ACCESS  accessible-for-notify
STATUS      current
DESCRIPTION  "L-ESS Application source/destination path."
::= { starLESSMIBObjects 16}
starLESSTerminationTime OBJECT-TYPE
SYNTAX DisplayString (SIZE (1..32))
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "This object indicates the time when this notification was generated. This will be current system's time in seconds."
::= { starLESSMIBObjects 17 }

cstarLESSPscNo OBJECT-TYPE
SYNTAX DisplayString (SIZE (1..32))
MAX-ACCESS accessible-for-notify
STATUS current
DESCRIPTION "PSC instance No."
::= { starLESSMIBObjects 18 }

-- **********************************************************************
--                 Notifications
-- *********************************************************************
-- Notifications 1-16 will not be used in generic LESS
-- **********************************************************************

starLESSApplicationStart NOTIFICATION-TYPE
OBJECTS {
  starLESSNotifRaisedTime,
  starLESSNodeName,
  starLESSInstance,
  starLESSApplicationType
}
STATUS current
DESCRIPTION "L-ESS application has started."
--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, has started"
--#ARGUMENTS {3,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 1 }

starLESSApplicationReStart NOTIFICATION-TYPE
OBJECTS {
  starLESSNotifRaisedTime,
  starLESSNodeName,
  starLESSInstance,
  starLESSApplicationType
}
STATUS current
DESCRIPTION "L-ESS application has restarted."
--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, has restarted"
--#ARGUMENTS {3,1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 2 }
starLESSApplicationStop NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSApplicationType,
    starLESSNotifInfo
}

DESCRIPTION
"L-ESS application has stopped."

--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, has stopped. %s"

--#ARGUMENTS {3,1,2,4}
--#STATE NONOPERATIONAL
--#SEVERITY WARNING
::= { starLESSMIBTraps 3 }

starLESSApplicationTerminated NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSApplicationType
}

DESCRIPTION
"L-ESS application has been terminated."

--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, has been terminated."

--#ARGUMENTS {3,1,2}
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starLESSMIBTraps 4 }

starLESSPullIntervalMissed NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance
}

DESCRIPTION
"L-ESS application has missed pull interval."

--#SUMMARY "[L-ESS] Pull Application on node %s with instance no %d, has missed pull interval"

--#ARGUMENTS {1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 5 }

starLESSThreshDiskUsage NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
starLESSNodeName,
starLESSThreshMeasuredInt,
starLESSThreshInt,
starLESSMountPoint
}

DESCRIPTION
"Total disk space used is now below configured threshold. Threshold condition is now clear"

--#SUMMARY "[L-ESS] Pull Application Threshold : Node %s, Total Disk space usage threshold CLEAR; measured %d threshold %d. Disk is mounted at %s "
--#ARGUMENTS {1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 7 }

starLESSFileMissed NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSRuleBaseName,
    starLESSFileType,
    starLESSSTXName,
    starLESSStartofMissedRange,
    starLESSEndofMissedRange,
    starLESSNotifInfo
}

DESCRIPTION
"L-ESS application has missed pulling files from STX. Probable Cause: File at STX side has been deleted before L-ESS fetching it. Clear Condition: There is no clear condition for this notification."
Condition Clear Alarm: There is no clear alarm for this notification.

--#SUMMARY "[L-ESS] Pull Application instance %d on node %s has missed %s file from range %s to %s of Rulebase %s from STX %s. %s"
--#ARGUMENTS {2,1,4,6,7,3,5,8}
--#STATE OPERATIONAL
--#SEVERITY WARNING
 ::= { starLESSMIBTraps 8 }

starLESSRemoteConnectionFail NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSApplicationType,
    starLESSRemoteHostName,
    starLESSNotifInfo
}
STATUS              current
DESCRIPTION
    "L-ESS application is unable to set up the connection with remote host. 
Proable Cause: No route to host, Authentication failure,HostUnrechable etc. 
Clear Condition: When LESS is able to setup the connection with remote host. 
Condition Clear Alarm: Clear alarm for this notification is 
starRemoteConnectionEstablished."

--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, is unable to 
setup connection with host %s. Reason for failure is : %s"
--#ARGUMENTS {3,1,2,4,5}
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
 ::= { starLESSMIBTraps 9 }

starLESSRemoteConnectionEstablished NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSApplicationType,
    starLESSRemoteHostName
}
STATUS              current
DESCRIPTION
    "L-ESS application is now able to set up the connection with remote host. 
Proable Cause: Connection established with remote host ."

--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, has 
established the connection with host %s."
--#ARGUMENTS {3,1,2,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
 ::= { starLESSMIBTraps 10 }

starLESSFileTransferFail NOTIFICATION-TYPE
OBJECTS {
STARENT-LESS-MIB DEFINITIONS ::= BEGIN

starLESSNotifRaisedTime,
starLESSNodeName,
starLESSInstance,
starLESSApplicationType,
starLESSRemoteHostName,
starLESSFileType,
starLESSNotifInfo
}
STATUS current
DESCRIPTION
"L-ESS application is failing to transfer file.
Probable Cause: This trap could be raised if pull or push process when it fails to
transfer files continuously. Reasons of this failure could be network
errors, Disk space unavailable at destination, Destination directory
unavailable, etc.

Clear Condition: When succesfull file transfer begins.
Condition Clear Alarm: Clear alarm for this notification is
starLESSFileTransferComplete."

--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, is unable to
transfer %s files to the host %s. Reason for the failure is %s "
--#ARGUMENTS {3,1,2,5,4,6}
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
::= { starLESSMIBTraps 11 }

starLESSFileTransferComplete NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSApplicationType,
    starLESSRemoteHostName,
    starLESSFileType
}
STATUS current
DESCRIPTION
"L-ESS application is now able to transfer file.
Probable Cause: The problems due to which LESS was unable to transfer file
have resolved and pull or push process has now restarted file transfer."

--#SUMMARY "[L-ESS] %s Application on node %s with instance no %d, is now able
to transfer %s files to the host %s"
--#ARGUMENTS {3,1,2,5,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 12 }

starLESSThreshPendingFiles NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
STARENT-LESS-MIB DEFINITIONS ::= BEGIN

starLESSApplicationType,
starLESSSTXName,
starLESSFileType,
starLESSThreshMeasuredInt,
starLESSThreshInt
)
STATUS current
DESCRIPTION
"Total pending files for this host are beyond configured threshold.
Probable Cause: This is a user configurable threshold.
The starLESSThreshPendingFiles notification will be generated by pull or
push process when the total number of files pending for transfer in source
directory are beyond configured threshold.

Clear Condition: When number of pending files at source directory falls
below configured threshold.
Condition Clear Alarm: Clear alarm for this notification is
starLESSThreshClearPendingFiles."

--#SUMMARY "[L-ESS] %d Application Threshold : Node %s, Instance %d, HostName
%s, Filetype %s, Total pending files ; measured %d threshold %d 
--#ARGUMENTS {3,1,2,4,5,6,7}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starLESSMIBTraps 13 }

starLESSThreshClearPendingFiles NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSInstance,
    starLESSApplicationType,
    starLESSSTXName,
    starLESSFileType,
    starLESSThreshMeasuredInt,
    starLESSThreshInt
}
STATUS current
DESCRIPTION
"Total pending files for this host are now below configured threshold.
Probable Cause: This is a user configurable threshold.
The starLESSThreshPendingFiles notification will be generated by pull or
push process when the total number of files pending for transfer in source
directory falls below configured threshold."
--#SUMMARY "[L-ESS] %d Application Threshold : Node %s, Instance %d, HostName
%s, Filetype %s, Total pending files ; measured %d threshold %d 
--#ARGUMENTS {3,1,2,4,5,6,7}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 14 }

starLESSNewHostFound NOTIFICATION-TYPE
OBJECTS {

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SNMP MIB Reference, StarOS™
Release 21.0

STARGET-LESS-MIB DEFINITIONS ::= BEGIN

starLESSNotifraisedTime,
starLESSnodeName,
starLESSInstance,
starLESSApplicationType,
starLESSSTXName

) STATUS current DESCRIPTION
"L-ESS Transfer process has detected addition of host.
Probable Cause: Operator has added host in L-ESS from which files
should be transferred to destination."
--#SUMMARY "[L-ESS] %d Application instance %d on node %s has detected addition
of host %s"
--#ARGUMENTS {3,2,1,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 15 }

starLESSHostRemoved NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifraisedTime,
    starLESSnodeName,
    starLESSInstance,
    starLESSApplicationType,
    starLESSSTXName

) STATUS current DESCRIPTION
"L-ESS Transfer process has detected removal of existing host.
Probable Cause: Operator has removed existing host in L-ESS from which L-
ESS
was already transferring files to destination."
--#SUMMARY "[L-ESS] %d Application instance %d on node %s has detected removal
of host %s"
--#ARGUMENTS {3,2,1,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 16 }

-- "*****************************************************************************
-- Traps for Generic LESS
-- "*****************************************************************************

starGenericLESSApplicationStart NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifraisedTime,
    starLESSnodeName

) STATUS current DESCRIPTION
"L-ESS application has started."
--#SUMMARY "L-ESS application on node %s has started."
--#ARGUMENTS {1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 17 }

starGenericLESSApplicationReStart NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName
}
STATUS current
DESCRIPTION
"L-ESS application has restarted."
--#SUMMARY "L-ESS application on node %s has restarted."
--#ARGUMENTS {1}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 18 }

starGenericLESSApplicationStop NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSNotifInfo
}
STATUS current
DESCRIPTION
"L-ESS application has stopped."
--#SUMMARY "L-ESS application on node %s has stopped.%s"
--#ARGUMENTS {1,2}
--#STATE NONOPERATIONAL
--#SEVERITY WARNING
::= { starLESSMIBTraps 19 }

starGenericLESSApplicationTerminated NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSTerminationTime
}
STATUS current
DESCRIPTION
"L-ESS application has been terminated."
--#SUMMARY "L-ESS application on node %s has been terminated at %s ."
--#ARGUMENTS {1,2}
--#STATE NONOPERATIONAL
--#SEVERITY CRITICAL
::= { starLESSMIBTraps 20 }

starGenericLESSPullIntervalMissed NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName
}
STATUS current
DESCRIPTION
"L-ESS application has missed pull interval."
---SUMMARY "L-ESS application on node %s has missed polling Interval for source : %s path : %s"
---ARGUMENTS {1,2,3}
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 21 }

starGenericLESSThreshDiskUsage NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSThreshMeasuredInt,
    starLESSThreshInt,
    starLESSMountPoint
}
STATUS current
DESCRIPTION
"Total Disk space used is beyond configured threshold.
Probable Cause: This is a user configurable threshold.
starLESSGenericThreshClearDiskUsage notification will be generated when the measured value falls below the configured threshold."
---SUMMARY "[L-ESS] Disk is above configured threshold on Node %s. Measured disk space usage percentage %d. Configured threshold percentage %d. Disk mount point is :%s"
---ARGUMENTS {1,2,3,4}
---STATE OPERATIONAL
---SEVERITY CRITICAL
::= { starLESSMIBTraps 22 }

starGenericLESSThreshClearDiskUsage NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSThreshMeasuredInt,
    starLESSThreshInt,
    starLESSMountPoint
}
STATUS current
DESCRIPTION
"Total disk used is now below configured threshold. Threshold condition is now clear"
---SUMMARY "[L-ESS] Disk is now below configured threshold on Node %s. Measured disk space usage percentage %d. Configured threshold percentage %d. Disk mount point is :%s"
---ARGUMENTS {1,2,3,4}
---STATE OPERATIONAL
---SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 23 }

starGenericLESSFileMissed NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
STARENT-LESS-MIB DEFINITIONS ::= BEGIN

starLESSStartofMissedRange,
starLESSEndofMissedRange,
starLESSRuleBaseName,
starLESSPscNo,
starLESSHostName,
starLESSSTXName,
starLESSPath,
starLESSNotifInfo
)

STATUS current
DESCRIPTION
"L-ESS application has missed pulling files from STX.
Probable Cause: File at STX side has been deleted before L-ESS fetching it.
Clear Condition: There is no clear condition for this notification.
Condition Clear Alarm: There is no clear alarm for this notification."

--#SUMMARY "L-ESS application on Node : %s has missed file in range %s to %s of
Rulebase : %s iPSC no : %s from source : %s remotehost %s path : %s . %s"
--#ARGUMENTS {1,2,3,4,5,6,7,8,9}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starLESSMIBTraps 24 }

starGenericLESSRemoteConnectionFail NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSRemoteHostName,
    starLESSNotifInfo
}

STATUS current
DESCRIPTION
"L-ESS application is unable to set up the connection with remote host.
Probable Cause: No route to host, Authentication failure,HostUnrechable etc.
Clear Condition: When LESS is able to setup the connection with remote host.
Condition Clear Alarm: Clear alarm for this notification is
starRemoteConnectionEstablished."

--#SUMMARY "L-ESS application on Node : %s is failed to setup connection with
hostID %s remote host %s. Reason for failure is : %s"
--#ARGUMENTS {1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
::= { starLESSMIBTraps 25 }

starGenericLESSRemoteConnectionEstablished NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSRemoteHostName
}

STATUS current
DESCRIPTION
"L-ESS application is now able to set up the connection with remote host.
Probable Cause: Connection established with remote host."

--#SUMMARY "L-ESS application on node %s has setup the connection with hostID %s remote host %s."
--#ARGUMENTS {1,2}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 26 }

starGenericLESSFileTransferFail NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSPath,
    starLESSNotifInfo
}
STATUS              current
DESCRIPTION
    "L-ESS application is failing to transfer file.
Probable Cause: This trap could be raised if pull or push process fails to transfer files continuously. Reasons of this failure could be network errors, Disk space unavailable at destination, Destination directory unavailable, etc.

Clear Condition: When successful file transfer begins.
Condition Clear Alarm: Clear alarm for this notification is starLESSGenericFileTransferComplete."

--#SUMMARY "L-ESS application on node: %s failed to transfer file for host: %s path: %s . Reason: %s"
--#ARGUMENTS {1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY CRITICAL
::= { starLESSMIBTraps 27 }

starGenericLESSFileTransferComplete NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSPath
}
STATUS              current
DESCRIPTION
    "L-ESS application is now able to transfer file.
Probable Cause: The problems due to which LESS was unable to transfer file have resolved and pull or push process has now restarted file transfer."

--#SUMMARY "L-ESS application on node %s is now able to transfer files for host: %s path: %s."
--#ARGUMENTS {1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESTMIBTraps 28 }

starGenericLESSThreshPendingFiles NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSSTXName,
    starLESSPath,
    starLESSThreshMeasuredInt,
    starLESSThreshInt
}
STATUS              current
DESCRIPTION
    "Total pending files for this host are beyond configured threshold. 
    Probable Cause: This is a user configurable threshold. 
    The starLESSGenericThreshPendingFiles notification will be generated by pull or 
    push process when the total number of files pending for transfer in source 
    directory are beyond configured threshold. 

    Clear Condition: When number of pending files at source directory falls 
    below configured threshold. 
    Condition Clear Alarm: Clear alarm for this notification is 
    starLESSGenericThreshClearPendingFiles." 

--#SUMMARY "L-ESS application on node %s has pending files to be pulled from 
host: %s path: %s .Measured pending files : %d, Configured pending file threshold : 
%d "
--#ARGUMENTS {1,2,3,4,5}
--#STATE OPERATIONAL
--#SEVERITY WARNING
::= { starLESTMIBTraps 29 }

starGenericLESSThreshClearPendingFiles NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSSTXName,
    starLESSPath,
    starLESSThreshMeasuredInt,
    starLESSThreshInt
}
STATUS              current
DESCRIPTION
    "Total pending files for this host are now below configured threshold. 
    Probable Cause: This is a user configurable threshold. 
    The starLESSGenericThreshPendingFiles notification will be generated by pull or 
    push process when the total number of files pending for transfer in source 
    directory falls below configured threshold." 

--#SUMMARY "L-ESS application on node : %s has now pending files below 
configured threshold from host : %s , path : %s . Measured pending files : %d, 
Configured pending file threshold : %d "
--#ARGUMENTS {1,2,3,4,5}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
starGenericLESSNewHostFound NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSPath
}
STATUS current
DESCRIPTION
"L-ESS has detected addition of host. 
Probable Cause: Operator has added host in L-ESS from which files should be pulled. Or added new destination to which files should be transferred"
--#SUMMARY "L-ESS application on node %s has detected addition of new host : %s path : %s"
--#ARGUMENTS {1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 30 }

starGenericLESSHostRemoved NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSPath
}
STATUS current
DESCRIPTION
"L-ESS has detected removal of existing host. 
Probable Cause: Operator has removed existing host in L-ESS from which L-ESS was already pulling files. Or removed destination to which LESS was transferring files"
--#SUMMARY "L-ESS application on node %s has detected removal of host %s path %s"
--#ARGUMENTS {1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 31 }

starGenericLESSHostEnabled NOTIFICATION-TYPE
OBJECTS {
    starLESSNotifRaisedTime,
    starLESSNodeName,
    starLESSHostName,
    starLESSPath
}
STATUS current
DESCRIPTION
"L-ESS has detected that host is enabled. 
Probable Cause: Operator has enabled host in L-ESS from which files
should be pulled. Or enabled destination to which files should be transferred.

--#SUMMARY "L-ESS application on node %s has enabled host : %s path : %s"
--#ARGUMENTS {1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 33 }

starGenericLESSHostDisabled NOTIFICATION-TYPE
OBJECTS {
starLESSNotifRaisedTime,
starLESSNodeName,
starLESSHostName,
starLESSPath
}
STATUS current
DESCRIPTION
"L-ESS has disabled existing host. 
Probable Cause: Operator has disabled existing host in L-ESS from which L-ESS was already pulling files. Or disabled destination to which LESS was transferring files.

--#SUMMARY "L-ESS application on node %s has disabled host : %s path : %s"
--#ARGUMENTS {1,2,3}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 34 }

starGenericLESSProcessFailure NOTIFICATION-TYPE
OBJECTS {
starLESSNotifRaisedTime,
starLESSNodeName,
starLESSHostName,
starLESSPath,
starLESSNotifInfo
}
STATUS current
DESCRIPTION
"L-ESS has detected process failure."

--#SUMMARY "L-ESS application on node %s has detected process failure for host : %s path : %s. Note : %s"
--#ARGUMENTS {1,2,3,4}
--#STATE OPERATIONAL
--#SEVERITY INFORMATIONAL
::= { starLESSMIBTraps 35 }

starGenericLESSProcessStarted NOTIFICATION-TYPE
OBJECTS {
starLESSNotifRaisedTime,
starLESSNodeName,
starLESSHostName,
starLESSPath
}
STATUS current
DESCRIPTION
"L-ESS has detected that process has started."
--SUMMARY "L-ESS application on node %s has detected that process pool
restarted for host : %s path : %s"
--ARGUMENTS {1,2,3}
--STATE OPERATIONAL
--SEVERITY INFORMATIONAL
 ::= { starLESSMIBTraps 36 }

--
-- Compliances statements
--
starLESSMIBCompliance MODULE-COMPLIANCE
  STATUS current
  DESCRIPTION "The compliance statements for entities which
implement the STARNET LESS MIB."
  MODULE -- this module
  MANDATORY-GROUPS
    { starLESSNotifMgmtGroup,
      starLESSNotifGroup
    }
 ::= { starLESSMIBCompliances 1 }

-- units of conformance
starLESSNotifMgmtGroup OBJECT-GROUP
  OBJECTS
    { starLESSNotifRaisedTime,
      starLESSNotifInfo,
      starLESSInstance,
      starLESSNodeName,
      starLESSApplicationType,
      starLESSThreshMeasuredInt,
      starLESSThreshInt,
      starLESSRuleBaseName,
      starLESSSTXName,
      starLESSStartofMissedRange,
      starLESSEndofMissedRange,
      starLESSFileType,
      starLESSRemoteHostName,
      starLESSMountPoint,
      starLESSHostName,
      starLESSPath,
      starLESSTerminationTime
    }
  STATUS current
  DESCRIPTION " A collection of objects related with notification
management on LESS."
 ::= { starLESSMIBGroups 1 }

starLESSNotifGroup NOTIFICATION-GROUP
  NOTIFICATIONS
    { starLESSApplicationStart,
      starLESSApplicationReStart,
STARENT-LESS-MIB DEFINITIONS ::= BEGIN

  starLESSApplicationStop,
  starLESSApplicationTerminated,
  starLESPullIntervalMissed,
  starLESSThreshDiskUsage,
  starLESSThreshClearDiskUsage,
  starLESSFileMissed,
  starLESSRemoteConnectionFail,
  starLESSRemoteConnectionEstablished,
  starLESSFileTransferFail,
  starLESSFileTransferComplete,
  starLESSThreshPendingFiles,
  starLESSThreshClearPendingFiles,
  starLESSNewHostFound,
  starLESSHostRemoved,
  starGenericLESSApplicationStart,
  starGenericLESSApplicationReStart,
  starGenericLESSApplicationStop,
  starGenericLESSApplicationTerminated,
  starGenericLESPullIntervalMissed,
  starGenericLESSThreshDiskUsage,
  starGenericLESSThreshClearDiskUsage,
  starGenericLESSFileMissed,
  starGenericLESSRemoteConnectionFail,
  starGenericLESSRemoteConnectionEstablished,
  starGenericLESSFileTransferFail,
  starGenericLESSFileTransferComplete,
  starGenericLESSThreshPendingFiles,
  starGenericLESSThreshClearPendingFiles,
  starGenericLESSNewHostFound,
  starGenericLESSHostRemoved,
  starGenericLESSHostEnabled,
  starGenericLESSHostDisabled,
  starGenericLESSProcessFailure,
  starGenericLESSProcessStarted

END
IETF and Cisco MIBs

This section is for Administrators working with integrating the Starent MIB and the Cisco MIB so Cisco management applications can manage the ASR 5x00 chassis. It provides some new configuration options; there is also a list of supported Cisco MIBs.

CLI Options

The following are CLI options used in connection with SNMP MIBs.

sysOld Options

The default OId string is 1.3.6.1.4.1.8164.

The new-style Cisco OId string is 1.3.6.1.4.1.9.

Using the following CLI, ASR 5000 users can choose which string they prefer:

```plaintext
[local]asr5000(config)# system sysoid-style new|default
```

**NOTE:** ASR 5500 users do not have this option as the Cisco OId String is the default.

**NOTE:** This command can be combined with `sysdesc` as follows: `system sysdesc-sysoid-style new|default` However, this combination affects BOTH `sysDesc` AND `sysOld` equally: that is, they can both be old-style or they can both be new-style. The System CLI offers an option to configure `sysDesc` independently, but `SysOld` is not a user-configurable parameter.

sysDesc Options

For ASR 5000 users, the default system description is:

```
Linux asr5000 2.6.18-staros-v2-private-deb #1 SMP (date/time) i686
```

The Cisco default system description is:

```
Cisco StarOS Software, ASR5000 Intelligent Mobile Gateway, Version 12.2. Copyright (c) 2011 by Cisco Systems, Inc.
```

Users can opt for either description using the following CLI command: `[local]asr5000(config)# system sysdesc-style new|default`

**NOTE:** This CLI will not be available to ASR 5500 users; it will default to the Cisco description only.

**NOTE:** This command can be combined with `sysOld` as follows: `system sysdesc-sysoid-style new|default`. However, this combination affects BOTH `sysDesc` AND `sysOld` equally: that is, they can both be old-style or they can both be new-style. The System CLI offers an option to configure `sysDesc` independently, but `SysOld` is not a user-configurable parameter.

Serial Number Configuration

ASR 5000 users can configure the chassis serial number with the following CLI:

```plaintext
[local]asr5000(config)# system chassis-serial-number <string>
```
NOTE: This CLI is not available for ASR 5500 users as the chassis serial number is hard-coded.

Standards-Based MIBs

The following are standards-based, read-only, and available from the Cisco MIB ftp site.

IF-MIB and ENTITY-MIB are disabled by default.

Configuration

MIBs can be configured using the following CLI:

```plaintext
[local]asr5000(config)# snmp mib <mib-name, auto complete> | no snmp mib <mib-name, auto complete>
```

Entity MIB

The Entity MIB is implemented as described in RFC4133. The following are not supported for this release:

- entPhysicalAlias
- entPhysicalAssetID
- entPhysicalMfgDate
- entPhysicalUris
- entLogicalTable
- entLPMappingTable
- entPhysicalContainsTable

IF MIB

The IF MIB is implemented per RFC1213, RFC1573, and RFC2863. The following are not supported for this release:

- ifStackTable
- ifStackLastChange
- ifRcvAddressTable
- ifTestTable

Cisco MIBS

The following is a list of supported Cisco MIBs for this release. These are available from the Cisco ftp site.

Configuration

MIBs can be configured using the following CLI:
Cisco MIBs

The following MIBs are supported in this release. They can be enabled/disabled as required.

- CISCO-ENHANCED-IPSEC-FLOW-MIB
- CISCO-ENTITY-DISPLAY-MIB
- CISCO-ENTITY-EXT-MIB
- CISCO-ENTITY-FRU-CONTROL-MIB
- CISCO-ENTITY-REDUNDANCY-MIB
- CISCO-ENTITY-SENSOR-MIB
- CISCO-ENTITY-STATE-MIB
- CISCO-FLASH-MIB
- CISCO-HOST-RESOURCE-MIB

**NOTE:** CISCO-HOST-RESOURCE-MIB is per the appropriate RFC, but limited to hrSystem and hrStorage tables.

- CISCO-IF-EXTENSION-MIB
- CISCO-IP-LOCAL-POOL-MIB
- CISCO-IPSEC-FLOW-MONITOR-MIB
- CISCO-MOBILE-WIRELESS-SERVICE-MIB
- CISCO-PROCESS_MIB