



Cisco BTS 10200 Softswitch Command Line Interface Reference

Software Releases 4.1, 4.2, 4.4.0, 4.4.1, 4.5 and 4.5.1
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Preface

Revised: July 24, 2009, OL-3743-42

This document describes the command line interface commands used to provision and maintain the Cisco BTS 10200 Softswitch Call Agent (CA), Feature Server (FS), Element Management System (EMS), and Bulk Data Management System (BDMS) for Releases 4.1, 4.2, 4.4.0, 4.4.1 and 4.5.



Note

The Cisco BTS 10200 Softswitch interworks with a wide range of network elements (NEs), but there are certain limitations. Some features involve using NEs deployed in the service provider network, for example, gateways, media servers, announcement servers, eMTAs, and SIP phones. See the “Component Interoperability” section of the Release Notes document for a complete list of the specific peripheral platforms, functions, and software loads used in system testing for interoperability with the Cisco BTS 10200 Softswitch Release 4.x software. Earlier or later releases of platform software may be interoperable and it may be possible to use other functions on these platforms. The list certifies only that the required interoperation of these platforms, along with the functions and the protocols listed, were successfully tested with the Cisco BTS 10200 Softswitch.

Audience

This guide is designed for Cisco BTS 10200 Softswitch users and system administrators.

Modification History

[Table 1](#) lists the modification history notations used in this document. Subsequent sections list the actual changes by release. Changes made for Releases 4.2, 4.4.0, 4.4.1 and 4.5 are also noted within the text of the document as given in the table.

Table 1 **Document Release Notation**

Release	Information is Noted As:
All	Not noted.
4.2	Release 4.2 and all subsequent releases. Does not include Release 4.1.

Table 1 Document Release Notation (continued)

Release	Information is Noted As:
4.4.0	Release 4.4.0 and all subsequent releases, unless otherwise stated. For example: “Release 4.4.0 and 4.5” means the item is included in Releases 4.4.0 and 4.5, but not 4.4.1.
4.4.1	Release 4.4.1 and all subsequent releases. Does not include Releases 4.1, 4.2 or 4.4.0.
4.5	Release 4.5 and all subsequent releases. Does not include Releases 4.1, 4.2, 4.4.0 or 4.4.1.
Not supported as of Release	Designates tokens that may list as the result of a CLI command, but are not used in the release.
Obsolete in Release	Designates tokens, values or rules that are no longer supported as of a particular release, but are supported in prior releases.

Release 4.5.1

The following changes were made in Release 4.5.1. It is not an inclusive list.

- Added tokens CHARGE-TYPE and CHARGE-BAND-UNIT to the Destination table.
- New *Block Information* command added to the [Session Management Activity Commands](#).
- In the COS Restrict table, II-WB-LIST changed to II-RESTRICT.
- In the Media Gateway Profile table, for the CODEC-NEG-SUPP token, codec usage has changed when condec-negsupp=Y.
- For medium configurations, ISDN table database usage was increased to 2000 active D-channels.
- Added token FORCED to the Exchange Code table.
- Added list of supported call types to the Usage Guidelines of the National White Black list table. This applies to all releases.
- BPC-ID is obsolete in the Signal Connection Control Part Route table for Releases 4.5 and 4.5.1.
- Added token PADDED-CC to the International Dial Plan table.
- Added mtv.sh information to the Signaling System 7 Trace command. This applies to all 4.x releases.
- The following changes were made to the Office Code table:
 - Added token FORCED.
 - Added new rules.
- Added new rules to the National Destination Code table.
- Added new rules to the Exchange Code table.
- Changed the descriptions for Q761-ISUP-BASE and Q761-ISUP-CHINA values for the CAUSE-CODE-TYPE token.
- Added the value Q767-COLOMBIA to the User Part Variant table.
- Added Measurements for the Columbia ISUP to Appendix I.
- Modified the descriptions of the SEND-BDN-FOR-EMG and

- Added usage guideline for the SEND-GROUP-DN token in the ISDN Trunk Group Profile table. Applies to all releases.
- In the Billing Record Query table, more than one value cannot be specified for the ORDER token.
- Added Office Service id Precedence information to Appendix B, Office Table Features.
- For the END-TIME and START-TIME tokens in the Billing Record Query table, removed the sentence “Response is returned in GMT time.”
- Added bits 3, 5 and 6 to the PROPRIETARY-SUPP token in the ISDN Trunk Group Profile table.
- Added SIA-TG-VALIDATE-SOURCE-IP to the Call Agent Configuration table in Appendix A.
- Added ciscouser information to the Preface; as well as cautions to the delete transaction queue and download database commands. This change also applies to Release 4.5.
- MGCP-T-LONGTRAN value is in seconds, not milliseconds. Applies to all releases.
- Expanded definition of CLH for MLHG. Applies to all releases.
- For CFB (List of Features) in Appendix B, added TDPn=T_EXCEPTION and TIDn=T_NOT_REACHABLE.
- The NANP-WB-LIST column in COS Restrict table was renamed to NATIONAL-WB-LIST (all releases).
- Added the token SPARE1-SUPP to the Media Gateway Profile table.
- Added the following France ISUP values for the DISPLAY token in the Measurement ISUP Summary table:
 - MEAS_SGA_TXA_RX
 - MEAS_SGA_TXA_TX
 - MEAS_SGA_ITX_RX
 - MEAS_SGA_ITX_TX
- Added ISUPs for France and Poland to Appendix I.
- Added section concerning Extended Read Access Commands to the Preface.
- Added the following values to the ID token of the User Part Variant table:
 - Q761-ETSIV3-FRENCH
 - Q761-ETSIV2-POLAND
- Added the token SEND-SIP-181-RESP to the Softswitch Trunk Group Profile table.
- The IPTOS-RTP-LOWDELAY token default is N. This applies to all releases.
- The MGCP-SIG-TOS-PRECEDENCE token default is 3. This applies to all releases.
- Mexico ISUP is supported.
- Changed ranges for the MGCP-MAX1-RETRIES and MGCP-MAX2-RETRIES tokens in the Media Gateway Profile table.
- Added the following tokens to the SS7 Q761 Trunk Group Profile table: AOC-ENABLED, CRG-ABILITY
- Added a note in the cause-code-type token of cause-code-map table to indicate the cause-code-type for ISDN trunk groups.

Release 4.5

The following changes were made in Release 4.5. It is not an inclusive list.

- The following changes were made to the Office Code table:
 - Added token FORCED.
 - Added new rules.
- Added new rules to the National Destination Code table.
- Added new rules to the Exchange Code table.
- Added SIP-3XX-REROUTE-ON-LOCAL-DOMAIN to the Call Agent Configuration table in Appendix A.
- For the query call-trace command, MGW has been replaced with RGW.
- Length of the BILLING-FILE-PREFIX token changed to 64 characters.
- Subnet is no longer supported for the *query call-trace* command.
- Added EM-PRIVACY-IND-SUPP to Appendix A. Used by EM Billing.
- The token USE-GRP-DN in the ISDN Trunk Group Profile table moved to the Subscriber table.
- Added the EXCHANGE-TYPE token to the SS7 Q767 Trunk Group Profile table.
- Added CIDS, CIDSD and CIDSS to the Feature Profile Base table.
- Added complete command security level list by noun and verb.
- Added the following to the SIPT ISUP Version Base table:
 - Added the value GTD to the ID token.
 - Added the value SIPT-GTD to the BASE token.
- Added the following values to the ID token of the User Part Variant table:
 - Q761_STANDARD97 (Q.761 base variant—97 version)
 - Q761_ETSIV3 (Base ETSI v3 variant)
 - Q761_ETSIV3_HUNGARY (Hungarian variant)
- Added the THROTTLE token to the *status mgw*, *status trunk-grp*, *status trunk-termination* and *status subscriber-termination* commands.
- Added Hungary and France ISUP display values to Appendix G.
- The following measurement SIA display values are obsoleted. These values will still execute, but will always contain a value of zero:
 - SIA_TOTAL_SUCC
 - SIA_TOTAL_FAIL
 - SIA_TOTAL_OUTG_MSG_FAIL
 - SIA_TOTAL_INCOM_MSG_FAIL
- In the SCTP Association Profile table, the tokens HB-TIMEOUT and MAX-PATH-RETRANS cannot be changed.
- Added WAIT token to all status, control and equip commands in Chapter 17: ADM Commands.
- Added the following tokens to the Transaction Queue table: USER-ID, TERMINAL-ID and STATUS.

- Added the tokens AUTO-REFRESH, DISPLAY, LIMIT, ORDER and START-ROW to every show and report command where applicable.

**Note**

The tokens AUTO-REFRESH, DISPLAY, LIMIT, ORDER and START-ROW apply to all previous releases of this document.

- Added new command: Number Resource Utilization and Forecast for NANPA audit.
- The *change ems ntp-server* command is obsolete.
- Added new query command: query-call-trace.
- In the SCTP Association table, the tokens DSCP and IP-TOS-PRECEDENCE are obsolete.
- For the AOR To Subscriber table:
 - The add and delete commands are obsolete
 - Added the SEQUIRE-FQDN token
- In the Maintenance and Administration of System Component Commands chapter, replaced references to MySQL with Oracle.
- The status-ss7 is now obsolete.
- In the H.323 Gateway table, PASSWORD can be changed without taking the gateway out of service.
- In the Stream Control Transmission Protocol Association table, the maximum size of the HTTP-FEATURE-SERVER-ID is 8.
- In the Signaling System 7 Q761 Trunk Group Profile table, the default is 20 for the CHARGE-ORIG token.
- The following changes were made to the Routing Key table:
 - Subsystem-grp-id is required if si=SCCP.
 - Cross-check the opc-id and subsystem-grp-id across the Subsystem table when the routing-key is added with si=sccp.
 - The opc-id and subsystem-grp-id combine to make a unique key if si=sccp.
 - If a dpc-id is specified, the net-ap values for OPC and DPC must be the same.
- Added the tokens PASS-UNREC-PARAM-WITHOUT-PCI and T4 to the SS7 Q761 Trunk Group Profile table.
- Added the following values to the DISPLAY token in the AIN Services Feature Server table:
 - AINSVC_LOC_LNP_QUERY
 - AINSVC_LOC_LNP_QUERY_SUCC
 - AINSVC_LOC_LNP_FAIL_APP
 - AINSVC_LOC_LNP_QUERY_RN_FOUND
 - AINSVC_LOC_LNP_QUERY_NO_RN
- Added notation “Not provisionable—provisioned in the User Part Variant Base table” to the following tokens in the User Part Variant table:
 - MAX-BLOCK-MASTER-RANGE
 - MAX-BLOCK-SLAVE-RANGE
 - MAX-PARALLEL-JOBS

- MAX-RESET-MASTER-RANGE
- MAX-RESET-SLAVE- RANGE
- PROTO-FAM
- RESET-SUPPORTED
- The following changes were made to the Feature table:
 - FNAME is now a foreign key to the Feature Profile Base table.
 - Added token FNAME5.
 - The value for the following tokens is now 32: VALUE1, VALUE2, VALUE3 and VALUE4.
- Added PS-TRIGGER to the Trigger Identification Descriptions table. Removed the following triggers:
 - ACCOUNT_CODE
 - D_OF_TRIGGER
 - ENUM-TRIGGER
 - O_ABANDON
 - O_ANSWER
 - O_CALLED_PARTY_BUSY
 - O_DISCONNECT
 - O_EXCEPTION
 - O_NO_ANSWER
 - O_NOT_REACHABLE
 - O_REANSWER
 - O_SUSPEND
 - ORIGINATION_ATTEMPT
 - T_ABANDON_DP
 - T_DISCONNECT
 - T_EXCEPTION
 - T_NOT_REACHABLE
 - T_REANSWER
 - T_SUSPEND
- Added the following tokens to the Quality of Service table:
 - FAX-T38-ENABLED
 - FORCED
 - MAX-DQOS-AUTH-BANDWIDTH
 - CLIENT-TYPE
 - DOCSIS-DSCP-TOS
 - DOCSIS-DSCP-TOS-BITMASK
 - DQOS-DSCP-TOS-BITMASK
- Added the following tokens to the DN2subscriber table:

- END-TIME
 - LAST-CHANGED
 - START-TIME
 - PORTED-IN
 - VIRTUAL-DN
- Added the following tokens to the Class of Service Restriction table:
 - BLOCK-900
 - BLOCK-976
 - BLOCK-DA
 - BLOCK-INFO
 - BLOCK-INTL
 - BLOCK-INTL-OPER-ASSIST
 - BLOCK-NANP-OPER-ASSIST
 - BLOCK-TW
 - PROMPT-METHOD
 - ALLOW-CALLS-ON-IVR-FAILURE
- Added the following values to the Valid Nature of Dial Values table.
 - LNP
 - BLV
 - SPEED-CALL
- The valid return code combinations MDCX 3xx through 9xx when mgcp-msg=mdcx have changed to Valid Values of Call Action=None and Valid Values of Endpoint Action=EP_ACTION_NONE.
- Added the following tokens to the Carrier table:
 - LNP-QUERY
- In the Activity table, the ENABLED token default is now Y; the ID token is now 32 in length.
- Added the following MO and MT rules to the Trunk Group table:
 - When configuring a trunk group, set the direction token to OUT when the MGCP-PKG-TYPE is MO.
 - When configuring a trunk group, set the direction token to IN when the MGCP-PKG-TYPE is MT.
- Added Automatic Completion and Expansion of CLI commands.
- Added Context Sensitive Help section.
- In the Dial Plan table, the range for MIN-DIGITS is 1–64. Added the FORCED token.
- The following DISPLAY values were obsoleted in the Measurement SIA Summary table:
 - SIA_ATTENDED_TRANSFER
 - SIA_MWI_NOTIFY_TX_FAIL
 - SIA_SIP_INCOM_FAIL
 - SIA_SIP_INCOM_INIT

- SIA_SIP_INCOM_SUCC
 - SIA_SIP_OUTG_FAIL
 - SIA_SIP_OUTG_INIT
 - SIA_SIP_OUTG_SUCC
 - SIA_UNATTENDED_TRANSFER
- The following DISPLAY values were added to the Measurement SIA Summary table:
 - SIA_AUDIT_BCM_CALL_RELEASED
 - SIA_AUDIT_CALL_RELEASED
 - SIA_AUDIT_CCB_FREED
 - SIA_AUDIT_REGCONTACT_FREED
 - SIA_INCOM_FAIL
 - SIA_INCOM_INIT
 - SIA_INCOM_SUCC
 - SIA_OUTG_FAIL
 - SIA_OUTG_INIT
 - SIA_OUTG_SUCC
 - SIA_SECURE_FQDN_VIOLATION_REQ
 - SIA_SECURE_FQDN_VIOLATION_RESP
- The following DISPLAY values were added to the Measurement ISUP Summary table:
 - ISUP_ABNORMAL_REL_RX
 - ISUP_ABNORMAL_REL_TX
 - ISUP_ACM_RX
 - ISUP_ACM_TX
 - ISUP_ANM_RX
 - ISUP_ANM_TX
 - ISUP_ARR_RX
 - ISUP_ARR_TX
 - ISUP_BLA_RX
 - ISUP_BLA_TX
 - ISUP_BLO_RX
 - ISUP_BLO_TX
 - ISUP_CCL_RX
 - ISUP_CCL_TX
 - ISUP_CCR_RX
 - ISUP_CCR_TX
 - ISUP_CFN_RX
 - ISUP_CFN_TX
 - ISUP_CGB_RX

- ISUP_CGB_TX
- ISUP_CGBA_RX
- ISUP_CGBA_TX
- ISUP_CGU_RX
- ISUP_CGU_TX
- ISUP_CGUA_RX
- ISUP_CGUA_TX
- ISUP_CON_RX
- ISUP_CON_TX
- ISUP_COT_RX
- ISUP_COT_TX
- ISUP_CPG_RX
- ISUP_CPG_TX
- ISUP_CQM_RX
- ISUP_CQM_TX
- ISUP_CQR_RX
- ISUP_CQR_TX
- ISUP_CRA_RX
- ISUP_CRA_TX
- ISUP_CRG_RX
- ISUP_CRG_TX
- ISUP_CRM_RX
- ISUP_CRM_TX
- ISUP_CVR_RX
- ISUP_CVR_TX
- ISUP_CVT_RX
- ISUP_CVT_TX
- ISUP_EXM_RX
- ISUP_EXM_TX
- ISUP_FAA_RX
- ISUP_FAA_TX
- ISUP_FAC_RX
- ISUP_FAC_TX
- ISUP_FAR_RX
- ISUP_FAR_TX
- ISUP_FOT_RX
- ISUP_FOT_TX
- ISUP_FRJ_RX

- ISUP_FRJ_TX
- ISUP_FWT_RX
- ISUP_FWT_TX
- ISUP_GRA_RX
- ISUP_GRA_TX
- ISUP_GRS_RX
- ISUP_GRS_TX
- ISUP_IAM_RX
- ISUP_IAM_TX
- ISUP_IDR_RX
- ISUP_IDR_TX
- ISUP_INF_RX
- ISUP_INF_TX
- ISUP_INR_RX
- ISUP_INR_TX
- ISUP_IRS_RX
- ISUP_IRS_TX
- ISUP_LPA_RX
- ISUP_LPA_TX
- ISUP_LPM_RX
- ISUP_LPM_TX
- ISUP_MSG_RX
- ISUP_MSG_TX
- ISUP_NRM_RX
- ISUP_NRM_TX
- ISUP_OLM_RX
- ISUP_OLM_TX
- ISUP_OPR_RX
- ISUP_OPR_TX
- ISUP_PAM_RX
- ISUP_PAM_TX
- ISUP_PRI_RX
- ISUP_PRI_TX
- ISUP_REL_RX
- ISUP_REL_TX
- ISUP_RES_RX
- ISUP_RES_TX
- ISUP_RLC_RX

- ISUP_RLC_TX
 - ISUP_RSC_RX
 - ISUP_RSC_TX
 - ISUP_SAM_RX
 - ISUP_SAM_TX
 - ISUP_SGM_RX
 - ISUP_SGM_TX
 - ISUP_SUS_RX
 - ISUP_SUS_TX
 - ISUP_UBA_RX
 - ISUP_UBA_TX
 - ISUP_UBL_RX
 - ISUP_UBL_TX
 - ISUP_UCIC_RX
 - ISUP_UCIC_TX
 - ISUP_UNEXPECT_MSG_RX
 - ISUP_UNRECOG_MSG_RX
 - ISUP_UPA_RX
 - ISUP_UPA_TX
 - ISUP_UPT_RX
 - ISUP_UPT_TX
 - ISUP_USR_RX
 - ISUP_USR_TX
- Added the following DISPLAY values to the Measurement TCAP Protocol Summary table:
 - TCAP_OPERATION_REQ_RX
 - TCAP_OPERATION_CONFIRM_RX
 - TCAP_OPERATION_IND_RX
 - TCAP_COMPONENT_REQ_RX
 - TCAP_COMPONENT_CONFIRM_RX
 - TCAP_COMPONENT_IND_RX
 - TCAP_DATA_IND_RX
 - TCAP_UDATA_IND_RX
 - TCAP_DATA_REQ_RX
 - TCAP_DELIMITER_REQ_RX
 - TCAP_DELIMITER_IND_RX
 - TCAP_OPEN_IND_RX
 - TCAP_OPEN_CONFIRM_RX
 - TCAP_STATUS_IND_RX

- TCAP_DIALOG_CONFIRM_RX
- TCAP_CLOSE_IND_RX
- TCAP_ABORT_IND_RX
- TCAP_BIND_CONFIRM_RX
- TCAP_STAT_CONFIRM_RX
- TCAP_NOTICE_IND_RX
- TCAP_STAT_IND_RX
- Added the following DISPLAY values to the Measurement AIN Tools Summary table:
 - AINSVC_LOC_LNP_FAIL_APP
 - AINSVC_LOC_LNP_QUERY
 - AINSVC_LOC_LNP_QUERY_NO_RN
 - AINSVC_LOC_LNP_QUERY_RN_FOUND
 - AINSVC_LOC_LNP_QUERY_SUCC
- Added the following DISPLAY values to the POTS Class of Service Feature Server table:
 - POTS_COS_TOLLFREE_BLOCKED
 - POTS_TDISC_CALLS_OUTG_BLOCKED
 - POTS_COS_TOT_AUTH_IVR_SESSION
 - POTS_COS_TOT_ACCT_IVR_SESSION
 - POTS_COS_TOT_IVR_FAIL
- The following POTS Miscellaneous Feature Server table DISPLAY token values are obsoleted:
 - POTS_LCD_AUTH_ATTEMPTS. Use POTS_LCD_AUTH_ATTMP.
 - POTS_LCD_AUTH_SUCCESS. Use POTS_LCD_AUTH_SUCC.
 - POTS_LCD_FORCED_DISCONNECT. Use POTS_LCD_FORCED_DISC.
- Added the values SIM_AUDIT_CCB_FREED and SIM_AUDIT_SIP_CCB_FREED to the DISPLAY token in the Measurement SIM Summary table.
- Added Session Initiation Protocol values to the DISPLAY token of the Measurement SIA Summary table, the Measurement SIM Summary table, the Measurement POTS Miscellaneous Feature Server Summary table and the Measurement AIN Tools Summary table.
- Added the following tokens to the Measurement Trunk Group Summary table:
 - TRKGRP-EXCHANGE
 - TRKGRP-NAME
 - CALL-AGENT-ID
- Added the following values to the DISPLAY token of the Measurement MGCP Signaling Adapter Summary table:
 - MGCP_AUCX_TX
 - MGCP_AUCX_ACK_RX
 - MGCP_AUCX_NACK_RX
- Added the following values to the DISPLAY token of the Measurement Billing Summary table:
 - BILLING_TOTAL_AIRLINES

- BILLING_TOTAL_CNA
- BILLING_TOTAL_DA_INTER
- BILLING_TOTAL_DA_INTL
- BILLING_TOTAL_INTL_OPR
- BILLING_TOTAL_INTL_WZ1
- BILLING_TOTAL_LB_TEST
- BILLING_TOTAL_NAT_OPR BILLING_TOTAL_RAILWAYS
- BILLING_TOTAL_SVC_CODE
- BILLING_TOTAL_MOBILE
- BILLING_TOTAL_UAN
- Added value definitions to the PROTOCOL-VERSION token in the Electronic Surveillance Server table.
- The following tokens were added to the Media Gateway Profile table: MGCP-TO-SUPP, MGCP-QDISCARD-SUPP, MGCP-TEST-CONN-SUPP and SDP-CAP-ENCODE-TYPE.
- Db-license file provisioning is not required.
- The token MAX-INIT-RTO value in the Stream Control Transmission Protocol Association table is now SMALLINT:1000–3000 (Default = 1000).
- The token MAX-LINES in the MultiLine Hunt Group table is obsolete.
- The following changes were made to the Trunk Group table:
 - Added the tokens TG, SCRIPT-SUPP, VOICE-INFO-TRANSFER-CAP, VOICE-LAYER1-USERINFO and PERFORM-LNP-QUERY.
 - The TG token is a unique key.
 - Added two values, DYNAMIC and LINE, to the MGCP-PKG-TYPE token.
 - Added usage rule for MGCP-PKG-TYPE token.
 - The MD value for MGCP-PKG-TYPE is now supported.
 - The token PFX-DIGITS is 1-10 digits.
- The following changes were made to the Subscriber table:
 - Added the tokens ACCOUNT-ID, BILLING-TYPE, FORCED, LNP-TRIGGER, PORTED-IN, PRIVACY-MANAGER-ID, SECURE-FQDN, VMWI, SDT-MWI, VOICE-MAIL-ID and DN-STATUS.
 - The SECURE-FQDN token is a unique key.
 - The COUNTRY token has no default.
 - Added rule regarding use of FORCED in add commands.
 - The delete subscriber command now deletes all subscriber related records such as those in the Subscriber Feature Data table and the Subscriber Service Profile table.
- The following changes were made to the Destination table:
 - The CALL-TYPE token is a foreign key to the Call Subtype table.
 - Added the tokens ACQ-LNP-Query and CALL-SUBTYPE.
 - The RING-TYPE-DN1 token value is now a range from 1 to 7.
 - The test-line value for the CATEGORY token is obsolete.

- Added Database Usage Default sections for Small, Medium, Routeserver, Local Number Portability (LNP) and Cable8 configurations to Appendix D.
- The TCAP-VERSION token is obsoleted in the Subsystem table.
- The Subsystem Profile table is obsoleted.
- Added new tables AAA Server Group, Call Type Profile, Call Subtype, Subsystem Group, Region Code, Directory Number to Routing Number, Signal Connection Control Part Route and Directory Number to Gateway Number.
- For medium and large configurations, up to 30 OPCs can be provisioned per Cisco BTS 10200 Softswitch. For small configurations, up to 8 OPCs can be provisioned per Cisco BTS 10200 Softswitch.
- Added the subsystem-grp-id token to the following tables:
 - Service Logic Host Route
 - Signaling Connection Control Part Route
 - Routing Key
- Obsoleted the ssn-id token in the following tables
 - Service Logic Host Route
 - Signaling Connection Control Part Route
 - Routing Key
- Added new section on Subsystem Group control and status commands.
- The OPC-ID token is now required in the “control subsystem” command.
- The SDT and SDT-TYPE tokens in the Vertical Service Code table are obsoleted.
- Added new delete rule to the Service table.
- In the Digit Map table, the DIGIT-PATTERN token size is now 2048 ASCII characters.
- In the Changed Number table, made the following changes:
 - Added new tokens: END-TIME, LAST-CHANGED and START-TIME.
 - Added new delete and show command examples.
- In the Audio Segment and Audio Sequence tables, the description token is now 512 ASCII characters.
- In the Route table, added the following new tokens:
 - NEXT-ACTION
 - ANNC-ID
 - OVERFLOW-DN
- In the ISDN D-Channel table, added the following new tokens
 - DCHAN-FORMAT
 - DCHAN-SUBSLOT.
- The following changes were made to the Digit Manipulation table:
 - The token MATCH-NOA is 40 ASCII characters
 - The token REPLACE-NOA is 32 ASCII characters.

- Added the following values to the MATCH-NOA token: PORTED-NUMBER-WITHOUT-RN, PORTED-NUMBER-WITH-RN, NON-UNIQUE-INTL, NON-UNIQUE-NATIONAL and NON-UNIQUE-SUBSCRIBER.
- Added tokens OVERDECADIC-DIGITS-SUPP, NOA-BASED-ROUTING and NOA-ROUTE-PROFILE-ID to the Dial Plan Profile table.
- Added the following call types to the Call Type table:
 - ANA
 - MOBILE
- Added the following feature information to Appendix B:
 - CFC
 - CFC-DN-CHG-ACT
 - CFC-ACT
 - CFC-DEACT
 - CFCI
 - CFCI-NO-DN-VRFY
 - NSA
 - NSA-ACT
 - PS
 - PS-MANAGE
 - PS-O
 - SLE
 - VM
 - VM-ACCESS
 - VMA
 - VMA-ACT
 - VM-ACT
 - VMA-DEACT
 - VM-DEACT
 - Added column “VALUE 5.”
- Added the following rules to the Stream Control Transmission Protocol table:
 - The remote-port and remote-tsap-addr1 cannot be the same.
 - The remote-port and remote-tsap-addr2 cannot be the same.
- Added the following note to the Call Agent Configuration table: When the Cisco BTS 10200 Softswitch looks for provisioned values, Call Agent Configuration table is read first to provide a value. If the Call Agent Configuration table is not provisioned, the system then reads the Call Agent Configuration Base table and returns that default value.
- The IKE-KEY token description has changed in the Aggregation, Media Gateway Profile, Electronic Surveillance Server and Radius Profile tables.
- Modified the description of the IKE-KEY-ENCR token in the Aggregation, Media Gateway Profile, Electronic Surveillance Server and Radius Profile tables.

- Modified the description of the IPSEC-SA-ESP-CS token in the Aggregation, Media Gateway Profile, Electronic Surveillance Server and Radius Profile tables.
- Added the following types to the Check Possible Values Types and Values table (these types are not provisionable in this release):
 - MGCP-T38-FAX-MODE-PREF1
 - MGCP-T38-FAX-MODE-PREF1
 - MGCP-T38-FAX-MODE-PREF1
 - MGCP-T38-FAX-MODE-PREF2
 - MGCP-T38-FAX-MODE-PREF2
 - MGCP-T38-FAX-MODE-PREF2
 - MGCP-T38-FAX-MODE-PREF3
 - MGCP-T38-FAX-MODE-PREF3
 - MGCP-T38-FAX-MODE-PREF3
- Point of Presence (POP) table changes:
 - Added the following tokens: ENUM-PROFILE-ID, ENUM-SUPP, CLLI-CODE-ID, CUSTOMER-SUPPORT-DN, IVR-DN, OFFICE-SERVICE-ID, POLICY-SERVER, PRIVACY-MANAGER-ID, SENSOR-ID, TEMP-DISC-COS-RESTRICT-ID, TEMP-DISC-SERVICE-ALLOWED, VIRTUAL-NSA-SUBSCRIBER-ID, VOICE-MAIL-ID
 - Added information to the TIMEZONE token; TIMEZONE token is now optional, and is a foreign key to the Timezone table.
 - Added cos-restrict-id for temporarily disconnected subscribers.
 - LATA token range has changed from 100–65535 to 100–99999. Token defaults to 99999 if not provisioned.
 - The STATE token changed to VARCHAR(16) and is uppercase only. Use two uppercase characters for U.S. states. For example: TX, CA, and so forth.
 - JIP token value is now numeric.
- Added list of 4.5 timezone values to Appendix C.
- Channel Associated Signaling Trunk Group Profile table changes:
 - Added tokens: TEST-LINE-TYPE, PLAY-DIAL-TONE, PLAY-RINGBACK-TONE, SEND-ANI, INBAND-INFO, NO-ANSWER-TIMER and NO-ANSWER-ACTION.
 - Modified the values for SIG-TYPE.
 - The SIG-TYPE value MF-FGD has been obsoleted.
 - Added the SIG-TYPE value LINE.
 - The MGCP-PKG-TYPE token is obsoleted. Token moved to the Trunk Group table.
 - The OSS-SIG token is obsoleted. Use new token OSS-SIG-TYPE.
 - The tokens TEST-LINE and NO-TEST-TRUNK are now optional.
- Media Gateway table changes:
 - Added token: NODE.
- Media Gateway Profile table changes:

- Added tokens: FAX-FAILURE-HANDLING, FAX-INBAND-METHOD, T38-FXR-LOOSE-SUPP, T38-FXR-GW-SUPP, NLB-SUPP, MGCP-MSG-PIGGYBACK-SUPP, MGCP-MAX-KEEPALIVE-INTERVAL, MGCP-REQ-ID-SUPP, MGCP-PIGGYBACK-MSG-SUPP, and PARALLEL-NETWLOOP-SUPP.
- Marked obsoleted: “if fax-pref-mode=FAX-T38CAMODE, then fax-t38-camode-supp=Y” and “if fax-pref-mode=FAX-INBAND, then fax-inband-supp=Y” from the usage guidelines.
- Added rule for MGCP-MAX-KEEPALIVE-INTERVAL.
- Added rule for PARALLEL-NETWLOOP-SUPP.
- Added the value MD to the MGCP-DEFAULT-PKG token.
- Added BAU-URI token to the Announcement table.
- Call Park Subscriber Group table changes:
 - Added token: CPRK-DIGIT-MAP-STRING.
- Exchange Code table changes:
 - Added primary key token digit-string.
 - NDC token now optional.
 - Digit-string token is created by concatenating NDC + EC.
- Office Code table changes:
 - NDC token now optional.
 - Digit-string range changed to 1–14 ASCII characters.
- Subscriber table changes:
 - Added tokens: PORTED-IN, FORCED, BILLING-TYPE, ACCOUNT-ID, VOICE-MAIL-ID, VOICE MAIL ID, and PRIVACY-MANAGER-ID.
 - Added expanded description to the temp-unavailable value of the STATUS token.
 - Added forced rule.
 - The delete subscriber command deletes all subscriber related records such as subscriber-feature-data and subscriber-service-profile.
 - The token SEND-BILLING-DN is obsolete.
- Subscriber Profile table changes:
 - Added tokens: TEST-LINE-TYPE, VOICE-MAIL-ID, INTERLATA-PFX1-OPT and PRIVACY-MANAGER-ID.
- Subscriber Feature Data table changes:
 - Added values NSA, PM, VM, and VMU to the fname token.
 - Added new value “T” to the active token.
 - Added value FDN4 to the type token.
- The following changes were made to the Feature Server table:
 - Table containment area now includes FSAIN.
 - Added new 3PTY value to the type token.
 - Added new token EXTERNAL-FEATURE-SERVER.
- The following new tables were added:

- Script
- Trigger NOD Escape List
- Feature Profile Base
- Feature Configuration Base
- Feature Configuration Base Check Possible Values
- Feature Configuration Check Possible Values
- Subscriber Time of Day Schedule
- Common Language Location Identifier
- Emergency Number List
- Nature of Address Route Profile
- Nature of Address Route
- Added the token policy-server-id to the Aggregation table.
- The following changes were made to the Users table:
 - It is now possible to change user attributes DAYS-VALID and WARN using the “change user” command.
 - Added token PASSWORD.
 - Added note in the Examples section on using the PASSWORD token in the add command.
- Subscriber table: added new delete rule.
- Screen List Editing table: added new value, NSA, to the fname token.
- Added Application Server table to the Features chapter.
- Vertical Service Code table: added two Second Dial Tone Indicator tokens.
- Custom Dial Plan table: added sdt-type token.
- Softswitch Trunk Group Profile table changes:
 - The following tokens are obsoleted: ECHO-SUPP-REQUIRED, SATELLITE-CIRCUIT, SEND-CPN, SEND-OCN, SEND-REDIR-NUM, SEND-ATP, SEND-GAP, SEND-GN, SEND-JIP, CC-DIVERSION-SUPP AND SEND-CIP.
 - The following new tokens were added: SEND-FULL-E164, SCALE-FACTOR, MAX-FORWARDS, HOP-COUNTER-SUPP, HOP-COUNTER-MAX, USE-CMSS-RESRC-MGMT, USE-RESOURCE-MGMT, ES-SUPP, AUDIT-THRESHOLD, SIP-TIMER-PROFILE-ID, SEND-CIC-PARAM, USE-PAI-HDR-FOR-ANI, APPLY-USER-PRIVACY, and DNS-SRV-ADV-ON-RETRANS-TIMEOUT.
 - Added two rules for add.
- Display token values for ETSI are supported.
- Display token values for Chile, Israel and Australia ISUPs are not supported.
- Added new tokens SEND-FS-CALLP and REMOTE-FAX-PORT-RETRIEVAL-MSG to the H.323 Terminal Profile and H323 Trunk Group Profile tables.
- The following rules are no longer required for the H323 Trunk Group Profile table:
 - If fax-pref-mode=FAX-T38-CAMODE, then fax-t38-camode-supp=Y;
 - If transport-pref-mode=UDP-MODE, then annexe-supp=Y;
 - If h245-tunneling = AUTO or ENABLE, then facility-supp=Y;

- The following rules are no longer required for the H.323 Terminal Profile table:
 - If fax-pref-mode (in QOS table) = fax-t38-gwmode, then fax-t38-gwmode-supply=Y;
 - If fax-pref-mode (in QOS table) = fax-t38-camode, then fax-t38-camode-supply=Y;
 - If fax-pref-mode (in QOS table) = fax-inband, then fax-inband-supply=Y;
 - If dtmf-pref-mode (in QOS table) = dtmf-cisco-rtp, then dtmf-cisco-rtp-supply=Y;
 - If dtmf-pref-mode (in QOS table) = dtmf-h245-alpha, then dtmf-h245-alpha-supply=Y;
 - If dtmf-pref-mode (in QOS table) = dtmf-h245-signal, then dtmf-h245-signal-supply=Y;
 - If dtmf-pref-mode (in QOS table) = dtmf-rfc2833, then dtmf-rfc2833=Y;
- The H.323 Terminal Profile table tokens FAX-T38-CAMODE-SUPP and FAX-T38-GWMODE-SUPP are obsoleted.
- In the Call Detail Block table, 108 and NLB test calls are supported under the type token.
- The following values were added to the SERVICE-TYPE token for billing:
 - call-forward-combination
 - no-solicitation-announcement
 - privacy-screening
 - voice-mail
 - voice-mail-access
- The following values were added to the TYPE token for billing:
 - calling-number-announcement
 - interlata-da
 - international-da
 - universal-access-number
- The loopback-test (108 test calls) value of the TYPE token in the Call Detail Block table is obsoleted.
- Added Appendix F covering timezones and timezone localities for billing and call processing.
- The FREQ token in the Activity table is now mandatory.
- The following changes were made to the Activity Base table:
 - Added example for the *show activity-id* command.
 - Added four new activity ids: SIA-MEMORY-PERIODIC-AUDIT, SIA-MEMORY-SCHEDULED-AUDIT, SIM-MEMORY-PERIODIC-AUDIT and SIM-MEMORY-SCHEDULED-AUDIT.
 - The ID token is now 32 characters.
 - The VALID-FREQ token is now 64 characters.
 - Added the following tokens: AUDIT-COUNT-RANGE-FROM, AUDIT-COUNT-RANGE-TO, AUDIT-INTERVAL-RANGE-FROM, AUDIT-INTERVAL-RANGE-TO, and FIXED-TIME-INTERVAL
- The following changes were made to the Aggregation table:
 - Modified the description of the TSAP-ADDR token.
 - The IPSEC-SA-GRACE- PERIOD token range has changed; notes added.

- The IKE-GROUP token range has changed.
 - Added token: TYPE.
- Added Appendix H: Data Values for DiffServ Code Point and Type of Service Parameters.
- Added examples and made corrections to the PacketCable chapter.
- The Measurement TSA Summary table is obsoleted. Display values are now part of the Measurement TCAP Summary table.
- The Measurement INAP Summary table is obsoleted.
- Added example for the Measurement Trunk Group Usage Summary table showing how to use the reporting option to gather statistics on a per Pop basis.
- Added the following display values for the Measurement Call Processing Summary table:
 - CALLP_LB_TEST_SUCC
 - CALLP_NCT_TEST_SUCC
 - CALLP_NCT_TEST_FAIL
 - CALLP_NLB_TEST_SUCC
 - CALLP_NLB_TEST_FAIL
 - CALLP_TEST_ROUTE_SUCC
 - CALLP_TOTAL_TDISC_ORIG_ATTMP
 - CALLP_T38_FAX_MEDIA_SETUP_SUCC
 - CALLP_T38_FAX_MEDIA_SETUP_FAIL
- Added the following display values for the POTS Local Feature Server table:
 - POTS_CFC_ACT_ATTMP
 - POTS_CFC_ACT_FAIL
 - POTS_CFC_ACT_SUCC
 - POTS_CFC_DEACT_ATTMP
 - POTS_CFC_DEACT_FAIL
 - POTS_CFC_DEACT_SUCC
 - POTS_CFC_DN_CHG_ACT_ATTMP
 - POTS_CFC_DN_CHG_ACT_FAIL
 - POTS_CFC_DN_CHG_ACT_SUCC
 - POTS_CFC_FORWARD_ATTMP
 - POTS_CFC_FORWARD_FAIL
 - POTS_CFC_FORWARD_SUCC
 - POTS_CFC_INTERROG_ATTMP
 - POTS_CFC_INTERROG_FAIL
 - POTS_CFC_INTERROG_SUCC
 - POTS_NSA_INVOKE_ABANDON
 - POTS_NSA_INVOKE_ATTMP
 - POTS_NSA_INVOKE_FAIL

- POTS_NSA_INVOKE_SUCC
- Added the following display values for the Measurement TCAP Protocol Summary table:
 - TCAP_ABORT_IND_RX
 - TCAP_BIND_CONFIRM_RX
 - TCAP_CLOSE_IND_RX
 - TCAP_COMPONENT_CONFIRM_RX
 - TCAP_COMPONENT_IND_RX
 - TCAP_COMPONENT_REQ_RX
 - TCAP_DATA_IND_RX
 - TCAP_DATA_REQ_RX
 - TCAP_DELIMITER_IND_RX
 - TCAP_DELIMITER_REQ_RX
 - TCAP_DIALOG_CONFIRM_RX
 - TCAP_NOTICE_IND_RX
 - TCAP_OPEN_CONFIRM_RX
 - TCAP_OPEN_IND_RX
 - TCAP_OPERATION_CONFIRM_RX
 - TCAP_OPERATION_IND_RX
 - TCAP_OPERATION_REQ_RX
 - TCAP_STAT_CONFIRM_RX
 - TCAP_STAT_IND_RX
 - TCAP_STATUS_IND_RX
 - TCAP_UDATA_IND_RX
- Added the following display values to the Measurement ISUP Summary table. These counters replace the SGA counters in previous releases.
 - ISUP_ABNORMAL_REL_RX
 - ISUP_ABNORMAL_REL_TX
 - ISUP_ACM_RX
 - ISUP_ACM_TX
 - ISUP_ANM_RX
 - ISUP_ANM_TX
 - ISUP_ARR_RX
 - ISUP_ARR_TX
 - ISUP_BLA_RX
 - ISUP_BLA_TX
 - ISUP_BLO_RX
 - ISUP_BLO_TX
 - ISUP_CCL_RX

- ISUP_CCL_TX
- ISUP_CCR_RX
- ISUP_CCR_TX
- ISUP_CFN_RX
- ISUP_CFN_TX
- ISUP_CGB_RX
- ISUP_CGB_TX
- ISUP_CGBA_RX
- ISUP_CGBA_TX
- ISUP_CGU_RX
- ISUP_CGU_TX
- ISUP_CGUA_RX
- ISUP_CGUA_TX
- ISUP_CON_RX
- ISUP_CON_TX
- ISUP_COT_RX
- ISUP_COT_TX
- ISUP_CPG_RX
- ISUP_CPG_TX
- ISUP_CQM_RX
- ISUP_CQM_TX
- ISUP_CQR_RX
- ISUP_CQR_TX
- ISUP_CRA_RX
- ISUP_CRA_TX
- ISUP_CRG_RX
- ISUP_CRG_TX
- ISUP_CRM_RX
- ISUP_CRM_TX
- ISUP_CVR_RX
- ISUP_CVR_TX
- ISUP_CVT_RX
- ISUP_CVT_TX
- ISUP_EXM_RX
- ISUP_EXM_TX
- ISUP_FAC_RX
- ISUP_FAC_TX
- ISUP_FAR_RX

- ISUP_FAR_TX
- ISUP_FOT_RX
- ISUP_FOT_TX
- ISUP_FRJ_RX
- ISUP_FRJ_TX
- ISUP_FWT_RX
- ISUP_FWT_TX
- ISUP_GRA_RX
- ISUP_GRA_TX
- ISUP_GRS_RX
- ISUP_GRS_TX
- ISUP_IAM_RX
- ISUP_IAM_TX
- ISUP_IDR_RX
- ISUP_IDR_TX
- ISUP_INF_RX
- ISUP_INF_TX
- ISUP_INR_RX
- ISUP_INR_TX
- ISUP_IRS_RX
- ISUP_IRS_TX
- ISUP_LPA_RX
- ISUP_LPA_TX
- ISUP_LPM_RX
- ISUP_LPM_TX
- ISUP_MSG_RX
- ISUP_MSG_TX
- ISUP_NRM_RX
- ISUP_NRM_TX
- ISUP_OPR_RX
- ISUP_OPR_TX
- ISUP_PAM_RX
- ISUP_PAM_TX
- ISUP_PRI_RX
- ISUP_PRI_TX
- ISUP_REL_RX
- ISUP_REL_TX
- ISUP_RES_RX

- ISUP_RES_TX
 - ISUP_RLC_RX
 - ISUP_RLC_TX
 - ISUP_RSC_RX
 - ISUP_RSC_TX
 - ISUP_SAM_RX
 - ISUP_SAM_TX
 - ISUP_SGM_RX
 - ISUP_SGM_TX
 - ISUP_SUS_RX
 - ISUP_SUS_TX
 - ISUP_UBA_RX
 - ISUP_UBA_TX
 - ISUP_UBL_RX
 - ISUP_UBL_TX
 - ISUP_UCIC_RX
 - ISUP_UCIC_TX
 - ISUP_UNEXPECT_MSG_RX
 - ISUP_UNRECOG_MSG_RX
 - ISUP_USR_RX
 - ISUP_USR_TX
- In the Measurements chapter, INAP is obsoleted.
 - Added Appendix I: ISUP Measurement Counters.
 - In the Media Gateway Profile table, the token SPARE2-SUPP is used to specify network loopback test calls.
 - SS7 display values have been changed to AUDIT values in the Measurement Audit Summary table. The following display values have been added:
 - AUDIT_SS7_TRUNK_STATE_SYNCED
 - AUDIT_SS7_LONG_DUR_EXCEEDED
 - AUDIT_FS_TOTAL_SIP_RESP_TMO
 - AUDIT_FS_TOTAL_SIP_NOACK_TMO
 - AUDIT_FS_TOTAL_CA_SWITCHOVER
 - AUDIT_SIP_CCB_FREED
 - AUDIT_SIP_CALL_RELEASED
 - AUDIT_SIP_BCM_CALL_RELEASED
 - AUDIT_SIP_REGCONTACT_FREED
 - Added the following display values to the Measurement Billing Summary table:
 - BILLING_TOTAL_LB_TEST

- BILLING_TOTAL_INTL_OPR
 - BILLING_TOTAL_NAT_OPR
 - BILLING_TOTAL_AIRLINES
 - BILLING_TOTAL_RAILWAYS
 - BILLING_TOTAL_SVC_CODE
 - BILLING_TOTAL_INTL_WZ1
 - BILLING_TOTAL_CNA
 - BILLING_TOTAL_DA_INTER
 - BILLING_TOTAL_DA_INTL
 - BILLING_TOTAL_UAN
- Added the following display values to the Measurement Trunk Group Usage Summary table:
 - TRKGRP_EXCHANGE
 - TRKGRP_GLARE_COUNT
 - TRKGRP_LBLK_TRK_USAGE
 - TRKGRP_MAINT_TRK_USAGE
 - TRKGRP_NAME
 - TRKGRP_OOS_TRK_USAGE
 - TRKGRP_RBLK_TRK_USAGE
 - TRKGRP_TOTAL_INS_TRK
 - TRKGRP_UEQP_TRK_USAGE
- Added the display value ANM_EMG_CKT_UNAVAIL to the Announcement Measurements Summary table.
- In the Screening List Editing table the following changes were made:
 - Added the value NSA to the fname token.
 - Added tokens FORCED and LAST-CHANGED.
 - Added delete command examples using the FORCED token.
- Added the following call types:
 - Automatic number announcement (ANA)
 - InterLATA DA call (DA-INTERLATA)
 - International DA Call (DA-INTL)
 - International call within World Zone 1 (INTL-WZ1)
 - Universal Access Number (UAN)
- VACANT call type: removed default call type.
- The following changes were made to the Call Agent Configuration table in Appendix A:
 - Added the following T38 values:
 - MGCP-T38-FAX-MODE-PREF1: Not provisionable.
 - MGCP-T38-FAX-MODE-PREF2: Not provisionable.
 - MGCP-T38-FAX-MODE-PREF3: Not provisionable.

- CODEC-T38-PTIME
- T38-MAX -BIT-RATE: Not provisionable.
- T38-MAX -BUFFER-SIZE: Not provisionable.
- T38-MAX -DATAGRAM-SIZE: Not provisionable.
- The following values are obsoleted:
 - MGCP-MIN-RETRANSMIT-COUNT
 - MGCP-MAX-RETRANSMIT-COUNT
 - MGCP-PING-ATTEMPTS
 - MGCP-PING-DURATION
 - MGCP-TIMER-VAL
 - MIN-SE
 - SESSION-EXPIRES
 - DEFAULT-IVR-SCRIPT-PKG-TYPE
 - FQDN-FOR-EXTERNAL-FS
 - SCTP-IP-TOS-PRECEDENCE
- The following values were added:
 - ACCT-CODE-PROMPT-DELAY
 - ACCT-CODE-PROMPT-TIMEOUT
 - ACCT-CODE-PROMPT-TONE
 - COT-ACTIVATION-LEVEL
 - FEATURE-RECONNECT-TMR
 - EMG-SUSPEND-TMR
 - ENUM-QUERY-RESPONSE-TIMER
 - ENUM-QUERY-RETRY-COUNT
 - INACTIVE-CONN-MODE-BEFORE-ANSWER
 - MGCP-MAX-KEEPALIVE-AUEP
 - MGCP-MAX-KEEPALIVE-ICMP
 - MGCP-RTO-MAX
 - NCT-TEST-SERVICE-AFFECTING
 - NLB-TEST-SERVICE-AFFECTING
 - TEST-TRUNK-GRP-DIGITS
 - TEST-TRUNK-MEMBER-DIGITS
 - BEST-EFFORT-ON-QOS-FAIL
 - DEFAULT-OCB-PROFILE-ID
 - DEFAULT-PRIVACY-MANAGER-ID
 - DEFAULT-VOICE-MAIL-ID
 - ENCRYPTION-KEY
 - RADIUS-AUTHORIZATION-ALLOWED

- RADIUS-SERVER-ADDRESS
- WHISPER-TONE-TIMER
- SCTP-DSCP
- SIP-TIMER-PROFILE-ID
- SUB-MAX-FORWARDS
- SUB-SESSION-TIMER-ALLOWED
- SIA-REG-MAX-EXPIRES-SECS
- SIA-REG-MIN-EXPIRES-SECS
- REFER-ACCEPT-TIMER-SECS
- SESSION-EXPIRES
- REFER-ABANDON-TIMER-SECS
- MAX-SESSION-EXPIRES
- MAX-SUBSCRIPTION-LEVEL
- MGCP-T-HIST.
- RELEASE-CALL-ON-LCD-TRIGGER-FAILURE.
- The default value for SIA-REG-MIN-EXPIRES-SECS changed to 1800.
- The following types have no default values: CODEC-G722-PTIME, CODEC-G723-1A-H-PTIME, CODEC-G723-1A-L-PTIME, CODEC-G723-1-H-PTIME, CODEC-G723-1-L-PTIME, CODEC-G726-16K-PTIME, CODEC-G726-24K-PTIME, CODEC-G726-32K-PTIME, CODEC-G726-40K-PTIME, CODEC-G728-PTIME, CODEC-G729AB-PTIME, CODEC-G729B-PTIME, CODEC-G729E-PTIME, CODEC-G729-PTIME, CODEC-PCMA-PTIME, CODEC-T38-PTIME and CODEC-PCMU-PTIME.

Release 4.4.1

The following changes were made in Release 4.4.1. It is not an inclusive list.



Note

The OCB Profile and OCB K Value tables are supported in this release.

- Added TGID value to the TRUNK-SUB-GRP-TYPE token of the Softswitch Trunk Group Profile table.
- Added the token AAA-SERVER-GRP-ID to the Point of Presence table.
- For the measurement provisioning command, the ALL value for the TYPE token is obsolete.
- In the User Part Variant table, added the Q761_STANDARD value to the ID token.
- Added the tokens SEND-EARLY-BKWD-MSG and EARLY-BKWD-MSG-TMR to the Trunk Group table.
- In the H.323 Gateway to Gatekeeper table, the GK-IP-ADDR token must now be entered in dot notation: A.B.C.D.
- Added feature information for limited call duration (LCD) to Appendix B.

- Added new table Generic Transparency Descriptor (GTD) and table listing supported GTD parameters.
- Added the following new tables for IVR functionality:
 - Audio Segment
 - Audio Sequence
 - IVR Script Profile
 - Language
- The following rules were added to the Subscriber table:
 - if subscriber category=individual/pbx, mlhg-id and ctxg-id are not provisionable.
 - if subscriber category=mlhg/mlhg-individual/mlhg-pref-indiv, ctxg-id is not provisionable.
 - if subscriber category=ctxg/ctxg-individual/ctxg-tg, mlhg-id is not provisionable.
- Added the token ALARM-STATE to the Alarm Log/Event Log table.
- Added the following values for the Measurement POTS Miscellaneous Feature Server Summary table display token:
 - POTS_LCD_AUTH_ATTEMPTS
 - POTS_LCD_AUTH_SUCCESS
 - POTS_LCD_AUTH_FAIL
 - POTS_LCD_REAUTH_FAIL
 - POTS_LCD_FORCED_DISCONNECT
- In the ADM chapter, Address of Record to Subscriber (aor2sub) table, the status and control commands are obsoleted. Use the change command to control an aor2sub ID, and the show command to check the status.
- Added the token USE-PACKETCABLE-IAP to the Electronic Surveillance Server table for CALEA SII support.
- Added the following values and note to the ID token of the Activity table:
 - MEDIA-ALIVE-EM
 - MGCP-TERM
 - SS7-CIC



Note Note: Enter these values in upper case. These values are case-sensitive.

- Added note to the id token of the Activity Base table that the values are case-sensitive.
- In the Call Agent table, the token tsap-addr-sidea is now tsap-addr.
- In the Call Agent Configuration table:
 - Added example of add command.
 - Delete command is now supported
 - The tokens batch-mode-supp and batch-latency are obsoleted.
- In the Local Access and Transport Area table, the LATA id range is increased to 99999.
- In the Call Agent Profile table:

- Removed the add and change rule “cms-id cannot equal the mgc-id.”
 - Cms-id is now mandatory. Default is 99999.
 - Default for the feid token is now 33333.
 - Mgc-id is now mandatory. Default is 99999.
 - The token cms-supp is obsolete.
 - Removed the token mgc-supp.
 - Removed the token gtd-supp.
 - Removed the token es-intercept-type.
 - Added the tokens FORCED and PCMM-SUPP.
- For the cdb-billing-supp token:
- Added the token ALARM-STATUS to the Alarm or Event Log command.
- In the Softswitch Trunk Group Profile table the value for the SIPT-ISUP-VER token is no longer restricted to GR317.
- Added the following values for the Measurement POTS Miscellaneous Feature Server Summary table display token:
 - POTS_LCD_AUTH_ATTEMPTS
 - POTS_LCD_AUTH_SUCCESS
 - POTS_LCD_AUTH_FAIL
 - POTS_LCD_REAUTH_FAIL
 - POTS_LCD_FORCED_DISCONNECT
- In the ADM chapter, Address of Record to Subscriber (aor2sub) table, the status and control commands are no longer supported. Use the change command to control an aor2sub id, and the show command to check the status.
- Added the token use-packetcable-iap to the Electronic Surveillance Server table for CALEA SII support.
- Added the following values and note to the ID token of the Activity table:
 - MEDIA-ALIVE-EM
 - MGCP-TERM
 - SS7-CIC
 - Note: Enter these values in upper case. These values are case-sensitive.
- Added note to the ID token of the Activity Base table that the values are case-sensitive.
- In the Call Agent Configuration table:
 - Added example of add command.
 - Delete command is now supported
 - The tokens batch-mode-supp and batch-latency are no longer supported.
- In the Call Agent Profile table:
 - Removed the add and change rule “cms-id cannot equal the mgc-id.”
 - Cms-id is now mandatory. Default is 99999.
 - Default for the FEID token is now 33333.

- MGC-ID is now mandatory. Default is 99999.
- Removed the tokens CMS-SUPP, MGC-SUPP, GTD-SUPP and ES-INTERCEPT-TYPE.
- For the CDB-BILLING-SUPP token:
 - Added the caution: Cisco strongly recommends that you do not set both CDB-BILLING-SUPP and EM-BILLING-SUPP to Y. Attempting to generate both types of records simultaneously can significantly degrade system performance.
 - Added the note: To set both the cdb-billing-supp and em-billing-supp tokens to Y, include FORCED=Y in the command line.
- For the EM-BILLING-SUPP token:
 - Added the caution: Cisco strongly recommends that you do not set both CDB-BILLING-SUPP and EM-BILLING-SUPP to Y. Attempting to generate both types of records simultaneously can significantly degrade system performance.
 - Added the note: To set both the cdb-billing-supp and em-billing-supp tokens to Y, include FORCED=Y in the command line.
- For the FEID token:
 - Default is now 33333.
 - Amended note: This optional token becomes a mandatory token if the CMS-SUPP token, the MGC-SUPP token, or both are set to Y (yes) in Releases 4.1 and 4.2. This token is optional in Release 4.4.1 regardless of whether the CMS-SUPP token, the MGC-SUPP token, or both are set to Y (yes).
- Added new table Check Positive Values table. Moved the Check Positive Values Valid Types and Values table from Appendix A to Chapter 1.
- Added new token SEND-ALERT to the DB Usage table.
- Added the following tokens to the Trunk Group table: STATUS-MONITORING.
- Added the new token KEEPALIVE-METHOD to the Media Gateway Profile table. In Release 4.4.1, the Cisco BTS 10200 Softswitch uses the value NONE for this token to replace the mgw-monitoring flag in MGW table.
- Destination table:
 - Added new call type UAN.
 - Added new route type SCRIPT.
 - Added new token SCRIPT-ID.
- New tables:
 - Script
 - Network Element
 - GTD Parameter Values
- Cause Code Map Profile table: deleted tokens DEFAULT-STD-CAUSE-CODE and DEFAULT-ACTION.
- Measurements:
 - Added new report and clear commands for call-tools, ain-tools and pct-tools.
 - Added new types: call-tools, ain-tools, and pct-tools.
- Deleted the token MGW-MONITORING-ENABLED in the Media Gateway table.

- Added new tokens ES-SUPP and AUDIT-THRESHOLD to the Softswitch Trunk Group Profile table.
- Changed range to 0–30 seconds for the STATUS-ENQ-TIMER in the H323 Gateway table.
- TIME-TO-LIVE token moved from the H323 GW2GK table to the H323 Gateway table.
- Added the following types to the Call Agent Configuration table in Appendix A:
 - trunk-audit-interval
 - exchange-type
 - ar-announcement-response-timer-tanc
 - ar-invalid-digit-counter
 - ar-announcement-response-timeout-counter
 - ar-dn-voiceback-option
 - ar-name-voiceback-option
 - default-ivr-route-guide-id
- Added caution for no support of Telnet.
- The measurement DISPLAY tokens for ITU-Chile ISUP are not supported.
- DISPLAY token values for ETSI, Israel and Australia ISUPs are not supported.
- Added database usage tables for small, medium, large, routeserver and LNP configurations.
- Removed the delete rules for the IPSec Kerberos Old Service Keys table.
- Added expanded information for the ACC-REQ-RETRANSMIT and ACC-RSP-TIMER tokens in the Radius Profile table.
- Updated all information of all occurrences of the IKE-CS token.
- Values pertaining to the MGX8260 are no longer supported.
- Added new tokens GTD-MODE and GTD-PARMS to the Softswitch Trunk Group Profile table.

Release 4.4.0

The following changes were made in Release 4.4.0. It is not an inclusive list.

- MGP command is obsolete.
- Added new query commands: query-lnp, query-lidb and query-toll-free.
- In the Call Agent table, the token TSAP-ADDR-SIDEA is now TSAP-ADDR.
- Added the AR-ACTIVATION-LEVEL token to the Point of Presence table.
- The following changes were made to the Billing Account Address table:
 - BILLING-FILE-PREFIX token now VARCHAR(20): 1–20 (Default = bil) characters.
 - Added new token SFTP-SUPP.
- The Hardware Monitoring “change node” and “show node” commands are no longer supported.
- Removed the Call Agent Configuration token h323-max-reattempt-count from Appendix A.
- Modified descriptions of the CODEC-NEG-SUPP, MGCP-HAIRPIN-SUPP, MGCP-HAIRPIN-Z2-SUPP, and the MGCP-CONN-ID-AT- GW-SUPP tokens in the Media Gateway Profile table.
- Added change command to the Measurement Provisioning table.

- Added the following expanded information to the MGCP-DEFAULT-PKG token of the Media Gateway Profile table: “If the mgcp-variant=TGCP, the mgcp-pkg-type must be set to IT (ISUP trunk).”
- In the Call Agent Configuration table in Appendix A:
 - Changed the default values for SIA-SIG-TOS-LOWDELAY and SIA-SIG-TOS-PRECEDENCE to Y and 3.
 - Added SIP-SUB-SEND-CPG-ON-HOLD-SIGNAL, ACCT-CODE-PROMPT-DELAY, AUTH-CODE-PROMPT-DELAY, DEFAULT-OCB-PROFILE-ID.
- Added ISUP values for Israel and Australia to the ID token in the User Part Variant Base table.
- Added the token EXCHANGE-TYPE to the Signaling System 7 Q761 Trunk Group Profile table for ETSI v2 ISUP.
- Added the token EXCHANGE-TYPE to the Call Agent Configuration table in Appendix A.
- Made the following changes to the ISDN Trunk Group Profile table:
 - added new tokens T-304, T037, GENDIGIT-IE-CODESET, GENDIGIT-IE-SUPP, MAX-RESTART-COUNT, MAX-SERVICE-COUNT, OVERLAP-SENDING-SUPP, OVERLAP-RECEIVING-SUPP and GENDIGIT-TOD-INFODIGIT.
 - For the interface-type token: USER value is now valid; added value SYMMETRIC (Not Used).
- Added values to the measurement DISPLAY tokens for ISDN, ETSI, Israel and Australia.
- In the ISDN D Channel table, changed DCHAN-PORT range from 0–255 to 0–32768. Added VSXM note.
- Added Outgoing Call Barring (OCB) Profile and OCB K Value tables.
- Added token OCB-PROFILE-ID to the Point of Presence (POP) table.
- Changed N value description of the BLOCK-EAWOPIC token in the POP table from “Route to LEC” to “Route to LECOSS.”
- Added new table: Local Number Portability Profile.
- Added new appendix: ISUP Message Counters.
- The following changes were made to the Users section of the Security chapter:
 - Removed note regarding the reset password command.
 - Rephrased note regarding user prompt for password. Users connecting by SSH are not prompted to change their password upon first logging in; since SSH is now the default, users will never be prompted to change their password.
 - Added the tokens FIRST and START-TIME.
- Added new Chapter for Interactive Voice Response.

Release 4.2.1

The following changes were made in Release 4.2.1. It is not an inclusive list.

- The MGCP-CMD-SEQ-SUPP token in the MGW Profile table is not configurable.
- Added new table TIMEZONE.

Release 4.2

The following changes were made in Release 4.2. It is not an inclusive list.

- Added the following information to the Usage Guidelines section for the Subscriber Feature Data table: use Table B-1 “List of Features” to determine the correct tokens to provision features. For example, when provisioning CFU to allow forwarding to international numbers, you must provision TYPE3 and VALUE3.
- Added Release 4.2 Database Usage default section to Appendix D.
- Updated configurable parameters in Appendix A.
- Added the following tokens to the Subscriber table: H323-TERM-ID, SEND-BDN-AS-CPN and SEND-BDN-FOR-EMG.
- The following Subscriber table token definitions were modified.
 - Term-type—added H323 Term Type
 - Privacy—added USER as a privacy type
- Added the token, VIDEO-CODEC-TYPE to the Quality of Service table.
- The following new tables were added:
 - ANI Screening
 - ANI Screening Profile
 - H.323 Terminal
 - H.323 Terminal Profile
 - SIP Timer Profile
 - SIPT ISUP Version Base
 - SIPT ISUP Version Alias
- The following tokens were added to the Trunk Group table: ANI-SCREENING, ANI-SCREENING-PROFILE-ID and SEND-RDN-AS-CPN.
- The token TRUNK-SUB-GRP is provisionable for H323.
- Added new point-code-type value THAILAND to the DPC table.
- Added new point-code-type value THAILAND to the OPC table.
- The tokens H245-TUNNELING and CALL-START-MODE were deleted from the H323 Gateway table and moved to the H323 Trunk Group Profile and H323 Termination Profile tables.
- The following new tokens were added to the H323 Gateway table: STATUS-ENQ-TIMER, CODEC-NEG-TIMER, CODEC-NEG-ATTEMPTS and SOURCE-BASED-ROUTING.
- Updated display values for the ISUP summary command in the Measurements chapter with values for Thailand and ITU-HongKong.
- Updated Measurement chapter command examples to include the output-type token.
- Updated the “change ems” command regarding the ntp-server token.
- Added DB-Usage tables for Routeserver and LNP configurations for 4.2, in addition to updating Small and Medium configuration tables.
- Made the following changes to the Call Agent Configuration table in Appendix A:
 - added type H323-MAX-LOOP-COUNT

- added type DEFAULT-LNP-PROFILE-ID
- added type SUB-SESSION-TIMER-ALLOWED
- changed the default to Y for the TYPE CODEC-MOD-DURING-CALL token
- changed to-value of the type MGCP-INIT-TERMS to 5000
- changed default value for SCP-RESPONSE-TMR to 3
- In the AOR2SUB table, noted that the default for the STATUS token is OOS.
- Corrected value of the announcement timer token in the Announcement table from VARCHAR to INTEGER.
- The MGCP-CMD-SEQ-SUPP token in the Media Gateway Profile table is configurable only as N.
- The following changes were made to the Softswitch Trunk Group table:
 - The following tokens were added: USE-SIPT-ISUP-BASE and SIPT-ISUP-BASE
 - PROTOCOL-TYPE: updated SIP_T value definition.
 - Add rules no longer apply.

Release 4.1

The following changes were made in Release 4.1. It is not an inclusive list.

- Added the System Health command.
- Added Audit Circuit Identification Code command.
- Added SS7-trace command.
- In the Dial Plan Profile table, the following information was added to the NANP-DIAL-PLAN token: if this token is set to N, then the NOA token in the Dial Plan table defaults to UNKNOWN.
- The following call-types were added to the Call Type table:
 - AIRLINE
 - INTL-WZ1
 - RAILWAYS
 - SVC-CODE
 - NAT-OPR
- Chapter 26 has been renamed to Maintenance and Administration of System Component Commands.
- Returnable Status States and Success and Failure Responses sections in Chapter 26 have moved to the *Cisco BTS 10200 Operations and Maintenance Manual*.
- The PROPRIETARY-SUPP token must be set to 8 when provisioning NI2 in the ISDN Trunk Group Profile table.
- All -unsupp tokens changed to -supp.
- Added new CAUSE-CODE-TYPE values.
- Updated Subscriber table with MAC-ID.
- Changed TCPRK in CPSG table to a VARCHAR.
- Defined rules for the MGCP Retcode Action table.

- Added a new token REFER-TRIGGER to the Trigger ID table.
- Set token mgcp-cmd-seq-supply=N in MGW Profile table.
- Changed range value for MGCP-T-TRAN to 8000.
- Set token FEATURE-SERVER-SO-ON-CA-CONN-LOSS=Y.
- Added a new term-type=NONE in the Subscriber table.
- Added new FEATURE-SERVER type (HTTP) in the Feature server table. The HTTP Server is used by the SIP Phone to activate/deactivate call forwarding features.
- Now allow up to 64 digits in the Dial Plan table.
- Now allow a minimum of 3 digits and a maximum of 64 digits in the International Dial Plan table.
- Added new value=BBG for type=CC in the Feature table. The new value is used for CFVABBG.
- Updated description in the Trunk Group table DPC field.
- Ext2subscriber table is now also provisioned in the Call Agent.
- Added new token tRUNK-SUB-GRP to the Trunk Group table, which is used for SIP to identify a unique TG between two Call Agents.
- Removed tokens IPSEC-CMS-CONTROL-PORT, and IPSEC-AGGR-CONTROL-PORT from the Radius Profile table.
- Added new value NA for freq, day-of-month, day-of-week to the Activity table.
- In the Trunk Group table, traffic-type=local is now the default.
- Added mgcp-pkg-type=NA for SIP and H323 trunk groups.
- In the POP table, cnam-option=none is now the default.
- In the Special Call Type table, call-type is now a required field.
- In the CAS Trunk Group Profile table, added mf-oss-type=na as the default. Rule was also modified.
- In the MGW Profile table, added new mgw-type=unspecified as the default.
- In the QOS table, codec-type default is now PCMU.
- In the QOS table, max-dqos-auth-bandwidth=high is now the default for the default-bc token.
- Added PacketCable chapter.
- New tables:
 - ACTIVITY
 - ACTIVITY-BASE
 - AOR2SUB
 - AUTH-REALM
 - CALL-CTRL-ROUTE
 - CIPHERSUITE
 - CIPHERSUITE-PROFILE
 - DPC
 - HTTP-FEATURE-SERVER
 - IPSEC-KERBEROS
 - IPSEC-KERBEROS-KEYS

- IPSEC-POLICY
- IPSEC-SA
- MAC2SUB
- MGCP-RETCODE-ACTION
- OPC
- ROUTING-KEY
- SCCP-NW
- SCCP-ROUTE
- SCTP-ASSOC
- SCTP-ASSOC-PROFILE
- SERVING-DOMAIN-NAME
- SG
- SG-GRP
- SGP
- SLHR
- SLHR-PROFILE
- SS7-Q761-TG-PROFILE
- STATIC-CONTACT
- SUBSYSTEM
- SUBSYSTEM-PROFILE
- SUP
- USER-AUTH
- USER-PART-VARIANT
- USER-PART-VARIANT-BASE
- Added SS7 CQM diagnostic command responses.
- Removed all references to the MAC tool.
- Added note to User section regarding necessity of provisioning new-password for new user.
- SP-ID in the Technical Prefix Group table changed from optional to mandatory.
- Added CHK-POS-VAL column to Appendix A.
- Added DB-Usage tables for Small and Medium configurations for 4.1.
- Events and Alarms:
 - In the subscribe/unsubscribe commands “level” is changed to “severity.”
 - “Number” can be any value from 1 through 200. It is no longer limited to 150.
 - “Threshold” and “throttle” cannot be used with the show command—returns the error message “invalid key(s) found.”
- The token MGCP-PKG-TYPE was moved from the Announcement Trunk Group Profile table to the Trunk Group table.

- In the Signaling System 7 ANSI Trunk Group Profile table, for the cot-tone token, added note stating: “The Cisco BTS 10200 Softswitch does not support 2 wire side emulation in transponder COT testing.” Marked “2W-TO-2W—Tx High (2010 Hz), Rx Low (1780 Hz),” and “2W-TO-4W—Tx High (2010 Hz), Rx Low (1780 Hz),” as obsolete.
- In the Signaling System 7 Q761 Trunk Group Profile table, for the cot-tone token, added note stating: “The Cisco BTS 10200 Softswitch does not support 2 wire side emulation in transponder COT testing.” Marked “2W-TO-2W—Tx High (2010 Hz), Rx Low (1780 Hz),” and “2W-TO-4W—Tx High (2010 Hz), Rx Low (1780 Hz),” as not supported.
- Added new values and changed VARCHAR for the CAUSE-CODE-TYPE token.
- Added values for the Measurement ISUP Summary DISPLAY tokens for China ISUP.
- Softswitch Trunk Group table: changed values for redirect-supported token.
- Added Batch Data Retrieval (Paging) information and examples.
- Removed tokens: NAT-800-MSGTYPE, CAR-800-TTYPE, CAR-800-MSGTYPE, LNP-TTYPE, and CNAM-TTYPE from Appendix A.
- In the Destination table, marked the CARRIER-OPERATOR call type as “not used.”
- Added note to the Multiline Hunt Group table ID token: “When you are provisioning a multiline hunt group, add the MLHG-ID to every subscriber in the group. While the MLHG will work when the mlhg-id is added to just the main subscriber; account codes will not work unless the MLHG-ID is added to all subscribers of the MLHG.”
- Added note to the Billing chapter to state that a hyphen is not allowed in the BILLING-FILE-PREFIX token. Also removed hyphen from the example.
- In the Appendix D, Database Usage, changed the following for all medium configurations:
 - NDC 800 N 800 800 Y N N Y
 - EXCHANGE-CODE 50000 N 50000 50000 Y N N Y
 - OFFICE-CODE 50000 Y 50000 50000 Y Y N Y
- The following parameters in Appendix A are obsolete:
 - MGA-SIG-TOS-LOWDELAY
 - MGA-SIG-TOS-PRECEDENCE
 - MGA-SIG-TOS-RELIABILITY
 - MGA-SIG-TOS-THROUGHPUT
- The following changes were made to the Stream Transmission Control Protocol table:
 - Added value definitions for the DSCP token.
 - Added new rule.

Conventions

This section outlines the conventions used within this book and in the commands used to provision and maintain the Cisco BTS 10200 Softswitch.

Document

This document uses the following conventions:

- If only a single option from a list is allowed, the choices are separated by a vertical bar (|).
- Table tokens are specified as table-name::token-name syntax.
- Token names in Syntax Descriptions are in uppercase for easy scanning of information.
- The following terms are used in the table descriptions:

- Table Containment Area

The hardware component a table resides in. For example, Call Processing tables reside within the Call Agent (CA). Operations, Administration, Maintenance, and Provisioning (OAMP) tables reside in the EMS. The casual-wb-list resides in the plain old telephone service (POTS) Feature Server.

- Primary Key Token(s)

A mandatory, unique key.



Note

A primary key cannot be changed—it identifies the record.

Some primary key tokens are optional. In these cases, the token does not have to be entered from the CLI, but the default value for the token is always used by the system.

- Unique Key Token(s)

Provides a unique index (secondary key).

- Foreign Key Token(s)

References tokens in foreign (other) tables. The table of the foreign key is listed in the table cell. When a token has a Foreign Key designation, validation is performed to ensure that the value of the token matches the value of that token in the referenced table.

- Mandatory tokens are proceeded by an asterisk. If an asterisk is not present, the token is optional.

- Dependencies

In some cases, information must be entered into other tables before information can be entered into a given table. Tables with these requirements have *dependencies*.

For example, you cannot add a dial plan unless a dial plan ID exists.

- SideA/SideB

Each Cisco BTS 10200 Softswitch component (Call Agent, Feature Server, Element Management System, and Bulk Data Management System) operates in redundant mode. Each component has two sides, labeled A and B, loaded on different machines during installation. You cannot change these assignments during operation. Side A is designated as “primary” and Side B as “secondary.” During normal operations, Side A is active and Side B is standby.

Notes, Cautions, Warnings, and Tips

Notes, cautions, warnings, and tips are used throughout the document where applicable.

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

**Tip**

Means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information or information that might save time.

**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

**Warning****IMPORTANT SAFETY INSTRUCTIONS**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, see the translated safety warnings that accompanied this device.

Note: SAVE THESE INSTRUCTIONS

Note: This documentation is to be used in conjunction with the specific product installation guide that shipped with the product. See the Installation Guide, Configuration Guide, or other enclosed additional documentation for further details.

Command Structure

The following conventions apply to the commands:

- All commands start with a verb.
- A noun immediately follows the verb if appropriate.
- All primary keys must be specified in add, change, or delete commands.
- A primary key cannot be changed—it identifies the record.
- All parameters must be specified in a “token-name=value” pair. However, when a parameter (token) is referenced by another table, a full table-name qualifier is required. For example, in the Local Service Area table, the token is ID; but, because the table is referenced by the LSA Profile table, the command is entered as lsa-id. Likewise, the token is also specified as lsa-id when used in the LSA Profile table.
- Each value is terminated by a semicolon.
- A token can contain several values separated by commas.
- All token names, command verbs, and command nouns are case insensitive.
- All values entered after the equal sign (=) in a command are case sensitive.

**Caution**

You must enter system component names in the case in which they were originally added to the system. For example, if a Call Agent ID was entered in lowercase (ca146), you must always enter it in lowercase. If it was entered in uppercase (CA146), you must always enter it in uppercase or you will get an error message.

Likewise, feature tokens are always entered in uppercase, or you will receive the message “*Reply: Database is void of entries.*” For example, enter AC_ACT, not ac_act.

- White space is allowed in a value field if the value type is an ASCII character string.
- Any alphanumeric character and spaces can be used in specified values.
 - All fields that are alphanumeric characters by definition are stored in string form in the database.
 - If a token has a default value, the value is considered optional when entering a command. However, the token itself can be required, but its default value is automatically entered into the system.
 - Optional fields can become *required* based on the provisioning of another token. For example, in the Destination table, carrier-id (optional) becomes required if route-type=Carrier.
 - All fields that represent digit strings are entered and displayed in the proper dial plan format with a dash (-) but only the numeric characters are stored in the database. The international dial-plan digits should not contain dashes.
 - All dashes (-) in the token fields are converted to underscores (_) when they are stored in the database.

**Caution**

Exception—you must type feature tokens with an underscore (_) or you will receive the message “*Reply: Database is void of entries.*” For example, enter AC_ACT, not AC-ACT.

Ciscouser

The “ciscouser” login is a high-level security login for TAC and other Cisco BTS 10200 Softswitch support personnel that restricts access to certain commands. Anyone else trying to execute such commands receives an error message.

User and Command Privilege Levels

The system administrator assigns a User Privilege Level (UPL) to a user's login. There are 10 levels, 1 to 10, with 10 being the highest (system administrator level). Similarly, each command has a Command Privilege Level (CPL), 1 to 10, associated with it. A user must have a UPL equal to or higher than the command's CPL to use that command. The system will deny users with UPLs lower than the CPL. The system administrator can change a user's UPL as well as the CPL of any command. The default Security CPL values are:

Table 2 *Noun/Verb Command Default Security Privilege Levels*

Noun	Verb	Default Security Level
aaa-server-grp	add	8
aaa-server-grp	audit	8
aaa-server-grp	change	5
aaa-server-grp	delete	8
aaa-server-grp	help	1
aaa-server-grp	show	2
activity	add	8
activity	audit	8
activity	change	5
activity	delete	8
activity	help	1
activity	show	2
activity-base	help	1
activity-base	show	2
activity-summary	report	3
aggr	add	8
aggr	audit	8
aggr	change	8
aggr	delete	8
aggr	help	1
aggr	show	2
aggr	status	8
alarm	ack	7
alarm	clear	7
alarm	help	1
alarm	show	2
alarm-log	help	1
alarm-log	show	3
alarm-report	help	1
alarm-report	subscribe	3
alarm-report	unsubscribe	3
all-ss7-cics	audit	2
all-ss7-cics	help	1
ancement	add	8
ancement	audit	8
ancement	change	5

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ancement	delete	8
ancement	help	1
ancement	show	2
ani	add	8
ani	audit	8
ani	change	5
ani	delete	8
ani	help	1
ani	show	2
ani-screening	add	8
ani-screening	audit	8
ani-screening	change	5
ani-screening	delete	8
ani-screening	help	1
ani-screening	show	2
ani-screening-profile	add	8
ani-screening-profile	audit	8
ani-screening-profile	change	5
ani-screening-profile	delete	8
ani-screening-profile	help	1
ani-screening-profile	show	2
ani-wb-list	add	8
ani-wb-list	audit	8
ani-wb-list	delete	8
ani-wb-list	help	1
ani-wb-list	show	2
annc	add	8
annc	audit	8
annc	change	5
annc	delete	8
annc	help	1
annc	show	2
annc-tg-profile	add	8
annc-tg-profile	audit	8
annc-tg-profile	change	8
annc-tg-profile	delete	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
annc-tg-profile	help	1
annc-tg-profile	show	2
annc-trunk	add	6
annc-trunk	audit	6
annc-trunk	change	6
annc-trunk	delete	6
annc-trunk	help	1
annc-trunk	show	2
annc-trunk-termination	diag	2
annc-trunk-termination	help	1
aor2sub	audit	8
aor2sub	change	8
aor2sub	help	1
aor2sub	show	2
application	change	1
application	control	1
application	help	1
application	show	1
application	status	1
app-server	add	8
app-server	audit	8
app-server	change	5
app-server	delete	8
app-server	help	1
app-server	show	2
audio-segment	add	8
audio-segment	audit	8
audio-segment	change	5
audio-segment	delete	8
audio-segment	help	1
audio-segment	show	2
audio-seq	add	8
audio-seq	audit	8
audio-seq	change	5
audio-seq	delete	8
audio-seq	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
audio-seq	show	2
auth-code	add	8
auth-code	audit	8
auth-code	change	5
auth-code	delete	8
auth-code	help	1
auth-code	show	2
auth-code-grp	add	8
auth-code-grp	audit	8
auth-code-grp	change	5
auth-code-grp	delete	8
auth-code-grp	help	1
auth-code-grp	show	2
auth-realm	add	8
auth-realm	audit	8
auth-realm	change	5
auth-realm	delete	8
auth-realm	help	1
auth-realm	show	2
backhaul-set	add	8
backhaul-set	audit	8
backhaul-set	change	5
backhaul-set	delete	8
backhaul-set	help	1
backhaul-set	show	2
bdms	control	1
bdms	help	1
bdms	status	1
billing-acct-addr	change	9
billing-acct-addr	help	1
billing-acct-addr	show	2
billing-alarm	change	5
billing-alarm	help	1
billing-alarm	show	2
billing-cdb	change	5
billing-cdb	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
billing-cdb	show	2
billing-file	help	1
billing-file	report	6
billing-record	help	1
billing-record	report	6
ca-config	add	8
ca-config	audit	8
ca-config	change	8
ca-config	delete	8
ca-config	help	1
ca-config	show	2
ca-config-base	help	1
ca-config-base	show	2
ca-config-base-pos-val	help	1
ca-config-base-pos-val	show	2
call-agent	add	8
call-agent	audit	6
call-agent	change	5
call-agent	control	6
call-agent	delete	8
call-agent	get-trace	2
call-agent	help	1
call-agent	set-trace	6
call-agent	show	2
call-agent	status	2
call-agent-profile	add	8
call-agent-profile	audit	8
call-agent-profile	change	5
call-agent-profile	delete	8
call-agent-profile	help	1
call-agent-profile	show	2
call-ctrl-route	add	6
call-ctrl-route	audit	6
call-ctrl-route	change	6
call-ctrl-route	delete	6
call-ctrl-route	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
call-ctrl-route	show	3
call-subtype	help	1
call-subtype	show	2
call-trace	help	1
call-trace	query	2
call-trace-summary	help	1
call-trace-summary	report	3
call-type	help	1
call-type	show	2
call-type-profile	add	8
call-type-profile	audit	8
call-type-profile	change	8
call-type-profile	delete	8
call-type-profile	help	1
call-type-profile	show	2
carrier	add	8
carrier	audit	8
carrier	change	5
carrier	delete	8
carrier	help	1
carrier	show	2
cas-tg-profile	add	8
cas-tg-profile	audit	8
cas-tg-profile	change	5
cas-tg-profile	delete	8
cas-tg-profile	help	1
cas-tg-profile	show	2
cas-trunk-termination	diag	2
cas-trunk-termination	help	1
casual-wb-list	add	8
casual-wb-list	audit	8
casual-wb-list	delete	8
casual-wb-list	help	1
casual-wb-list	show	2
cause-code-map	add	8
cause-code-map	audit	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
cause-code-map	change	5
cause-code-map	delete	8
cause-code-map	help	1
cause-code-map	show	2
cause-code-map-profile	add	8
cause-code-map-profile	audit	8
cause-code-map-profile	change	5
cause-code-map-profile	delete	8
cause-code-map-profile	help	1
cause-code-map-profile	show	2
centrex-grp	add	8
centrex-grp	audit	8
centrex-grp	change	5
centrex-grp	delete	8
centrex-grp	help	1
centrex-grp	show	2
changed-number	add	8
changed-number	audit	8
changed-number	change	8
changed-number	delete	8
changed-number	help	1
changed-number	show	2
ciphersuite	add	8
ciphersuite	audit	8
ciphersuite	change	8
ciphersuite	delete	8
ciphersuite	help	1
ciphersuite	show	2
ciphersuite-profile	add	8
ciphersuite-profile	audit	8
ciphersuite-profile	change	8
ciphersuite-profile	delete	8
ciphersuite-profile	help	1
ciphersuite-profile	show	2
circuit-code	add	8
circuit-code	audit	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
circuit-code	change	8
circuit-code	delete	8
circuit-code	help	1
circuit-code	show	2
cli-code	add	8
cli-code	change	5
cli-code	delete	8
cli-code	help	1
cli-code	show	2
cmdpar	add	10
cmdpar	change	10
cmdpar	delete	10
cmdpar	show	10
cmdtab	add	10
cmdtab	change	10
cmdtab	delete	10
cmdtab	show	10
command-alias	add	10
command-alias	delete	10
command-alias	show	10
command-level	change	8
command-level	help	1
command-level	show	2
command-table	change	10
command-table	help	3
command-table	reset	10
command-table	show	3
cos-restrict	add	8
cos-restrict	audit	8
cos-restrict	change	5
cos-restrict	delete	8
cos-restrict	help	1
cos-restrict	show	2
cpsg	add	8
cpsg	audit	8
cpsg	change	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
cpsg	delete	8
cpsg	help	1
cpsg	show	2
ctxg	add	8
ctxg	audit	8
ctxg	change	5
ctxg	delete	8
ctxg	help	1
ctxg	show	2
cust-grp	add	8
cust-grp	audit	8
cust-grp	change	5
cust-grp	delete	8
cust-grp	help	1
cust-grp	show	2
custom-dial-plan	add	8
custom-dial-plan	audit	8
custom-dial-plan	change	5
custom-dial-plan	delete	8
custom-dial-plan	help	1
custom-dial-plan	show	2
custom-dial-plan-profile	add	8
custom-dial-plan-profile	change	5
custom-dial-plan-profile	delete	8
custom-dial-plan-profile	help	1
custom-dial-plan-profile	show	2
database	audit	10
database	download	10
database	help	1
db-license	add	10
db-license	change	10
db-license	delete	10
db-license	show	10
db-route	show	10
db-size	add	10
db-size	change	10

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
db-size	delete	10
db-size	show	10
db-usage	change	6
db-usage	help	1
db-usage	show	2
debug-report	help	1
debug-report	subscribe	3
debug-report	unsubscribe	3
destination	add	6
destination	audit	6
destination	change	6
destination	delete	6
destination	help	1
destination	show	3
dial-plan	add	8
dial-plan	audit	8
dial-plan	change	5
dial-plan	delete	8
dial-plan	help	1
dial-plan	show	2
dial-plan-profile	add	8
dial-plan-profile	audit	8
dial-plan-profile	change	5
dial-plan-profile	delete	8
dial-plan-profile	help	1
dial-plan-profile	show	2
digit-map	add	8
digit-map	audit	8
digit-map	change	5
digit-map	delete	8
digit-map	help	1
digit-map	show	2
digman	add	8
digman	audit	8
digman	change	8
digman	delete	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
digman	help	1
digman	show	2
digman-profile	add	8
digman-profile	audit	8
digman-profile	change	8
digman-profile	delete	8
digman-profile	help	1
digman-profile	show	2
dn2cust-grp	add	8
dn2cust-grp	audit	8
dn2cust-grp	change	5
dn2cust-grp	delete	8
dn2cust-grp	help	1
dn2cust-grp	show	2
dn2gn	add	8
dn2gn	audit	8
dn2gn	change	8
dn2gn	delete	8
dn2gn	help	1
dn2gn	show	2
dn2rn	add	8
dn2rn	audit	8
dn2rn	change	8
dn2rn	delete	8
dn2rn	help	1
dn2rn	show	2
dn2subscriber	add	5
dn2subscriber	audit	5
dn2subscriber	change	5
dn2subscriber	delete	5
dn2subscriber	help	1
dn2subscriber	show	2
dn-feat-list	help	1
dn-feat-list	show	2
dn-line-feat	show	2
dn-sd-list	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
dn-sd-list	show	2
dn-summary	help	1
dn-summary	report	6
dpc	add	6
dpc	audit	6
dpc	change	6
dpc	delete	6
dpc	help	1
dpc	show	3
dpc	status	2
ds1	add	8
ds1	audit	8
ds1	delete	8
ds1	help	1
ds1	show	2
element-manager	control	1
element-manager	help	1
element-manager	status	1
emergency-number-list	add	8
emergency-number-list	audit	8
emergency-number-list	change	5
emergency-number-list	delete	8
emergency-number-list	help	1
emergency-number-list	show	2
ems	add	1
ems	change	1
ems	help	1
ems	show	1
ess	add	10
ess	audit	10
ess	change	10
ess	delete	10
ess	help	1
ess	show	10
event-log	help	1
event-log	show	3

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
event-prov	change	5
event-prov	help	1
event-prov	show	2
event-queue	add	1
event-queue	delete	1
event-queue	help	1
event-queue	show	1
event-report	help	1
event-report	subscribe	3
event-report	unsubscribe	3
exchange-code	add	8
exchange-code	audit	8
exchange-code	delete	8
exchange-code	help	1
exchange-code	show	2
ext2subscriber	add	8
ext2subscriber	audit	8
ext2subscriber	change	5
ext2subscriber	delete	8
ext2subscriber	help	1
ext2subscriber	show	2
feature	add	6
feature	audit	8
feature	change	6
feature	delete	6
feature	help	1
feature	show	3
feature-config	add	8
feature-config	audit	8
feature-config	change	8
feature-config	delete	8
feature-config	help	1
feature-config	show	2
feature-config-base	help	1
feature-config-base	show	2
feature-config-base-pos-val	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
feature-config-base-pos-val	show	2
feature-profile-base	help	1
feature-profile-base	show	2
feature-server	add	8
feature-server	audit	8
feature-server	change	5
feature-server	control	6
feature-server	delete	8
feature-server	get-trace	2
feature-server	help	1
feature-server	set-trace	6
feature-server	show	2
feature-server	status	2
fs-audit-profile	add	8
fs-audit-profile	audit	8
fs-audit-profile	change	5
fs-audit-profile	delete	8
fs-audit-profile	help	1
fs-audit-profile	show	2
gtd-parm-values	help	1
gtd-parm-values	show	3
h323-gw	add	8
h323-gw	audit	8
h323-gw	change	5
h323-gw	control	6
h323-gw	delete	8
h323-gw	help	1
h323-gw	reset	2
h323-gw	show	2
h323-gw	status	2
h323-gw2gk	add	8
h323-gw2gk	audit	8
h323-gw2gk	change	5
h323-gw2gk	delete	8
h323-gw2gk	help	1
h323-gw2gk	show	2

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
h323-term	add	8
h323-term	audit	8
h323-term	change	5
h323-term	delete	8
h323-term	help	1
h323-term	show	2
h323-term-profile	add	8
h323-term-profile	audit	8
h323-term-profile	change	5
h323-term-profile	delete	8
h323-term-profile	help	1
h323-term-profile	show	2
h323-tg-profile	add	8
h323-tg-profile	audit	8
h323-tg-profile	change	5
h323-tg-profile	delete	8
h323-tg-profile	help	1
h323-tg-profile	show	2
help	help	3
hg-dn-find	help	1
hg-dn-find	show	2
hg-dn-list	help	1
hg-dn-list	show	2
hg-sequence	help	1
hg-sequence	show	2
history	help	3
history	report	3
history	show	3
http-feature-server	add	8
http-feature-server	audit	8
http-feature-server	change	5
http-feature-server	delete	8
http-feature-server	help	1
http-feature-server	show	2
ii-restrict-list	add	8
ii-restrict-list	audit	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ii-restrict-list	delete	8
ii-restrict-list	help	1
ii-restrict-list	show	2
ii-wb-list	add	8
ii-wb-list	audit	8
ii-wb-list	change	8
ii-wb-list	delete	8
ii-wb-list	help	1
ii-wb-list	show	6
intl-dial-plan	add	6
intl-dial-plan	audit	6
intl-dial-plan	change	6
intl-dial-plan	delete	6
intl-dial-plan	help	6
intl-dial-plan	show	6
intl-dial-plan-profile	add	8
intl-dial-plan-profile	audit	8
intl-dial-plan-profile	change	5
intl-dial-plan-profile	delete	8
intl-dial-plan-profile	help	1
intl-dial-plan-profile	show	2
intl-wb-list	add	8
intl-wb-list	audit	8
intl-wb-list	delete	8
intl-wb-list	help	1
intl-wb-list	show	2
ipsec-kerberos	add	8
ipsec-kerberos	audit	8
ipsec-kerberos	change	8
ipsec-kerberos	delete	8
ipsec-kerberos	help	1
ipsec-kerberos	show	2
ipsec-kerberos-keys	audit	8
ipsec-kerberos-keys	delete	8
ipsec-kerberos-keys	help	1
ipsec-kerberos-keys	show	2

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ipsec-policy	add	8
ipsec-policy	audit	8
ipsec-policy	delete	8
ipsec-policy	help	1
ipsec-policy	show	2
ipsec-sa	add	8
ipsec-sa	audit	8
ipsec-sa	change	8
ipsec-sa	delete	8
ipsec-sa	help	1
ipsec-sa	show	2
isdn-bchan	audit	8
isdn-bchan	help	1
isdn-bchan	show	2
isdn-dchan	add	8
isdn-dchan	audit	8
isdn-dchan	change	5
isdn-dchan	control	2
isdn-dchan	delete	8
isdn-dchan	help	1
isdn-dchan	show	2
isdn-intf	add	8
isdn-intf	audit	8
isdn-intf	delete	8
isdn-intf	help	1
isdn-intf	show	2
isdn-tg-profile	add	8
isdn-tg-profile	audit	8
isdn-tg-profile	change	5
isdn-tg-profile	delete	8
isdn-tg-profile	help	1
isdn-tg-profile	show	2
isdn-trunk-termination	diag	2
isdn-trunk-termination	help	1
ivr-script-profile	add	8
ivr-script-profile	audit	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ivr-script-profile	change	5
ivr-script-profile	delete	8
ivr-script-profile	help	1
ivr-script-profile	show	2
language	add	8
language	change	5
language	delete	8
language	help	1
language	show	2
lata	add	8
lata	audit	8
lata	change	5
lata	delete	8
lata	help	1
lata	show	2
lata-map	add	8
lata-map	audit	8
lata-map	delete	8
lata-map	help	1
lata-map	show	2
lids	help	1
lids	query	2
line	help	1
line	translate	2
lnp	help	1
lnp	query	2
lnp-profile	add	8
lnp-profile	audit	8
lnp-profile	change	8
lnp-profile	delete	8
lnp-profile	help	1
lnp-profile	show	2
lsa	add	6
lsa	audit	6
lsa	delete	6
lsa	help	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
lsa	show	6
lsa-profile	add	6
lsa-profile	change	6
lsa-profile	delete	6
lsa-profile	help	1
lsa-profile	show	2
mac2sub	add	8
mac2sub	audit	8
mac2sub	change	5
mac2sub	delete	8
mac2sub	help	1
mac2sub	show	2
macro	add	6
macro	change	6
macro	delete	6
macro	help	1
macro	macro	6
macro	show	6
measurement-ainsvc-summary	clear	9
measurement-ainsvc-summary	help	1
measurement-ainsvc-summary	report	2
measurement-ainsvc-summary	show	2
measurement-ain-tools-summary	clear	9
measurement-ain-tools-summary	help	1
measurement-ain-tools-summary	report	2
measurement-ain-tools-summary	show	2
measurement-anm-summary	clear	9
measurement-anm-summary	help	1
measurement-anm-summary	report	6
measurement-anm-summary	show	2
measurement-audit-summary	clear	9
measurement-audit-summary	help	1
measurement-audit-summary	report	2
measurement-audit-summary	show	2
measurement-billing-summary	clear	9
measurement-billing-summary	help	1

Table 2 **Noun/Verb Command Default Security Privilege Levels (continued)**

Noun	Verb	Default Security Level
measurement-billing-summary	report	6
measurement-billing-summary	show	6
measurement-callp-summary	clear	9
measurement-callp-summary	help	1
measurement-callp-summary	report	2
measurement-callp-summary	show	2
measurement-call-tools-summary1	help	
measurement-call-tools-summary2	report	
measurement-call-tools-summary2	show	
measurement-call-tools-summary9	clear	
measurement-dqos-summary	help	1
measurement-dqos-summary	report	2
measurement-dqos-summary	show	2
measurement-em-summary	clear	9
measurement-em-summary	help	1
measurement-em-summary	report	2
measurement-em-summary	show	2
measurement-h323-summary	clear	9
measurement-h323-summary	help	1
measurement-h323-summary	report	6
measurement-h323-summary	show	6
measurement-isdn-summary	clear	9
measurement-isdn-summary	help	1
measurement-isdn-summary	report	2
measurement-isdn-summary	show	2
measurement-isup-summary	help	1
measurement-isup-summary	report	2
measurement-isup-summary	show	2
measurement-m3ua-summary	help	1
measurement-m3ua-summary	report	2
measurement-m3ua-summary	show	2
measurement-mgcp-summary	clear	9
measurement-mgcp-summary	help	1
measurement-mgcp-summary	report	6
measurement-mgcp-summary	show	2
measurement-pct-tools-summary	clear	9

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
measurement-pct-tools-summary	help	1
measurement-pct-tools-summary	report	2
measurement-pct-tools-summary	show	2
measurement-pots-acar-summary	clear	9
measurement-pots-acar-summary	help	1
measurement-pots-acar-summary	report	2
measurement-pots-acar-summary	show	2
measurement-pots-cos-summary	clear	9
measurement-pots-cos-summary	help	1
measurement-pots-cos-summary	report	2
measurement-pots-cos-summary	show	2
measurement-pots-cot-summary	clear	9
measurement-pots-cot-summary	help	1
measurement-pots-cot-summary	report	2
measurement-pots-cot-summary	show	2
measurement-pots-local-summary1	help	1
measurement-pots-local-summary2	report	2
measurement-pots-local-summary2	show	2
measurement-pots-local-summary9	clear	9
measurement-pots-misc-summary	clear	9
measurement-pots-misc-summary	help	1
measurement-pots-misc-summary	report	2
measurement-pots-misc-summary	show	2
measurement-pots-sle-summary	clear	9
measurement-pots-sle-summary	help	1
measurement-pots-sle-summary	report	2
measurement-pots-sle-summary	show	2
measurement-prov	change	5
measurement-prov	help	1
measurement-prov	show	2
measurement-sctp-summary	help	1
measurement-sctp-summary	report	2
measurement-sctp-summary	show	2
measurement-sia-summary	clear	9
measurement-sia-summary	help	1
measurement-sia-summary	report	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
measurement-sia-summary	show	2
measurement-sim-summary	clear	9
measurement-sim-summary	help	1
measurement-sim-summary	report	1
measurement-sim-summary	show	2
measurement-snmp-summary	clear	9
measurement-snmp-summary	help	1
measurement-snmp-summary	report	6
measurement-snmp-summary	show	2
measurement-sua-summary	help	1
measurement-sua-summary	report	2
measurement-sua-summary	show	2
measurement-tcap-summary	clear	9
measurement-tcap-summary	help	1
measurement-tcap-summary	report	2
measurement-tcap-summary	show	2
measurement-tg-usage-summary	help	1
measurement-tg-usage-summary	report	6
measurement-tg-usage-summary	show	2
mgcp-retcode-action	add	8
mgcp-retcode-action	audit	8
mgcp-retcode-action	change	8
mgcp-retcode-action	delete	8
mgcp-retcode-action	help	1
mgcp-retcode-action	show	2
mgw	add	8
mgw	audit	8
mgw	change	5
mgw	control	6
mgw	delete	8
mgw	diag	2
mgw	help	1
mgw	show	2
mgw	status	2
mgw-profile	add	8
mgw-profile	audit	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
mgw-profile	change	5
mgw-profile	delete	8
mgw-profile	help	1
mgw-profile	show	2
mlhg	add	6
mlhg	audit	6
mlhg	change	6
mlhg	delete	6
mlhg	help	1
mlhg	show	3
mlhg-pref-list	add	6
mlhg-pref-list	audit	6
mlhg-pref-list	change	6
mlhg-pref-list	delete	6
mlhg-pref-list	help	1
mlhg-pref-list	show	3
mlhg-terminal	add	8
mlhg-terminal	audit	8
mlhg-terminal	change	8
mlhg-terminal	delete	8
mlhg-terminal	help	1
mlhg-terminal	show	2
national-wb-list	add	8
national-wb-list	audit	8
national-wb-list	delete	8
national-wb-list	help	1
national-wb-list	show	2
ndc	add	8
ndc	audit	8
ndc	change	5
ndc	delete	8
ndc	help	1
ndc	show	2
network-element	help	1
network-element	show	2
noa-route	add	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
noa-route	audit	8
noa-route	change	8
noa-route	delete	8
noa-route	help	1
noa-route	show	2
noa-route-profile	add	8
noa-route-profile	audit	8
noa-route-profile	change	8
noa-route-profile	delete	8
noa-route-profile	help	1
noa-route-profile	show	2
nod	help	1
nod	show	2
node	change	9
node	control	9
node	help	1
node	report	9
node	status	9
nod-restrict-list	add	8
nod-restrict-list	audit	8
nod-restrict-list	delete	8
nod-restrict-list	help	1
nod-restrict-list	show	2
nod-wb-list	add	8
nod-wb-list	audit	8
nod-wb-list	delete	8
nod-wb-list	help	1
nod-wb-list	show	2
ocb-k-value	add	6
ocb-k-value	audit	6
ocb-k-value	delete	6
ocb-k-value	help	1
ocb-k-value	show	3
ocb-profile	add	6
ocb-profile	audit	6
ocb-profile	change	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ocb-profile	delete	6
ocb-profile	help	1
ocb-profile	show	3
office-code	add	6
office-code	audit	6
office-code	change	6
office-code	delete	6
office-code	help	6
office-code	show	6
opc	add	6
opc	audit	6
opc	change	6
opc	delete	6
opc	help	1
opc	show	3
password	help	1
password	reset	1
policy-nxx	add	8
policy-nxx	audit	8
policy-nxx	change	5
policy-nxx	delete	8
policy-nxx	help	1
policy-nxx	show	2
policy-odr	add	6
policy-odr	audit	6
policy-odr	change	6
policy-odr	delete	6
policy-odr	help	1
policy-odr	show	6
policy-oli	add	6
policy-oli	audit	6
policy-oli	change	6
policy-oli	delete	6
policy-oli	help	1
policy-oli	show	3
policy-percent	add	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
policy-percent	audit	8
policy-percent	change	5
policy-percent	delete	8
policy-percent	help	1
policy-percent	show	2
policy-pop	add	8
policy-pop	audit	8
policy-pop	change	5
policy-pop	delete	8
policy-pop	help	1
policy-pop	show	2
policy-prefix	add	8
policy-prefix	audit	8
policy-prefix	change	5
policy-prefix	delete	8
policy-prefix	help	1
policy-prefix	show	2
policy-region	add	8
policy-region	audit	8
policy-region	change	8
policy-region	delete	8
policy-region	help	1
policy-region	show	2
policy-tod	add	8
policy-tod	audit	8
policy-tod	change	5
policy-tod	delete	8
policy-tod	help	1
policy-tod	show	2
pop	add	8
pop	audit	8
pop	change	5
pop	delete	8
pop	help	1
pop	show	2
ported-office-code	add	8

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ported-office-code	audit	8
ported-office-code	change	5
ported-office-code	delete	8
ported-office-code	help	1
ported-office-code	show	2
qos	add	8
qos	audit	8
qos	change	8
qos	delete	8
qos	help	1
qos	show	2
queue-throttle	change	6
queue-throttle	help	1
queue-throttle	show	6
radius-profile	add	8
radius-profile	audit	8
radius-profile	change	5
radius-profile	delete	8
radius-profile	help	1
radius-profile	show	2
region-code	add	8
region-code	audit	8
region-code	change	5
region-code	delete	8
region-code	help	1
region-code	show	2
region-profile	add	6
region-profile	audit	6
region-profile	change	6
region-profile	delete	6
region-profile	help	6
region-profile	show	6
release-cause	add	6
release-cause	audit	6
release-cause	change	6
release-cause	delete	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
release-cause	help	1
release-cause	show	3
report-properties	change	5
report-properties	help	1
report-properties	show	7
rgw	add	8
rgw	change	5
rgw	control	6
rgw	delete	8
rgw	diag	2
rgw	help	1
rgw	show	2
rgw	status	2
route	add	8
route	audit	8
route	change	5
route	delete	8
route	help	1
route	show	2
route-guide	add	8
route-guide	audit	8
route-guide	change	8
route-guide	delete	8
route-guide	help	1
route-guide	show	2
routing-key	add	6
routing-key	audit	6
routing-key	change	6
routing-key	delete	6
routing-key	help	1
routing-key	show	3
rdp-backhaul-session	add	8
rdp-backhaul-session	audit	8
rdp-backhaul-session	change	5
rdp-backhaul-session	delete	8
rdp-backhaul-session	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
rdp-backhaul-session	show	2
sc1d	add	8
sc1d	audit	8
sc1d	change	8
sc1d	delete	8
sc1d	help	1
sc1d	show	2
sc2d	add	8
sc2d	audit	8
sc2d	change	8
sc2d	delete	8
sc2d	help	1
sc2d	show	2
sccp-nw	add	6
sccp-nw	audit	6
sccp-nw	change	6
sccp-nw	delete	6
sccp-nw	help	1
sccp-nw	show	3
sccp-route	add	6
sccp-route	audit	6
sccp-route	change	6
sccp-route	delete	6
sccp-route	help	1
sccp-route	show	3
scheduled-command	add	6
scheduled-command	change	6
scheduled-command	delete	6
scheduled-command	help	1
scheduled-command	show	6
sctp-assoc	add	6
sctp-assoc	audit	6
sctp-assoc	change	6
sctp-assoc	control	6
sctp-assoc	delete	6
sctp-assoc	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
sctp-assoc	show	3
sctp-assoc	status	2
sctp-assoc-profile	add	8
sctp-assoc-profile	audit	8
sctp-assoc-profile	change	5
sctp-assoc-profile	delete	8
sctp-assoc-profile	help	1
sctp-assoc-profile	show	2
security-summary	help	1
security-summary	report	8
service	add	8
service	audit	8
service	change	8
service	delete	8
service	help	1
service	show	2
service-provider	add	8
service-provider	audit	8
service-provider	change	5
service-provider	delete	8
service-provider	help	1
service-provider	show	2
service-trigger	audit	8
service-trigger	help	1
service-trigger	show	2
serving-domain-name	add	8
serving-domain-name	audit	8
serving-domain-name	change	5
serving-domain-name	delete	8
serving-domain-name	help	1
serving-domain-name	show	2
session	block	9
session	block	10 (Release 4.5)
session	change	2
session	help	9
session	show	2

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
session	stop	9
session	unblock	9
sg	add	6
sg	audit	6
sg	change	6
sg	delete	6
sg	get-trace	3
sg	help	1
sg	set-trace	6
sg	show	3
sg-grp	add	6
sg-grp	audit	6
sg-grp	change	6
sg-grp	delete	6
sg-grp	help	1
sg-grp	show	3
sgp	add	6
sgp	audit	6
sgp	change	6
sgp	delete	6
sgp	get-trace	2
sgp	help	1
sgp	set-trace	6
sgp	show	3
sgp	status	2
sip-reg-contact	help	1
sip-reg-contact	status	2
sip-timer-profile	add	8
sip-timer-profile	audit	8
sip-timer-profile	change	5
sip-timer-profile	delete	8
sip-timer-profile	help	1
sip-timer-profile	show	2
sipt-isup-ver-alias	add	6
sipt-isup-ver-alias	audit	6
sipt-isup-ver-alias	change	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
sipt-isup-ver-alias	delete	6
sipt-isup-ver-alias	help	1
sipt-isup-ver-alias	show	3
sipt-isup-ver-base	help	1
sipt-isup-ver-base	show	3
sle	add	8
sle	audit	8
sle	change	8
sle	delete	8
sle	help	1
sle	show	2
slhr	add	6
slhr	audit	6
slhr	change	6
slhr	delete	6
slhr	help	1
slhr	show	3
slhr-profile	add	6
slhr-profile	audit	6
slhr-profile	change	6
slhr-profile	delete	6
slhr-profile	help	1
slhr-profile	show	3
snmpconfig	add	9
snmpconfig	change	9
snmpconfig	delete	9
snmpconfig	help	1
snmpconfig	show	9
snmptrapdest	add	2
snmptrapdest	change	2
snmptrapdest	delete	2
snmptrapdest	help	1
snmptrapdest	show	2
softsw-tg-profile	add	6
softsw-tg-profile	audit	6
softsw-tg-profile	change	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
softsw-tg-profile	delete	6
softsw-tg-profile	help	1
softsw-tg-profile	show	3
special-call-type	add	8
special-call-type	audit	8
special-call-type	change	8
special-call-type	delete	1
special-call-type	help	1
special-call-type	show	2
split-npa	add	6
split-npa	audit	6
split-npa	change	6
split-npa	delete	6
split-npa	help	1
split-npa	show	3
ss7-ansi-tg-profile	add	8
ss7-ansi-tg-profile	audit	8
ss7-ansi-tg-profile	change	5
ss7-ansi-tg-profile	delete	8
ss7-ansi-tg-profile	help	1
ss7-ansi-tg-profile	show	2
ss7-cic	audit	8
ss7-cic	help	1
ss7-cic	show	2
ss7-q761-tg-profile	add	8
ss7-q761-tg-profile	audit	8
ss7-q761-tg-profile	change	5
ss7-q761-tg-profile	delete	8
ss7-q761-tg-profile	help	1
ss7-q761-tg-profile	show	2
ss7-q767-tg-profile	add	8
ss7-q767-tg-profile	audit	8
ss7-q767-tg-profile	change	5
ss7-q767-tg-profile	delete	8
ss7-q767-tg-profile	help	1
ss7-q767-tg-profile	show	2

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
ss7-trace	help	1
ss7-trace	start	2
ss7-trace	stop	2
ss7-trunk-termination	diag	2
ss7-trunk-termination	help	1
static-contact	add	8
static-contact	audit	8
static-contact	change	5
static-contact	delete	8
static-contact	help	1
static-contact	show	2
sub-cid	show	2
sub-da-block	help	1
sub-da-block	show	2
sub-dn-find	help	1
sub-dn-list	help	1
sub-dn-list	show	2
sub-intl-block	help	1
sub-intl-block	show	2
sub-ld-block	help	1
sub-ld-block	show	2
sub-oper-block	help	1
sub-oper-block	show	2
subscriber	add	8
subscriber	audit	8
subscriber	change	5
subscriber	delete	8
subscriber	help	1
subscriber	show	2
subscriber-feature-data	add	8
subscriber-feature-data	audit	8
subscriber-feature-data	change	5
subscriber-feature-data	delete	8
subscriber-feature-data	help	1
subscriber-feature-data	show	2
subscriber-profile	add	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
subscriber-profile	audit	6
subscriber-profile	change	6
subscriber-profile	delete	6
subscriber-profile	help	6
subscriber-profile	show	6
subscriber-service-profile	add	8
subscriber-service-profile	audit	8
subscriber-service-profile	change	5
subscriber-service-profile	delete	8
subscriber-service-profile	help	1
subscriber-service-profile	show	2
subscriber-termination	control	6
subscriber-termination	diag	2
subscriber-termination	equip	6
subscriber-termination	help	1
subscriber-termination	reset	2
subscriber-termination	status	2
subscriber-termination	unequip	6
subscriber-tod-schedule	add	8
subscriber-tod-schedule	audit	8
subscriber-tod-schedule	change	5
subscriber-tod-schedule	delete	8
subscriber-tod-schedule	help	1
subscriber-tod-schedule	show	2
subsystem	add	6
subsystem	audit	6
subsystem	change	6
subsystem	control	6
subsystem	delete	6
subsystem	help	1
subsystem	show	3
subsystem	status	2
subsystem-grp	add	6
subsystem-grp	audit	6
subsystem-grp	change	6
subsystem-grp	control	6

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
subsystem-grp	delete	6
subsystem-grp	help	1
subsystem-grp	show	3
subsystem-grp	status	2
sup-config	change	9
sup-config	help	1
sup-config	show	9
system	control	6
system	help	1
system	status	2
system-health	help	1
system-health	report	9
tech-prefix-grp	add	8
tech-prefix-grp	audit	8
tech-prefix-grp	change	5
tech-prefix-grp	delete	8
tech-prefix-grp	help	1
tech-prefix-grp	show	2
tech-prefix-grp-profile	add	8
tech-prefix-grp-profile	audit	8
tech-prefix-grp-profile	change	5
tech-prefix-grp-profile	delete	8
tech-prefix-grp-profile	help	1
tech-prefix-grp-profile	show	2
termination	add	8
termination	audit	8
termination	change	5
termination	delete	8
termination	help	1
termination	show	2
tgw	add	8
tgw	change	5
tgw	control	6
tgw	delete	8
tgw	diag	2
tgw	help	1

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
tgw	show	2
tgw	status	2
timezone	help	1
timezone	show	2
toll-free	help	1
toll-free	query	2
toll-free-msg-type	help	1
toll-free-msg-type	query	2
transaction-queue	delete	6
transaction-queue	help	1
transaction-queue	show	2
trigger-detection-point	help	1
trigger-detection-point	show	2
trigger-id	help	1
trigger-id	show	2
trigger-nod-escape-list	add	6
trigger-nod-escape-list	audit	8
trigger-nod-escape-list	change	6
trigger-nod-escape-list	delete	6
trigger-nod-escape-list	help	1
trigger-nod-escape-list	show	3
trunk	add	8
trunk	audit	8
trunk	change	5
trunk	delete	8
trunk	help	1
trunk	show	2
trunk	translate	2
trunk-grp	add	6
trunk-grp	audit	6
trunk-grp	change	6
trunk-grp	control	6
trunk-grp	delete	6
trunk-grp	help	1
trunk-grp	show	3
trunk-grp	status	2

Table 2 *Noun/Verb Command Default Security Privilege Levels (continued)*

Noun	Verb	Default Security Level
trunk-grp-feature-data	add	6
trunk-grp-feature-data	audit	6
trunk-grp-feature-data	change	6
trunk-grp-feature-data	delete	6
trunk-grp-feature-data	help	6
trunk-grp-feature-data	show	6
trunk-grp-service-profile	add	8
trunk-grp-service-profile	audit	8
trunk-grp-service-profile	change	5
trunk-grp-service-profile	delete	8
trunk-grp-service-profile	help	1
trunk-grp-service-profile	show	2
trunk-termination	control	6
trunk-termination	equip	2
trunk-termination	help	1
trunk-termination	reset	2
trunk-termination	status	2
trunk-termination	unequip	2
tt	control	6
tt	help	1
tt	reset	2
tt	status	2
user	add	9
user	change	9
user	delete	9
user	help	1
user	show	9
user-auth	add	8
user-auth	audit	8
user-auth	change	5
user-auth	delete	8
user-auth	help	1
user-auth	show	2
user-part-variant	add	3
user-part-variant	audit	6
user-part-variant	delete	3

Table 2 Noun/Verb Command Default Security Privilege Levels (continued)

Noun	Verb	Default Security Level
user-part-variant	help	1
user-part-variant	show	3
user-part-variant-base	help	1
user-part-variant-base	show	3
var-alias	add	10
var-alias	change	10
var-alias	delete	10
var-alias	show	10
var-default	add	10
var-default	change	10
var-default	delete	10
var-default	help	10
var-default	show	10
v-commandparameter	show	10
v-commandtable	show	10
vsc	add	8
vsc	audit	8
vsc	change	8
vsc	delete	8
vsc	help	1
vsc	show	2

Login—Logoff/Exit

Logging in to a CLI session is a Telnet or Secure Shell (SSH) function, not a UNIX function. **Login** is not a supported CLI command. Users must use Telnet or SSH to connect to the EMS using their user name and password, which invokes a CLI shell. SSH is the default method of access to the Cisco BTS 10200 Softswitch CLI. The maximum number of CLI sessions allowed is 50.



Note

A user must be added as a new user before logging in.

Quitting a session is an OAMP function. Type **quit** or **exit** at the CLI prompt to end both the CLI and Telnet sessions.



Caution

For security purposes, Telnet is obsoleted as of Release 4.4.

Shell

You can enter commands using the command line interface (CLI). The CLI allows you to enter an entire command and its parameters from the command line.

The shell parameter is specified when a user is added to the system. If a shell is not specified when a user is added, the default is the CLI. All command defaults, parameters, and rules are the same regardless of which method you use to enter them.

Command Line Interface

After you use SSH to access the server and log in, if the shell is CLI, only the command prompt appears on the screen. To enter commands using the CLI, enter the entire command with all its required parameters (tokens).

Commands

All commands consist of a valid noun-verb pair. Each table has its own valid commands and each type can have specific applicable rules. The show command allows a wildcard. Commands can also be either graceful or forced. Multiple tokens must be separated by a semicolon (;).

Available verbs are defined in the CommandTable for each user table (noun-verb pair). Verb-driven required fields are defined in the CommandParameter table.

The following are valid command verbs:

- Add—Insert records.
- Ack—Acknowledge alarms.
- Audit—Examine entries.
- Change—Modify records.
- Clear—Clear records.
- Control—Change the operational state of devices.
- Delete—Delete records.
- Download—Download the database.
- Equip—Equip terminations.
- Help—Find help on a particular table, table-name, or command.
- Report—Show history of a subsystem event, alarm, traffic.
- Reset—Reset a default.
- Show—Display records with qualifier.
- Status—Show operational status of devices.
- Unequip—Unequip terminations.

Automatic Completion (Release 4.5)

This section describes the automatic completion of CLI commands. Automatic completion means the system automatically completes a command based on user input.

Automatic Completion of Verbs

A CLI command verb is automatically completed after a user enters a substring of the verb and presses the Tab key.

Examples

If a user types “ad” and presses the Tab key, the command is completed to “add.” In order for a verb to complete successfully, a user must enter the minimum number of characters that uniquely identify the verb from all other verbs.

If a user enters the characters “su” and presses the Tab key, the command is resolved to a single command “subscribe.” Since the entered command can be resolved, the word “su” is erased and then replaced with “subscribe” on the same line as follows:

```
su <Tab>
```

```
Reply :
```

```
CLI>subscribe
```

Automatic Completion of Nouns

A CLI command noun is automatically completed after a user enters a valid verb, followed by a substring of the noun, and presses the Tab key.

Examples

If a user types “add ac” and presses the Tab key, the command is completed to “add activity.” In order for a noun to be completed successfully, a user must enter the minimum number of characters that uniquely identify the noun from all other nouns.

If a user types “subscribe a” and presses the Tab key, the system attempts to complete the noun. As the noun “a” is resolved to “alarm-report” the command is erased and the command is completed on the same line as follows:

```
subscribe a <Tab>
```

```
Reply :
```

```
CLI>subscribe alarm_report
```

Automatic Completion of Parameters

A CLI command parameter is automatically completed after a user enters a valid verb::noun pair, followed by a substring of the parameter, and presses the Tab key.

Examples

If a user types “add activity ena” and presses the Tab key, the command is completed to “add activity enabled=.” In order for a parameter to be completed successfully, a user must enter the minimum number of characters to uniquely identify the parameter from the possible list of parameters.

If a user types “subscribe alarm-report o” and presses the Tab key, the “o” parameter is resolved. Since it matches a single parameter “origin,” the entered command is erased and the command is completed as “subscribe alarm_report origin=” on the same line follows:

```
subscribe alarm-report o <Tab>
```

Reply :

```
CLI>subscribe alarm_report origin=
```

Automatic Completion of Commands with a Single Verb, Noun and Parameter

There are a few CLI commands that have a single verb, noun and parameter. For these commands, when a user enters the verb and presses the Tab key, the entire command is completed.

Examples

If a user enters “ac” and enters the Tab key, the command is completed as “ack alarm id=” as the verb works with a single noun and single parameter.

```
ac <Tab>
```

Reply :

```
CLI>ack alarm id=
```

Automatic Completion of Default Parameter Values

Some CLI command parameters have default values. Default values are used during automatic completion of a command.

Examples

If a user types “add user shell=” and presses the Tab key, the value part of the parameter is automatically completed because the parameter has a default value.

```
add user shell=<Tab>
```

Reply :

```
CLI>add user shell=CLI;
```

Automatic Validation of CLI Command Syntax

If a user types an invalid combination of verb, noun and parameters and presses the Tab key, the entire command is validated as part of automatic completion (that is, the verb, noun and parameters are checked as to whether they form a true command). After validation, the automatic completion feature displays only the part of the command that is valid. The following error conditions are handled during automatic validation:

- Invalid verbs

- Invalid nouns
- Invalid parameters

Invalid Verbs

If a user enters an invalid verb followed by valid or invalid noun, parameters and presses the Tab key, the entire list of verbs is displayed. The command is completed to “nothing”—that is, the command prompt has no characters following it.

Examples

If a user enters “xxx user name=john;” and presses the Tab key, the verb is determined to be invalid. The command is not completed, a complete list of possible verbs displays as help and the command prompt displays with the entire command removed.

```
xxx user name=john; <Tab>
Reply :
```

```
ack
add
audit
block
change
clear
control
delete
diag
download
equip
force_delete
get_trace
help
macro
query
report
reset
set_trace
show
start
status
stop
subscribe
sync
translate
unblock
unequip
unsubscribe
CLI>
```

Invalid Nouns

If a user enters a valid verb with an invalid noun, valid or invalid parameters and presses the Tab key, the entire list of nouns that work with that verb is displayed. For example, a complete list of nouns that work with that verb is displayed and the entered command is completed only to the verb.

Examples

If a user enters “show xxx id=10;” and presses the Tab key, the noun is determined to be invalid. The system completes the command by removing everything from the invalid noun to the end of the command: the command completes to “stop” and displays a list of all possible nouns that work with the verb.

```
stop xxx terminal
```

```
Reply :
```

```
session
ss7_trace
CLI>stop
```

Invalid Parameters

If a user enters a valid verb and noun with invalid parameters and presses the Tab key, the command is completed up to the first invalid parameter encountered. If a user enters a valid verb and noun with multiple valid parameters but does not enter a value for one or more parameters and presses the Tab key, the command is completed. However, during the validation process, any valid parameters that do not have a value are given a question mark (?) value.



Note

This replacement does not work for the last parameter. For example, if a user enters “add user name=;password=;” and presses the Tab key, the command is completed to “add user name=?;password=.”

Examples

If a user enters “add user xxx=10;” and presses the Tab key, the parameter is determined to be invalid. The system completes the command by stripping the parameter and displays a list of possible parameters.

```
add user xxx=10;
```

```
Reply :
```

```
command_level*
days_valid
name*
password*
shell*
warn
work_groups
CLI>add user
```

If a user enters “add user name=;password=;command-level=” and presses the Tab key, the system determines that the entered parameters are valid but no value was entered. The system completes the command by entering the question mark (?) character for the missing values.

```
add user name=;password=;command-level <Tab>
```

```
Reply:
```

```
CLI>add user name=?;password=?;command_level=<Tab>
```

Automatic Expansion of Verbs, Nouns and Parameters

During automatic completion of an entered command, the verb, noun and parameters names are expanded to their full name. This expansion clearly shows that the expanded command is executed and there is no additional expansion of the command internally.

Examples

If a user enters “ad user n=john;c=10;wo=” and presses the Tab key, the system completes the command by expanding the verb, noun and parameter names. The command completes to “add user name=john; command_level=10; work_groups=.”

```
ad user n=john;c=10;wo= <Tab>
```

Reply :

```
CLI>add user name=john;command_level=10;work_groups=
```

Invalid Characters

This section describes the invalid characters in ASCII and subscriber commands. Usage applies to token values, such as subscriber names, trunk group names, and so forth.

ASCII Characters

The following characters are invalid in all ASCII character commands:

- Double quotation marks (“ ”).
- Single quotation marks (‘ ’).
- Semicolon (;)—A semicolon can only be used as a delimiter between tokens. It cannot be used within a token value (for example, within a subscriber name).

Using any of these characters returns an error message. This applies whether a command is entered from the CLI or by bulk provisioning.

Subscriber

The following characters are invalid or not recommended for using in Subscriber commands:

- Single quotation marks (‘ ’)—The single-quote is a reserved character for delimiting strings.
- Double quotation marks (“ ”)—The double-quote is also a reserved character for delimiting strings.
- Semicolon (;)—A semicolon can only be used as a delimiter between tokens. It cannot be used within a token value (for example, within a subscriber name).
- Percent sign (%)—The percent sign is a wild-card, for example: show subscriber id=x1-6-00% shows all subscribers whose ID begins with x1-6-00. So the percent sign is a valid character for the show command, but is invalid when used with the add or change commands.
- Hyphen (—)—This is a valid character but impacts the way caller-ids are displayed. Cisco does not recommend using this character.
- Underscore (_)—This is a valid character but impacts the way caller-ids are displayed. Cisco does not recommend using this character.

- Ampersand (&)—The ampersand is a reserved character in XML.

Batch Data Retrieval (Paging) Using the Show Command

You can use the show command for batch data retrieval (paging). This command uses tokens that do not match command-to-field in the database. The tokens are generated as needed by the system. These tokens are available for all show commands in the system that have a database table as the backing store. A show of configuration data does not support these tokens because configuration data is not stored in a database table. This command also works in the CORBA interface.

Batch data retrieval (paging) examples:

```
show subscriber limit=1000; start-row=<next page value>;
show subscriber limit=1000; start-row=<next page value>; display=id,sub-service-profile;
order=id;
>
```

The following tokens are available for batch data retrieval (paging) to order and display desired data:

LIMIT—Specifies the page size for the maximum amount of data returned in any single show.

START-ROW—Specifies the page to start the display. You can start in the middle if so desired. Usually the first page is specified to see the total size of the display to determine how many pages are required.

DISPLAY—Only return the columns of data requested. This is a comma-separated list of the desired columns to be returned in the show. All other data is truncated.

ORDER—Specifies a key by which the data is sorted or ordered.



Note

More than one item can be specified for a sort. This is a comma-separated list of columns for the noun being displayed.

Rules

Rules applying to commands are given with each section described in this document. These rules describe behavior exclusive of Primary Key or Foreign Key constraints. Primary Key and Foreign Key constraints are listed as applicable by token.

Add Rules

The following add rules are commonly used:

- What is being added cannot already exist.
- If a key in another table is referenced, that key must exist in the other table.

Delete Rules

The following delete rules are commonly used:

- The ID, or record, must already exist.
- If a key in another table is referenced, that key must be deleted first.

Change Rules

The following change rules are commonly used:

- The ID, or record, must already exist.
- If a key in another table is referenced, that key must exist in the other table.



Note

All primary keys must be specified in a change command.

Show Rule

The *ID/Record must exist* is a commonly used show rule.

Wildcard

This section describes how to use the available wildcard in commands and tokens.

In Commands

The percent sign (%) is the only valid wildcard for show, report, and display commands. The asterisk (*) is the only valid wildcard for status and control commands. Using other commands returns the error message: “*invalid parameter.*”

The following example returns a list of all Call Agents:

```
show call-agent id=;
```

The following example shows only those Call Agents whose IDs begin with *ca*:

```
show call-agent id=ca%;
```

The following example is not a valid command. You must specify a value.

```
show %;
```

The following example controls all subscribers into service for a media gateway:

```
control subscriber-termination id=*@c2421.192;mode=forced;target-state=INS;
```

In Tokens

You can use a wildcard with tokens as long as the token is distinctive enough for the wildcard to distinguish it. Only one wildcard is allowed per token. The wildcard does not work with required tokens.

Examples:

Add a policy-prefix where prefix1 is the token for which we are using the wildcard. If the token is not distinctive enough, all possible tokens the token can represent are displayed:

```
add policy-prefix id=Test;pre%=toll-free;policy-id1=somepolicy;policy-type1=TOD;
```

Command parameter 'pre%' is too ambiguous. Possible parameters are:

```
prefix10
prefix1
prefix2
prefix3
```

```

prefix4
prefix5
prefix6
prefix7
prefix8
prefix9

```

```
add policy-prefix id=Test;p%1=toll-free;policy-id1=somepolicy;policy-type1=TOD;
```

Command parameter 'p%1' is too ambiguous. Possible parameters are:

```

policy_type1
prefix1
policy_id1

```

```
add policy-prefix id=Test;pr%1=toll-free;policy-id1=somepolicy;policy-type1=TOD;
```

Reply: Transaction 1481 was processed.

uca12 update successful



Tip

Once the command is executed, performing a control-p (^p), causes the verbose form of the command to appear. In the above example, *add policy-prefix id=Test;prefix1=toll-free;policy-id1=somepolicy;policy-type1=TOD;* appears when a ^p is performed.

Graceful and Forced Commands

Most commands are considered graceful unless “mode=forced” is specified. Graceful commands allow applicable processes and components to complete all activity before shutting down. This allows calls to complete and users to go on-hook. When a command is forced, all applicable processes and components terminate immediately, including calls.

Tables

The Cisco BTS 10200 Softswitch uses a replicated master-master database that is partitioned into a set of tables according to function. These tables are user provisionable and provide the user with a clear view of system status and functions.

Tables are provisioned using token IDs. Tokens equate to database field names in a structured query language (SQL) database, similar to the cell names in a spreadsheet. Tokens allow individual fields to be provisioned in any order (within the rules of a command).

Cursor Controls

The following control characters are available:

Control Character	Action
^A	Moves the cursor to beginning of the line.
^B	Moves the cursor back one space.
^C	Interrupts a command during typing.

Control Character	Action
^D	Deletes a character at the cursor position.
^E	Moves the cursor to the end of a line.
^F	Moves the cursor forward one character.
^I	Allows toggling between insert and overwrite (default is overwrite).
^K	Deletes all characters from the cursor position to the end of a line.
^L	Redisplays the current line.
^N	Scrolls forward through commands that have been entered (you must scroll backward through the commands before this will work).
^P	Scrolls backward through commands starting with the most recent.
^T	Transposes a character at cursor position with a previous character.
Backspace	Deletes the character to the left of the cursor.
Return	Executes a command.
Down arrow key	Pages down.
Up arrow key	Pages up.

Secure Shell

Secure shell (SSH) is the default method of access to the Cisco BTS 10200 Softswitch. SSH provides encrypted communication between a remote machine and the EMS or Call Agent for executing CLI commands. The SSH server runs on the EMSs and CAs of the Cisco BTS 10200. To connect, the client and server sides must run the secure shell daemon (SSHD).

The SSH daemon is available 24 hours a day, 7 days a week. It runs as a Solaris daemon process. It is automatically started when the Solaris is brought up, but if it dies, it must be manually restarted. A single unique instance of the SSHD runs on every component of the Cisco BTS 10200 Softswitch.

SSH is an optional login choice. Using the Cisco BTS 10200 Softswitch default application installation option, SSH is enabled; RSH, REMSH, RLOGIN, Telnet, or REXEC are disabled; but, FTP is not affected. If SSH is not selected, then RSH, REMSH, RLOGIN, Telnet, or REXEC are enabled and FTP is still not affected.



Caution

For security purposes, Telnet is obsoleted as of Release 4.4.

If SSH is enabled, new users are prompted to enter a new password and reenter that password during their first login. From that point, they are prompted once for a password only.

To log in from the client-side, enter the following:

```
ssh -l username IPAddress
```

On the first SSH login from the client-side, expect a message similar to this:

```
The authenticity of host [hostname] can't be established.
Key fingerprint is 1024 5f:a0:0b:65:d3:82:df:ab:42:62:6d:98:9c:fe:e9:52.
Are you sure you want to continue connecting (yes/no)?
```

Enter yes.

The password prompt appears. From this point on, all communications are encrypted. Subsequent SSH logins will prompt only for a password.

Help

This section details the help available for the Cisco BTS 10200 Softswitch.

Basic Usage

This section details the help available. The Cisco BTS 10200 generates help information when a question mark (?) character is entered as part of a command. The following list provides a brief summary of the functionality provided.

The following command lists all the commands for the route table that have a verb starting with s:

```
s? route
```

The following command lists all the commands that have a noun starting with rou:

```
show rou?
```

The following command lists all the commands that have a noun starting with rou and a verb starting with s:

```
s? rou?
```

The following command lists all the tokens for the show route command:

```
show route ?
```

The following command lists all the tokens for the add route command:

```
add route ?
```

The following command lists all the parameters that start with i for the show route command:

```
show route i?
```

The following command lists all the parameters that end with id= for the show route command:

```
show route ?id
```

The following command lists all the valid commands on the Cisco BTS 10200:

```
? ?
```

A ? substituted for a token value can be entered for multiple tokens if the full token name is entered. For example, enter the following command to get help on the id and tgn8-id tokens for the show route command:

```
show route id=?;tgn8-id=?
```

Possible matches:

```
id; Enter at least 0 characters, but not more than 16 characters.
tgn8-id; Enter a number from 0 to 2147483647.
```

For help on tokens, a token name followed by an equal sign (=) is required. A list of tokens can be determined using the percent character (%) wildcard. For example, enter the following command to get help on one of the tgn-id tokens:

```
show route tgn%=?
```

```
Command parameter 'tgn%' too ambiguous. Possible parameters:
```

```
tgn10-id
tgn3-id
tgn9-id
tgn1-id
tgn8-id
tgn7-id
tgn6-id
tgn2-id
tgn5-id
tgn4-id
```

```
show route tgn3-id=?
```

```
Matches found:
```

```
tgn3-id; Enter a number from 0 to 2147483647.
```

```
show route tgn3-id=0;
```

```
Reply : Success: Database is void of entries.
```

System-generated help is available for all command nouns and verbs. For help on a specific command noun/verb pair, help provides:

1. A list of all parameters:
 - Sorted into groups of *Required* or *Optional/Conditional*.
 - With their data format described, or, for those parameters that require a value from a pick-list, a list of permitted values.
 - With their default value (if any).
 - With any FK dependency.
2. All related commands for each help request.
3. The URL to the HTML version of the CLI guide for each help request.

One parameter is supported:

- VERB = a valid verb or %.

Support for this verb is hard-coded in ManagedObject.java to avoid significant changes to the CommandParameter table.

Examples

```
***** example 1 *****
help help
Reply : Success:
Description of the BTS CLI 'help subscriber' command for release 900-03.02.00.I03
=====
For a given command noun, Help provides a list of all command noun-verb pairs
associated with the given noun.
For Help on a specific command noun-verb pair, a description of all associated tokens,
related commands, and a reference to the CLI Users Guide is provided. The required
tokens are listed first, and the optional/conditional tokens are listed next.
The following information is provided for each token:
- a brief description
- the expected data format or list of values
- the default value (if any),
- prevalidation formatting instructions
- the dependency chain (if the value for the token must be pre-provisioned).
```

The dependency chain is depicted in the by showing the relationship of the token to another BTS command token. The format is noun.token->noun.token->noun.token and so on until a token is reached that has no dependencies. The rightmost noun.token pair references the value that must be provisioned first. Moving to the left, you can follow the provisioning dependency chain back up to the token described in the help command.

For example, execution of 'show noun token=%', where noun and token are derived from one of the dependency chain pairs, yields a list of possible values for the token described in the help text.

Example for getting this description on the BTS help command:

```
help help
```

Example for getting help for a command noun:

```
help the_target_noun
```

Example for getting help for a specific command noun-verb pair:

```
help the_target_noun verb=the_target_verb
```

Where 'verb' represents the command verb for which help information is requested.

***** example 2 *****

```
help subscriber
```

```
Reply : Success:
```

```
Description of the BTS CLI 'help subscriber' command for release 900-03.02.00.I03
```

```
=====
```

```
Related Commands:
```

```
    add subscriber
    audit subscriber
    change subscriber
    delete subscriber
    sync subscriber
    show subscriber
```

```
The BTS 10200 Users Guide is available at http://kyle-btc.cisco.com:10200
```

***** example 3 *****

```
help subscriber verb=change;
```

```
Reply : Success:
```

```
Description of the BTS CLI 'change subscriber' command for release 900-03.02.00.I03
```

```
=====
```

```
-----
```

```
Required Parameters:
```

```
-----
```

```
id (ID)
```

```
    Enter at least 1 character, but not more than 30 characters.
    There is no default value.
```

```
-----
```

```
Optional/Conditional Parameters:
```

```
-----
```

```
address1 (Address1)
```

```
Enter at least 1 character, but not more than 32 characters.
There is no default value.
```

```
address2 (Address2)
```

```
Enter at least 1 character, but not more than 32 characters.
There is no default value.
```

```
billing_dn (Billing Dn)
```

```
Enter at least 1, but not more than 14 characters from the following set:
{0123456789-}.
There is no default value.
```

```
category (Category)
```

```
Enter one of the following values: [INDIVIDUAL, MLHG, MLHG_INDIVIDUAL,
MLHG_PREF_INDIV, CTXG, CTXG_INDIVIDUAL,
PBX, CTXG_TG, CTXG_MLHG, RACF, IVR]
The default value is INDIVIDUAL.
```

```
city (City)
```

```
Enter at least 1 character, but not more than 16 characters.
There is no default value.
```

```

cos_restrict_id (COS Restrict ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: cos_restrict.id
country (Country)
    Enter at least 1 character, but not more than 16 characters.
    The default value is USA.
ctxg_id (Ctxg Id)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: centrex_grp.id
dn1 (Dn1)
    Enter at least 1, but not more than 14 characters from the following set:
    {0123456789-}.
    There is no default value.
email (Email)
    Enter an email address in the form text@text where text is a set of characters
    with no spaces.
    There is no default value.
grp (Grp)
    Enter a boolean value of Y for yes or N for no.
    The default value is N.
immediate_release (Immediate Release)
    Enter a boolean value of Y for yes or N for no.
    The default value is N.
language (Language)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
mgw_id (Media Gateway ID)
    Enter at least 0 character, but not more than 32 characters.
    There is no default value.
    Dependency chain: termination.mgw_id -> mgw.id
mlhg_id (MLHG ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: mlhg_pref_list.mlhg_id -> mlhg.id
mlhg_pref_list_id (Mlhg Pref List Id)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: mlhg_pref_list.id
name (Name)
    Enter at least 1 character, but not more than 32 characters.
    There is no default value.
pic1 (Pic1)
    Enter a PIC value as four numeric characters: NPIC, or NONE.
    There is no default value.
pic2 (Pic2)
    Enter a PIC value as four numeric characters: NPIC, or NONE.
    There is no default value.
pic3 (Pic3)
    Enter a PIC value as four numeric characters: NPIC, or NONE.
    There is no default value.
policy_id (POLICY_ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
privacy (Privacy)
    Enter one of the following values: [FULL, NAME, NONE]
    The default value is NONE.
qos_id (QOS ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: qos.id
ring_type_dn1 (Ring Type Dn1)
    Enter a number from 1 to 3.

```

```

    The default value is 1.
sip_url (Sip Url)
    Enter at least 1 character, but not more than 32 characters.
    There is no default value.
ss_number (Ss Number)
    Enter a Social Security Number in the form ###-##-#### where # are digits from
    0-9.
    There is no default value.
state (State)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
status (Status)
    Enter one of the following values: [ACTIVE, TEMP_OOS, TEMP_DISCONNECTED,
    TEMP_UNAVAILABLE]
    The default value is ACTIVE.
sub_profile_id (Sub Profile Id)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: subscriber_profile.id
term_id (Termination ID)
    Enter at least 1 character, but not more than 32 characters.
    There is no default value.
    Dependency chain: termination.id
term_type (TERM TYPE)
    Enter one of the following values: [TERM, TG, ROUTE, RG]
    The default value is TERM.
terminating_immediate_rel (Terminating Immediate Release)
    Enter a boolean value of Y for yes or N for no.
    The default value is N.
tgn_id (Trunk Group Number ID)
    Enter a number from 0 to 99999999.
    There is no default value.
    Dependency chain: trunk_grp.id
usage_sens (Usage Sens)
    Enter a boolean value of Y for yes or N for no.
    The default value is Y.
zipcode (Zipcode)
    Enter at least 1 character, but not more than 10 characters.
    There is no default value.
-----
See Also:
-----
Related Commands:
    add subscriber
    audit subscriber
    delete subscriber
    help subscriber
    sync subscriber
    show subscriber

```

Context Sensitive (Release 4.5)

Context sensitive help is available based on the following categories:

- Context sensitive help for verbs
- Context sensitive help for nouns
- Context sensitive help for parameters
- Context sensitive help for parameter values

Context Sensitive Help for Verbs

Context sensitive help for verbs is provided under the following conditions:

- A user does not enter any characters at the CLI prompt and enters the Tab key
- A user enters a substring of the verb at the CLI prompt and enters the Tab key

If a user does not enter any characters at the CLI prompt and just presses the Tab key, a list of possible verbs is displayed.

If a user enters a substring of a verb at the CLI prompt and presses the Tab key, a list of all possible verbs, starting with the substring, is displayed.

Examples

If a user presses the Tab key at the CLI command prompt, a list of all possible verbs is displayed as follows:

<Tab>

```
Reply :
ack
add
audit
block
change
clear
control
delete
diag
download
equip
force_delete
get_trace
help
macro
query
report
reset
set_trace
show
start
status
stop
subscribe
sync
translate
unblock
unequip
unsubscribe
```

If a user types the character “s” and presses the Tab key, the command is ambiguous and cannot be resolved. All possible commands that begin with the character “s” are listed as follows:

s <Tab>
Reply :

```
set_trace
show
start
status
stop
subscribe
```

sync

Context Sensitive Help for nouns

Context sensitive help for nouns is provided for the following conditions:

- If a user enters a valid verb and presses the Tab key.
- If a user enters a valid verb, followed by a substring of the noun, and presses the Tab key

If a user enters a valid verb and presses the Tab key, a list of all possible nouns is displayed.

If a user enters a valid verb, followed by a substring of the noun, then enters the Tab key, a list of all possible nouns, starting with the substring, displays.

Examples

If a user enters the word “subscribe” and presses the Tab key, all possible nouns are listed for the verb as follows:

```
subscribe <Tab>
```

Reply :

```
alarm_report
debug_report
event_report
CLI>subscribe
```

Context Sensitive Help for Parameters

Context sensitive help for parameters is provided under the following conditions:

- A user enters a valid verb::noun pair and presses the Tab key.
- When the user enters a valid verb::noun pair and presses the Tab key a list of all possible parameters is displayed. Any parameters with an asterisks (*) are required parameters.
- A user enters a valid verb::noun pair with an invalid parameter and presses a invalid parameter.
- When the user enters a valid verb::noun pair with an invalid parameter and presses the Tab key, a list of all possible parameters is displayed. The parameters with asterisks (*) indicate a required parameter.

Examples

If user types “subscribe alarm-report” and presses the Tab key, the system attempts to complete the parameter part of the command. Since there is more than one match in this case, the entire list of possible parameters is listed as follows:

```
subscribe alarm-report <Tab>
```

Reply :

```
origin*
severity*
type*
```

Context Sensitive Help for Parameter Values

Context sensitive help for parameter values is provided when the a user types a valid verb, noun, parameter and the equal (=) sign.

Examples

If a user types “show user name=” and presses the Tab key, help is displayed for the parameter value.

```
show user name= <Tab>
```

Reply :

Enter at least 1 character, but not more than 16 characters. If you want to clear the value, please enter NULL.

Command Line Interface Extended Read Access Commands

The following Extended Read Access Commands (ERAC) are documented in the *Cisco BTS 10200 Softswitch Extended Read Access Commands* document.

- hg-dn-find
- hg-dn-list
- hg-sequence
- sub-cid
- sub-da-block
- sub-ld-block
- sub-oper-block

Related Documentation

Related documentation includes the following:

- *Cisco BTS 10200 Softswitch System Description Manual*
- *Cisco BTS 10200 Softswitch Operations, Maintenance and Troubleshooting Manual*
- *Release 4.1, 4.2, 4.4, or 4.5 Release Notes*

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

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To access Cisco.com, go to the following website:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.cisco.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

<http://www.cisco.com/register/>

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

Contacting TAC by Telephone

If you have a priority level 1(P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.



CHAPTER 1

Administration, Diagnostic, and Maintenance Commands

Revised: July 24, 2009, OL-3743-42

This chapter describes the Administration, Diagnostic, and Maintenance (ADM) commands. With the exception of the Status Update Processor command, status and control commands do not have their own tables. They use the tokens in the applicable tables from the Call Processing chapters in this document. Tokens used in addition to the tokens from the tables in the Call Processing chapters are noted where applicable in this document.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Command Responses

See the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide* and the *Cisco BTS 10200 Softswitch Troubleshooting Guide* for command response information,

Generic Status and Control Commands

Generic status and control commands apply to all media gateways, subscribers, trunks, trunk groups and in one specific case, system. Some sample responses, replies, and failure reasons are also listed in this section. For a complete list, see the *Cisco BTS 10200 Softswitch Operations Manual*.

Administration and Maintenance

Administration and Maintenance commands consist of commands that control or show the status of a component. The following commands are specific to, and listed under, the applicable type. Sample responses, replies, and failure reasons are also listed in this section. For a complete list, see the *Cisco BTS 10200 Softswitch Operations Manual*.

Address of Record to Subscriber Status and Control Commands

This section describes the status and control commands for the Address of Record (AOR) to Subscriber (aor2sub) table.

**Caution**

These commands are no longer supported in Release 4.4.1. Use the `change aor2sub` command to control an aor2sub id, and the `show aor2sub` to check the status.

Control Command

An aor2sub id must be put in service to terminate a call to a Session Initiation Protocol (SIP) subscriber.

Command Types

Control

Examples

```
control aor2sub aor-id=4692551114@prica45.ipclab.cisco.com; target-state=oos
control aor2sub aor-id=4692551114@prica45.ipclab.cisco.com; target-state=ins
```

Status Command

The status command determines the status of the dynamic contact for the particular AOR. This shows if the AOR (SIP phone subscriber) has a registered contact or not. Calls cannot be terminated to SIP subscribers if the AOR does not have a registered contact (such as an expired or freed contact).

Command Types

Status

Examples

```
status sip-reg-contact AOR-ID=4692552222@prica45.ipclab.cisco.com
```

Reply example:

```
AOR ID ->
USER ->
HOST ->
PORT -> 0
USER TYPE ->
EXPIRES ->
EXPIRETIME ->
STATUS -> FREED CONTACT

Reply : Success:
AOR ID -> 4692552222@prica45.ipclab.cisco.com
USER -> 4692552222
HOST -> 64.101.150.141
PORT -> 5062
USER TYPE -> USER_IP_TYPE
EXPIRES -> 1800
EXPIRETIME -> Wed Jun 4 11:08:33 2003

STATUS -> EXPIRED CONTACT
```



```
Reply : Success:

status sip-reg-contact AOR_ID=4692552222@prica45.ipclab.cisco.com

AOR ID -> 4692552222@prica45.ipclab.cisco.com
USER -> 4692552222
HOST -> 64.101.150.141
PORT -> 5060
USER TYPE -> USER_IP_TYPE
EXPIRES -> 3600
EXPIRETIME -> Wed Jun 4 11:37:44 2003

STATUS -> REGISTERED CONTACT

Reply : Success:
```

Aggregation Status Command

This section describes the status command for an aggregation (aggr) router. Aggregation routers are used in cable and network-based call signaling (NCS) markets. In cable markets, they are used as cable modem termination systems (CMTs). In NCS markets, they are used as edge routers.

Command Types

Status

Examples

```
status aggr id=CMTS1
```

Reply Example:

```
Reply: Success:

AGGR ID -> CMTS1
OPER STATE -> AGGR IN Service
RESULT -> ADM configure result in success
REASON -> ADM executed successful
```

Usage Guidelines

The following list provides the AGGR operational-state values and possible responses for the command:

1. IN SERVICE
 - a. Means the TCP connection to the AGGR is up.
 - b. CLI output: AGGR IN SERVICE.
2. CONNECTING
 - a. Means the TCP connection to the AGGR is being set up.
 - b. CLI output: AGGR CONNECTING.
3. INITIALIZING
 - a. Identifies the initial state of the AGGR before a Call Agent (CA) attempts to connect to it.
 - b. CLI output: AGGR INITIALIZING (this is a transitional state, which a user may rarely see).
4. OUT OF SERVICE

- a. Means the AGGR is out of service.
- b. CLI output: AGGR OUT OF SERVICE.

Syntax Description

The following token may be used with the status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Destination Point Code Status Command

This section describes the status command for destination point codes (DPCs).

Command Types

Status

Examples

```
status dpc id=dpc1;
```

Syntax Description

The following token may be used with the destination point code status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

H.323 Gateway Status and Control Command

This section describes the status and control commands for H.323 gateways.

Command Types

Status and control

Examples

```
status h323-gw id=CHINA-1;
```

Reply Example:

Reply : Success:

```
ADMIN_STATE -> ADMIN_INS
H3A PROCESS NUMBER -> 30
H3A PROCESS NAME -> H3A1
ENDPOINT ID ->
ACTIVE CALLS -> 0
RAS STATE -> CCH323_RAS_STATE_GRQ
RAS PORT -> 35881
IP ADDRESS -> 10.89.224.125
REGISTERED GATEKEEPER ID ->
PRIMARY GATEKEEPER ID ->
PRIMARY GATEKEEPER PORT -> 0
PRIMARY GATEKEEPER IP ->
H323 VERSION -> 4
TIME TO LIVE -> 0
NUM ALT GATEKEEPERS -> 0
ALT GATEKEEPER PERMANENT -> TRUE
THRESHOLD_ENABLED -> FALSE
OUT_OF_RESOURCES -> FALSE
ALT GATEKEEPER LIST ->
```

```
control h323-gw id=CHINA_1; target-state=INS;
```

Reply Example:

Reply : Failure:

```
INITIAL STATE -> ADMIN_INS
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM entity in desired state
REASON -> ADM is in request state
RESULT -> ADM configure result in warning
H323GW ID -> CHINA_1
```

Syntax Description

The following token may be used with the H.323 status and control commands:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Media Gateway Status and Control Commands

This section describes the status and control commands for media gateways.

Command Types

Status and control

Examples

```
status mgw id=c5400_197;
```

Reply Example:

Reply : Success:

```
MGW ID -> c5400_197
RESULT -> ADM configure result in success
REASON -> ADM executed successful
ADMIN STATE -> ADMIN_INS
OPER STATE -> Media gateway in working status
```

Table 1-1 lists the administrative states the system can return.

Table 1-1 Returnable Administrative States

State	Definition
ADMIN-INS	In Service.
ADMIN-OOS	Out of Service.
ADMIN-MAINT	Maintenance Mode.
ADMIN-OOS-PENDING	Transitioning to Out of Service.
ADMIN-MAINT-PENDING	Transitioning to Maintenance Mode.

The following command shows how to control a media gateway in service. Modes can be either forced or graceful. Forced tears down all calls immediately; graceful allows calls in progress to complete before teardown.

```
control mgw id=c5400_162; mode=forced; target-state=INS;
```

Reply Example:

Reply : Success: CLI change successful

```
MGW ID -> c5400_162
INITIAL STATE -> ADMIN_OOS
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
```

Syntax Description

The following token may be used with the media gateway status command:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).

**Caution**

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.

The following token may be used with the media gateway status and control commands:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Signaling Gateway Get and Set Trace Commands

This section details the set-trace and get-trace commands for the Signaling Gateway table. The get-trace command retrieves trace information for the Signaling Gateway table. The set-trace command sets what trace information to log for the Signaling Gateway table.

Command Types

get-trace and set-trace

Examples

```
get-trace sg id=sg1;
set-trace sg id=sg1;
```

Syntax Description

The following tokens are used with the get-trace and set-trace commands:

- ID—The Signaling Gateway id. VARCHAR(16): 1-16 ASCII characters. Mandatory.
- PLATFORM ID—Platform ID (must be a valid Call Agent or Feature Server ID). VARCHAR(16): 1–16 ASCII characters. Optional.

The following tokens may be used with the set-trace command:

- TRACE-DPC-STATE—DBM only. The DPC trace state. CHAR(1): Y/N (Default = N). Optional.
- TRACE-ERR—DBM only. The trace error. CHAR(1): Y/N (Default = N). Optional.
- TRACE-ERRIND—DBM only. The trace error indicator. CHAR(1): Y/N (Default = N). Optional.
- TRACE-SG-STATE—DBM only. The signaling gateway trace state. CHAR(1): Y/N (Default = N). Optional.

Signaling Gateway Process Status, Get-Trace and Set Trace Commands

This section details the status, set-trace, and get-trace commands for the Signaling Gateway Process table.

Status Command

The SGP status command returns the state of the SGP.

Command Types

Status

Examples

```
status sgp id=sgp1;
```

Syntax Description

The following token may be used with the status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Get Trace and Set Trace Commands

The get-trace command retrieves trace information for the Signaling Gateway Process table. The set-trace command sets what trace information to log for the Signaling Gateway Process table.

Command Types

Get-trace and set-trace

Examples

```
get-trace sgp id=sgp1;
set-trace sgp id=sgp1; trace-err=Y;
```

Syntax Description

The following tokens may be used with the get-trace and set-trace commands:

- ID—Unique signaling gateway process identifier. VARCHAR(16): 1–16 ASCII characters. Mandatory.
- SG-ID—Unique signaling gateway identifier. VARCHAR(16): Y/N (Default = N). Mandatory.
- TRACE-SCTP—CHAR(1): Y/N (Default = N).
- TRACE-PAK—CHAR(1): Y/N (Default = N).
- TRACE-HB—CHAR(1): Y/N (Default = N).
- TRACE-ERR—The SGP trace error. CHAR(1): Y/N (Default = N).
- TRACE-ERRIND—The SGP trace error indicator. CHAR(1): Y/N (Default = N).

Session Initiation Protocol Registration Status

The Session Initiation Protocol Registration Check command checks the AOR status of a SIP subscriber.

Command Types Status

Examples `status sip-reg-contact;`

Signaling System 7 Trace Command

The Signaling System 7 (SS7) trace command performs a trace of a CIC for a specific trunk.

Command Types Start and Stop

Examples `start ss7-trace cic=1-2; tgn-id=1; file-prefix=tgn-1;`
`stop ss7-trace tgn-id=1; file-name=tgn-1_20030826110057;`

Upon successful completion of this command a trace file name is returned. Trace file name has the format <file-prefix>-<time stamp>. Traces files are stored in /opt/OptiCall/CA146/mdltrace directory.

Traces can be started by specifying the time duration for which they can be active. By default all traces are active for 10 minutes.

Upon successful completion of this command a trace file name is returned. The trace file name format is <file-prefix>_<time stamp>. Trace report files are stored in /opt/OptiCall/CA146/mdltrace directory. Trace files must be converted using the mtv.sh script:

```
cd /opt/OptiCall/CA146/bin ./mtv.sh <trace-file-name>_<timestamp>.btr
```

See the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide* for more information on using the mtv.sh script.

Status Update Processor Command

The Status Update Processor (SUP) Configuration (sup-config) table stores configurable values used by the SUP process to poll various components on the CA/FS. Each value is used to modify the SUP so that the collection of statuses is least intrusive depending on the size of the Softswitch (number of media gateways, trunk groups, and terminations). Most of the values are used for performance tuning.


Note

This table is initially provisioned with default values at installation. During upgrades the values in these tables are not maintained.

Table Name: SUP-CONFIG

Table Containment Area: OAMP

Command Types Show and change

Examples

```
show sup-config
change sup-config type= refresh-rate; value=600
```

Usage Guidelines

Primary Key Token(s): type
Change Rules: None

Syntax Description

The following tokens may be used for the status update processor command:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- **TYPE**—Identifies the configurable property of the SUP process to change or show. VARCHAR: 1–64 ASCII characters. Mandatory. Permitted values are:
 - **REFRESH-RATE**—Specifies the interval in seconds between each collection period in seconds. The value must be greater than 30 seconds.
 - **PRIORITY**—Specifies the inner priority of the Collection Thread. The value can range from 1 to 10 and the default value is 5. Modifying this value has a minor effect in changing the CPU utilization of the SUP.
 - **SUBTERM-MGW-BLOCK**—Specifies the block of subterms within a gateway to retrieve and update at a time. Default value is 5 subterm blocks at a time.
 - **SUBTERM-BLOCK-PAUSE**—Specifies the time in milliseconds to pause between each subterm block from each subterm-mgw-block retrieved. The default value is 9000 milliseconds (9 seconds).
 - **SUBTERM-STATUS-PAUSE**—Specifies the time in milliseconds to pause between each bulk subterm status command. The default value is 0 milliseconds.
 - **TRUNKTERM-TG-BLOCK**—Specifies the block of trunk terms within a trunk group to retrieve and update at a time. Default value is 5 trunk term blocks at a time.
 - **TRUNKTERM-BLOCK-PAUSE**—Specifies the time in milliseconds to pause between each trunk term block for each trunkterm-tg-block retrieved. The default value is 9000 milliseconds (9 seconds).
 - **TRUNKTERM-STATUS-PAUSE**—Specifies the time in milliseconds to pause between each bulk trunk term status command. The default value is 0 milliseconds.
 - **TRUNKTERM-RANGE-BLOCK**—Specifies the range of CICs to retrieve on each bulk trunk term status. The default value is 1000 CICs per query.
 - **TRUNKTERM-RANGE-PAUSE**—Specifies the time in milliseconds to pause between each block of the trunkterm-range-block retrieved. The default value is 20000 milliseconds (20 seconds).

- **VALUE**—Identifies the values of the configurable property specified in the **TYPE** token.
VARCHAR: 1–64 ASCII characters. Optional.

Stream Control Transmission Protocol Association Control and Status Commands

This section details the status and control commands for the Stream Control Transmission Protocol (SCTP) Association table. Use the control command to control an SCTP out of service. The status command checks the status of an SCTP association.

Command Types

Control and status

Examples

```
control sctp-assoc id=sctpassoc1; target-state=OOS
status sctp-assoc id=sctpassoc1;
```

Syntax Description

The following tokens may be used with the SCTP status and control commands:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes.
CHAR(1): Y/N (Default = N).
 - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- **MODE**—Specifies the control mode. **VARCHAR(6)**: 1–6 ASCII characters. The only permitted value is **FORCED**.
 - **Forced**—immediately tears down all calls.

Trunk Group Status and Control Commands

This section describes the status and control commands for trunk groups.

Command Types

Status and control

Examples

The following command shows how to display the status of one trunk group id:

```
status trunk-grp id=2;
```

Reply Example:

```

RESULT -> ADM configure result in success
REASON -> ADM executed successful
ADMIN STATE -> ADMIN_INS
OPER STATE -> Trunk group in-service
TGN ID -> 2

```

Table 1-2 lists the administrative states the system can return.

Table 1-2 Returnable Administrative States

State	Definition
ADMIN-INS	In Service.
ADMIN-OOS	Out of Service.
ADMIN-MAINT	Maintenance Mode.
ADMIN-OOS-Pending	Transitioning to Out of Service.
ADMIN-MAINT-Pending	Transitioning to Maintenance Mode.
ACL	Congestion is at level 1.
ACL	Congestion is at level 2.
ACL	Congestion is at level 3.
TFC	Congestion is at level 1.
TFC	Congestion is at level 2.
TFC	Congestion is at level 3.

See the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide* for returnable operating states.

Examples

The following command shows how to control one trunk group id:

```
control trunk-grp tgn-id=2; mode=forced; target-state=INS;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```

INITIAL STATE -> ADMIN_OOS
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
TGN ID -> 2

```



Caution

To control an ISDN trunk in-service, the media gateway must be in-service.

Usage Guidelines

The administrative target-state MAINT is for ISDN trunk groups only.

Syntax Description

The following token may be used with the trunk group commands:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).

**Caution**

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.

The following tokens may be used with the trunk group status and control commands:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- MODE—Valid for the control command. Specifies whether shutdown is graceful or forced. VARCHAR(8): 1–8 ASCII characters. Permitted values are:
 - GRACEFUL—Allow applicable processes and components to complete all activity before shutting down.
 - FORCED—All applicable processes and components terminate immediately, including calls.

Subscriber Termination Commands

This section describes the status and control commands for subscriber terminations. Either a range of subscribers can be specified (using *@mgw-id for the ID parameter), or a single subscriber can be specified (for example: sub-ctx1@Cisco.com).

Status Command

This section describes the subscriber termination status command.

Command Types

Status

Examples

The following command shows how to display the status for one subscriber termination:

```
status subscriber-termination id=ubr204_1;
```

Reply Example:

```
RESULT -> ADM configure result in success
REASON -> ADM executed successful
ADMIN STATE -> ADMIN_INS
OPER STATE -> Termination is idle
SUBSCRIBER ID -> ubr204_1
FAULT REASON -> No fault reason available
```

Table 1-3 lists the administrative states the system can return.

Table 1-3 Returnable Administrative States

State	Definition
ADMIN-UEQP	Unequipped.
ADMIN-INS	In Service.
ADMIN-OOS	Out of Service.
ADMIN-MAINT	Maintenance Mode.
ADMIN-OOS-Pending	Transitioning to Out of Service.
ADMIN-MAINT-Pending	Transitioning to Maintenance Mode.

Show the status for all subscriber terminations on a particular gateway using the following command:

```
status subscriber-termination id=@ubr235;
```

Reply Example:

```
SUBSCRIBER DN -> ubr235_1
ADMIN STATE -> ADMIN_UEQP
OPER STATE -> Termination is unequipped
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAULT REASON -> No fault reason available
```

```
SUBSCRIBER DN -> ubr235_2
ADMIN STATE -> ADMIN_UEQP
OPER STATE -> Termination is unequipped
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAULT REASON -> No fault reason available
```

Reply : Success:

Syntax Description

The following token may be used with the subscriber termination status command:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).



Caution

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.

The following tokens may be used with the subscriber termination status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.

- N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- OPER-STATE—Operating state. Expands the range of useful information returned by the status subscriber-termination command. Permitted values are:
 - FA—Faulty
 - NF—Not faulty
 - IDLE—Termination idle
 - LBLK—Trunk local blocked
 - RBLK—Trunk remote blocked
 - ACTIVE—Termination active
 - DOWN—Termination down
 - TERM-FA—Termination fault
 - TEMP-DOWN—Termination temporarily down
 - UNREACH—Termination unreachable
 - INT-MAINT—Termination internal maintenance
 - UEQP—Termination unequipped
 - ALL—All states, same as executing command without oper-state token

**Note**

The values for the oper-state token are not the same as the operational status responses returned for the command.

The following command example returns only those subscriber terminations that are FA (if any):

```
status subscriber-termination id=*@ubr235; oper-state=FA;
```

- SOURCE—Source. The source token specifies whether to query the Call Agent or the EMS for status information. It is an optional token. Permitted values are:
 - EMS (Default)—Query the local EMS database for most current status.
 - AGENT—Query the remote Call Agent database for most current status.

The following command example returns the current status of the Call Agent:

```
status subscriber-termination id=*@ubr235; source=AGENT;
```

Control Command

This section describes how to control subscriber-terminations on a particular gateway. To control a subscriber termination to the unequipped or equipped state, use the equip or unequip commands.

Command Types

Control

Examples

```
control subscriber-termination id=*@c3810_167; mode=forced; target-state=INS;
```

Reply Example:

```
Reply : Success: CLI change successful

ID -> c3810_167
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
```

Control all subscriber-terminations on a particular gateway using the following command:

```
control subscriber-termination id=*@ubr235; mode=forced; target-state=MAINT
```

Reply Example:

```
Reply : Success: CLI change successful

ID -> ubr235
REASON -> ADM executed successful
RESULT -> ADM configure result in success
REQUEST STATE -> ADMIN_MAINT
RESULT STATE -> ADMIN_MAINT
FAIL REASON -> ADM found no failure
```

Syntax Description

The following tokens may be used with the subscriber termination control command:

- **WAIT (Release 4.5)**—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes.
CHAR(1): Y/N (Default = N).
 - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Equip Command

The equip command changes the administrative state of terminations that are in the UEQP state to OOS state. It ignores the terminations in the states INS, MAINT, or OOS.

Use the equip command or the control trunk-grp command to change the termination state for a subscriber to an ISDN trunk. The control trunk-grp command changes all trunks in the specified trunk group to the specified state. For trunk types other than ISDN, use the equip command to set the subscriber termination state. Thereafter, to change the termination state, use the control command.

A subscriber termination state must set to unequipped before it can be deleted.

You cannot use the control command to change a termination state to UEQP. Furthermore, you cannot use the control command to change the state of any subscriber termination that is already in the UEQP state.

For example, consider a case in which 24 CICs in a trunk group are in the following initial states:

- CICs 1–10 in OOS state

- CICs 11–15 in UEQP state
- CICs 16–24 in MAINT state

For this case, issuing the control, equip, or unequip commands would affect the initial state of the CICs as follows:

- If a control command is used with target-state = ins, the final states of all the CICs are:
 - CICs 1–10 in INS state
 - CICs 11–15 in UEQP state
 - CICs 16–24 in INS state
- If an equip command is applied to the CICs in the initial states, the final states of all the CICs are:
 - CICs 1–10 in OOS state
 - CICs 11–15 in OOS state
 - CICs 16–24 in MAINT state
- If an unequip command is applied to the CICs in the initial states, the final states of the CICs are:
 - CICs 1–10 in UEQP state
 - CICs 11–15 in UEQP state
 - CICs 16–24 in MAINT state

Command Types

Equip

Examples

```
equip subscriber-termination id=97_8@ipclab.cisco.com;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```
ID -> Subscriber ID -> 97_8@ipclab.cisco.com
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAIL REASON -> ADM found no failure
```

Syntax Description

The following token may be used with the equip command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Unequip Command

The `unequip` command changes the administrative state of subscriber terminations that are in OOS state into UEQP state. It ignores the terminations in the states: INS, MAINT, or UEQP.

Command Types

Unequip

Examples

```
unequip subscriber-termination id=97_8@ipclab.cisco.com;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```
ID -> Subscriber ID -> 97_8@ipclab.cisco.com
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAIL REASON -> ADM found no failure
FAIL REASON -> ADM found no failure
```

Subsystem Status and Control Commands

This section describes the status and control commands for the Subsystem table. Use the status command to display the state of a subsystem. Use the control command to control a subsystem out of service in forced mode.

Command Types

Status and control

Examples

```
status subsystem id=SSN1;
control subsystem id=SSN1; OPC-ID=dallas-pc; target-state=OOS; mode=FORCED;
```

Syntax Description

The following token may be used with the subsystem status and control commands:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. **CHAR(1): Y/N** (Default = N).
 - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Subsystem Group Status and Control Commands (Release 4.5)

This section describes the status and control commands for the Subsystem Group table. Use the status command to display the state of a subsystem group. Use the control command to control a subsystem out of service in forced mode.

Command Types

Status and control

Examples

```
status subsystem-grp id=CNAM
```

The following command controls one system-OPC combination out of service:

```
control subsystem-grp id=SSN1; OPC-ID=dallas-pc; target-state=OOS; mode=FORCED;
```



Note

If you have controlled one system in a group OOS, and the group is controlled OOS then back to INS, all subsystems (including the one system originally controlled OOS) are returned to INS.

The following command controls all subsystem-OPC combinations out-of-service. If a subsystem-OPC combination is taken out-of-service individually, the state of the subsystem group is in-service while individual members of the group are out-of-service.

```
control subsystem-grp id=CNAM; mode=forced; target_state=UOS;
```

Syntax Description

The following token may be used with the subsystem group status and control commands:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Trunk Termination Status and Control Commands

This section describes the status and control commands for trunk terminations. Either a range (for example, cic=1–24;) or a single value (for example, cic=1;) for the CIC parameter can be specified for the status and control of trunk terminations.

Status Command

This command can be executed for one CIC (for example, cic=1;), a range of CICs (for example, cic=1–12;) or for all CICs (cic=all;).

Command Types

Status

Examples

```
status trunk-termination tgn-id=2; cic=8;
```

Reply Example:

Reply : Success:

```
RESULT -> ADM configure result in success
REASON -> ADM executed successful
TGN ID -> 2
CIC -> 8
TERM ADMIN STATE -> ADMIN_INS
TERM OPER STATE -> Termination is idle
TERM REASON -> No fault reason available
TRUNK STATIC STATE -> ACTV
TRUNK DYNAMIC STATE -> TRNS
TRUNK REASON -> NON_FAULTY
```

The following command returns only those trunk terminations that are in administrative state OOS (if any), and operating state IDLE (if any):

```
status trunk-termination tgn-id=12; cic=1-1000; admin-state=OOS; oper-state=idle
```

[Table 1-4](#) lists the administrative states the system can return for the *term admin state* response.

Table 1-4 Returnable Administrative States

State	Definition
ADMIN-UNEQP	Unequipped.
ADMIN-INS	In Service.
ADMIN-OOS	Out of Service.
ADMIN-MAINT	Maintenance Mode.
ADMIN-OOS-Pending	Transitioning to Out of Service.
ADMIN-MAINT-Pending	Transitioning to Maintenance Mode.
ADMIN-NULL	Resource does not exist.

Syntax Description

The following tokens may be used with the trunk termination status command:

- Administrative State (admin-state). Permitted values are:
 - UEQP: Unequipped; resource is not commissioned. Resource not registered.
 - OOS: Termination was manually controlled out of service.
 - INS: Termination was manually controlled in service, but operationally may be available or unavailable.
 - OOS-PENDING: Termination was manually controlled out of service with mode graceful, termination is still involved in a call.
 - MAINT: Termination in maintenance mode, can run diagnostic commands.
 - MAINT-PENDING: Termination was manually controlled to MAINT state, but termination is still involved in call.

- ALL: Return all possible states.
- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. Permitted values are:
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N (Default)—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

The following token may be used with the trunk termination status command:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).



Caution

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.
- Operating State (oper-state). Valid values are:
 - FA—Includes FAULTY, UNREACH, TEMP-DOWN, and DOWN.
 - FAULTY—The MGCP endpoint returned a permanent error code.
 - UNREACH—The MGCP endpoint was declared as not reachable. This indicates gateway connectivity problems.
 - TEMP-DOWN—The MGCP endpoint is temporarily down.
 - DOWN—MGCP endpoint is down because GW termination has sent RSIP-down message.
 - NF—Includes INT-MAINT, IDLE, BUSY, and ACTIVE.
 - INT-MAINT—Internal error recovery is in progress.
 - IDLE—Termination is not involved in a call, but is available.
 - BUSY—Termination is involved in transient call.
 - ACTIVE—Termination is involved in stable call.
 - UEQP—Termination is not equipped.
 - ALL—Returns all possible operational states.

The following command example returns only those trunk terminations that are FA (if any):

```
status trunk-termination tgn-id=12; cic=ALL; oper-state=FA;
```

- Static State (static-state). Valid values are:
 - UEQP—Unequipped resource is not commissioned. Resource is not registered.
 - LBLK—Termination is locally blocked: either manually taken OOS/MAINT (block reason can be MANUAL-OOS, MAINT-OOS), or automatically went out of service (see block-reason: TERM-FAULT, SIG-FAULT).
 - RBLK—Termination is remotely blocked (blocked by remote side).
 - ACTV—Available.

- All—Returns all possible static states.

The following command example returns only those terminations that are locally blocked (if any):

```
status trunk-termination tgn-id=101; cic=1-24; static-state=lblk;l
```

- Dynamic State (dynamic-state). Valid values are:
 - IBSY—Trunk-termination is involved in an incoming active call.
 - OBSY—Trunk-termination is involved in an outgoing active call.
 - TRNS—Transient maintenance state (sent maintenance signaling message and waiting for response).
 - IDLE—Termination is not involved in a call.
 - IBSY-TRNS—Termination is involved in a transient call (for example, waiting to send first backward signaling message, such as ACM/ALERTING).
 - OBSY-TRNS—Termination is involved in a transient call (for example, waiting to receive first backward signaling message, such as ACM/ALERTING).
 - ALL—All possible dynamic states.

The following command example returns only those terminations that are idle (if any):

```
status trunk-termination tgn-id=101; cic=1-24; dynamic-state=idle;
```

- Off-normal State (off-normal). Valid values are:
 - Yes—Return all terminations in off-normal state.
 - No—Return all terminations in normal state.

The following command example returns only those terminations in an off-normal state (if any):

```
status trunk-termination tgn-id=101; cic=1-24; off-normal=yes;
```

A termination is in an off-normal state when it is *not* in one of the state combinations shown in [Table 1-5](#).

- Source (source)—specifies whether to query the Call Agent or the EMS, for status information. It is an optional token. Valid values are:
 - EMS (Default)—Query the local EMS database for the most current status.
 - AGENT—Query the remote Call Agent database for the most current status.

The following command example returns the current status of the Call Agent:

```
status trunk-termination tgn-id=101; cic=1-24; source=AGENT;
```

Table 1-5 Valid Normal Trunk Termination States

State/Token	ADMIN-STATE	OPER-STATE	STATIC-STATE	DYNAMIC-STATE
UNEQP	UNEQP	ANY	UEQP	IDLE
MANUALLY OOS	OOS	ANY	LBLK	IDLE
MANUALLY MAIN	MAINT	IDLE	LBLK	IDLE
IDLE	INS	IDLE	ACTV	IDLE
ACTIVE INCOMING	INS	IDLE	ACTV	IDLE
ACTIVE OUTGOING	INS	ACTIVE	ACTV	OBSY

Table 1-5 Valid Normal Trunk Termination States (continued)

State/Token	ADMIN-STATE	OPER-STATE	STATIC-STATE	DYNAMIC-STATE
TRANSIENT INCOMING	INS	ACTIVE	ACTV	IBY-TRNS
TRANSIENT OUTGOING	INS	BUSY	ACTV	OBSY-TRNS

The following command example (**status tt**) returns current status in a tabular format.

```
status tt tgn-id=994; cic=all
```

Reply Example (column headings will not appear on screen):

TGN ID	CIC	ADMIN STATE	OPER STATE	STATIC STATE	DYNAMIC STATE	REASON
994	1	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	2	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	3	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	4	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	5	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	6	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	7	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	8	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	9	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	10	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	11	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	12	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	13	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	14	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	15	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	16	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	17	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	18	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	19	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	20	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	21	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	22	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	23	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY
994	24	ADMIN_INS	TERM_ACTIVE_IDLE	ACTV	IDLE	NON_FAULTY

Reply : Success:

Control Command

This section describes how to control a trunk termination.

Command Types

Control

Examples

The following command controls one trunk termination into OOS.

```
control trunk-termination tgn-id=22; cic=1; target-state=OOS; mode=forced;
```

Reply Example:

Reply : Success: CLI change successful

```
TGN ID -> 22
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 1
FAIL REASON -> ADM found no failure
REQUEST STATE -> ADMIN_OOS
RESULT STATE -> ADMIN_OOS
```

The following command controls all trunk terminations for a particular CIC or group of CICs to OOS:

```
control trunk-termination tgn-id=17; cic=1-23; target-state=oos; mode=forced;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED ISDN-TRUNK-GROUP -> 17
INIT STATE -> ADMIN-OOS
FINAL STATE -> ADMIN-OOS
```

Syntax Description

The following token may be used with the trunk termination control command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Reset Command

This command clears all manual and blocked states as well as any active/transient calls on a trunk termination, with the exception of SS7 trunk terminations. It brings a trunk into INS mode.

Required Parameters:

- tgn-id: The trunk group ID to be reset (a number).
- CIC: Circuit Identification Code (CIC) to be reset. All, a range, or only one CIC can be reset.

Examples

The following command resets a single CIC:

```
reset trunk-termination tgn-id=22; cic=1
```

Reply Example:

Reply : Success:

```
TGN ID -> 13
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 24
FAIL REASON -> ADM found no failure
```

The following command resets a range of CICs:

```
reset trunk-termination tgn-id=13; cic=1-6;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED -> reset trunk-termination
```

The following command resets all CICs:

```
reset trunk-termination tgn-id=13; cic=all;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED -> reset trunk-termination
```

Equip Command

The equip command changes the administrative state of terminations that are in the UEQP state to OOS state. It ignores the terminations in the states: INS, MAINT, or OOS.

Use the equip command or the control trunk-grp command to change the termination state for a subscriber to an ISDN trunk. The control trunk-grp command changes all trunks in the specified trunk group to the specified state. For trunk types other than ISDN, use the equip command to set the subscriber termination state. Thereafter, to change the termination state, use the control command.

A subscriber termination state must set to unequipped before it can be deleted.

You cannot use the control command to change a termination state to UEQP. Furthermore, you cannot use the control command to change the state of any subscriber termination that is already in the UEQP state.

For example, consider a case in which 24 CICs in a trunk group are in the following initial states:

- CICs 1–10 in OOS state
- CICs 11–15 in UEQP state
- CICs 16–24 in MAINT state

For this case, issuing the control, equip, or unequip commands would affect the initial state of the CICs as follows:

- If a control command is used with target-state = ins, the final states of all the CICs are:
 - CICs 1–10 in INS state
 - CICs 11–15 in UEQP state
 - CICs 16–24 in INS state
- If an equip command is applied to the CICs in the initial states, the final states of all the CICs are:
 - CICs 1–10 in OOS state

- CICs 11–15 in OOS state
- CICs 16–24 in MAINT state
- If an unequip command is applied to the CICs in the initial states, the final states of the CICs are:
 - CICs 1–10 in UEQP state
 - CICs 11–15 in UEQP state
 - CICs 16–24 in MAINT state

Command Types

Equip

Examples

Use the following command to change the termination administrative state to EQP:

```
equip trunk-termination tgn-id=13; cic=all;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```
TGN ID -> 13
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 24
FAIL REASON -> ADM found no failure
```

Syntax Description

The following token may be used with the trunk termination equip command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
 - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
 - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

Unequip Command

The unequip command changes the administrative state of terminations that are in OOS state into UEQP state. It ignores the terminations in the states: INS, MAINT, or UEQP.

Command Types

Unequip

Examples

```
unequip trunk-termination tgn-id=13; cic=all;
```

Reply Example:


```
Reply : Success: CLI change successful

TGN ID -> 13
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 24
```

Diagnostic Tests

This section describes diagnostic tests that can be performed on media gateways, subscriber terminations, and trunk terminations. SS7 COT, CVM, and CQM tests must be performed while in service. All other tests require the MAINT state for testing.

Use the following command example to force a media gateway into the MAINT state:

```
control mgw id=c2421.65; mode=forced; target-state=maint;
```

Reply Example:

```
Reply : Success: CLI change successful

MGW ID -> c2421.65
INITIAL STATE -> ADMIN_INS
REQUEST STATE -> ADMIN_MAINT
RESULT STATE -> ADMIN_MAINT
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
```

Media Gateway Tests

This section describes the tests that can be performed on media gateways. The gateway must be in the MAINT state.

Test Menu

This section describes how to display the Test Menu.

Command Types

diag

Examples

```
diag mgw;
```

Reply Example:

```
Reply: Diagnostic MGW Menu.
===
(1) MGW Network Connectivity Test
(2) MGW MGCP Connectivity Test
(3) ALL
```

**Note**

Test #1 tests if there is a path to the device (ping).
 Test #2 tests if MGCP has access to the device.
 Test #3 performs tests 1 and 2.

Tests

This section describes how to perform a specific test.

Command Types

diag

Examples

```
diag mgw id=ubr-03; test=1;
```

Reply Example:

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-NETW-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

```
diag mgw id=ubr-03; test=2;
```

Reply Example:

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

```
diag mgw id=ubr-03; test=3;
```

Reply Example:

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-NETW-CONNECTIVITY-TEST
TEST-DURATION -> 11
RESULT -> TEST-SUCCESS
REASON -> PASSED
```

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

Subscriber Termination Tests

This section describes the tests that can be performed on subscriber terminations. All terminations must be in the MAINT state.

Test Menu

This section describes how to display the Test Menu.

Command Types

diag

Examples

```
diag subscriber-termination;
```

Reply Example:

```
Reply: Diagnostic Subscriber Menu.
===
(1) Subscriber MGCP Connectivity Test
(2) Subscriber Termination Connection Test
(3) Subscriber Termination Ring Test
(4) ALL
```



Note

Test #1 tests if MGCP has access to the termination.
 Test #2 tests if there is a path to the device (ping).
 Test #3 tests if the Subscriber can be rung. The Ring parameter must be specified in seconds for this test. The default is 5 seconds.
 Test #4 performs tests 1 through 3.

Tests

This section describes how to perform a specific test.

Command Types

diag

Examples

```
diag subscriber-termination id=sub2-ctx2; test=1;
```

Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub2-ctx2
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 10
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag subscriber-termination id=sub-ubr3-1@cisco.com; test=2;
```

Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub-ubr3-1@Cisco.com
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 55
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag subscriber-termination id=sub-ubr3-1@cisco.com; test=3; ring-duration=10;
```

Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub-ubr3-1@Cisco.com
TEST-TYPE -> ADM-TERM-RING-TEST
TEST-DURATION -> 9989
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

```
diag subscriber-termination id=sub-ubr3-1@cisco.com; test=3; ring-duration=10;
```

•



Note

RING-DURATION—Specifies the ring duration in seconds. INTEGER(2): 1–40 (Default = 10). (Release 4.5.1)

Ring-duration values are 0–999 (Default = 5). Maximum ring time is 30 seconds regardless of whether the duration is set higher than or equal to 31 .

Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub-ubr3-1@Cisco.com
TEST-TYPE -> ADM-TERM-RING-TEST
TEST-DURATION -> 9896
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

Trunk Termination Tests

This section describes diagnostic tests that can be performed on trunk terminations. All must be in the MAINT state for testing. Trunk termination tests are done by trunk type.

SS7 Trunk Termination Tests

This section describes the tests that can be performed on SS7 trunk terminations.

Test Menu

This section describes how to display the Test Menu.

**Note**

Set COT, CVM, and CQM on the terminating gateway or switch to perform these tests. The terminating gateway or switch must be INS. Otherwise, the test or tests will fail. COT must also be set in the SS7 trunk-grp-profile to run COT test.

Examples

```
diag ss7-trunk-termination tgn-ID=50079; cic=1
```

Reply Example:

Reply: Diagnostic SS7 Trunk Group Menu.

===

- (1) SS7 MGCP Connectivity Test
- (2) SS7 Termination Connection Test
- (3) SS7 COT Test
- (4) SS7 CQM Test
- (5) SS7 CVT Test
- (6) SS7 CIC Audit
- (7) ALL

**Note**

Test #1 tests if MGCP has access to the SS7 trunk termination.

Test #2 tests if there is a path to the device (ping).

Test #3 tests the integrity of the SS7 Bearer Path.

Test #4 queries the SS7 circuit (or group of circuits) status. A range of CICs can be specified (to a maximum of twenty four). Both remote and local trunk states are displayed in the results.

Test #5 tests to ensure that each end of the circuit has sufficient and consistent information for using the circuit in call connections. CLLI names are included.

Test #6 performs CIC audit.

Test #6 performs tests 1 through 6.

CQM Responses

Table 1-6 lists the responses that can be returned for the CQM test.

Table 1-6 CQM Responses

Response	Description
CS_TRANSIENT	Transient
CS_UNEQUIPPED	Unequipped
CS_IC_BUSY	Incoming Busy
CS_IC_BUSY_LOCBLOC	Incoming Busy and Locally Maintenance Blocked
CS_IC_BUSY_REMBLOC	Incoming Busy and Remotely Maintenance Blocked
CS_IC_BUSY_BOTH_BLOC	Incoming Busy and Remotely and Locally Maintenance Blocked
CS_OG_BUSY	Outgoing Busy
CS_OG_BUSY_LOCBLOC	Outgoing Busy and Locally Maintenance Blocked
CS_OG_BUSY_REMBLOC	Outgoing Busy and Remotely Maintenance Blocked

Table 1-6 CQM Responses (continued)

Response	Description
CS_OG_BUSY_BOTH_BLOC	Outgoing Busy and Remotely and Locally Maintenance Blocked
CS_IDLE	Idle
CS_IDLE_LOCBLOC	Idle and Locally Maintenance Blocked
CS_IDLE_REMBLOC	Idle and Remotely maintenance blocked
CS_IDLE_BOTH_BLOC	Idle and Remotely and Locally Maintenance Blocked
CS_HW_LOCBLOC	Locally Hardware Blocked
CS_HW_LOCBLOC_LOCBLOC	Locally Hardware and Locally Maintenance Blocked
CS_HW_LOCBLOC_REMBLOC	Locally Hardware and Remotely Maintenance Blocked
CS_HW_LOCBLOC_BOTHBLOC	Locally Hardware and Remotely and Locally Maintenance Blocked
CS_HW_REMBLOC	Remotely Hardware Blocked
CS_HW_REMBLOC_LOCBLOC	Remotely Hardware and Locally Maintenance Blocked
CS_HW_REMBLOC_REMBLOC	Remotely Hardware and Remotely Maintenance Blocked
CS_HW_REMBLOC_BOTHBLOC	Remotely Hardware and Remotely and Locally Maintenance Blocked
CS_HW_BOTHBLOC	Remotely and Locally Hardware Blocked
CS_HW_BOTHBLOC_LOCBLOC	Remotely and Locally Hardware and Locally Maintenance Blocked
CS_HW_BOTHBLOC_REMBLOC	Remotely and Locally Hardware and Remotely Maintenance Blocked
CS_HW_BOTHBLOC_BOTHBLOC	Remotely and Locally Hardware and Remotely and Locally Maintenance Blocked

Tests

This section describes how to perform specific tests.

Command Types

Diag

Examples

```
diag ss7-trunk-termination tgn-id=103; cic=13; test=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 103
CIC -> 13
```

```
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag ss7-trunk-termination tgn-id=103; cic=13; test=2;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 103
CIC -> 13
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 33
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag ss7-trunk-termination tgn-id=103; cic=14; test=3;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 103
CIC -> 14
TEST-TYPE -> ADM-SS7-COT-TEST
TEST-DURATION -> 0
RESULT -> TEST-FAILURE
REASON -> ADM-MAINT-STATE-REQUIRED
Reply: Diagnostic command executed.
```

```
diag ss7-trunk-termination tgn-id=2;cic=1-24;test=4
```

Reply Example:

Reply : Success:

```
TGN ID -> 2
START CIC -> 1
END CIC -> 24
TEST TYPE -> ADM running SS7 circuit query message test
TEST DURATION -> 0
RESULT -> ADM ran test successsfully
REASON -> CQM test pass
CIC COUNT -> 24
CIC STATES ->
```

Remote State	Local State
CIC 1 -> CS_IDLE	ACTV IDLE
CIC 2 -> CS_IDLE	ACTV IDLE
CIC 3 -> CS_IDLE	ACTV IDLE
CIC 4 -> CS_IDLE	ACTV IDLE
CIC 5 -> CS_IDLE	ACTV IDLE
CIC 6 -> CS_IDLE	ACTV IDLE
CIC 7 -> CS_IDLE	ACTV IDLE
CIC 8 -> CS_IDLE	ACTV IDLE
CIC 9 -> CS_IDLE	ACTV IDLE
CIC 10 -> CS_IDLE	ACTV IDLE
CIC 11 -> CS_IDLE	ACTV IDLE

```

CIC 12 -> CS_IDLE   ACTV   IDLE
CIC 13 -> CS_IDLE   ACTV   IDLE
CIC 14 -> CS_IDLE   ACTV   IDLE
CIC 15 -> CS_IDLE   ACTV   IDLE
CIC 16 -> CS_IDLE   ACTV   IDLE
CIC 17 -> CS_IDLE   ACTV   IDLE
CIC 18 -> CS_IDLE   ACTV   IDLE
CIC 19 -> CS_IDLE   ACTV   IDLE
CIC 20 -> CS_IDLE   ACTV   IDLE
CIC 21 -> CS_IDLE   ACTV   IDLE
CIC 22 -> CS_IDLE   ACTV   IDLE
CIC 23 -> CS_IDLE   ACTV   IDLE
CIC 24 -> CS_IDLE   ACTV   IDLE

```

```
diag ss7-trunk-termination tgn-id=2;cic=1;test=5;
```

Reply Example:

Reply : Success:

```

TGN ID -> 2
START CIC -> 1
END CIC -> 1
TEST TYPE -> ADM running SS7 circuit validation test
TEST DURATION -> 0
RESULT -> ADM ran test successfully
REASON -> CVT test pass
CLLI -> DALLTXRCDN5

```

ISDN Trunk Termination Tests

This section describes the tests that can be performed on ISDN trunk terminations.

Test Menu

This section describes how to display the Test Menu.

Examples

```
diag isdn-trunk-termination tgn-id=17; cic=1;
```

Reply Example:

```

Reply: Diagnostic ISDN Trunk Group Menu.
===
(1) ISDN MGCP Connectivity Test
(2) ISDN Termination Connection Test
(3) ALL

```



Note

Test #1 tests if MGCP has access to the ISDN termination.
 Test #2 tests if there is a path to the device (ping).
 Test #3 performs tests 1 and 2.

Tests

This section describes how to perform a specific test.

Command Types

Diag

Examples

```
diag isdn-trunk-termination test=1; tgn-id=17; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 17
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag isdn-trunk-termination test=2; tgn-id=17; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 17
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

CAS Trunk Termination Tests

This section describes the tests that can be performed on CAS trunk terminations.

Test Menu

This section describes how to display the Test Menu.

Examples

```
diag cas-trunk-termination; tgn-id=64; cic=1;
```

Reply Example:

```
Reply: Diagnostic CAS Trunk Group Menu.
===
(1) CAS MGCP Connectivity Test
(2) CAS Termination Connection Test
(3) ALL
```



Note

Test #1 tests if MGCP has access to the CAS termination.
 Test #2 tests if there is a path to the device (ping).
 Test #3 performs tests 1 and 2.

Tests

This section describes how to perform a specific test.

Command Types

Diag

Examples

```
diag cas-trunk-termination tgn-id=64;cic=1;test=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag cas-trunk-termination tgn-id=64;cic=1;test=2;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 32
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag cas-trunk-termination tgn-id=64;cic=1;test=3;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 11
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510

TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 32
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

Announcement Trunk Termination Tests

This section describes the tests that can be performed on Announcement trunk terminations.

Test Menu

This section describes how to display the Test Menu.

Examples

```
diag annnc-trunk-termination; tgn-id=13; cic=1
```

Reply Example:

```
Reply: Diagnostic ANC Trunk Group Menu.
===
(1) ANC MGCP Connectivity Test
(2) ANC Termination Connection Test
(3) ALL
```



Note

Test #1 tests if MGCP has access to the ANC termination.
 Test #2 tests if there is a path to the device (ping).
 Test #3 performs tests 1 and 2.

Tests

This section describes how to perform a specific test.

Command Types

Diag

Examples

```
diag annnc-trunk-termination; test=1; tgn-id=13; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag annnc-trunk-termination; test=2; tgn-id=13; cic=1
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 33
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag annnc-trunk-termination; test=3; tgn-id=13; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 11
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
```

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 33
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

Hardware Monitoring

The Hardware Monitor (HMN) subsystem monitors the CPUs, memory consumption, disk, and disk control utilization and returns information and alarms as appropriate.

Command Types

Show, change, control, report, and status



Caution

Show and change and control are obsolete as of Release 4.4.0.

Examples

```
show node node=CA146; service=ssh (Obsoleted as of Release 4.4.0)
change node node=CA146; service=ftp; enable=Y (Obsoleted as of Release 4.4.0)_
```



Caution

Altering node settings after the delivery of a Cisco BTS 10200 Softswitch can create security issues in your network.



Caution

```
control node node=CA146; action=HALT; (Obsoleted as of Release 4.4.0)
```

Modifying nodes are low-level maintenance activities.



Note

After halting a Cisco BTS 10200 Softswitch node, local console access or a power cycle may be required to restart the node.

```
report node node=CA146
status node node=CA146;cpu=y;memory=y;
```

Examples

```
report node node=priems123;
report node;
status node node=priems123;cpu=y;memory=y;
status node;
```

**Note**

The hostname is the only permitted value for the node token.

Usage Guidelines

Primary Key Token(s): None

If the report and status commands are entered with no tokens then the commands are executed on the active EMS.

**Note**

In the Syntax Description, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Syntax Description

* NODE	The logical host name of the target node in the Cisco BTS 10200 Softswitch. This replaces manually telneting to the box. Use only the hostname (priemsxxx) not the application name (for example, CA146).
 Caution For security purposes, Telnet is no longer supported as of Release 4.4.0/1.	
STRING: Hostname in the format: priemsxxx.	
ACTION	Valid only for the control command. The <i>action</i> indicates the type of activity to perform. Both parameters are required. STRING: <i>REBOOT</i> , or <i>HALT</i> , are the only valid actions for this token.
CPU	Valid only for the status and report commands. Specifies whether to generate a report of CPU utilization. STRING: Y/N (Default = Y).
ENABLE (Obsolete as of Release 4.4.0)	Valid only for the change command. Specifies whether to turn a service on (Y), or off (N). STRING: Y/N (Default = Y).
MEMORY	Valid only for the status and report commands. Specifies whether to generate a report of memory utilization. STRING: Y/N (Default = Y).
NETWORK	Valid only for the status and report commands. Specifies whether to generate a report of network utilization. STRING: Y/N (Default = Y).

PROCESS	Valid only for the status and report commands. Specifies whether to generate a report of process utilization. STRING: Y/N (Default = Y).
SERVICE (Obsolete as of Release 4.4.0)	Valid only for the show and change commands. Specifies the standard UNIX service. STRING: any valid UNIX service. Permitted values are: ftp—File Transfer Protocol telnet—Text-based terminal service
	
Caution	For security purposes, Telnet is no longer supported as of Release 4.4.0/1.
	echo—Application space service to verify a remote host discard—Solaris testing facility day—Solaris testing facility time—Solaris testing facility chargen—Solaris testing facility smtp—Solaris mail service finger—UNIX user ID service sunrpc—Solaris Remote Procedure Call service exec—Remote execution service login—BSD remote login service shell—BSD remote shell service printer—Solaris printer services uucp—UNIX-to-UNIX copy service nfs—Network File System service lockd—Remote file locking facility x11—X Window graphical services dtscp—Solaris management services font_service—Solaris character set service http—Hyper-Text Transfer Protocol service
Note	These values must be entered in lowercase.

System Health

The System Health Report (system-health) (SHR) allows a service provider to retrieve the status of various processes within the Cisco BTS 10200 Softswitch.

Command Types

Report

Examples

Use the following command example to run a SHR immediately.

```
report system-health period=720;
```

Syntax Description

PERIOD	The amount of time to collect back to in hours. INTEGER: 1–720 (Default = 24).

The SHR command can be used in conjunction with the command scheduler. Using the command scheduler, the SHR runs at periodic intervals collecting the last 24 hours (configurable) worth of data. Upon initial installation and startup, there is an SHR command already scheduled to execute at midnight every 24 hours.

To schedule multiple SHR command(s) at different times, the command scheduler add command can be issued multiple times:

```
add scheduled-command verb=report; noun=system-health; <recurrence=DAILY>; <start-time=...>;  
<keys=period>; <values=...>
```

Use the following command to remove any scheduled SHR command(s):

```
delete scheduled-command id=NNN
```

To obtain an id, view the list of scheduled commands using the show scheduled command:

```
show scheduled-command verb=report; noun=system-health
```

To reschedule an SHR command at another time, change the recurrence, or change the collection period, use the change command:

```
change scheduled-command id=NNN; <recurrence=DAILY>; <start-time=...>; <keys=period>;  
<values=...>
```




CHAPTER 2

Alarms and Events

Revised: July 24, 2009, OL-3743-42

This chapter describes Cisco BTS 10200 Softswitch alarms and events. This chapter is divided into three parts:

- Alarm or Event Log Command—The Log command is valid for both alarms and events.
- Alarms—Valid alarm commands.
- Events—Valid event commands.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Alarm or Event Log Command

This command is valid for both alarms and events. The Alarm Log command requests a summary report of alarms by severity, type, and start/stop times from the Alarm Log (alarm-log) table. Alarms are events with severities of minor, major, or critical. Substituting Event for Alarm returns a summary report of events by severity, type, and start/stop times from the Event Log (event-log) table.

Table Name: ALARM-LOG or EVENT-LOG

Table Containment Area: OAMP

Command Types

Show

Examples

```
show alarm-log
show event-log
```

Usage Guidelines

Primary Key Token(s): id

Change Rules: None.

Syntax Description

ID (System generated)	Primary key. A unique integer value that identifies the specific event or alarm in the log. INTEGER: 12-digit number.
TYPE	Type of event to show in the alarm summary. Only one type is selectable at a time. VARCHAR(12): 1–12 ASCII characters. Permitted values are: AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined. BILLING (Billing data alarms)—This includes the generation, collection, and retrieval of billing call events. CALLP (Call processing alarms)—Alarm types dealing with the processing of actual call data. CONFIG (Configuration alarms)—Alarm types dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management. DATABASE (Database alarms)—Alarm types dealing with database activity. Includes table download, reading, and writing. MAINTENANCE (Maintenance alarms)—Alarm types dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components. OSS (Operating system services)—Alarm types dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system. SECURITY (Security alarms)—Alarm types dealing with access to the system through both human interfaces and machine interfaces. SIGNALING (Signaling alarms)—Alarm types dealing with protocol stacks such as MGCP and TDM interfaces like SS7. STATISTICS (Statistical alarms)—Alarm types dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data. SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging.
ALARM-STATUS	Status of an alarm. VARCHAR(12): 1–12 ASCII characters. Permitted values are: ON OFF ACKNOWLEDGED IGNORED

AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
END-TIME	Ending time for alarm summary. Enter all 19 ASCII characters as shown. DATE: YYYY-MM-DD HH:MM:SS.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
NUMBER	Numerical identifier of the event to clear or query. NUMERIC: 1–150. NUMERIC: 1–500 (Release 4.5).
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
ORIGIN	Process that originated the alarm, for example: pmg, mga, and so forth. VARCHAR(12): 1–12 ASCII characters.

SEVERITY	Level of alarm or event to show in the summary. VARCHAR(8): 1–8 ASCII characters. Permitted values are: INFO (Information level)—Provides only added data to the general processing of an event report. Selecting Info turns on Info and all the levels above it (Warn, Minor, Major, and Critical). WARNING (Warning level)—Indicates that some potential service degradation is occurring as a result of internal or external processing. At this level, processing is able to continue. Turns on Warn and all the levels above it (Minor, Major, and Critical). MINOR (Minor level)—Indicates that some loss of capacity or availability has occurred. An example is the loss of an Ethernet link or a software outage. Selecting Minor turns on Minor and all the levels above it (Minor, Major, and Critical). MAJOR (Major level)—Indicates a loss of capacity or availability. It refers to a larger loss than Minor or an escalation of some earlier alarm. Selecting Major turns on Major and Critical. CRITICAL (Critical level)—Indicates a catastrophic condition in the system that requires operator attention and potential supervision over the situation. This can be an outage or complete loss of service somewhere in the system. Selecting Critical turns on Critical only.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).
START-TIME	Starting time for alarm summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Alarm events are available for the current and previous calendar days only. Level indicates the minimum level to show in the report summary. DATE: YYYY-MM-DD HH:MM:SS.

Alarm or Event Report Properties

The Report Properties (report-properties) command (formerly Alarm-logsize or Event-logsize) specifies the maximum number of alarm or event entries permitted (up to 30,000) in the Report Properties (report-properties) table. It also specifies the minimum event severity level to be stored in the Event Log.

Table Name: REPORT-PROPERTIES

Table Containment Area: OAMP

Command Types

Show and change

Examples

```
show report-properties;
```

**Note**

The show command, without any tokens, returns all alarm-logsize, event-logsize, and event-level data.

```
change report-properties type=alarm-logsize; value=1234
```

```
change report-properties type=event-logsize; value=5000
```

Usage Guidelines

Primary Key Token(s): None.

Change Rules: None.

Syntax Description

TYPE	Optional for show; mandatory for change. Primary key. Type of alarm or event. VARCHAR(12): 1–12 ASCII characters. Permitted values are: ALARM-LOGSIZE EVENT-LOGSIZE EVENT-LEVEL
VALUE	Optional for show; mandatory for change. Property value. Do not enter commas. VARCHAR(12): 1–12 ASCII characters. For type=alarm-logsize or event-logsize, valid values are 1–30000. For type=event-level, valid values are INFO, WARNING, MINOR, MAJOR, CRITICAL (or the minimum level of events stored in the log).
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).

Alarms

Alarms are a subset of events and indicate a problem with the system.

Alarm

The Alarm (alarm) command shows, clears, and acknowledges specific alarms on specific nodes.

Table Name: ALARM

Table Containment Area: OAMP

Command Types

Show, ack, and clear

Examples

```
show alarm;
clear alarm id=123;
ack alarm id=123;
```

Usage Guidelines

Primary Key Token(s): id

Change Rules: None.

Syntax Description

ID (System generated)	Primary key. A unique integer value that identifies the specific alarm in the log. INTEGER: 12-digit number.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
END-TIME	Ending time for alarm summary. Enter all 19 ASCII characters as shown. DATE: YYYY-MM-DD HH:MM:SS.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.

NUMBER	Numerical identifier of the alarm to clear or query. INTEGER: 1–200.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).
START-TIME	Starting time for alarm summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Alarm events are available for the current and previous calendar days only. Level indicates the minimum level to show in the report summary. DATE: YYYY-MM-DD HH:MM:SS.

Alarm Report

The Alarm Report (alarm-report) command provides the ability to subscribe or unsubscribe to each level and type of alarm report.

Table Containment Area: OAMP

Command Types

Subscribe and unsubscribe



Note

When you subscribe to alarms or events, they take over the screen as they happen, which can interrupt other commands.

Examples

```
subscribe alarm-report severity=major; type=callp,config;
unsubscribe alarm-report severity=major,critical; type=all;
```

Usage Guidelines

Primary Key Token(s): None.

Syntax Description

SEVERITY	Specifies the minimum severity of an alarm report to subscribe to or unsubscribe from. VARCHAR(8): 1–8 ASCII characters. Permitted values are: MINOR (Minor severity)—Indicates that some loss of capacity or availability occurred. An example is the loss of an Ethernet link or a software outage. Selecting Minor turns on Minor and all the levels above it (Minor, Major, and Critical). MAJOR (Major severity)—Indicates a loss of capacity or availability. This is a larger loss than Minor or an escalation of an earlier alarm. Selecting Major turns on Major and Critical. CRITICAL (Critical severity)—Indicates a catastrophic condition in the system that requires operator attention and potential supervision over the situation. This can be an outage or a complete loss of service somewhere in the system. Selecting Critical only turns on Critical. ALL—Turns on all severities.
TYPE	Type of alarm report to subscribe to or unsubscribe from. VARCHAR(12): 1–12 ASCII characters. Permitted values are: AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined. BILLING (Billing alarms)—Alarms dealing with bill data. This includes the generation, collection, and retrieval of billing call events. CALLP (Call processing alarms)—Alarm types dealing with the processing of actual call data. CONFIG (Configuration alarms)—Alarm types dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management. DATABASE (Database alarms)—Alarm types dealing with database activity. Includes table download, reading, and writing. MAINTENANCE (Maintenance alarms)—Alarm types dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components. OSS (Operating System Services)—Alarm types dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system. SECURITY (Security alarms)—Alarm types dealing with access to the system through both human interfaces and machine interfaces. SIGNALING (Signaling alarms)—Alarm types dealing with protocol stacks such as MGCP and TDM interfaces such as SS7. STATISTICS (Statistical alarms)—Alarm types dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data. SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging. ALL—Turns on all of the above.

Events

Cisco BTS 10200 Softswitch events are indications that something has happened with the system.

Event Provisioning

The Event Provisioning (event-prov) command uses the Report Parameters (reportparameters) table to provision threshold and throttling values for any event that can be issued by the system.

Table Name: REPORTPARAMETERS

Table Containment Area: OAMP

Command Types

Show and change

Examples

```
show event-prov type=callp; number=20;
```

**Note**

The show command also displays the descriptive string and the data labels for the specified data words.

```
change event-prov type=callp; number=20; threshold=95; throttle=1;
```

Usage Guidelines

Primary Key Token(s): type, number

Change Rules: None.

Other Rules: Type and number are the only valid tokens for this command. The limit, start-row, display, order, threshold and throttle tokens cannot be used with the show event-prov command—returns the error message “invalid key(s) found.”

Syntax Description

NUMBER	Primary key. Unique instance within the event category. NUMERIC: 1–200.
TYPE	Primary key. Event category. VARCHAR(12): 1–12 ASCII characters. Permitted values are: CALLP (Call processing events)—Events dealing with the processing of actual call data. CONFIG (Configuration events)—Events dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management. DATABASE (Database events)—Events dealing with database activity. Includes table download, reading, and writing. MAINTENANCE (Maintenance events)—Events dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components. OSS (Operating System Services events)—Events dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system. SECURITY (Security events)—Events dealing with access to the system through both human interfaces and machine interfaces. SIGNALING (Signaling events)—Events dealing with protocol stacks such as MGCP and TDM interfaces like SS7. STATISTICS (Statistical events)—Events dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data. BILLING (Billing events)—Events dealing with billing data. This includes the generation, collection, and retrieval of billing call events. AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined. SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.

LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).
THRESHOLD	Mandatory for change. Specifies the maximum number of events, (as identified by its type and number) to be reported for a 30-minute interval. Specifying the value zero establishes no threshold; therefore, every event of the specified type and number would be reported during the 30-minute interval. Specifying the default value of 100 would enable the Cisco BTS 10200 Softswitch to report the first 100 events of the specified type and number during the 30-minute interval but no more until the beginning of the next interval. If both the threshold and throttle parameters are specified, the throttle parameter is applied before the threshold parameter is considered. NUMERIC: 0–100 (Default = 100).
THROTTLE	Mandatory for change. Reporting reduction factor. For any throttle value, <i>n</i>, the system issues only one report for every <i>n</i> event for the specified event. When setting both throttle and threshold, the throttle value is applied before the threshold values. NUMERIC: 0–100 (Default = 0). A throttle set to zero means no throttling.

Event Report

The Event Report (event-report) command provides the ability to view events in a near real-time format by subscribing or unsubscribing to each level and type of event report.

Table Containment Area: OAMP

Command Types

Subscribe and unsubscribe

Examples



Note

```
subscribe event-report severity=info; type=callp;
```

When you subscribe to alarms or events, they take over the screen as they happen, which can interrupt other commands.

```
unsubscribe event-report severity=info, warn; type=callp;
```

Usage Guidelines

Primary Key Token(s): None.

Syntax Description

SEVERITY	Specifies the minimum severity of event report to be subscribed to or unsubscribed from. VARCHAR(8): 1–8 ASCII characters. Permitted values are: INFO (Information severity)—Provides only added data to the general processing of an event report. Selecting Info turns on Info and all the levels above it (Warn, Minor, Major, and Critical). WARNING (Warning severity)—Indicates that some potential service degradation is occurring as a result of internal or external processing. At this level, processing is able to continue. Turns on Warn and all the levels above it (Minor, Major, and Critical). MINOR (Minor severity)—Indicates some loss of capacity or availability has occurred. An example is the loss of an Ethernet link or a software outage. Selecting Minor turns on Minor and all the levels above it (Major and Critical). MAJOR (Major severity)—Indicates a loss of capacity or availability. It refers to a larger loss than Minor or an escalation of some earlier alarm. Selecting Major turns on Major and Critical. CRITICAL (Critical severity)—A catastrophic condition in the system that requires operator attention and potential supervision over the situation. This can be an outage or complete loss of service somewhere in the system. Selecting Critical turns on Critical only. ALL—Turns on all severities.

TYPE	Type of event report to be subscribed to or unsubscribed from. VARCHAR(12): 1–12 ASCII characters. Permitted values are: CALLP (Call processing events)—Events dealing with the processing of actual call data. CONFIG (Configuration events)—Events dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management. DATABASE (Database events)—Events dealing with database activity. Includes table download, reading, and writing. MAINTENANCE (Maintenance events)—Events dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components. OSS (Operating System Services events)—Events dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system. SECURITY (Security events)—Events dealing with access to the system through both human interfaces and machine interfaces. SIGNALING (Signaling events)—Events dealing with protocols stacks such as MGCP and TDM interfaces like SS7. STATISTICS (Statistical events)—Events dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data. BILLING (Billing data events)—This includes the generation, collection and retrieval of billing call events. AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined. SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging. ALL—Report all events.



CHAPTER 3

Audit

Revised: July 24, 2009, OL-3743-42

This chapter describes the types of audit commands available. Note that most audit commands are time intensive. Completion time depends upon the number of entries in the table or database—for example, systems with 50,000+ subscribers may take over 7 hours to do a complete database audit.

Audit Circuit Identification Code

The Audit Circuit Identification Code (CIC) command allows executing a General Remote CIC audit at a scheduled time.

Command Types

Audit

Examples

```
audit all-ss7-cics
```



Note

When entered manually, this command initiates a General Remote CIC audit of the entire system on demand. This command does not provide per-trunk results—its primary use is to be automatically scheduled by the command-scheduled CLI capability. This command does not wait for a general remote CIC audit to be completed before responding. The response occurs as soon as the audit starts. An INFO event is logged when this audit starts and completes. Any unexpected results from this audit are written as WARNings in the alarm log.

Audit Database

The Audit Database command allows users to audit every entry in every table that can be provisioned, or by number of rows in every table.

Command Types Audit

Examples

```
audit database;
audit database type=row-count;
audit database platform-state=ems;
```

Usage Guidelines Primary Key Token(s): None.

Syntax Description	TYPE	Type of audit. VARCHAR(10): 1–10 ASCII characters. Permitted values are: FULL (Default)—Audits the entire table. ROW-COUNT—Audits the table by row count.
	PLATFORM-STATE	State of an active or standby system shared memory database; use to audit an active or standby system shared memory database. VARCHAR(7): 1–7 ASCII characters. Permitted values are: ACTIVE (Default)—System is active (currently running). STANDBY—System is in standby mode. EMS—Audits the active EMS to the standby EMS. Note If platform-state=EMS; the system does a full audit even if type=row-count;

Audit Table Name

The Audit Table Name command is more specific than the Audit Database command in that it audits only the entries in a particular table (whereas table-name (feature) is any provisionable table). You can audit a particular table from the active side or the standby side. The audit can be made more specific by specifying any valid token and its value for that particular table to narrow the search.

Command Types Audit

Examples

```
audit trunk platform-state=active;
audit trunk platform-state=active; tgn-id=42;
audit subscriber id=jer%;
```



Note

The last example shows how to use the percent sign (%) to specify a search range. This example returns any subscriber entries that have an ID field that begins with *jer*.

Usage Guidelines

Primary Key Token(s): None.

There is only one token: PLATFORM-STATE.

Syntax Description	PLATFORM-STATE	State of an active or standby system shared memory database; use to audit an active or standby system shared memory database.
		VARCHAR(7): 1–7 ASCII characters. Permitted values are:
		ACTIVE (Default)—System is active (currently running).
		STANDBY—System is in standby mode.

Audit Table Name



CHAPTER 4

Billing

Revised: July 24, 2009, OL-3743-42

This chapter describes the call detail block (CDB) billing tables, commands, and tokens that the Cisco BTS 10200 Softswitch uses for billing data transfer. These tables, commands, and tokens do not apply to event message (EM) billing.



Caution

Manual manipulation of billing files can cause Billing to fail. Contact Cisco for assistance before manually manipulating any billing file, including clean up.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Billing Account Address

The Billing Account Address (billing-acct-addr) table provisions addresses and polling intervals for billing data transfer. It also provisions the user authorized to transfer the data. Only one billing account address can be set per Cisco BTS 10200 Softswitch.



Note

New Cisco BTS 10200 Softswitches are delivered without a billing account address set.

Table Name: BILLING-ACCT-ADDR

Table Containment Area: OAMP

Command Types

Show and change

Examples

```
show billing-acct-addr;  
change billing-acct-addr; billing-server-addr=billing-server.cisco.com;billing-file-  
prefix=cisco001; billing-server-directory=/export/billing/ftp/inbound; user-name=cisco001;  
password=test; polling-interval=12;
```

Usage Guidelines

Primary Key Token(s): None.

Change Rules: None.

Syntax Description

BILLING-DIRECTORY	Specifies the BDMS directory where the billing files are located. VARCHAR(64): 1–64 ASCII characters.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
BILLING-FILE-PREFIX	Prefix of the filename of a billing-data file at a local office. VARCHAR(10): 1–10 (Default = bil) ASCII characters. VARCHAR(20): 1–20 (Default = bil) characters. (Release 4.4.1) VARCHAR(64): 1–64 (Default = bil) characters. (Release 4.5)
 Caution A hyphen is automatically appended to this field. Do not manually enter a hyphen in this field.	
BILLING-SERVER-ADDR	Mandatory if billing-server-directory is populated. Address of a remote billing center—the IP address or the domain name of a remote billing server. VARCHAR(64): 1–64 ASCII characters in domain format.
BILLING-SERVER-DIRECTORY	Directory at a remote billing center—the directory path to the billing server for billing data files. VARCHAR(64): 1–64 ASCII characters.
DEPOSIT-CONFIRMATION-FILE (Release 4.5)	Specifies whether to send an explicit confirmation file after each CDB file is transferred to the remote billing collection system. CHAR(1): Y/N (Default = N). Y—An empty file with the same name with a suffix of “.done” is appended to the end of the file. N—No file is appended.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.

PASSWORD	Mandatory if billing-server-directory is populated. FTP password on the billing server. VARCHAR(32): 1–32 ASCII characters.
POLLING-INTERVAL	The time in minutes between file transfers of billing information from the BDMS to the billing server. NUMERIC: 1–60 (Default = 15).
SFTP-SUPP (Release 4.4.1)	Specifies whether secure FTP is supported. CHAR(1): Y/N (Default = N).
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).
USER-NAME	Mandatory if billing-server-directory is populated. FTP login name on the billing server. VARCHAR(32): 1–32 ASCII characters.

Billing Alarm

The Billing Alarm (billing-alarm) table provisions the percentage of disk storage filled that triggers minor, major, and critical alarms.

Table Name: BILLING-ALARM

Table Containment Area: OAMP

Command Types

Show and change

Examples

```
show billing-alarm;
change billing-alarm minor-thresh=75; major-thresh=85; critical-thresh=95;
```

Usage Guidelines

Primary Key Token(s): None.

Change Rules: None.

Syntax Description

AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
CRITICAL-THRESH	Real-time billing data storage—percentage of capacity that triggers a critical alarm. NUMERIC: 4–99 (Default = 90).

LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
MAJOR-THRESH	Real-time billing data storage—percentage of capacity that triggers a major alarm. NUMERIC: 3–98 (Default = 80).  Caution Major-thresh <i>must</i> be less than critical-thresh.
MAXIMUM-RECORD	The maximum number of records to store in a given flat file. NUMERIC: 500–10000 (Default = 1000).
MAXIMUM-SIZE	The size of a call detail block (CDB) flat file in megabytes. NUMERIC: 1–10 (Default = 2).
MAXIMUM-SPACE	The allocated storage capacity for billing data in megabytes. NUMERIC: 10–5000 (Default = 1000).
MAXIMUM-TIME	The maximum number of seconds a given flat file can remain open for the addition of new records. NUMERIC: 10–3600 (Default = 3600).
MINOR-THRESH	Real-time billing data storage—percentage of capacity that triggers a minor alarm. NUMERIC: 2–97 (Default = 70).  Caution Minor-thresh <i>must</i> be less than major-thresh.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
REGULAR-SPACE	The percentage of real time capacity used before secondary files are deleted. NUMERIC: 1–90 (Default = 60).  Caution Regular-space <i>must</i> be less than minor-thresh.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).

Billing File

The system operator uses the Billing File Report (billing-file) command to manage files that are stored on the Bulk Data Management System (BDMS) platform at any given time. The names of the available files and their operational status can be queried. This command does not query a particular table.

Table Containment Area: OAMP

Command Types

Report

Examples

```
report billing-file filename=%;
report billing-file filename=<filename>;
report billing-file state=open;
```

Usage Guidelines

Primary Key Token(s): None.

Syntax Description

0/1	Specifies whether to turn daylight saving time on or off. CHAR(1): 0, 1 1—On 0—Off
AUTO-REFRESH	Specifies whether to display cached data on the screen. This token must be entered with at least one other valid token. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
FILENAME	The name of the billing file to report on. If the filename does not exist, the user is notified that the file does not exist.
HHMMSS	The UTC offset time. Specify +/-HHMMSS.
LIMIT	Specifies the number of rows to display on the screen. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.

SEQUENCE-NUMBER	Used to prevent generation of billing files with the same filename. INTEGER(6): 000001–999999. A monotonically increasing 6 digit number that rolls over to 000001 when the maximum number of 999999 is reached.
START-ROW	Specifies to begin displaying data on the screen at a specific row. INTEGER: 1–100000000 (Default = 1).
STATE	The current state of a given file. VARCHAR(10): 1–10 ASCII characters. Valid values are: OPEN—The file is currently being written to. PRIMARY—The file has not been sent to and acknowledged by the external billing mediation system. SECONDARY—The file has been sent to and acknowledged by the external billing mediation system.
YYYYMMDD-HHMMSS	The local time the file was created. DATE/TIME

Billing Record Query

The system operator uses the Billing Record Query (billing-record) command to obtain specific billing reports from the Call Detail (calldetail) table.

Table Name: CALLEDDETAIL

Table Containment Area: OAMP

Command Types

Report

Examples

```
report billing-record start-time=2000-03-27 12:00:00; end-time=2000-03-27 12:01:00;
orig-number=9726712344;
report billing-record;
```



Note

If the command is entered without parameters, it defaults to tail=1 and returns the most recently written record.

Usage Guidelines

Primary Key Token(s): None.

There is no restriction on the start time and end time that can be entered for searches.

For all searches, only the most recent 500,000 billing records are considered.

The limit on the number of records returned by a search is 500.

Syntax Description	AUTO-REFRESH Specifies whether to display cached data on the screen. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
	CALL-TYPE Type of call. STRING. Permitted values are: 500—Service access code 500, use carrier to route the call. 700—700 SAC call-route via PIC or dialed CAC. 900—Service access code 900, use carrier to route the call. 976—Information service calls. AIRLINES—Airline call. AMBULANCE—Ambulance service call. ATTENDANT—Call to a Centrex attendant. BLV—Busy line verification call. BUSINESS—811 call to business office. CARRIER-OPERATOR—101xxxx+0-, or 00(PIC) call. CUT-THRU—Call to user-dialed access code (101xxxx+#). DA—411, NPA-555-12121 call to directory assistance. DA-TOLL—1+411, 1+NPA-555-1212 toll call to directory assistance. EMG—911 emergency calls. EXTENSION—Call to another extension within a business group. FIRE—Fire department call. INFO—Same as 976. INTERLATA—InterLATA call that uses PIC or dialed CAC. INTL_OPERATOR—International operator. INTL_WORLD_ZONE_1—International world zone 1. INVALID—Partial dialed digits that time out. LOCAL—7-digit or 10-digit nontoll call. LOOPBACK_TEST—Loopback test. LRN—Call to a DN that has been reserved as a local routing number. MOBILE—Calls to a mobile network. (Release 4.5) NAS—Network access server call. NATIONAL—Call within the United States, use LSA table to determine if local, toll or destination call. See the <i>Cisco BTS 10200 Softswitch Provisioning Manual</i> for more information. NATL_OPERATOR—National operator. NONE—No call type was provisioned into the Cisco BTS 10200 Softswitch or the given dialing pattern. No data available regarding call type.

NON-EMG—311 Civic service call.

NULL—Service activation, deactivation, or interrogation call.

OPERATOR—0—call.

OPERATOR-ASSISTED—0+ call.

PCS—Call to personal communications services line (service access code 500—use carrier to route the call).

POLICE—Police service call.

PREMIUM—Same as 900.

RAILWAYS—Railway.

RELAY—711 relay call.

REPAIR—611 repair call.

SERVICE_CODE—Service code.

SPEED-DIAL—Speed-dial call.

TANDEM—Tandem call between CA and the next switch or CA.

TEST-CALL—Test call dialed as: 958/959-xxxx or 1xx.

TIME—Time service call.

TOLL—1+NPA-xxx-xxxx IntraLATA toll call.

TOLL-FREE—8NN toll-free call (800, 888, 877, 866, 855).

TRAFFIC—Traffic service call.

TW—Time and weather call.

VACANT—Call attempted to an NPA/DN that is currently unassigned.

VOICE-MAIL (Release 4.5)

VOICE-MAIL-ACCESS (Release 4.5)

WEATHER—Weather service call.

DISPLAY	Specifies what token information to display on the screen. VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
END-TIME	Report billing records that occur at this time and earlier. STRING: yyyy-mm-dd hh:mm:ss.
FILENAME	Specifies the name of a group of records, which can be searched using search qualifiers other than the filename.
LIMIT	Specifies the number of rows to display on the screen. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Note In this table, more than one value cannot be specified for this token.

ORIG-NUMBER	Dialing number of the calling number. NUMERIC: 4–15 decimal characters. (Do <i>not</i> include hyphens.) NUMERIC: 3–15 decimal characters. (Do <i>not</i> include hyphens.) (Release 4.5.1)
SERVICE-TYPE	Specifies the type of service to filter against in the billing database. STRING. Permitted values are: 911-HANDLING ACCOUNT-CODE AIN-HANDLING ANONYMOUS-CALL-REJECTION AUTHORIZATION-CODE AUTOMATIC-CALLBACK AUTO-RECALL BUSY-LINE-VERIFICATION CALL-BLOCK CALL-FORWARD-BUSY CALL-FORWARD-COMBINATION (Release 4.5) CALL-FORWARD-NO-ANSWER CALL-FORWARD-UNCONDITIONAL CALL-HOLD CALL-PARK CALL-PARK-REOFFERED CALL-PARK-RETRIEVAL CALL-TRANSFER CALL-WAITING CALL-WAITING-DELUXE CALL-WAITING-WITH-CALLER-IDENTITY CALLING-ID-DELIVERY-BLOCK-PERMANENT CALLING-IDENTITY-DELIVERY-SUPPRESSION CALLING-NAME-DELIVERY CALLING-NAME-DELIVERY-BLOCKING CALLING-NUMBER-DELIVERY CALLING-NUMBER-DELIVERY-BLOCK CANCELLED-CALL-WAITING CLASS-OF-SERVICE CNAM-SCP-QUERY CUSTOM-DIALING-PLAN CUSTOMER-ORIGINATED-TRACE DIRECTED-CALL-PICKUP-WITH-BARGE-IN

DIRECTED-CALL-PICKUP-WITHOUT-BARGE-IN
 DO-NOT-DISTURB
 DRCW
 HOTLINE
 HOTLINE-VARIABLE
 NO-SOLICITATION-ANNOUNCEMENT (Release 4.5)
 LNP
 OUTGOING-CALL-BARRING
 PRIVACY-SCREENING (Release 4.5)
 REFER
 REJECT-CALLER
 REMOTE-ACTIVATION-OF-CALL-FORWARDING
 REMOTE-ACTIVATION-OF-CALL-FORWARDING-PIN
 REPEAT-CALL
 RETURN-CALL
 SCREENING-LIST-EDIT-DRCW
 SCREENING-LIST-EDIT-SCA
 SCREENING-LIST-EDIT-SCF
 SCREENING-LIST-EDIT-SCR
 SELECTIVE-CALL-ACCEPTANCE
 SELECTIVE-CALL-FORWARDING
 SELECTIVE-CALL-REJECTION
 SERVICE-FEATURE-GROUP-INCOMING
 SERVICE-FEATURE-GROUP-OUTGOING
 SPEED-CALLING
 THREE-WAY-CALL
 THREE-WAY-CALL-DELUXE
 TOLL-FREE
 USER-SENSITIVE-THREE-WAY-CALL
 WARMLINE

START-ROW	Specifies to begin displaying data on the screen at a specific row. INTEGER: 1–100000000 (Default = 1).
START-TIME	Report billing records that occur from this time forward. STRING: yyyy-mm-dd hh:mm:ss.
TAIL	Causes the system to report only the most recent records of the requested set. NUMERIC: 1–50 decimal characters.
TERM-CAUSE	Specifies the call termination cause to filter against in the billing database. STRING. Permitted values are:

AAL-PARAM-NOT-SUPPORTED

ACCESS-INFO-DISCARDED
BEARER-CAPABILITY-NOT-IMPLEMENTED
BEARER-CAPABILITY-UNAVAILABLE
BEARER-CAPAB-INCOMPAT-WITH-SERVICE
CALL-AWARDED
CALL-PROCEEDING
CALL-REJECTED
CALL-RESTRICTED-WITH-CLIR
CHANNEL-DOES-NOT-EXIST
CHANNEL-UNACCEPTABLE
CHANNEL-UNAVAILABLE
CIRCUIT-CHANNEL-CONGESTED
DESTINATION-OUT-OF-ORDER
EXCESS-DIGIT-RECD
FACILITY-NOT-IMPLEMENTED
FACILITY-NOT-SUBSCRIBED
FACILITY-REJECTED
INCOMPATIBLE-DESTINATION
INCORRECT-MESSAGE-LENGTH
INFOELEMENT-NONEXISTENT
INVALID-CALL-REFERENCE
INVALID-ENDPOINT-REFERENCE
INVALID-INFOELEMENT
INVALID-NUMBER-FORMAT
INVALID-TRANSIT-NETW-SELECTION
MANDATORY-INFOELEMENT-MISSING
MESSAGE-INCOMPAT-WITH-CALL-STATE
MESSAGE-TYPE-NONEXISTENT
NETWORK-OUT-OF-ORDER
NORMAL-CALL-CLEARING
NORMAL-UNSPECIFIED
NO-ROUTE-DESTINATION
NO-ROUTE-TRANSIT-NETWORK
NO-VPCI-VCI-AVAILABLE
NUMBER-CHANGED
ONE-DIALED-IN-ERROR
ONE-NOT-DIALED
PROTOCOL-ERROR-THRESHOLD-XCEEDED
PROTOCOL-ERROR-UNSPECIFIED
QOS-UNAVAILABLE
RESOURCE-UNAVAILABLE

SERVICE-DENIED
SERVICE-NOT-IMPLEMENTED
SERVICE-OPERATION-VIOLATED
SERVICE-UNSPECIFIED
SWITCH-EQUIP-CONGESTED
TEMPORARY-FAILURE
TIMER-EXPIRY-RECOVERY
TOO-MANY-PENDING-ADD-PARTY-REQ
UNASSIGNED-NUMBER
UNAUTHORIZED-BEARER-CAPABILITY
UNSUPPORTED-TRAFFIC-PARAMS
USER-ALERTED-NO-ANSWER
USER-BUSY
USER-CELLRATE-UNAVAILABLE
USER-NOT-RESPONDING
VACANT-CODE
VPCI-VCI-ASSIGNMENT-FAIL
VPCI-VCI-NOT-AVAILABLE
ZERO-DIALED-IN-ERROR
INTERWORKING-ERROR-UNSPECIFIED
AAL_PARAM_NOT_SUPPORTED (Release 4.5.1)
ACCESS_INFO_DISCARDED (Release 4.5.1)
ACCOUNT_LIMIT_EXCEEDED (Release 4.5.1)
BEARER_CAPAB_INCOMPAT_WITH_SERVICE (Release 4.5.1)
BEARER_CAPABILITY_NOT_IMPLEMENTED (Release 4.5.1)
BEARER_CAPABILITY_UNAVAILABLE (Release 4.5.1)
CALL_AWARDED (Release 4.5.1)
CALL_PROCEEDING (Release 4.5.1)
CALL_REJECTED (Release 4.5.1)
CALL_RESTRICTED_WITH_CLIR (Release 4.5.1)
CALLED_NUMBER_PORTED_OUT (Release 4.5.1)
CHANNEL_DOES_NOT_EXIST (Release 4.5.1)
CHANNEL_UNACCEPTABLE (Release 4.5.1)
CHANNEL_UNAVAILABLE (Release 4.5.1)
CIRCUIT_CHANNEL_CONGESTED (Release 4.5.1)
DESTINATION_OUT_OF_ORDER (Release 4.5.1)
EXCESS_DIGIT_RECD (Release 4.5.1)
FACILITY_NOT_IMPLEMENTED (Release 4.5.1)
FACILITY_NOT_SUBSCRIBED (Release 4.5.1)

FACILITY_REJECTED (Release 4.5.1)
INCOMPATIBLE_DESTINATION (Release 4.5.1)
INCORRECT_MESSAGE_LENGTH (Release 4.5.1)
INFOELEMENT_NONEXISTENT (Release 4.5.1)
INTERWORKING_ERROR_UNSPECIFIED (Release 4.5.1)
INVALID_CALL_REFERENCE (Release 4.5.1)
INVALID_ENDPOINT_REFERENCE (Release 4.5.1)
INVALID_INFOELEMENT (Release 4.5.1)
INVALID_NUMBER_FORMAT (Release 4.5.1)
INVALID_TRANSIT_NETW_SELECTION (Release 4.5.1)
MANDATORY_INFOELEMENT_MISSING (Release 4.5.1)
MESSAGE_INCOMPAT_WITH_CALL_STATE (Release 4.5.1)
MESSAGE_TYPE_NONEXISTENT (Release 4.5.1)
MISROUTED_PORTED (Release 4.5.1)
NE_CAUSE_AUDIT_RELEASE (Release 4.5.1)
NETWORK_OUT_OF_ORDER (Release 4.5.1)
NO_ROUTE_DESTINATION (Release 4.5.1)
NO_ROUTE_TRANSIT_NETWORK (Release 4.5.1)
NO_VPCI_VCI_AVAILABLE (Release 4.5.1)
NORMAL_CALL_CLEARING (Release 4.5.1)
NORMAL_UNSPECIFIED (Release 4.5.1)
NUMBER_CHANGED (Release 4.5.1)
ONE_DIALED_IN_ERROR (Release 4.5.1)
ONE_NOT_DIALED (Release 4.5.1)
PROTOCOL_ERROR_THRESHOLD_XCEEDED (Release 4.5.1)
PROTOCOL_ERROR_UNSPECIFIED (Release 4.5.1)
QOS_UNAVAILABLE (Release 4.5.1)
REPOSE_STATIC_ENQ_MSG (Release 4.5.1)
RESOURCE_UNAVAILABLE (Release 4.5.1)
SERVICE_DENIED (Release 4.5.1)
SERVICE_NOT_IMPLEMENTED (Release 4.5.1)
SERVICE_OPERATION_VIOLATED (Release 4.5.1)
SERVICE_UNSPECIFIED (Release 4.5.1)
SWITCH_EQUIP_CONGESTED (Release 4.5.1)
TEMPORARY_FAILURE (Release 4.5.1)
TIMER_EXPIRY_RECOVERY (Release 4.5.1)
TOO_MANY_PENDING_ADD_PARTY_REQ (Release 4.5.1)
UNASSIGNED_NUMBER (Release 4.5.1)

UNAUTHORIZED_BEARER_CAPABILITY (Release 4.5.1)
 UNSUPPORTED_TRAFFIC_PARAMS (Release 4.5.1)
 USER_ALERTED_NO_ANSWER (Release 4.5.1)
 USER_BUSY (Release 4.5.1)
 USER_CELLRATE_UNAVAILABLE (Release 4.5.1)
 USER_NOT_RESPONDING (Release 4.5.1)
 VACANT_CODE (Release 4.5.1)
 VPCI_VCI_ASSIGNMENT_FAIL (Release 4.5.1)
 VPCI_VCI_NOT_AVAILABLE (Release 4.5.1)
 ZERO_DIALED_IN_ERROR (Release 4.5.1)

TERM-NUMBER	Dialing number of the called number. NUMERIC: 4–15 decimal characters. (Do <i>not</i> include hyphens.) NUMERIC: 3–15 decimal characters. (Do <i>not</i> include hyphens.) (Release 4.5.1)

Billing Call Detail Block

The Call Detail Block (CDB) (billingcdb) table enables or disables call types for billing using the billing-cdb command. Used to determine what is reported in the billing file.

Table Name: BILLINGCDB

Table Containment Area: OAMP



Note

CDB is the implementation of CDR, call detail record.

Command Types

Show and change

Examples

```
show billing-cdb type=local;
change billing-cdb type=local; enable=y;
```

Usage Guidelines

Primary Key Token(s): type

Syntax Description

* TYPE	Primary key. Call type to be enabled or disabled for billing purposes. STRING. Permitted values are: 500—Service access code 500, use carrier to route the call. 700—700 SAC call-route via PIC or dialed CAC. 900—Service access code 900, use carrier to route the call. 976—Information service calls. AIRLINES—Airline. AMBULANCE—Ambulance service call. ATTENDANT—Call to a Centrex attendant. BLV—Busy line verification call. BUSINESS—811 call to business office. CALLING-NUMBER-ANNOUNCEMENT (Release 4.5)—Announcement played upon call. CARRIER-OPERATOR—101xxxx+0-, or 00(PIC) call. CUT-THRU—Call to user-dialed access code (101xxxx+#). DA-411, NPA-555—12121 call to directory assistance. DA-TOLL—1+411, 1+NPA-555-1212 toll call to directory assistance. EMG—911 emergency calls. EXTENSION—Call to another extension within a business group. FIRE—Fire department call. INFO—Same as 976. INTERLATA—InterLATA call that uses PIC or dialed CAC. INTERLATA-DA (Release 4.5)—InterLATA Directory Assistance. INTERNATIONAL-DA (Release 4.5)—International Directory Assistance. INTL-OPERATOR—International operator. INTL-WORLD-ZONE-1—International World Zone. INVALID—Partial dialed digits that time out. LOCAL—7-digit or 10-digit nontoll call. LOOPBACK—TEST-Loopback test. (Obsoleted as of Release 4.5) LRN—Call to a DN that has been reserved as a local routing number. NAS—Network access server call. NATIONAL—Call within the United States, use LSA table to determine if local, toll or destination call. See the <i>Cisco BTS 10200 Softswitch Provisioning Guide</i> for more information. NATL-OPERATOR—National operator. NON—EMG-311 Civic service call. NONE—No call type was provisioned into the Cisco BTS 10200 Softswitch or the given dialing pattern. No data available regarding call type. NULL—Service activation, deactivation, or interrogation call. OPERATOR—0-call. OPERATOR-ASSISTED—0+ call. PCS—Call to personal communications services line (service access code 500-use carrier to route the call). POLICE—Police service call. PREMIUM—Same as 900. RAILWAYS—Railway. RELAY—711 relay call. REPAIR—611 repair call. SERVICE-CODE—Service code. SPEED-DIAL—Speed-dial call. TANDEM—Tandem call between CA and the next switch or CA. TEST-CALL—100,101,102,103,105, 108, NLB test calls. 108 and NLB test calls are supported as of Release 4.5. TIME—Time service call. TOLL—1+NPA-xxx-xxxx IntraLATA toll call. TOLL-FREE—8NN toll-free call (800, 888, 877, 866, 855). TRAFFIC—Traffic service call. TW—Time and weather call. UNIVERSAL-ACCESS-NUMBER (Release 4.5)—Universal access number. VACANT—Call attempted to an NPA/DN that is currently unassigned. WEATHER—Weather service call.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.

ENABLE	Enable or disable collection of the specified type of CDB. CHAR(1): Y/N (Default = Y). Y—Enable N—Disable
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START- ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).



CHAPTER 5

Command Scheduler

Revised: July 24, 2009, OL-3743-42

The Command Scheduler (scheduled-command) table allows an operator to schedule a command to execute daily, weekly, or monthly at a specific time. Once a command is scheduled, the Command Scheduler allows removing a command from the schedule. Regardless of whether the command previously executed, the command can be removed at any time. If the command is scheduled to recur and is currently executing within the Element Management System (EMS), the command completes in a normal fashion but is removed from the list from that point forward.

It is often necessary to schedule commands to occur during periods of least system activity. Using the start time and recurrence command parameters, commands can be scheduled at any time and at any frequency. The recurrence parameter schedules a command daily, weekly, or monthly. Scheduling a command without the recurrence parameter causes the Command Scheduler to execute the command only once.

The characteristics of a scheduled command are read once at execution time. During execution, the characteristics can be changed but do not affect the command that is running.

To view generated a report go to <https://<active EMS IP address>>. Select the report and open ScheduledCommand<generated id>.html. Report results vary based on the scheduled command entered.'



Note

Noun-verb syntax is not checked until execution.

Table Name: SCHEDULED-COMMAND

Table Containment Area: OAMP

Command Types

Show, add, change, and delete

Examples

```
show scheduled-command id=1234
add scheduled-command start-time=2001-10-01 12:22:22; noun=database; verb=audit
change scheduled-command id=1234; start-time=2001-10-02 20:00:00
delete scheduled-command id=1234
```

Usage Guidelines

Primary Key Token(s): id

Add Rules: None.

Change Rules: Security privilege levels apply.

Commands with additional tokens use keys as token and key-values as the token values. Multiple token/token values are separated with a comma (no white space is allowed). For example:

```
add scheduled-command start-time=2005-0901 02:22:00; noun=mgw; verb=control;
keys=id,mode,target-state; key-values=emat-11,forced,oos;
```

This forces the mgw id=emat-11 out of service at 2:22AM.


Note

An asterisk preceeding a token name means the token is mandatory. A token without an asterisk is optional.

Syntax Description

ID (System generated)	Mandatory for change command. Primary key. System-generated identifier. INTEGER.
VERB	Mandatory for add command. Command-line interface (CLI) verb. VARCHAR(64): 1–64 ASCII characters; any valid command verb.
NOUN	Mandatory for add command. CLI noun. VARCHAR(64): 1–64 ASCII characters; any valid command noun.
KEYS	Key associated with the noun-verb combination. VARCHAR(1024): 1–1024 ASCII characters; any key or keys allowed for the noun-verb combination, separated by a comma. Spaces are not allowed. For example: type,display Note The field size is large because many commands include several keys whose length can be up to 1024 characters.
KEY-VALUES	Value associated with the key entered for the noun-verb combination. VARCHAR(1024): 1–1024 ASCII characters; any value or values associated with the key or keys entered, separated by a comma. Spaces are not allowed. For example: full,none Note The field size is large because many commands include several values whose length can be up to 1024 characters.
START-TIME	Mandatory for add command. Start time of the command. Enter all 19 ASCII characters as shown. DATE: yyyy-mm-dd hh:mm:ss.
NEXT-START-DAY (System generated)	The next time the command will run. System generated based on the start-time. NUMERIC.
USER-NAME (System generated)	Username of the last user to modify the scheduled command. VARCHAR(16): 1–16 ASCII characters.

EXECUTION-COUNTER (System generated)	System-generated command repetition counter. NUMERIC.
RECURRENCE	Number of times to execute the command. VARCHAR(16); 1–16 ASCII characters. Permitted values are: NONE (Default)—One time DAILY WEEKLY MONTHLY



Customer Originated Trace

Revised: July 24, 2009, OL-3743-42

The Customer Originated Trace (call-trace) table contains information gathered by the system when a customer activates a trace by pressing *57 on the telephone. The table logs information pertaining only to the most recently received call. The Call Trace Summary (call-trace-summary) command retrieves the logged information.

Table Name: CALL-TRACE

Table Containment Area: OAMP

Command Types

Report

Examples

`report call-trace-summary`

**Note**

Using the command without any tokens returns all entries in the table.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): term-id

**Note**

An asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Syntax Description

CUSTOMER-DN	The customer's directory number.
	VARCHAR(10): 10 digits in the format npaxxxxxxx.
CALLING-DN	The caller's directory number.
	VARCHAR(10): 10 digits in the format npaxxxxxxx.
CALL-DATE	Date of the call.
	DATE: yyyy-mm-dd hh:mm:ss.

TRACE-DATE	Date the trace was activated. DATE: yyyy-mm-dd hh-mm-ss.
SUB-ID (System generated)	The subscriber ID of the customer who activated the trace. VARCHAR(30): 1–30 ASCII characters
TERM-ID (System generated)	Foreign key: Termination table. The termination ID of the customer who activated the trace. VARCHAR(32): 1–32 ASCII characters.
PRIVACY-STATUS	Refers to what caller information is displayed to the person being called. If the caller has this feature activated, only the applicable information is logged. VARCHAR(30): 1–30 ASCII characters. Permitted values are: FULL—Nothing is logged. NAME—Name is not logged. NUMBER—Number is not logged. OFF—Whatever is available for the caller is logged.

**Note**

Table information is logged from the switch. If the system cannot decipher the information from the switch, it returns the value UNKNOWN in the applicable field.



Database Usage

Revised: July 24, 2009, OL-3743-42

The Database Usage (db-usage) table can only be provisioned at installation. It provides maximum, licensed, and current database record statistics. The *current number of records* field is updated by the Element Management System (EMS) in real time. The db-usage command also uses the Database Threshold (db-thresholds) table, which contains default alarm threshold parameters that are preprovisioned during installation. A service provider can change and show these threshold parameters. The default threshold parameters are:

- 80 percent minor
- 85 percent major
- 90 percent critical

**Note**

After a new install or an upgrade, all provisioning is disabled unless the DB-LICENSE file is provisioned. See the *Cisco BTS 10200 Softswitch Provisioning Guide* for steps.

Table Name: DB-USAGE

Table Containment Area: EMS

Command Types

Show and change

Examples

```
show db-usage table-name=dial-plan;  
change db-usage table-name=dial-plan; minor-threshold=70; major-threshold=80;  
critical-threshold=95;
```

Usage Guidelines

Primary Key Token(s): table-name

Change Rules:

- max-record-count must be greater than or equal to licensed-record-count.
- max-record-count must be greater than or equal to current-record-count.
- licensed-record-count must be greater than or equal to current-record-count.
- Major threshold must be less than Critical threshold and more than Minor threshold.

- Minor threshold must be less than Major threshold.

**Note**

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Syntax Description

TABLE-NAME	Primary key. Table name. VARCHAR(32): 1–32 ASCII characters.
MAX-RECORD-COUNT (Not provisionable)	The size is specified in number of records. This field is populated during installation. INTEGER.
ALERT-LEVEL	Displays the status of record count for each table. VARCHAR(12): 1–12 ASCII characters. Permitted values are: NO-LICENSE—The DB size (license) is not installed. NORMAL—The current record count is lower than the minor threshold. MINOR—The current record count is higher than minor threshold and lower than major threshold. MAJOR—The current record count is higher than major threshold and lower than critical threshold. CRITICAL— The current record count is higher than critical threshold.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
CRITICAL-THRESHOLD	Threshold for critical alarm (in percent). INTEGER: 2–100 (Default = 90).
CURRENT-RECORD-COUNT (System generated)	Current number of records in the table. This field is 0 for new installations and is the current table size for existing systems. INTEGER.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
LICENSED-RECORD-COUNT (Not provisionable)	Number of records authorized for the customer. This field is populated during installation. INTEGER.

LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
MAJOR-THRESHOLD	Threshold for major alarm (in percent). INTEGER: 1–99 (Default = 85).
MINOR-THRESHOLD	Threshold for minor alarm (in percent). INTEGER: 0–98 (Default = 80).
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
SEND-ALERT	Indicates whether to turn the threshold alarm ON or OFF. If the table size is 10 records or less, the flag is automatically set to OFF. VARCHAR(16): 1–16 ASCII characters. Permitted values are: ON—Turn the threshold alarm on. OFF—Turn the threshold alarm off.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).



Fresh Download

Revised: July 24, 2009, OL-3743-42

The Fresh Download command refreshes data in Call Agent (CA) shared memory. It recovers the data in the Call Agent shared memory in the event that shared memory data cannot be recovered by any other means. The fresh download wipes out Call Agent shared memory data and causes a total outage.

**Caution**

Only a operator of "ciscouser" authority can execute a download database command. No other user can execute this command. (Release 4.5)

**Caution**

Do not use this command on any live traffic production systems. Contact Cisco TAC if you need additional help regarding the use of this command for disaster recovery.

You can perform the command in one of the following ways:

- By ID
- By standby CA or Feature Server (FS)

**Note**

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Download by ID

The download by ID command allows copying database information from the Element Management System (EMS) to a specific CA or FS. If a CA ID is not specified, the command copies to all IDs.

Command Types

Download

Examples

```
download database target=ca; id=CA146
download database target=fsptc; id=FSPTC135
download database target=fsain; id=FSAIN125
```

Download by Standby Call Agent or Feature Server

The download to Standby CA or FS command allows copying database information from the EMS to a specific standby CA or FS. If a target is not specified, the active instance is used.

Command Types

Download

Examples

```
download database target=ca; id=CA146;
download database target=ca; id=CA146; target-state=standby;
```

Syntax Description

*TARGET	Specifies the network element to receive the download. VARCHAR(5): 1–5 ASCII characters. Permitted values are: CA—Network identifier of a Call Agent. FSPTC (POTS/Tandem/Centrex Feature Server)—Network identifier of a specific Feature Server. FSAIN (AIN Feature Server)—Network identifier of AIN Feature Servers.
ID	Network ID of a specific CA or FS. VARCHAR(8): 1–8 ASCII characters consisting of any valid, provisioned CA, FSPTC, or FSAIN ID.
FILE	This contains all the SQL commands that represent all the data in an EMS database. This is a faster process than the alternative of going through the Queuing and Audit Manager (QAM). VARCHAR(128): 1–128 ASCII characters consisting of any valid filename.
TARGET-STATE	The state (active or standby) of the Call Agent or Feature Server. VARCHAR(7): 1–7 ASCII characters. Permitted values are: ACTIVE (Default)—Call Agent or Feature Server is in active state. STANDBY—Call Agent or Feature Server is in standby state.



CHAPTER 9

History

Revised: July 24, 2009, OL-3743-42

The History (history) table stores a list of executed commands. A list of all executed commands can be sent to a file (report history), or displayed on the screen (show history).

Table Name: HISTORY

Table Containment Area: EMS only.

Command Types

Show and report

Examples

```
show history
report history
```



Note

Using the command without any tokens returns all entries in the table.

Usage Guidelines

Primary Key Token(s): None.

Syntax Description	ADAPTER	The OSS adapter. User input is not modified prior to validation. VARCHAR(30): 1–30 ASCII characters. Permitted values are: CLI SPIT IOS MNT TEST GUI FTP SNMP SUP CORBA HTTP CRON QAM DBASE
	AUTO-REFRESH	Specifies whether to display cached data on the screen. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
	DISPLAY	Specifies what token information to display on the screen. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
	END-TIME	Ending time for history range. DATE/TIME: in the format: YYYY-MM-DD HH:MM:SS.
	LIMIT	Specifies the number of rows to display on the screen. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
	NOUN	The command noun. VARCHAR(50): 1–50 ASCII characters.

ORDER	Specifies whether to display data on the screen in a sorted order. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
RESULT	The result of the command. VARCHAR(100): 1–100 ASCII characters.
SESSION	The login session ID. VARCHAR(30): 1–30 ASCII characters.
START-ROW	Specifies to begin displaying data on the screen at a specific row. INTEGER: 1–100000000 (Default = 1).
START-TIME	The starting time for history range. Start-time must occur before end-time. DATE/TIME: in the format: YYYY-MM-DD HH:MM:SS.
TRANSACTION-ID	The transaction id. VARCHAR(30): 1–30 ASCII characters.
USER	The user. VARCHAR(50): 1–50 ASCII characters.
USER-DOMAIN	The user domain. VARCHAR(100): 1–100 ASCII characters.
USER-INPUT	The command input. VARCHAR(100): 1–100 ASCII characters.
VERB	The command verb. VARCHAR(50): 1–50 ASCII characters.



CHAPTER 10

Maintenance and Administration of System Component Commands

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This chapter describes the status and control commands that are applicable only to the Call Agent (CA), Feature Server (FS), Element Management System (EMS), and the Bulk Data Management System (BDMS). There is also one System command. Status and control commands do not have their own tables.

Do not attempt to interpret responses from the status commands, or to use any control commands without first referring to the procedures and interpretations in the Cisco BTS 10200 Softswitch Operations Manual. Incorrect interpretation of the status commands, and incorrect usage of the control commands can cause a traffic or data interruption. For a complete list of sample replies and states, see the *Cisco BTS 10200 Softswitch Operations Manual*.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Control Command Target States

Table 10-1 lists target states and their descriptions for the control commands.

Table 10-1 Control Command Target States and Descriptions

Target State	Description
NORMAL (Obsoleted as of Release 4.5)	Normal allows changing the operational state from FORCED to NORMAL. If the previous configuration was FORCED_STANDBY_ACTIVE, a switchover will occur.
ACTIVE_STANDBY (Release 4.5)	Controls Side A to active and Side B to standby.
STANDBY_ACTIVE (Release 4.5)	Controls Side A to standby and Side B to active.
FORCED-ACTIVE-STANDBY (Obsoleted as of Release 4.5)	Side A is forced to active and Side B is standby.

Table 10-1 Control Command Target States and Descriptions (continued)

Target State	Description
FORCED-STANDBY-ACTIVE (Obsoleted as of Release 4.5)	Side A has been forced to standby and Side B is active.

Call Agent

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Call Agent.

Status Command

The status command reports the status of a Call Agent.

Command Types

Status

Examples

```
status call-agent;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED-> status call-agent
PRIMARY STATUS -> ACTIVE_NORMAL
SECONDARY STATUS -> STANDBY_NORMAL
```



Note

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE_NORMAL becomes ACTIVE, STANDBY_NORMAL becomes STANDBY, and so forth.

Control Command

The control command puts the Call Agent into a specific state.

Command Types

Control

Examples

```
control call-agent id=CA146; target-state=forced-standby-active;
control call-agent id=CA146; target-state=forced-active-standby;
control call-agent id=CA146; target-state=normal;
```

```
control call-agent id=CA146; target-state=standby-active; (Release 4.5)
control call-agent id=CA146; target-state=active-standby; (Release 4.5)
```

Reply Example:

```
Request was successful
```

REPLY=CONFIGURATION COMMAND EXECUTED->Reconfigured successfully.

**Note**

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE_NORMAL becomes ACTIVE, STANDBY_NORMAL becomes STANDBY, and so forth.

Feature Server

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Feature Server.

Status Command

The status command reports the status of a Feature Server. Entering the command without an id returns all feature servers except third party (3PTY) feature servers. 3PTY feature servers are not valid for this command.

Command Types

Status

Examples

```
status feature-server id=FSAIN205.Cisco.com;
```

Reply Example:

```
Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED-> status feature-server
PRIMARY STATUS -> ACTIVE-NORMAL
SECONDARY STATUS -> STANDBY-NORMAL
```

**Note**

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE_NORMAL becomes ACTIVE, STANDBY_NORMAL becomes STANDBY, and so forth.

Control Command

The control command puts a Feature Server into a specific state. This command is not valid for 3PTY feature servers.

Command Types

Control

Examples

```
control feature-server id=FSAIN205.Cisco.com; target-state=normal;
```

```
control feature-server id=FSAIN205.Cisco.com; target-state=active-standby; (Release 4.5)
```

Reply Example:

```
Request was successful
```

```
REPLY=CONFIGURATION COMMAND EXECUTED->control feature-server LOCAL STATUS
```

Element Management System

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Element Management System (EMS). These commands are specific to the EMS. For Billing commands, see the [“Bulk Data Management System” section on page 10-5](#).

Status Command

The status command reports the status of an EMS.

Command Types

Status

Examples

```
status element-manager; id=EM01;
```

Reply Example:

Reply : Success:

```
ELEMENT MANAGER STATUS IS... ->

APPLICATION INSTANCE -> Element Manager [EM1]
PRIMARY STATUS -> ACTIVE_NORMAL
SECONDARY STATUS -> FAULTY

EMS ORACLE STATUS IS ... -> Daemon is running!

ORACLE STATUS IS... -> Daemon is running! Control Command
```



Note

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE_NORMAL becomes ACTIVE, STANDBY_NORMAL becomes STANDBY, and so forth.

Control Command

The control command puts an EMS into a specific state.

Command Types

Control

Examples

```
control element-manager id=EM01; target-state=normal;
control element-manager id=EM01; target-state=active-standby; (Release 4.5)
```

Reply Example:

```
Request was successful
REPLY=CONFIGURATION COMMAND EXECUTED->CONTROL EMS LOCAL STATUS
```

Bulk Data Management System

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Bulk Data Management System (BDMS).

Status Command

The status command reports the status of the BDMS.

Command Types

Status

Examples

```
status bdms; id=BDMS01;
```

Reply Example:

```
BILLING SERVER STATUS IS... ->
```

```
APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
```

```
PRIMARY STATUS -> ACTIVE
```

```
SECONDARY STATUS -> STANDBY
```

```
BILLING ORACLE STATUS IS... -> Daemon is running!
```

Reply : Success:

```
CLI>
```

```
CLI>control bdms id=BDMS01; target-state=active-standby
```

```
APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
```

```
REASON -> Application instance is already in request configuration
```

Reply : Success:

Control Command

The control command puts the BDMS into a specific state.

Command Types

Control

Examples

```
control bdms id=BDMS1; target-state=normal;
```

```
control bdms id=BDMS1; target-state=active-standby; (Release 4.5)
```

Reply Example:

Reply : Success:

```
APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
```

```
REASON -> CONFIGURATION COMMAND EXECUTED->CONTROL BDMS LOCAL STATUS System
```

Status System Command

The status system command returns the status of all applicable components of the system, including the BDMS.

Command Types

Status

Examples

```
status system;
```

Reply Example:

```
Checking Call Agent status ...
Checking Feature Server status ...
Checking Billing Server status ...
Checking Billing Oracle status ...
Checking Element Manager status ...
Checking ORACLE status ...

CALL AGENT STATUS IS... ->

APPLICATION INSTANCE -> Call Agent [CA146]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

FEATURE SERVER STATUS IS... ->

APPLICATION INSTANCE -> Feature Server [FSPTC235]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

FEATURE SERVER STATUS IS... ->

APPLICATION INSTANCE -> Feature Server [FSAIN205]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

BILLING SERVER STATUS IS... ->

APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
PRIMARY STATUS -> ACTIVE_NORMAL
SECONDARY STATUS -> STANDBY_NORMAL

BILLING ORACLE STATUS IS... -> Daemon is running!

ELEMENT MANAGER STATUS IS... ->

APPLICATION INSTANCE -> Element Manager [EM01]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

EMS ORACLE STATUS IS ... -> Daemon is running!

Reply : Success:
```



Note

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE_NORMAL becomes ACTIVE, STANDBY_NORMAL becomes STANDBY, and so forth.

Status Application Command

The status application command shows the state of any Cisco BTS 10200 Softswitch application (CA, FS, EMS, BDMS), including uptime, side indications and additional qualifying reason information.

Command Types

Status

Examples

```
status application id=*; (returns status of each component)
status application id=1; (returns status of every component containing a 1)
status application id=CA146;
status application id=CA146;
status application id=EM01;
status application id=EM01;
```

Usage Guidelines

Wild card matching is available for this command. A value can be entered to report any component that has this value. For example, entering id=1 returns every component that has a 1 in its value.

Syntax Description

* ID	Type of application. VARCHAR(8): 1–8 ASCII characters. Permitted values are: CA ⁿⁿⁿ (or cannn)—CA EM ⁿⁿ (or emnn)—EMS BDMS ⁿⁿ (or bdms)—BDMS FSPTC ⁿⁿⁿ (or fsptcnnn)—FSPTC FSAIN ⁿⁿⁿ (or fsainnnn)—FSAIN
NODE	UNIX system id. Input is not modified prior to validation. VARCHAR(64): 1–64 ASCII characters. Enter at least 1 character, but not more than 64 characters. To clear a value, enter NULL.

Control Application Command

The control application command stops or starts a platform instance using the CLI. This is the same as a root user entering the command: platform stop -i CA146.

Command Types

Control

Examples

```
control application id=CA146; node=prica01;action=start;
control application id=CA146; node=prica01;action=stop;
control application id=EM01; node=priems01;action=start;
control application id=EM01; node=priems01;action=stop;
```

Syntax Description

* ID	Type of application. VARCHAR(8): 1–8 ASCII characters. VARCHAR(64): 1–64 ASCII characters. (Release 4.5.1) Permitted values are: CAnnn (or cannn)—CA EMnn (or emnn)—EMS BDMSnn (or bdms)—BDMS FSnnn (or fsnnn)—FS
* ACTION	Activity to perform. Permitted values are: START—Start a CA, EMS, BDMS, or FS. This is the same as performing a <i>platform start</i>. STOP—Stop a CA, EMS, BDMS, or FS. This is the same as performing a <i>platform stop</i>.  Caution Performing a platform stop takes down a component and can produce outages.
* BYPASS (Release 4.5)	Mandatory in Release 4.5.1. Bypass. Input is not modified prior to validation. CHAR(1): Y/N (Default = N).
* NODE	UNIX system id. Input is not modified prior to validation. VARCHAR(64): 1–64 ASCII characters. Enter at least 1 character, but not more than 64 characters. To clear a value, enter NULL.
* IRDP (Release 4.5)	Mandatory in Release 4.5.1. IRDP. Input is not modified prior to validation. CHAR(1): Y/N (Default = Y).
* PING (Release 4.5)	Mandatory in Release 4.5.1. Ping. Input is not modified prior to validation. CHAR(1): Y/N (Default = Y).

System Configuration Command

Use the System Configuration commands to manage the Network Time Protocol servers on the system.

Command Types

Show and change

Examples

```
show ems;
change ems ntp-server=ntp-server-1,ntp-server-2; (Obsolete in Release 4.5)
change ems interface=cel;ip-alias=priems09.cisco.com
```



Note

There are two forms of the change command:

```
change ems ntp-server=xxxx (Obsolete in Release 4.5)
```

```
change ems interface=xxx, ip-alias=xxx
```

The first form identifies the NTP server that the Element Management System (EMS) must synchronize to. The second form creates an IP address alias that tracks the active EMS.

Usage Guidelines

Primary Key Token(s): None.

Change Rules: None.

Syntax Description

INTERFACE	The physical network interface to be made an alias. VARCHAR(10): 1–10 characters.
IP-ALIAS	Interface alias. Assigned by the service provider. VARCHAR(64): 1–64 characters.
NTP-SERVER	Network time protocol master server name. Defines the Cisco BTS 10200 Softswitch server used for time synchronization. VARCHAR(64): 1–64 ASCII characters. Note In Release 4.1, both NTP servers must be specified. In Release 4.2, only one NTP server must be specified.



CHAPTER 11

Measurements

Revised: July 24, 2009, OL-3743-42

This chapter describes the tables and their commands that are used to provision and manage the types of traffic statistics in Measurement tables.



Note

Some tokens in this chapter are mandatory for *on-demand requests*. An *on-demand request* takes a snapshot of current counters at a particular point in time. This snapshot can be across current collection intervals (time interval), although only data from the current interval is returned. For example, if you wish to get a current measurement at 6:10 AM, and it is 6:10 AM, you can enter a start time of 6:10 or greater (such as 6:20). But you will receive only those counters collected from 6:01 until 6:10, within the time of the current collection interval. For this type of command, the on-demand tokens are mandatory. However, if it is 6:10 AM and you run a start time of 5:00 and an end time of 5:30, you will receive all measurements collected in that interval and the on-demand tokens are optional.

For any measurement report request, you can specify the creation of a file of comma-separated ASCII data of the values retrieved. This is done using the `output=<filename>` token. This token is created in memory when needed and is not physically present in any of the measurement tables. It is used in conjunction with the `output-type` token. For example, entering the following command results in the creation of a file `Tm_yourfilename.csv` in the `/opt/ems/report` directory:

```
report measurement-callp-summary; output=callpsummary; output-type=CSV
```

All files begin with `Tm_`, followed by the filename entered by the user, and are placed in the `/opt/ems/report` directory on the active Element Management System (EMS).

The output file contains the same data that one receives from issuing a report, except that the data is arranged horizontally in a comma-separated format. Therefore, instead of the following:

```
FIELD-NAME1 value1  
FIELD-NAME2 value2
```

The output is:

```
FIELD-NAME1, FIELD-NAME2, value1, value2, and so forth.
```



Note

In the following tables, the start-time value must be greater than, or equal to, now when you take snapshots of measurement data that have not yet been logged to the disk yet.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

AIN Services Summary

The Measurement AIN Services Feature Server Summary (measurement-ainsvc-summary) table requests a summary report of AIN service-related statistics for a specified Feature Server that occur during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-AINSVC-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-ainsvc-summary;  
report measurement-ainsvc-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27  
13:00:00; feature-server-id=FSAIN203;output-type=csv;  
clear measurement-ainsvc-summary feature-server-id=FSAIN203;
```



Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.
Foreign Key Token(s): feature-server-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. The ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format fsptcnnn or fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-1 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-1 lists the values for the AIN Services Summary Display token.

Table 11-1 AIN Services Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
AIN SVC_TOTAL_QUERY
AIN SVC_8XX_QUERY
AIN SVC_EXT_8XX_QUERY
AIN SVC_EXT_8XX_QUERY_SUCC
AIN SVC_EXT_8XX_FAIL_APP
AIN SVC_EXT_8XX_FAIL_NETW
AIN SVC_LOC_8XX_QUERY
AIN SVC_LOC_8XX_QUERY_SUCC
AIN SVC_LOC_8XX_ANI_BLOCK
AIN SVC_LOC_8XX_II_BLOCK
AIN SVC_LOC_8XX_DNIS_SUCC

AIN SVC LOC 8XX ROUTING SUCC	
AIN SVC LOC 8XX REROUTE	
AIN SVC LOC 8XX FAIL APP	
AIN SVC TOTAL LNP QUERY	
AIN SVC EXT LNP QUERY	
AIN SVC EXT LNP QUERY SUCC	
AIN SVC EXT LNP FAIL APP	
AIN SVC EXT LNP FAIL NETW	
AIN SVC EXT 8XX QUERY FAIL	
AIN SVC EXT LNP QUERY LRN	
AIN SVC EXT LNP QUERY FAIL	
AIN SVC LOC LNP QUERY	(Release 4.5)
AIN SVC LOC LNP QUERY SUCC	(Release 4.5)
AIN SVC LOC LNP FAIL APP	(Release 4.5)
AIN SVC LOC LNP QUERY RN FOUND	(Release 4.5)
AIN SVC LOC LNP QUERY NO RN	(Release 4.5)
NUM OF 8XX	
NUM OF AIN	
NUM OF CNAM	
NUM OF EXT 8XX	
NUM OF EXT 8XX FAIL APPL	
NUM OF EXT 8XX FAIL NET	
NUM OF EXT 8XX QUERY FAIL	
NUM OF EXT 8XX SUCCEED	
NUM OF EXT CNAM	
NUM OF EXT CNAM FAIL APPL	
NUM OF EXT CNAM SUCCEED	
NUM OF EXT LNP	
NUM OF EXT LNP FAIL APPL	
NUM OF EXT LNP QUERY FAIL	
NUM OF EXT LNP QUERY LRN	
NUM OF EXT LNP SUCCEED	
NUM OF LNP	
NUM OF LOC 8XX	
NUM OF LOC 8XX ANI BLOCKED	
NUM OF LOC 8XX DNIS SUCCEED	
NUM OF LOC 8XX FAIL APPL	
NUM OF LOC 8XX II BLOCKED	

NUM_OF_LOC_8XX_REROUTED
NUM_OF_LOC_8XX_ROUTING_SUCCEED
NUM_OF_LOC_8XX_SUCCEED
SIP_100_RX
SIP_100_TX
SIP_18x_RX
SIP_18x_TX
SIP_200_RX
SIP_200_TX
SIP_3xx_RX
SIP_3xx_TX
SIP_4xx_RX
SIP_4xx_TX
SIP_5xx_RX
SIP_5xx_TX
SIP_6xx_RX
SIP_6xx_TX
SIP_7xx_RX
SIP_7xx_TX
SIP_ACK_RX
SIP_ACK_TX
SIP_BYE_RX
SIP_BYE_TX
SIP_CANCEL_RX
SIP_CANCEL_TX
SIP_INFO_RX
SIP_INFO_TX
SIP_INVITE_RX
SIP_INVITE_REPLACES_RX
SIP_INVITE_REPLACES_TX
SIP_INVITE_TX
SIP_NOTIFY_RX
SIP_NOTIFY_TX
SIP_OPTIONS_RX
SIP_OPTIONS_TX
SIP_PRACK_RX
SIP_PRACK_TX
SIP_PROV_RSP_RETRAN_RX

SIP_PROV_RSP_RETRAN_TX
SIP_REFER_RX
SIP_REFER_W_REPLACEs_RX
SIP_REFER_TX
SIP_REGISTER_RX
SIP_REGISTER_TX
SIP_REL100_RX
SIP_REL100_TX
SIP_REQ_RETRAN_RX
SIP_REQ_RETRAN_TX
SIP_RSP_RETRAN_RX
SIP_RSP_RETRAN_TX
SIP_SUBSCRIBE_RX
SIP_SUBSCRIBE_TX
SIP_T1_TIMER_EXPIRED
SIP_T2_TIMER_REACHED
SIP_TOTAL_INCOM_MSG
SIP_TOTAL_SUCC_INCOM_MSG
SIP_TOTAL_OUTG_MSG_ATTMP
SIP_TOTAL_SUCC_OUTG_MSG
SIP_UNSUPPORTED_RX
SIP_UPDATE_RX
SIP_UPDATE_TX

Announcement Measurements Summary

The Announcement Measurements Summary (measurement-anm-summary) table collects announcement statistics, such as how many times a specific announcement was played during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-ANM-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-anm-summary;
report measurement-anm-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-anm-summary call-agent-id=ca001;
```

**Caution**

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Change Rules: None.

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION ANM_ADDR_INCOMPLETE ANM_AUTHCODE_INVALID ANM_CALL_REJECTED ANM_CAUSE_UNKNOWN ANM_CKT_UNAVAIL ANM_DEST_OUTOFORDER ANM_EMG_CKT_UNAVAIL (Release 4.5) ANM_FAC_REJECT ANM_FEAT_NOT_SUBS ANM_HNPA_ABSENT ANM_NO_ROUTE_DEST ANM_NO_RTE_TRANSITNW ANM_NUM_CHANGED ANM_PRE_0_1_ABSENT ANM_PRE_0_1_PRESENT ANM_TEMP_DISCONNECT ANM_UNALLOCATED_NUM
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement AIN Tools Summary (Release 4.4.1)

The Measurement AIN Tools Summary (measurement-ain-tools-summary) table collects AIN tools statistics. Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-AIN-TOOLS-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-ain-tools-summary;
report measurement-ain-tools-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27
12:00:00; feature-server-id=FSAIN203; output=ain-tools-report; output-type=csv;
clear measurement-ain-tools-summary feature-server-id=FSAIN203;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description	FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. The ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format fsptcnnn or fsainnnn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-2 for permitted values.
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
	OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
	START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

[Table 11-2](#) lists the values for the Measurement AIN Tools Summary Display token.

Table 11-2 Measurement AIN Tools Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
AIN SVC_8XX_QUERY
AIN SVC_EXT_8XX_FAIL_APP
AIN SVC_EXT_8XX_FAIL_NETW
AIN SVC_EXT_8XX_QUERY

AIN SVC_EXT_8XX_QUERY_FAIL	
AIN SVC_EXT_8XX_QUERY_SUCC	
AIN SVC_EXT_LNP_FAIL_APP	
AIN SVC_EXT_LNP_FAIL_NETW	
AIN SVC_EXT_LNP_QUERY	
AIN SVC_EXT_LNP_QUERY_FAIL	
AIN SVC_EXT_LNP_QUERY_LRN	
AIN SVC_EXT_LNP_QUERY_SUCC	
AIN SVC_LOC_8XX_ANI_BLOCK	
AIN SVC_LOC_8XX_DNIS_SUCC	
AIN SVC_LOC_8XX_FAIL_APP	
AIN SVC_LOC_8XX_II_BLOCK	
AIN SVC_LOC_8XX_QUERY	
AIN SVC_LOC_8XX_QUERY_SUCC	
AIN SVC_LOC_8XX_REROUTE	
AIN SVC_LOC_8XX_ROUTING_SUCC	
AIN SVC_LOC_LNP_FAIL_APP	(Release 4.5)
AIN SVC_LOC_LNP_QUERY	(Release 4.5)
AIN SVC_LOC_LNP_QUERY_NO_RN	(Release 4.5)
AIN SVC_LOC_LNP_QUERY_RN_FOUND	(Release 4.5)
AIN SVC_LOC_LNP_QUERY_SUCC	(Release 4.5)
AIN SVC_TOTAL_LNP_QUERY	
AIN SVC_TOTAL_QUERY	
SIS_100_RX	(Release 4.5)
SIS_100_TX	(Release 4.5)
SIS_18x_RX	(Release 4.5)
SIS_18x_TX	(Release 4.5)
SIS_200_RX	(Release 4.5)
SIS_200_TX	(Release 4.5)
SIS_3xx_RX	(Release 4.5)
SIS_3xx_TX	(Release 4.5)
SIS_4xx_RX	(Release 4.5)
SIS_4xx_TX	(Release 4.5)
SIS_5xx_RX	(Release 4.5)
SIS_5xx_TX	(Release 4.5)
SIS_6xx_RX	(Release 4.5)
SIS_6xx_TX	(Release 4.5)
SIS_7xx_RX	(Release 4.5)

SIS_7xx_TX	(Release 4.5)
SIS_ACK_RX	(Release 4.5)
SIS_ACK_TX	(Release 4.5)
SIS_BYE_RX	(Release 4.5)
SIS_BYE_TX	(Release 4.5)
SIS_CANCEL_RX	(Release 4.5)
SIS_CANCEL_TX	(Release 4.5)
SIS_INFO_RX	(Release 4.5)
SIS_INFO_TX	(Release 4.5)
SIS_INVITE_REPLACES_RX	(Release 4.5)
SIS_INVITE_REPLACES_TX	(Release 4.5)
SIS_INVITE_RX	(Release 4.5)
SIS_INVITE_TX	(Release 4.5)
SIS_NOTIFY_RX	(Release 4.5)
SIS_NOTIFY_TX	(Release 4.5)
SIS_OPTIONS_RX	(Release 4.5)
SIS_OPTIONS_TX	(Release 4.5)
SIS_PRACK_RX	(Release 4.5)
SIS_PRACK_TX	(Release 4.5)
SIS_PROV_RSP_RETRAN_RX	(Release 4.5)
SIS_PROV_RSP_RETRAN_TX	(Release 4.5)
SIS_REFERER_RX	(Release 4.5)
SIS_REFERER_TX	(Release 4.5)
SIS_REFERER_W_REPLACES_RX	(Release 4.5)
SIS_REGISTER_RX	(Release 4.5)
SIS_REGISTER_TX	(Release 4.5)
SIS_REL100_RX	(Release 4.5)
SIS_REL100_TX	(Release 4.5)
SIS_REQ_RETRAN_RX	(Release 4.5)
SIS_REQ_RETRAN_TX	(Release 4.5)
SIS_RSP_RETRAN_RX	(Release 4.5)
SIS_RSP_RETRAN_TX	(Release 4.5)
SIS_SUBSCRIBE_RX	(Release 4.5)
SIS_SUBSCRIBE_TX	(Release 4.5)
SIS_T1_TIMER_EXPIRED	(Release 4.5)
SIS_T2_TIMER_REACHED	(Release 4.5)
SIS_TOTAL_INCOM_MSG	(Release 4.5)
SIS_TOTAL_OUTG_MSG_ATTMP	(Release 4.5)

SIS_TOTAL_SUCC_INCOM_MSG	(Release 4.5)
SIS_TOTAL_SUCC_OUTG_MSG	(Release 4.5)
SIS_UNSUPPORTED_RX	(Release 4.5)
SIS_UPDATE_RX	(Release 4.5)
SIS_UPDATE_TX	(Release 4.5)
TOOLS_LNP_QUERY_ATTMP	
TOOLS_LNP_QUERY_SUCC	
TOOLS_TOLLFREE_QUERY_ATTMP	
TOOLS_TOLLFREE_QUERY_SUCC	

Measurement Audit Summary

The Measurement Audit Summary (measurement-audit-summary) table requests a summary report of audit-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-AUDIT-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-audit-summary;
report measurement-audit-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-audit-summary call-agent-id=CA146;
```



Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description	CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION AUDIT_FS_TOTAL_SIP_RESP_TMO (Release 4.5) AUDIT_FS_TOTAL_SIP_NOACK_TMO (Release 4.5) AUDIT_FS_TOTAL_CA_SWITCHOVER (Release 4.5) AUDIT_SIP_CCB_FREED (Release 4.5) AUDIT_SIP_CALL_RELEASED (Release 4.5) AUDIT_SIP_BCM_CALL_RELEASED (Release 4.5) AUDIT_SIP_REGCONTACT_FREED (Release 4.5) AUDIT_SS7_TRUNK_STATE_SYNCED (Release 4.5) AUDIT_SS7_LONG_DUR_EXCEEDED (Release 4.5) SS7_AUDIT_LONG_DUR_EXCEEDED SS7_AUDIT_TRUNK_STATE_SYNCED
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
	OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement Billing Summary

The Measurement Billing Summary (measurement-billing-summary) table requests a summary report of billing-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-BILLING-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-billing-summary;
report measurement-billing-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-billing-summary call-agent-id=CA146;
```



Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-3 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.

OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-3 lists the values for the Measurement Billing Summary Display token.

Table 11-3 Measurement Billing Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
BILLING_EM_ACKED
BILLING_EM_LOGGED
BILLING_EM_RETRANS
BILLING_TOTAL_AIRLINES
BILLING_TOTAL_CNA
BILLING_TOTAL_DA_INTER
BILLING_TOTAL_DA_INTL
BILLING_TOTAL_INTL_OPR
BILLING_TOTAL_INTL_WZ1
BILLING_TOTAL_LB_TEST
BILLING_TOTAL_NAT_OPR
BILLING_TOTAL_RAILWAYS
BILLING_TOTAL_SVC_CODE
BILLING_TOTAL_MOBILE
BILLING_TOTAL_UAN
CALLTYPE_500
CALLTYPE_700
CALLTYPE_900
CALLTYPE_976
CALLTYPE_AMBULANCE

CALLTYPE_ATTENDANT
CALLTYPE_BLV
CALLTYPE_BUSINESS
CALLTYPE_CARRIER_OPERATOR
CALLTYPE_CUT_THRU
CALLTYPE_DA
CALLTYPE_DA_TOLL
CALLTYPE_EMG
CALLTYPE_EXTENSION
CALLTYPE_FIRE
CALLTYPE_INFO
CALLTYPE_INTERLATA
CALLTYPE_INTL
CALLTYPE_INVALID
CALLTYPE_LOCAL
CALLTYPE_LRN
CALLTYPE_NAS
CALLTYPE_NATIONAL
CALLTYPE_NON_EMG
CALLTYPE_NONE
CALLTYPE_OPERATOR
CALLTYPE_OPERATOR_ASSISTED
CALLTYPE_PCS
CALLTYPE_POLICE
CALLTYPE_PREMIUM
CALLTYPE_RELAY
CALLTYPE_REPAIR
CALLTYPE_SPEED_DIAL
CALLTYPE_TANDEM
CALLTYPE_TEST_CALL
CALLTYPE_TIME
CALLTYPE_TOLL
CALLTYPE_TOLL_FREE
CALLTYPE_TRAFFIC
CALLTYPE_TW
CALLTYPE_VACANT
CALLTYPE_WEATHER

Measurement Call Processing Summary

The Measurement Call Processing Summary (measurement-callp-summary) table provides a summary report of call processing statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-CALLP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-callp-summary;
report measurement-callp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-callp-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-4 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-4 lists the values for the Measurement Call Processing Summary Display token.

Table 11-4 Measurement Call Processing Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
BCM_CALL_SUCC
BCM_CAS_CALL_SUCCBCM_CAS_CALL_A BAND
BCM_CAS_CAS_CALL
BCM_CAS_H323_CALLS
BCM_CAS_ISDN_CALL
BCM_CAS_MGCP_CALL
BCM_CAS_ORIG_ATTMP
BCM_CAS_ORIG_FAIL
BCM_CAS_SIP_CALL
BCM_CAS_SS7_CALL
BCM_CAS_TERM_ATTMP
BCM_CAS_TERM_FAIL
BCM_EMGNCY_ATTMP
BCM_EMGNCY_CALL_ABAND
BCM_EMGNCY_CALL_SUCC
BCM_EMGNCY_FAIL
BCM_H323_CALLS_ABANDON
BCM_H323_CALLS_SUCCESS
BCM_H323_CAS_CALLSBCM_H323_H323_C ALLS
BCM_H323_ISDN_CALLS
BCM_H323_MGCP_CALLS
BCM_H323_ORIG_ATTEMPTS
BCM_H323_ORIG_FAILURES

BCM_H323_SIP_CALLS
BCM_H323_SS7_CALLS
BCM_H323_TERM_ATTEMPTS
BCM_H323_TERM_FAILURES
BCM_INTERLA_ATTMP
BCM_INTERLA_CALL_ABAND
BCM_INTERLA_FAILBCM_INTERL_CALL_SUCC
BCM_INTL_ATTMP
BCM_INTL_CALL_ABAND
BCM_INTL_CALL_SUCC
BCM_INTL_FAIL
BCM_INTRAL_CALL_SUCC
BCM_INTRALA_ATTMP
BCM_INTRALA_CALL_ABAND
BCM_INTRALA_FAIL
BCM_ISDN_CALL_ABAND
BCM_ISDN_CALL_SUCC
BCM_ISDN_CAS_CALL
BCM_ISDN_H323_CALLS
BCM_ISDN_ISDN_CALL
BCM_ISDN_MGCP_CALL
BCM_ISDN_ORIG_ATTMP
BCM_ISDN_ORIG_FAIL
BCM_ISDN_SIP_CALL
BCM_ISDN_SS7_CALL
BCM_ISDN_TERM_ATTMP
BCM_ISDN_TERM_FAIL
BCM_LOCAL_ATTMP
BCM_LOCAL_CALL_ABAND
BCM_LOCAL_CALL_SUCC
BCM_LOCAL_FAIL
BCM_MGCP_CALL_ABAND
BCM_MGCP_CALL_SUCC
BCM_MGCP_CAS_CALL
BCM_MGCP_H323_CALLS
BCM_MGCP_ISDN_CALL
BCM_MGCP_MGCP_CALL
BCM_MGCP_ORIG_ATTMP

BCM_MGCP_ORIG_FAIL
BCM_MGCP_SIP_CALL
BCM_MGCP_SS7_CALL
BCM_MGCP_TERM_ATTMP
BCM_MGCP_TERM_FAIL
BCM_ORIG_ATTMP
BCM_ORIG_FAIL
BCM_SIP_CALL_ABAND
BCM_SIP_CALL_SUCC
BCM_SIP_CAS_CALL
BCM_SIP_H323_CALLS
BCM_SIP_ISDN_CALL
BCM_SIP_MGCP_CALL
BCM_SIP_ORIG_ATTMP
BCM_SIP_ORIG_FAIL
BCM_SIP_SIP_CALL
BCM_SIP_SS7_CALL
BCM_SIP_TERM_ATTMP
BCM_SIP_TERM_FAIL
BCM_SS7_CALL_ABAND
BCM_SS7_CALL_SUCC
BCM_SS7_CAS_CALL
BCM_SS7_H323_CALLS
BCM_SS7_ISDN_CALL
BCM_SS7_MGCP_CALL
BCM_SS7_ORIG_ATTMP
BCM_SS7_ORIG_FAIL
BCM_SS7_SIP_CALL
BCM_SS7_SS7_CALL
BCM_SS7_TERM_ATTMP
BCM_SS7_TERM_FAIL
BCM_TERM_ATTMP
BCM_TERM_FAIL
BCM_TOLL_FREE_ATTMP
BCM_TOLL_FREE_CALL_ABAND
BCM_TOLL_FREE_CALL_SUCCBCM_CALL _ABAND
BCM_TOLL_FREE_FAIL
BCM_TPM_NAS_ADMIN_REBOOT

BCM_TPM_NAS_ADMIN_RESET	
BCM_TPM_NAS_AUTH_FAIL	
BCM_TPM_NAS_AUTH_SUCC	
BCM_TPM_NAS_CALLBACK	
BCM_TPM_NAS_CLD_UNACC	
BCM_TPM_NAS_CLG_UNACC	
BCM_TPM_NAS_HOST_REQUEST	
BCM_TPM_NAS_IDLE_TIMEOUT	
BCM_TPM_NAS_ISP_PORT_LIMIT	
BCM_TPM_NAS_LOST_CARRIER	
BCM_TPM_NAS_LOST_SERVICE	
BCM_TPM_NAS_NAS_ERROR	
BCM_TPM_NAS_NAS_REBOOT	
BCM_TPM_NAS_NAS_REQUEST	
BCM_TPM_NAS_NO_MODEMS	
BCM_TPM_NAS_OP_FAIL	
BCM_TPM_NAS_PORT_ERROR	
BCM_TPM_NAS_PORT_PREEMPTED	
BCM_TPM_NAS_PORT_SUSPENDED	
BCM_TPM_NAS_PORT_UNNEEDED	
BCM_TPM_NAS_SERVICE_UNAVAIL	
BCM_TPM_NAS_SESSION_TIMEOUT	
BCM_TPM_NAS_USER_ERROR	
BCM_TPM_NAS_USER_REQUEST	
CALLP_LB_TEST_SUCC	(Release 4.5)
CALLP_NCT_TEST_SUCC	(Release 4.5)
CALLP_NCT_TEST_FAIL	(Release 4.5)
CALLP_NLB_TEST_SUCC	(Release 4.5)
CALLP_NLB_TEST_FAIL	(Release 4.5)
CALLP_TEST_ROUTE_SUCC	(Release 4.5)
CALLP_TOTAL_TDISC_ORIG_ATTMP	(Release 4.5)
CALLP_T38_FAX_MEDIA_SETUP_SUCC	(Release 4.5)
CALLP_T38_FAX_MEDIA_SETUP_FAIL	(Release 4.5)

Measurement Call Tools Summary (Release 4.4.1)

The Measurement Call Tools Summary (measurement-call-tools-summary) table collects call tools statistics. Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-CALL-TOOLS-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-call-tools-summary;
report measurement-call-tools-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27
12:00:00; call-agent-id=CA146; output=call-tools-report; output-type=csv;
clear measurement-call-tools-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION TOOLS_TRUNK_TRANS_ATTMP TOOLS_TRUNK_TRANS_SUCC TOOLS_LINE_TRANS_ATTMP TOOLS_LINE_TRANS_SUCC
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.

OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement Dynamic QOS Summary

The Measurement Dynamic Quality of Service (QOS) Summary (measurement-dqos-summary) table requests a summary report of quality-of-service-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-DQOS-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-dqos-summary;
report measurement-dqos-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-dqos-summary call-agent-id=CA146;
```



Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description	CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION DQOS_GATE_COMMIT—The number of successfully committed DQOS gates of all types on the reporting CMTS. DQOS_GATESET_ATTMP—The number of DQOS gate set attempts of all types on the reporting CMTS. DQOS_GATESET_SUCC—The number of successful DQOS gate set attempts of all types on the reporting CMTS.
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
	OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
	START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement Event Messaging Summary

The Measurement Event Messaging Summary (measurement-em-summary) table requests a summary report of billing event-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-EM-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-em-summary;
report measurement-em-summary start-time=2003-03-27 06:00:00;end-time=2003-03-27 06:30:00;
call-agent-id=CA146;output-type=csv;
clear measurement-em-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION BILLING_EM_ACKED—The number of EMs acknowledged by the RKS. BILLING_EM_LOGGED—The number of EMs written to disk but not sent to any RKS. BILLING_EM_RETRANS—The number of event messages that were transmitted to an alternate RKS due to the lack of a response from a previously tried RKS, excluding retries. The counter is incremented when an event message is first sent to an alternate RKS. Any retries that occur at the RADIUS stack level (as provided in the radius-profile table) will not be included in this count.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement H323 Summary

The Measurement H323 Summary (measurement-h323-summary) table requests a summary report of H.323-related statistics for a specified Call Agent that occur during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-H323-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-h323-summary;
report measurement-h323-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-h323-summary call-agent-id=ca001;
```



Note

The clear command clears all current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Other Rules: None.

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-5 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

[Table 11-5](#) lists the values for the Measurement H.323 Summary Display token.

Table 11-5 Measurement H.323 Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
H323_ALERT_RX

H323_ALERT_TX
H323_ARJ_RX
H323_ARJ_TX
H323_ARQ_RX
H323_ARQ_TX
H323_BCF_RX
H323_BCF_TX
H323_BRJ_RX
H323_BRJ_TX
H323_BRQ_RX
H323_BRQ_TX
H323_CALL_PROCEEDING_FAIL
H323_CALL_PROCEEDING_RX
H323_CALL_PROCEEDING_TX
H323_CONNECT_FAIL
H323_DCF_RX
H323_DCF_TX
H323_DRJ_RX
H323_DRJ_TX
H323_DRQ_RX
H323_DRQ_TX
H323_FACILITY_FAIL
H323_FACILITY_RX
H323_FACILITY_TX
H323_GCF_RX
H323_GCF_TX
H323_GRJ_RX
H323_GRJ_TX
H323_GRQ_RX
H323_GRQ_TX
H323_IN_PROGRESS_FAIL
H323_IN_PROGRESS_RX
H323_IN_PROGRESS_TX
H323_INFORMATION_FAIL
H323_INFORMATION_RX
H323_INFORMATION_TX
H323_NOTIFY_FAIL
H323_NOTIFY_RX

H323_NOTIFY_TX
H323_PASSTHROU_FAIL
H323_PASSTHROU_RX
H323_PASSTHROU_TX
H323_RAC_RX
H323_RAC_TX
H323_RAI_RX
H323_RAI_TX
H323_RCF_RX
H323_RCF_TX
H323_REJECT_FAIL
H323_REJECT_RX
H323_REJECT_TX
H323_RELEASE_COMPLETE_FAIL
H323_RELEASE_COMPLETE_RX
H323_RELEASE_COMPLETE_TX
H323_RIP_RX
H323_RIP_TX
H323_RRJ_RX
H323_RRJ_TX
H323_RRQ_RX
H323_RRQ_TX
H323_SETUP_CONFIRM_RX
H323_SETUP_CONFIRM_TX
H323_SETUP_FAIL
H323_SETUP_RX
H323_SETUP_TX
H323_UCF_RX
H323_UCF_TX
H323_URJ_RX
H323_URJ_TX
H323_URQ_RX
H323_URQ_TX
H323_USER_INFO_FAIL
H323_USER_INFO_RX
H323_USER_INFO_TX

Measurement INAP Summary



Note

This table is obsoleted in Release 4.5.

The Measurement Intelligent Network Application Part (INAP) Summary (measurement-inap-summary) table requests a summary report of INAP-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-INAP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-inap-summary;
report measurement-inap-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-inap-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-6 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.

OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-6 lists the values for the Measurement INAP Summary Display token.

Table 11-6 Measurement INAP Summary Display Token Values

INAP_CANCEL_RX	Obsolete in Release 4.5.
INAP_CANCEL_TX	Obsolete in Release 4.5.
INAP_DATABASE_ERR_RX	Obsolete in Release 4.5.
INAP_DATABASE_ERR_TX	Obsolete in Release 4.5.
INAP_ETC_FAIL_RX	Obsolete in Release 4.5.
INAP_ETC_FAIL_TX	Obsolete in Release 4.5.
INAP_IMPROP_CALLER_RSP_RX	Obsolete in Release 4.5.
INAP_IMPROP_CALLER_RSP_TX	Obsolete in Release 4.5.
INAP_INFO_KEY_ERR_RX	Obsolete in Release 4.5.
INAP_INFO_KEY_ERR_TX	Obsolete in Release 4.5.
INAP_MISSING_CUST_REC_RX	Obsolete in Release 4.5.
INAP_MISSING_CUST_REC_TX	Obsolete in Release 4.5.
INAP_MISSING_PARM_RX	Obsolete in Release 4.5.
INAP_MISSING_PARM_TX	Obsolete in Release 4.5.
INAP_NUM_CAPAB_FAIL	Obsolete in Release 4.5.
INAP_NUM_CHANNEL_BUSY	Obsolete in Release 4.5.
INAP_NUM_RSRC_NOT_AVAIL	Obsolete in Release 4.5.
INAP_NUM_RSRC_NOT_SUPP	Obsolete in Release 4.5.
INAP_NUM_TASK_REFUSED	Obsolete in Release 4.5.
INAP_NUM_INVALID_CALLER_RSP	Obsolete in Release 4.5.
INAP_NUM_IP_TMO	Obsolete in Release 4.5.
INAP_NUM_SUPPL_SVC_INVOKE	Obsolete in Release 4.5.
INAP_NUM_SEND_RSCR_CANCEL	Obsolete in Release 4.5.

INAP_NUM_TEMP_FAIL	Obsolete in Release 4.5.
INAP_NUM_UNAUTH_REQ	Obsolete in Release 4.5.
INAP_NUM_UNAUTH_DEST	Obsolete in Release 4.5.
INAP_NUM_PROCED_ERR	Obsolete in Release 4.5.
INAP_PARM_OUT_OF_RANGE_RX	Obsolete in Release 4.5.
INAP_PARM_OUT_OF_RANGE_TX	Obsolete in Release 4.5.
INAP_REFERRAL_RX	Obsolete in Release 4.5.
INAP_REFERRAL_TX	Obsolete in Release 4.5.
INAP_REPORT_ERR_RX	Obsolete in Release 4.5.
INAP_REPORT_ERR_TX	Obsolete in Release 4.5.
INAP_REQ_INFO_RX	Obsolete in Release 4.5.
INAP_REQ_INFO_TX	Obsolete in Release 4.5.
INAP_SYS_FAIL_RX	Obsolete in Release 4.5.
INAP_SYS_FAIL_TX	Obsolete in Release 4.5.
INAP_TASK_REFUSED_RX	Obsolete in Release 4.5.
INAP_TASK_REFUSED_TX	Obsolete in Release 4.5.
INAP_UNAVIL_RSRC_RX	Obsolete in Release 4.5.
INAP_UNAVIL_RSRC_TX	Obsolete in Release 4.5.
INAP_UNEXPECT_COMP_SEQ_RX	Obsolete in Release 4.5.
INAP_UNEXPECT_COMP_SEQ_TX	Obsolete in Release 4.5.
INAP_UNEXPECT_DATA_VAL_RX	Obsolete in Release 4.5.
INAP_UNEXPECT_DATA_VAL_TX	Obsolete in Release 4.5.
INAP_UNEXPECT_PARM_RX	Obsolete in Release 4.5.
INAP_UNEXPECT_PARM_TX	Obsolete in Release 4.5.
INAP_UNKNOWN_LEG_ID_RX	Obsolete in Release 4.5.
INAP_UNKNOWN_LEG_ID_TX	Obsolete in Release 4.5.
INAP_UNKNOWN_RSRC_RX	Obsolete in Release 4.5.
INAP_UNKNOWN_RSRC_TX	Obsolete in Release 4.5.
INAP_UNRECOG_INVOKE_ID_RX	Obsolete in Release 4.5.
INAP_UNRECOG_INVOKE_ID_TX	Obsolete in Release 4.5.

Measurement ISDN Summary

The Measurement ISDN Summary (measurement-isdn-summary) table requests a summary report of ISDN-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-ISDN-SUMMARY

Table Containment Area: OAMP

Command Types Report, show and clear

Examples

```
show measurement-isdn-summary;
report measurement-isdn-summary start-time=2003-03-27 06:00:00;end-time=2003-03-27
06:30:00; call-agent-id=CA146; output-type=csv;
clear measurement-isdn-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description	CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-7 for permitted values.
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
	OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-7 lists the values for the Measurement ISDN Summary Display token.

Table 11-7 Measurement ISDN Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
ISDN_ALERTING_RX
ISDN_ALERTING_TX
ISDN_CALL_PROCEED_RX
ISDN_CALL_PROCEED_TX
ISDN_CONG_CNTL_RX (Release 4.4.0)
ISDN_CONG_CNTL_TX (Release 4.4.0)
ISDN_CONNECT_ACK_RX
ISDN_CONNECT_ACK_TX
ISDN_CONNECT_RX
ISDN_CONNECT_TX
ISDN_DISCONNECT_RX
ISDN_DISCONNECT_TX
ISDN_INFORMATION_RX
ISDN_INFORMATION_TX
ISDN_NOTIFY_RX
ISDN_NOTIFY_TX
ISDN_NUM_OF_SRVC_ACK_RX
ISDN_NUM_OF_SRVC_ACK_TX
ISDN_NUM_OF_SRVC_RX
ISDN_NUM_OF_SRVC_TX
ISDN_PROGRESS_RX
ISDN_PROGRESS_TX
ISDN_RELEASE_COMPLETE_RX

ISDN_RELEASE_COMPLETE_TX	
ISDN_RELEASE_RX	
ISDN_RELEASE_TX	
ISDN_RESTART_ACK_RX	
ISDN_RESTART_ACK_TX	
ISDN_RESTART_RX	
ISDN_RESTART_TX	
ISDN_RESUME_ACK_RX	(Release 4.4.0)
ISDN_RESUME_ACK_TX	(Release 4.4.0)
ISDN_RESUME_REJ_RX	(Release 4.4.0)
ISDN_RESUME_REJ_TX	(Release 4.4.0)
ISDN_RESUME_RX	(Release 4.4.0)
ISDN_RESUME_TX	(Release 4.4.0)
ISDN_SEGMENT_RX	(Release 4.4.0)
ISDN_SEGMENT_TX	(Release 4.4.0)
ISDN_SETUP_ACK_RX	
ISDN_SETUP_ACK_TX	
ISDN_SETUP_RX	
ISDN_SETUP_TX	
ISDN_STATUS_ENQUIRY_RX	
ISDN_STATUS_ENQUIRY_TX	
ISDN_STATUS_RX	
ISDN_STATUS_TX	
ISDN_SUSPEND_ACK_RX	
ISDN_SUSPEND_ACK_TX RX	(Release 4.4.0)
ISDN_SUSPEND_REJ_RX	(Release 4.4.0)
ISDN_SUSPEND_REJ_TX	(Release 4.4.0)
ISDN_SUSPEND_RX	(Release 4.4.0)
ISDN_SUSPEND_TX	(Release 4.4.0)
ISDN_USER_INFO_RX	(Release 4.4.0)
ISDN_USER_INFO_TX	(Release 4.4.0)
TIMESTAMP	
NODENAME	
CONDITION	

Measurement ISUP Summary

The Measurement ISUP Summary (measurement-isup-summary) table requests a summary report of ISDN user part (ISUP)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-ISUP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-isup-summary;
report measurement-isup-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-isup-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-8 for permitted values. Note SGA counters are renamed to ISUP in Release 4.5.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-8 lists the values for the Measurement ISUP Summary Display token.

Table 11-8 Measurement ISUP Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
TRKGRP-ID
ISUP_ABNORMAL_REL_RX (Release 4.5)
ISUP_ABNORMAL_REL_TX (Release 4.5)
ISUP_ACM_RX (Release 4.5)
ISUP_ACM_TX (Release 4.5)
ISUP_ANM_RX (Release 4.5)
ISUP_ANM_TX (Release 4.5)
ISUP_ARR_RX (Release 4.5)
ISUP_ARR_TX (Release 4.5)
ISUP_BLA_RX (Release 4.5)
ISUP_BLA_TX (Release 4.5)
ISUP_BLO_RX (Release 4.5)
ISUP_BLO_TX (Release 4.5)
ISUP_CCL_RX (Release 4.5)
ISUP_CCL_TX (Release 4.5)
ISUP_CCR_RX (Release 4.5)
ISUP_CCR_TX (Release 4.5)
ISUP_CFN_RX (Release 4.5)
ISUP_CFN_TX (Release 4.5)
ISUP_CGB_RX (Release 4.5)
ISUP_CGB_TX (Release 4.5)
ISUP_CGBA_RX (Release 4.5)
ISUP_CGBA_TX (Release 4.5)

ISUP_CGU_RX	(Release 4.5)
ISUP_CGU_TX	(Release 4.5)
ISUP_CGUA_RX	(Release 4.5)
ISUP_CGUA_TX	(Release 4.5)
ISUP_CON_RX	(Release 4.5)
ISUP_CON_TX	(Release 4.5)
ISUP_COT_RX	(Release 4.5)
ISUP_COT_TX	(Release 4.5)
ISUP_CPG_RX	(Release 4.5)
ISUP_CPG_TX	(Release 4.5)
ISUP_CQM_RX	(Release 4.5)
ISUP_CQM_TX	(Release 4.5)
ISUP_CQR_RX	(Release 4.5)
ISUP_CQR_TX	(Release 4.5)
ISUP_CRA_RX	(Release 4.5)
ISUP_CRA_TX	(Release 4.5)
ISUP_CRG_RX	(Release 4.5)
ISUP_CRG_TX	(Release 4.5)
ISUP_CRM_RX	(Release 4.5)
ISUP_CRM_TX	(Release 4.5)
ISUP_CVR_RX	(Release 4.5)
ISUP_CVR_TX	(Release 4.5)
ISUP_CVT_RX	(Release 4.5)
ISUP_CVT_TX	(Release 4.5)
ISUP_EXM_RX	(Release 4.5)
ISUP_EXM_TX	(Release 4.5)
ISUP_FAA_RX	(Release 4.5)
ISUP_FAA_TX	(Release 4.5)
ISUP_FAC_RX	(Release 4.5)
ISUP_FAC_TX	(Release 4.5)
ISUP_FAR_RX	(Release 4.5)
ISUP_FAR_TX	(Release 4.5)
ISUP_FOT_RX	(Release 4.5)
ISUP_FOT_TX	(Release 4.5)
ISUP_FRJ_RX	(Release 4.5)
ISUP_FRJ_TX	(Release 4.5)
ISUP_FWT_RX	(Release 4.5)
ISUP_FWT_TX	(Release 4.5)

ISUP_GRA_RX	(Release 4.5)
ISUP_GRA_TX	(Release 4.5)
ISUP_GRS_RX	(Release 4.5)
ISUP_GRS_TX	(Release 4.5)
ISUP_IAM_RX	(Release 4.5)
ISUP_IAM_TX	(Release 4.5)
ISUP_IDR_RX	(Release 4.5)
ISUP_IDR_TX	(Release 4.5)
ISUP_INF_RX	(Release 4.5)
ISUP_INF_TX	(Release 4.5)
ISUP_INR_RX	(Release 4.5)
ISUP_INR_TX	(Release 4.5)
ISUP_IRS_RX	(Release 4.5)
ISUP_IRS_TX	(Release 4.5)
ISUP_ITX_RX	(Release 4.5.1)
ISUP_ITX_TX	(Release 4.5.1)
ISUP_LPA_RX	(Release 4.5)
ISUP_LPA_TX	(Release 4.5)
ISUP_LPM_RX	(Release 4.5)
ISUP_LPM_TX	(Release 4.5)
ISUP_MSG_RX	(Release 4.5)
ISUP_MSG_TX	(Release 4.5)
ISUP_NRM_RX	(Release 4.5)
ISUP_NRM_TX	(Release 4.5)
ISUP_OLM_RX	(Release 4.5)
ISUP_OLM_TX	(Release 4.5)
ISUP_OPR_RX	(Release 4.5)
ISUP_OPR_TX	(Release 4.5)
ISUP_PAM_RX	(Release 4.5)
ISUP_PAM_TX	(Release 4.5)
ISUP_PRI_RX	(Release 4.5)
ISUP_PRI_TX	(Release 4.5)
ISUP_REL_RX	(Release 4.5)
ISUP_REL_TX	(Release 4.5)
ISUP_RES_RX	(Release 4.5)
ISUP_RES_TX	(Release 4.5)
ISUP_RLC_RX	(Release 4.5)
ISUP_RLC_TX	(Release 4.5)

ISUP_RSC_RX	(Release 4.5)
ISUP_RSC_TX	(Release 4.5)
ISUP_SAM_RX	(Release 4.5)
ISUP_SAM_TX	(Release 4.5)
ISUP_SGM_RX	(Release 4.5)
ISUP_SGM_TX	(Release 4.5)
ISUP_SUS_RX	(Release 4.5)
ISUP_SUS_TX	(Release 4.5)
ISUP_UBA_RX	(Release 4.5)
ISUP_UBA_TX	(Release 4.5)
ISUP_UBL_RX	(Release 4.5)
ISUP_UBL_TX	(Release 4.5)
ISUP_UCIC_RX	(Release 4.5)
ISUP_UCIC_TX	(Release 4.5)
ISUP_UNEXPECT_MSG_RX	(Release 4.5)
ISUP_UNRECOG_MSG_RX	(Release 4.5)
ISUP_UPA_RX	(Release 4.5)
ISUP_UPA_TX	(Release 4.5)
ISUP_UPT_RX	(Release 4.5)
ISUP_UPT_TX	(Release 4.5)
ISUP_USR_RX	(Release 4.5)
ISUP_USR_TX	(Release 4.5)
MEAS_SGA_ITX_RX	(France) (Release 4.5.1)
MEAS_SGA_ITX_TX	(France) (Release 4.5.1)
MEAS_SGA_TXA_RX	(France) (Release 4.5.1)
MEAS_SGA_TXA_TX	(France) (Release 4.5.1)
S7A_TPM_ACM_RX	
S7A_TPM_ACM_TX	
S7A_TPM_ANM_RX	
S7A_TPM_ANM_TX	
S7A_TPM_BLA_RX	
S7A_TPM_BLA_TX	
S7A_TPM_BLO_RX	
S7A_TPM_BLO_TX	
S7A_TPM_CGB_RX	
S7A_TPM_CGB_TX	
S7A_TPM_CGBA_RX	
S7A_TPM_CGBA_TX	

S7A_TPM_CGU_RX	
S7A_TPM_CGU_TX	
S7A_TPM_CGUA_RX	
S7A_TPM_CGUA_TX	
S7A_TPM_CPG_RX	
S7A_TPM_CPG_TX	
S7A_TPM_CVR_RX	
S7A_TPM_CVR_TX	
S7A_TPM_CVT_RX	
S7A_TPM_CVT_TX	
S7A_TPM_GRA_RX	
S7A_TPM_GRA_TX	
S7A_TPM_GRS_RX	
S7A_TPM_GRS_TX	
S7A_TPM_IAM_RX	
S7A_TPM_IAM_TX	
S7A_TPM_MSU_RX	
S7A_TPM_MSU_TX	
S7A_TPM_MSU_TXRX	
S7A_TPM_MSU8_RETX	
S7A_TPM_MSU8_RX	
S7A_TPM_MSU8_TX	
S7A_TPM_MSU8_TXRX	
S7A_TPM_REL_RX	
S7A_TPM_REL_TX	
S7A_TPM_RLC_RX	
S7A_TPM_RLC_TX	
S7A_TPM_RSC_RX	
S7A_TPM_RSC_TX	
S7A_TPM_UBA_RX	
S7A_TPM_UBA_TX	
S7A_TPM_UBL_RX	
S7A_TPM_UBL_TX	
SGA_ABNORMAL_REL_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_ABNORMAL_REL_RX	(ITU-Mexico) (Release 4.5.1)
SGA_ABNORMAL_REL_RX	(Thailand) (Release 4.2)
SGA_ABNORMAL_REL_RX	(ITU-Hong Kong) Release 4.2

SGA_ABNORMAL_REL_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_ABNORMAL_REL_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_ABNORMAL_REL_TX	(ITU-Mexico) (Release 4.5.1)
SGA_ABNORMAL_REL_TX	(Thailand) (Release 4.2)
SGA_ABNORMAL_REL_TX	(ITU-Hong Kong) Release 4.2
SGA_ABNORMAL_REL_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_ACM_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_ACM_RX	(Thailand) (Release 4.2)
SGA_ACM_RX	(ITU-Hong Kong) Release 4.2
SGA_ACM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_ACM_RX	(ITU-Mexico) (Release 4.5.1)
SGA_ACM_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_ACM_TX	(Thailand) (Release 4.2)
SGA_ACM_TX	(ITU-Hong Kong) Release 4.2
SGA_ACM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_ACM_TX	(ITU-Mexico) (Release 4.5.1)
SGA_ANM_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_ANM_RX	(Thailand) (Release 4.2)
SGA_ANM_RX	(ITU-Hong Kong) Release 4.2
SGA_ANM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_ANM_RX	(ITU-Mexico) (Release 4.5.1)
SGA_ANM_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_ANM_TX	(Thailand) (Release 4.2)
SGA_ANM_TX	(ITU-Hong Kong) Release 4.2
SGA_ANM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_ANM_TX	(ITU-Mexico) (Release 4.5.1)
SGA_ARR_RX	(Thailand) (Release 4.2)
SGA_ARR_TX	(Thailand) (Release 4.2)
SGA_BLA_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_BLA_RX	(Thailand) (Release 4.2)

SGA_BLA_RX	(ITU-Hong Kong) Release 4.2
SGA_BLA_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_BLA_RX	(ITU-Mexico) (Release 4.5.1)
SGA_BLA_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_BLA_TX	(Thailand) (Release 4.2)
SGA_BLA_TX	(ITU-Hong Kong) Release 4.2
SGA_BLA_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_BLA_TX	(ITU-Mexico) (Release 4.5.1)
SGA_BLO_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_BLO_RX	(Thailand) (Release 4.2)
SGA_BLO_RX	(ITU-Hong Kong) Release 4.2
SGA_BLO_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_BLO_RX	(ITU-Mexico) (Release 4.5.1)
SGA_BLO_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_BLO_TX	(Thailand) (Release 4.2)
SGA_BLO_TX	(ITU-Hong Kong) Release 4.2
SGA_BLO_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_BLO_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CCL_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CCL_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CCL_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CCL_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CCR_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CCR_RX	(Thailand) (Release 4.2)
SGA_CCR_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CCR_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CCR_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CCR_TX	(Thailand) (Release 4.2)

SGA_CCR_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CCR_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CFN_RX	(Thailand) (Release 4.2)
SGA_CFN_RX	(ITU-Hong Kong) Release 4.2
SGA_CFN_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CFN_TX	(Thailand) (Release 4.2)
SGA_CFN_TX	(ITU-Hong Kong) Release 4.2
SGA_CFN_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CGB_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGB_RX	(Thailand) (Release 4.2)
SGA_CGB_RX	(ITU-Hong Kong) Release 4.2
SGA_CGB_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGB_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CGB_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGB_TX	(Thailand) (Release 4.2)
SGA_CGB_TX	(ITU-Hong Kong) Release 4.2
SGA_CGB_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGB_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CGBA_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGBA_RX	(Thailand) (Release 4.2)
SGA_CGBA_RX	(ITU-Hong Kong) Release 4.2
SGA_CGBA_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGBA_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CGBA_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGBA_TX	(Thailand) (Release 4.2)
SGA_CGBA_TX	(ITU-Hong Kong) Release 4.2
SGA_CGBA_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGBA_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CGU_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGU_RX	(Thailand) (Release 4.2)
SGA_CGU_RX	(ITU-Hong Kong) Release 4.2

SGA_CGU_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGU_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CGU_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGU_TX	(Thailand) (Release 4.2)
SGA_CGU_TX	(ITU-Hong Kong) Release 4.2
SGA_CGU_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGU_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CGUA_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGUA_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CGUA_RX	(Thailand) (Release 4.2)
SGA_CGUA_RX	(ITU-Hong Kong) Release 4.2
SGA_CGUA_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGUA_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CGUA_TX	(Thailand) (Release 4.2)
SGA_CGUA_TX	(ITU-Hong Kong) Release 4.2
SGA_CGUA_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CGUA_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CON_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CON_RX	(Thailand) (Release 4.2)
SGA_CON_RX	(ITU-Hong Kong) Release 4.2
SGA_CON_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CON_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CON_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CON_TX	(Thailand) (Release 4.2)
SGA_CON_TX	(ITU-Hong Kong) Release 4.2
SGA_CON_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CON_TX	(ITU-Mexico) (Release 4.5.1)
SGA_COT_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_COT_RX	(ITU-Mexico) (Release 4.5.1)
SGA_COT_RX	(Thailand) (Release 4.2)

SGA_COT_RX	(ITU-Hong Kong) Release 4.2
SGA_COT_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_COT_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_COT_TX	(ITU-Mexico) (Release 4.5.1)
SGA_COT_TX	(Thailand) (Release 4.2)
SGA_COT_TX	(ITU-Hong Kong) Release 4.2
SGA_COT_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CPG_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CPG_RX	(Thailand) (Release 4.2)
SGA_CPG_RX	(ITU-Hong Kong) Release 4.2
SGA_CPG_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CPG_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CPG_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_CPG_TX	(Thailand) (Release 4.2)
SGA_CPG_TX	(ITU-Hong Kong) Release 4.2
SGA_CPG_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CPG_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CQM_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CQM_RX	(Thailand) (Release 4.2)
SGA_CQM_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CQM_TX	(Thailand) (Release 4.2)
SGA_CQR_RX	(ITU-Mexico) (Release 4.5.1)
SGA_CQR_RX	(Thailand) (Release 4.2)
SGA_CQR_TX	(ITU-Mexico) (Release 4.5.1)
SGA_CQR_TX	(Thailand) (Release 4.2)
SGA_CRG_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_CRG_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FAC_RX	(ITU-Hong Kong) Release 4.2
SGA_FAC_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FAC_TX	(ITU-Hong Kong) Release 4.2
SGA_FAC_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FAR_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FAR_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FRJ_RX	(ITU-Chile) (Release 4.4.0) (Not supported)

SGA_FRJ_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FWT_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_FWT_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_GRA_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_GRA_RX	(ITU-Mexico) (Release 4.5.1)
SGA_GRA_RX	(Thailand) (Release 4.2)
SGA_GRA_RX	(ITU-Hong Kong) Release 4.2
SGA_GRA_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_GRA_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_GRA_TX	(ITU-Mexico) (Release 4.5.1)
SGA_GRA_TX	(Thailand) (Release 4.2)
SGA_GRA_TX	(ITU-Hong Kong) Release 4.2
SGA_GRA_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_GRS_RX	(ITU-Mexico) (Release 4.5.1)
SGA_GRS_RX	(Thailand) (Release 4.2)
SGA_GRS_RX	(ITU-Hong Kong) Release 4.2
SGA_GRS_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_GRS_TX	(ITU-Mexico) (Release 4.5.1)
SGA_GRS_TX	(Thailand) (Release 4.2)
SGA_GRS_TX	(ITU-Hong Kong) Release 4.2
SGA_GRS_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_IAM_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_IAM_RX	(ITU-Mexico) (Release 4.5.1)
SGA_IAM_RX	(Thailand) (Release 4.2)
SGA_IAM_RX	(ITU-Hong Kong) Release 4.2
SGA_IAM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_IAM_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_IAM_TX	(ITU-Mexico) (Release 4.5.1)
SGA_IAM_TX	(Thailand) (Release 4.2)
SGA_IAM_TX	(ITU-Hong Kong) Release 4.2
SGA_IAM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_IDR_RX	(ITU-Chile) (Release 4.4.0) (Not supported)

SGA_IDR_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_INF_RX	(ITU-Mexico) (Release 4.5.1)
SGA_INF_RX	(Thailand) (Release 4.2)
SGA_INF_RX	(ITU-Hong Kong) Release 4.2
SGA_INF_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_INF_TX	(ITU-Mexico) (Release 4.5.1)
SGA_INF_TX	(Thailand) (Release 4.2)
SGA_INF_TX	(ITU-Hong Kong) Release 4.2
SGA_INF_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_INR_RX	(ITU-Mexico) (Release 4.5.1)
SGA_INR_RX	(Thailand) (Release 4.2)
SGA_INR_RX	(ITU-Hong Kong) Release 4.2
SGA_INR_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_INR_TX	(ITU-Mexico) (Release 4.5.1)
SGA_INR_TX	(Thailand) (Release 4.2)
SGA_INR_TX	(ITU-Hong Kong) Release 4.2
SGA_INR_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_IRS_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_IRS_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_LPM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_LPM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_MSG_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_MSG_RX	(Thailand) (Release 4.2)
SGA_MSG_RX	(ITU-Hong Kong) Release 4.2
SGA_MSG_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_MSG_RX	(ITU-Mexico) (Release 4.5.1)
SGA_MSG_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_MSG_TX	(Thailand) (Release 4.2)
SGA_MSG_TX	(ITU-Hong Kong) Release 4.2
SGA_MSG_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_MSG_TX	(ITU-Mexico) (Release 4.5.1)
SGA_NRM_RX	(ITU-Hong Kong) Release 4.2
SGA_NRM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_NRM_TX	(ITU-Hong Kong) Release 4.2
SGA_NRM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)

SGA_OPR_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_OPR_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_PAM_RX	(ITU-Hong Kong) Release 4.2
SGA_PAM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_PAM_TX	(ITU-Hong Kong) Release 4.2
SGA_PAM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_PRI_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_PRI_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_REL_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_REL_RX	(ITU-Mexico) (Release 4.5.1)
SGA_REL_RX	(Thailand) (Release 4.2)
SGA_REL_RX	(ITU-Hong Kong) Release 4.2
SGA_REL_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_REL_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_REL_TX	(ITU-Mexico) (Release 4.5.1)
SGA_REL_TX	(Thailand) (Release 4.2)
SGA_REL_TX	(ITU-Hong Kong) Release 4.2
SGA_REL_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_RES_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_RES_RX	(ITU-Mexico) (Release 4.5.1)
SGA_RES_RX	(Thailand) (Release 4.2)
SGA_RES_RX	(ITU-Hong Kong) Release 4.2
SGA_RES_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_RES_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_RES_TX	(ITU-Mexico) (Release 4.5.1)
SGA_RES_TX	(Thailand) (Release 4.2)
SGA_RES_TX	(ITU-Hong Kong) Release 4.2
SGA_RES_TX	(ITU-Chile) (Release 4.4.0) (Not supported)

SGA_RLC_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_RLC_RX	(ITU-Mexico) (Release 4.5.1)
SGA_RLC_RX	(Thailand) (Release 4.2)
SGA_RLC_RX	(ITU-Hong Kong) Release 4.2
SGA_RLC_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_RLC_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_RLC_TX	(ITU-Mexico) (Release 4.5.1)
SGA_RLC_TX	(Thailand) (Release 4.2)
SGA_RLC_TX	(ITU-Hong Kong) Release 4.2
SGA_RLC_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_RSC_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_RSC_RX	(ITU-Mexico) (Release 4.5.1)
SGA_RSC_RX	(Thailand) (Release 4.2)
SGA_RSC_RX	(ITU-Hong Kong) Release 4.2
SGA_RSC_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_RSC_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_RSC_TX	(ITU-Mexico) (Release 4.5.1)
SGA_RSC_TX	(Thailand) (Release 4.2)
SGA_RSC_TX	(ITU-Hong Kong) Release 4.2
SGA_RSC_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_SAM_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_SAM_RX	(ITU-Mexico) (Release 4.5.1)
SGA_SAM_RX	(Thailand) (Release 4.2)
SGA_SAM_RX	(ITU-Hong Kong) Release 4.2
SGA_SAM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_SAM_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_SAM_TX	(ITU-Mexico) (Release 4.5.1)
SGA_SAM_TX	(Thailand) (Release 4.2)
SGA_SAM_TX	(ITU-Hong Kong) Release 4.2
SGA_SAM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)

SGA_SGM_RX	(ITU-Hong Kong) Release 4.2
SGA_SGM_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_SGM_TX	(ITU-Hong Kong) Release 4.2
SGA_SGM_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_SUS_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_SUS_RX	(ITU-Mexico) (Release 4.5.1)
SGA_SUS_RX	(Thailand) (Release 4.2)
SGA_SUS_RX	(ITU-Hong Kong) Release 4.2
SGA_SUS_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_SUS_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_SUS_TX	(ITU-Mexico) (Release 4.5.1)
SGA_SUS_TX	(Thailand) (Release 4.2)
SGA_SUS_TX	(ITU-Hong Kong) Release 4.2
SGA_SUS_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UBA_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_UBA_RX	(ITU-Mexico) (Release 4.5.1)
SGA_UBA_RX	(Thailand) (Release 4.2)
SGA_UBA_RX	(ITU-Hong Kong) Release 4.2
SGA_UBA_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UBA_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_UBA_TX	(ITU-Mexico) (Release 4.5.1)
SGA_UBA_TX	(Thailand) (Release 4.2)
SGA_UBA_TX	(ITU-Hong Kong) Release 4.2
SGA_UBA_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UBL_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_UBL_RX	(ITU-Mexico) (Release 4.5.1)
SGA_UBL_RX	(Thailand) (Release 4.2)
SGA_UBL_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UBL_TX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_UBL_TX	(ITU-Mexico) (Release 4.5.1)

SGA_UBL_TX	(Thailand) (Release 4.2)
SGA_UBL_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UCIC_RX	(ITU-Mexico) (Release 4.5.1)
SGA_UCIC_RX	(Thailand) (Release 4.2)
SGA_UCIC_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UCIC_TX	(ITU-Mexico) (Release 4.5.1)
SGA_UCIC_TX	(Thailand) (Release 4.2)
SGA_UCIC_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UNEXPECT_MSG_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_UNEXPECT_MSG_RX	(ITU-Mexico) (Release 4.5.1)
SGA_UNEXPECT_MSG_RX	(Thailand) (Release 4.2)
SGA_UNEXPECT_MSG_RX	(ITU-Hong Kong) Release 4.2
SGA_UNEXPECT_MSG_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_UNRECOG_MSG_RX	(ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported)
SGA_UNRECOG_MSG_RX	(ITU-Mexico) (Release 4.5.1)
SGA_UNRECOG_MSG_RX	(Thailand) (Release 4.2)
SGA_UNRECOG_MSG_RX	(ITU-Hong Kong) Release 4.2
SGA_UNRECOG_MSG_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_USR_RX	(ITU-Chile) (Release 4.4.0) (Not supported)
SGA_USR_TX	(ITU-Chile) (Release 4.4.0) (Not supported)
TIMESTAMP	
NODENAME	
CONDITION	
TIMESTAMP	
NODENAME	
CONDITION	
TIMESTAMP	
NODENAME	
CONDITION	

Measurement M3UA Summary

The Measurement M3UA Summary (measurement-m3ua-summary) table requests a summary report of M3UA-related statistics for all media gateways (MGWs) that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-M3UA-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-m3ua-summary;
report measurement-m3ua-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id =CA146;
clear measurement-m3ua-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are:
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-9 lists the values for the Measurement M3UA Summary Display token.

Table 11-9 Measurement M3UA Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
M3UA-SGP-ID
M3UA_ACTIVE_ACK_RX
M3UA_ACTIVE_TX
M3UA_ASSOC_FAIL
M3UA_BEAT_ACK_RX
M3UA_BEAT_ACK_TX
M3UA_BEAT_RX
M3UA_BEAT_TX
M3UA_DATA_BYTES_RX
M3UA_DATA_BYTES_TX
M3UA_DATA_TRANS_RX
M3UA_DATA_TRANS_TX
M3UA_DAUD_TX
M3UA_DAVA_RX
M3UA_DOWN_ACK_RX
M3UA_DOWN_TX
M3UA_DRST_RX
M3UA_DUNA_RX
M3UA_DUPU_RX
M3UA_ERR_RX
M3UA_ERR_TX
M3UA_INACTIVE_ACK_RX
M3UA_INACTIVE_TX

M3UA_INVALID_SCTP_SIGNALS
M3UA_MSG_CLASS_ERR
M3UA_MSG_LENGTH_ERR
M3UA_MSG_RX_OTHER_ERR
M3UA_MSG_TYPE_ERR
M3UA_NETWORK_APPEAR_ERR
M3UA_NO_MEMORY_ERR
M3UA_NOTIFY_TX
M3UA_NOTIFY_RX
M3UA_PARAM_FIELD_ERR
M3UA_PARAM_VALUE_ERR
M3UA_PROTOCOL_ERR
M3UA_ROUTING_CONTEXT_ERR
M3UA_SCON_TX
M3UA_SCON_RX
M3UA_SCTP_TX_FAIL
M3UA_SGP_ID
M3UA_SINCE_LAST_RESET_ASSOC
M3UA_STREAM_ID_ERR
M3UA_UNEXPECT_MSG_ERR
M3UA_UNEXPECT_PARAM_ERR
M3UA_UP_TX
M3UA_UP_ACK_RX
M3UA_VERSION_ERR

Measurement MGCP Signaling Adapter Summary

The Measurement MGCP Signaling Adapter Summary (measurement-mgcp-summary) table requests a summary report of Media Gateway Control Protocol (MGCP) signaling adapter-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-MGCP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-mgcp-summary;
report measurement-mgcp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146; output-type=csv;
```

**Caution**

```
clear measurement-mgcp-summary call-agent-id=CA146;
```

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description	CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION MGCP_AUEP_ACK_RX MGCP_AUEP_NACK_RX MGCP_AUEP_TX MGCP_AUCX_TX (Release 4.5) MGCP_AUCX_ACK_RX (Release 4.5) MGCP_AUCX_NACK_RX (Release 4.5) MGCP_CRCX_ACK_RX MGCP_CRCX_NACK_RX MGCP_CRCX_TX MGCP_DECODE_ERROR MGCP_DLCX_ACK_RX MGCP_DLCX_NACK_RX MGCP_DLCX_RX MGCP_DLCX_TX MGCP_ENCODE_ERROR MGCP_MDCX_ACK_RX MGCP_MDCX_NACK_RX MGCP_MDCX_TX MGCP_NTFY_RX MGCP_RQNT_ACK_RX MGCP_RQNT_NACK_RX MGCP_RQNT_TX MGCP_RSIP_ACK_TX MGCP_RSIP_RX MGCP_SEND_FAILED MGCP_UNREACHABLE
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement PCT Tools Summary (Release 4.4.1)

The Measurement POTS/Centrex/Tandem (PCT) Tools Summary (measurement-pct-tools-summary) table collects PCT tools statistics. Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-PCT-TOOLS-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-pct-tools-summary;
report measurement-pct-tools-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27
12:00:00; call-agent-id=CA146; output=pct-tools-report; output-type=csv;
clear measurement-pct-tools-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description	FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION TOOLS_LIDB_QUERY_ATTMP TOOLS_LIDB_QUERY_SUCC
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
	START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
	SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement POTS Auto Callback/Recall/Call Rejection Feature Server Summary

The Measurement POTS Auto Callback/Recall/Call Rejection Feature Server Summary (measurement-pots-acar-summary) table requests a summary report of Auto Callback/Recall/Call Rejection-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-ACAR-SUMMARY

Table Containment Area: OAMP

Command Types	Report, show and clear

Examples	<code>show measurement-pots-acar-summary;</code>


```
report measurement-pots-acar-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-acar-summary feature-server-id=fsptc203;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

Syntax Description	FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
	DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION POTS_AC_ACT_ATTMP POTS_AC_DEACT_ATTMP POTS_AC_DEACT_BY_SYSTEM POTS_AC_DELAYED_PROC POTS_AC_IMMEDIATE_PROC POTS_AC_INTERLATA_ATTMP POTS_AC_OVERFLOW POTS_ACART_ORIG_SCAN_REQ POTS_ACART_QUEUED_REQ POTS_ACART_REJECT_NO_RSRC POTS_ACART_TERM_SCAN_REQ POTS_ACR_ACT_ATTMP POTS_ACR_ACT_REJECT_NO_RSRC POTS_ACR_DEACT_ATTMP POTS_ACR_DEACT_REJECT_NO_RSRC POTS_ACR_SUCC POTS_AR_ACT_ATTMP POTS_AR_DEACT_ATTMP POTS_AR_DEACT_BY_SYSTEM POTS_AR_DELAYED_PROC POTS_AR_IMMEDIATE_PROC POTS_AR_INTERLATA_ATTMP POTS_AR_OVERFLOW
	END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement POTS Class of Service Feature Server Summary

The Measurement POTS Class of Service Feature Server Summary (measurement-pots-cos-summary) table requests a summary report of class of service-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-COS-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-pots-cos-summary;
report measurement-pots-cos-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203; output-type=csv;
clear measurement-pots-cos-summary feature-server-id=fsptc203;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-10 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

[Table 11-10](#) lists the values for the Measurement POTS Class of Service Feature Server Summary Display token.

Table 11-10 Measurement POTS Class of Service Feature Server Summary

TIMESTAMP
NODENAME

CONDITION	
POTS_COS_900_BLOCKED	
POTS_COS_976_BLOCKED	
POTS_COS_ACCT_CODE_FAIL	
POTS_COS_ACCT_CODE_SUCC	
POTS_COS_ANI_ATTMP_SUCC	
POTS_COS_ANI_BLOCKED_CALL	
POTS_COS_AUTH_CODE_FAIL	
POTS_COS_AUTH_CODE_SUCC	
POTS_COS_CASUAL_RESTRICT	
POTS_COS_DA_BLOCKED	
POTS_COS_INTL_BLOCKED_BW	
POTS_COS_INTL_OP_BLOCKED	
POTS_COS_INTL_RESTRICT	
POTS_COS_NANP_BLOCKED_BW	
POTS_COS_NANP_OP_BLOCKED	
POTS_COS_NANP_RESTRICT	
POTS_COS_TOLLFREE_BLOCKED	(Release 4.5)
POTS_COS_TOT_ACCT_IVR_SESSION	(Release 4.5)
POTS_COS_TOT_AUTH_IVR_SESSION	(Release 4.5)
POTS_COS_TOT_IVR_FAIL	(Release 4.5)
POTS_TDISC_CALLS_OUTG_BLOCKED	(Release 4.5)

Measurement POTS Customer-Originated Trace Feature Server Summary

The Measurement POTS Customer-Originated Trace Feature Server Summary (measurement-pots-cot-summary) table requests a summary report of customer-originated trace-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-COT-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-pots-cot-summary;
report measurement-pots-cot-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-cot-summary feature-server-id=fsptc203;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION POTS_COT_ABAND POTS_COT_ACCESS POTS_COT_ACT POTS_COT_DENY POTS_COT_DN_UNAVAIL POTS_COT_TRACE_CONFIRM POTS_COT_TRACE_OUTPUT
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement POTS Local Feature Server Summary

The Measurement POTS Local Feature Server Summary (measurement-pots-local-summary) table requests a summary report of local-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-LOCAL-SUMMARY

Table Containment Area: OAMP

Command Types Report, show and clear

Examples

```
show measurement-pots-local-summary;
report measurement-pots-local-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-local-summary feature-server-id=fsptc203;
```

Usage Guidelines Primary Key Token(s): None.
Foreign Key Token(s): feature-server-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-11 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-11 lists the values for the Measurement POTS Local Feature Server Summary Display token.

Table 11-11 Measurement POTS Local Feature Server Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
POTS_CCW_ATTMP
POTS_CCW_LENGTH
POTS_CCW_REJECT_BY_CCW
POTS_CCW_REJECT_NO_RSRC
POTS_CFB_ACT_ATTMP
POTS_CFB_ACT_REFUSED
POTS_CFB_DEACT_ATTMP
POTS_CFB_FORWARD_FAIL
POTS_CFB_FORWARD_SUCC
POTS_CFB_INTERROG_ATTMP
POTS_CFC_ACT_ATTMP
(Release 4.5)

POTS_CFC_ACT_FAIL	(Release 4.5)
POTS_CFC_ACT_SUCC	(Release 4.5)
POTS_CFC_DEACT_ATTMP	(Release 4.5)
POTS_CFC_DEACT_FAIL	(Release 4.5)
POTS_CFC_DEACT_SUCC	(Release 4.5)
POTS_CFC_DN_CHG_ACT_ATTMP	(Release 4.5)
POTS_CFC_DN_CHG_ACT_FAIL	(Release 4.5)
POTS_CFC_DN_CHG_ACT_SUCC	(Release 4.5)
POTS_CFC_FORWARD_ATTMP	(Release 4.5)
POTS_CFC_FORWARD_FAIL	(Release 4.5)
POTS_CFC_FORWARD_SUCC	(Release 4.5)
POTS_CFC_INTERROG_ATTMP	(Release 4.5)
POTS_CFC_INTERROG_FAIL	(Release 4.5)
POTS_CFC_INTERROG_SUCC	(Release 4.5)
POTS_CFNA_ACT_ATTMP	
POTS_CFNA_ACT_REFUSED	
POTS_CFNA_DEACT_ATTMP	
POTS_CFNA_FORWARD_FAIL	
POTS_CFNA_FORWARD_SUCC	
POTS_CFNA_INTERROG_ATTMP	
POTS_CFU_ACT_ATTMP	
POTS_CFU_DEACT_ATTMP	
POTS_CFU_ACT_REFUSED	
POTS_CFU_ACT_ANSWERED	
POTS_CFU_ACT_SECOND	
POTS_CFU_FORWARD_FAIL	
POTS_CFU_FORWARD_SUCC	
POTS_CFU_INTERROG_ATTMP	
POTS_CHD_ANSWER	
POTS_CHD_ATTMP	
POTS_CHD_NOT_ANSWER	
POTS_CHD_REJECT_INTERACT	
POTS_CHD_REJECT_NO_RSRC	
POTS_CIDS_ATTMP	
POTS_CIDSS_ATTMP	
POTS_CNAB_ATTMP	
POTS_CNDB_ATTMP	
POTS_CPRK_CLEAR	

POTS_CPRK_FAIL_ATTMP
POTS_CPRK_FAIL_RET_ATTMP
POTS_CPRK_FORWARD
POTS_CPRK_SUCC_ATTMP
POTS_CPRK_SUCC_RET_ATTMP
POTS_CT_ANSWER
POTS_CT_ATTMP
POTS_CT_CONF
POTS_CT_FAIL
POTS_CT_TRANSFER
POTS_CW_ANSWERED
POTS_CW_ATTMP
POTS_CW_NOT_ANSWERED
POTS_CW_REJECT_NO_RSRC
POTS_CW_REJECT_INTERACT
POTS_CWD_ACT_FAIL
POTS_CWD_ACT_SUCC
POTS_CWD_ANSWER
POTS_CWD_ATTMP
POTS_CWD_DEACT_FAIL
POTS_CWD_DEACT_SUCC
POTS_CWD_INTERROG_SUCC
POTS_CWD_INTERROG_FAIL
POTS_DND_ACT_FAIL
POTS_DND_ACT_SUCC
POTS_DND_DEACT_FAIL
POTS_DND_DEACT_SUCC
POTS_DND_REJECT
POTS_DRCW_ATTMP
POTS_DRCW_REJECT_NO_RSRC
POTS_DRCW_SUCC
POTS_MDC_ATTMP
POTS_MDC_REJECT_INTERACT
POTS_MDC_REJECT_NO_RSRC
POTS_MDC_REJECT_OTHERS
POTS_NSA_INVOKE_ABANDON (Release 4.5)
POTS_NSA_INVOKE_ATTMP (Release 4.5)
POTS_NSA_INVOKE_FAIL (Release 4.5)

POTS_NSA_INVOKE_SUCC (Release 4.5)

POTS_OCB_ACT_SUCC

POTS_OCB_DEACT_SUCC

POTS_OCB_INTERROG_SUCC

POTS_OCB_INTL_BLOCK

POTS_OCB_INVALID_PASSWORD

POTS_OCB_INVOCATION

POTS_OCB_LOCAL_BLOCK

POTS_OCB_NATL_BLOCK

POTS_RACF_ATTMP

POTS_RACF_CFU_ACT

POTS_RACF_CFU_DEACT

POTS_RACF_CFU_UNCHANGED

POTS_RACF_PIN_ATTMP

POTS_RACF_PIN_CHANGE

POTS_RACF_PIN_REFUSE

POTS_RACF_PIN_REJECT_NO_RSRC

POTS_RACF_PIN_UNCHANGE

POTS_RACF_REFUSE

POTS_RACF_REJECT_NO_RSRC

POTS_RC_SUCC

POTS_REFERER_ATTMP

POTS_REFERER_FAIL

POTS_REFERER_SUCC

POTS_SC_1_DIGIT_ATTMP

POTS_SC_2_DIGIT_ATTMP

POTS_SC_SUCC_CCSC

POTS_TWC_ANSWERED

POTS_TWC_ATTMP

POTS_TWC_CONF

POTS_TWC_FAIL

POTS_TWCD_ATTMP

POTS_TWCD_CONF

Measurement POTS Miscellaneous Feature Server Summary

The Measurement POTS Miscellaneous Feature Server Summary (measurement-pots-misc-summary) table requests a summary report of miscellaneous-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-MISC-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-pots-misc-summary;
report measurement-pots-misc-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-misc-summary feature-server-id=fsptc203;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-12 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.

OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-12 lists the values for the Measurement POTS Miscellaneous Feature Server Summary Display token.

Table 11-12 Measurement POTS Miscellaneous Feature Server Summary Display Token Values

TIMESTAMP	
NODENAME	
CONDITION	
POTS_BLV_ATTMP	(Release 4.5)
POTS_CTX_SFG_OVERFLOW (Release 4.5)	(Release 4.5)
POTS_HOTLINE_ATTMP (Release 4.5)	(Release 4.5)
POTS_HOTV_ACT_SUCC (Release 4.5)	(Release 4.5)
POTS_HOTV_ATTMP (Release 4.5)	(Release 4.5)
POTS_HOTV_DEACT_SUCC (Release 4.5)	(Release 4.5)
POTS_HOTV_INTERROG_SUCC (Release 4.5)	(Release 4.5)
POTS_LCD_AUTH_ATTEMPTS	(Release 4.4.1) (Obsolete in 4.5)
POTS_LCD_AUTH_ATTMP (Release 4.5)	(Release 4.5)
POTS_LCD_AUTH_FAIL (Release 4.4.1)	(Release 4.5)
POTS_LCD_AUTH_SUCC (Release 4.5)	(Release 4.5)
POTS_LCD_AUTH_SUCCESS	(Release 4.4.1) (Obsolete in 4.5)
POTS_LCD_FORCED_DISC	(Release 4.5)
POTS_LCD_FORCED_DISCONNECT	(Release 4.4.1) (Obsolete in 4.5)
POTS_LCD_REAUTH_FAIL	(Release 4.4.1)
POTS_OP_INTERRUPT_ATTMP	(Release 4.5)
POTS_PS_FAIL	(Release 4.5)
POTS_PS_MANAGE_FAIL	(Release 4.5)
POTS_PS_MANAGE_SUCC	(Release 4.5)

POTS_PS_SUCC	(Release 4.5)
POTS_VM_ACCESS	(Release 4.5)
POTS_VM_ACT_FAIL	(Release 4.5)
POTS_VM_ACT_SUCC	(Release 4.5)
POTS_VM_ATTMP	(Release 4.5)
POTS_VM_DEACT_FAIL	(Release 4.5)
POTS_VM_DEACT_SUCC	(Release 4.5)
POTS_WARMLINE_ATTMP	(Release 4.5)
SIS_100_RX	(Release 4.5)
SIS_100_TX	(Release 4.5)
SIS_18x_RX	(Release 4.5)
SIS_18x_TX	(Release 4.5)
SIS_200_RX	(Release 4.5)
SIS_200_TX	(Release 4.5)
SIS_3xx_RX	(Release 4.5)
SIS_3xx_TX	(Release 4.5)
SIS_4xx_RX	(Release 4.5)
SIS_4xx_TX	(Release 4.5)
SIS_5xx_RX	(Release 4.5)
SIS_5xx_TX	(Release 4.5)
SIS_6xx_RX	(Release 4.5)
SIS_6xx_TX	(Release 4.5)
SIS_7xx_RX	(Release 4.5)
SIS_7xx_TX	(Release 4.5)
SIS_ACK_RX	(Release 4.5)
SIS_ACK_TX	(Release 4.5)
SIS_BYE_RX	(Release 4.5)
SIS_BYE_TX	(Release 4.5)
SIS_CANCEL_RX	(Release 4.5)
SIS_CANCEL_TX	(Release 4.5)
SIS_INFO_RX	(Release 4.5)
SIS_INFO_TX	(Release 4.5)
SIS_INVITE_REPLACES_RX	(Release 4.5)
SIS_INVITE_REPLACES_TX	(Release 4.5)
SIS_INVITE_RX	(Release 4.5)
SIS_INVITE_TX	(Release 4.5)
SIS_NOTIFY_RX	(Release 4.5)
SIS_NOTIFY_TX	(Release 4.5)

SIS_OPTIONS_RX	(Release 4.5)
SIS_OPTIONS_TX	(Release 4.5)
SIS_PRACK_RX	(Release 4.5)
SIS_PRACK_TX	(Release 4.5)
SIS_PROV_RSP_RETRAN_RX	(Release 4.5)
SIS_PROV_RSP_RETRAN_TX	(Release 4.5)
SIS_REFER_RX	(Release 4.5)
SIS_REFER_TX	(Release 4.5)
SIS_REFER_W_REPLACES_RX	(Release 4.5)
SIS_REGISTER_RX	(Release 4.5)
SIS_REGISTER_TX	(Release 4.5)
SIS_REL100_RX	(Release 4.5)
SIS_REL100_TX	(Release 4.5)
SIS_REQ_RETRAN_RX	(Release 4.5)
SIS_REQ_RETRAN_TX	(Release 4.5)
SIS_RSP_RETRAN_RX	(Release 4.5)
SIS_RSP_RETRAN_TX	(Release 4.5)
SIS_SUBSCRIBE_RX	(Release 4.5)
SIS_SUBSCRIBE_TX	(Release 4.5)
SIS_T1_TIMER_EXPIRED	(Release 4.5)
SIS_T2_TIMER_REACHED	(Release 4.5)
SIS_TOTAL_INCOM_MSG	(Release 4.5)
SIS_TOTAL_OUTG_MSG_ATTMP	(Release 4.5)
SIS_TOTAL_SUCC_INCOM_MSG	(Release 4.5)
SIS_TOTAL_SUCC_OUTG_MSG	(Release 4.5)
SIS_UNSUPPORTED_RX	(Release 4.5)
SIS_UPDATE_RX	(Release 4.5)
SIS_UPDATE_TX	(Release 4.5)

Measurement POTS Screening List Editing Feature Server Summary

The Measurement POTS Screening List Editing Feature Server Summary (measurement-pots-sle-summary) table requests a summary report of POTS screening list editing (SLE)-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-SLE-SUMMARY

Table Containment Area: OAMP

Command Types Report, show and clear

Examples

```
show measurement-pots-sle-summary;
report measurement-pots-sle-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-sle-summary feature-server-id=fsptc203;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION POTS_SCA_ATTMP POTS_SCA_REJECT_NO_RSRC POTS_SCA_SUCC POTS_SCF_ATTMP POTS_SCF_REJECT_NO_RSRC POTS_SCF_SUCC POTS_SCR_ATTMP POTS_SCR_REJECT_NO_RSRC POTS_SCR_SUCC
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement Provisioning

The Measurement Provisioning (measurement-provisioning) table collects all current traffic statistics by type.

Table Name: MEASUREMENT-PROVISIONING

Table Containment Area: OAMP

Command Types

Show and change

Examples

```
show measurement-prov type=isup;
change measurement-prov time-interval=60;
```

Usage Guidelines

Primary Key Token(s): None.

Syntax Description

*ENABLE	Indicates whether the specified type is currently being collected. CHAR(1): Y/N (Default = Y). Y—Type is collected. N—Type is not collected.
*TYPE	Specifies what measurements the traffic subsystem supports. Note Entering a show command without specifying a TYPE value will return all types as of Release 4.4.1. VARCHAR(10): 1–10 ASCII characters. Permitted values are: ALL—(Default) All types. (Obsolete as of Release 4.4.1) (Supported in Release 4.5.1) AIN-SVC—Advanced Intelligent Network server AIN-TOOLS (Release 4.4.1)—Advanced Intelligent Network tools ANM—Announcement Module AUDIT—Audit BILLING—Billing CALLP—Call Processing CALL-TOOLS (Release 4.4.1)—Call tools DQOS—Dynamic Quality of Service EM—Event Messaging (Billing) H323—H.323 INAP—Intelligent Network Application Protocol ISDN—Integrated Services Digital Network ISUP—ISDN User Part (SS7) M3UA—M3UA signaling protocol MGCP—Media Gateway Control Protocol PCT-TOOLS (Release 4.4.1)—PCT tools POTS-FS—POTS Feature Server POTS-LOCAL—Local Feature POTS-MISC—Miscellaneous Feature POTS-SLE—Screening List Editing POTS-ACAR—Auto Callback/Recall POTS-COS—Class of Service POTS-COT—Customer-Originated Trace SCCP—Signaling Connection Control Part protocol—SCTP signaling protocol SIA—SIP interface adapter SIM—Service Interaction Manager SNMP—Signaling Network Management Protocol SUA—SUA signaling protocol TCAP—Transactional Capabilities Application Part protocol TG-USG—Trunk Group usage TSA—TCAP Signaling Adapter (TSA) application

TIME-INTERVAL	The collection time. SMALLINT: 5, 15, 30, 60 minutes (Default = 15). If type=lg-usg, the default collection time is 100 seconds.

Measurement SCCP Summary

The Measurement SCCP Summary (measurement-sccp-summary) table requests a summary report of Signaling Connection Control Part (SCCP)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SCCP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-sccp-summary;
report measurement-sccp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-sccp-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent. VARCHAR(8): 1–8 ASCII characters.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-13 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-13 lists the values for the Measurement SCCP Summary Display token.

Table 11-13 Measurement SCCP Summary Display Token Values

SCCP_HOP_COUNTER_FAIL
SCCP_MSG_TX_BACKUP_SUBSYS
SCCP_NETWORK_CONGEST_FAIL
SCCP_NETWORK_FAIL
SCCP_NO_TRANS_ADDR_FAIL
SCCP_NO_TRANS_SPEC_ADDR_FAIL
SCCP_NSAP_ALLOW_MSG_RX
SCCP_NSAP_ALLOW_MSG_TX
SCCP_NSAP_CONGEST_RX
SCCP_NSAP_CONGEST_TX
SCCP_NSAP_OOS_GRANT_RX
SCCP_NSAP_OOS_GRANT_TX
SCCP_NSAP_OOS_REQ_RX
SCCP_NSAP_OOS_REQ_TX

SCCP_NSAP_PROHIBIT_RX
SCCP_NSAP_PROHIBIT_TX
SCCP_NSAP_STAT_TEST_RX
SCCP_NSAP_STAT_TEST_TX
SCCP_SUBSYS_CONGEST_FAIL
SCCP_SUBSYS_FAIL
SCCP_SUBSYS_OOS_REQ_DENY
SCCP_SUBSYS_OOS_REQ_GRANT
SCCP_SYNTAX_ERR
SCCP_TOTAL_CLASS_0_RX
SCCP_TOTAL_CLASS_0_TX
SCCP_TOTAL_CLASS_1_RX
SCCP_TOTAL_CLASS_1_TX
SCCP_TOTAL_EXT_UDATA_TX
SCCP_TOTAL_EXT_UDATA_SVC_TX
SCCP_TOTAL_EXT_UDATA_RX
SCCP_TOTAL_EXT_UDATA_SVC_RX
SCCP_TOTAL_GLOBAL_ADDR_TRAN
SCCP_TOTAL_LOCAL_MSG
SCCP_TOTAL_LONG_UDATA_RX
SCCP_TOTAL_LONG_UDATA_SVC_RX
SCCP_TOTAL_LONG_UDATA_SVC_TX
SCCP_TOTAL_LONG_UDATA_TX
SCCP_TOTAL_MSG
SCCP_TOTAL_UDATA_RX
SCCP_TOTAL_UDATA_SVC_RX
SCCP_TOTAL_UDATA_SVC_TX
SCCP_TOTAL_UDATA_TX
SCCP_USAP_TOTAL_CLASS_0_RX
SCCP_USAP_TOTAL_CLASS_0_TX
SCCP_USAP_TOTAL_CLASS_1_RX
SCCP_USAP_TOTAL_CLASS_1_TX
SCCP_UNEQUIP_USER_FAIL
SCCP_UNKNOWN_FAIL

Measurement Sctp Summary

The Measurement Stream Control Transmission Protocol (SCTP) Summary (measurement-sctp-summary) table requests a summary report of SCTP-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SCTP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-sctp-summary;
report measurement-sctp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-sctp-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent. VARCHAR(8): 1–8 ASCII characters.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-14 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-14 lists the values for the Measurement SCTP Summary Display token.

Table 11-14 Measurement SCTP Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
SCTP_ASSOC_COMM_LOST
SCTP_ASSOC_ID
SCTP_CHUNK_ORDER_ERR
SCTP_CHUNK_TOO_LARGE_ERR
SCTP_CHUNK_TOO_SMALL_ERR
SCTP_CONTROL_CHUNK_RX
SCTP_CONTROL_CHUNK_TX
SCTP_COOKIE_IN_SHUTDOWN_ERR_RX
SCTP_CWR_CHUNK_RX
SCTP_DATA_BYTE_RX
SCTP_DATA_BYTE_TX
SCTP_DATA_CHUNK_DISCARD
SCTP_DATA_CHUNK_RETRAN
SCTP_DATA_CHUNK_RX
SCTP_DATA_CHUNK_RX_BUNDLE
SCTP_DATA_CHUNK_RX_ORDER
SCTP_DATA_CHUNK_RX_SEQ_ERR
SCTP_DATA_CHUNK_RX_UNORDER
SCTP_DATA_CHUNK_TX
SCTP_DATA_CHUNK_TX_BUNDLE
SCTP_DATA_CHUNK_TX_ORDER
SCTP_DATA_CHUNK_TX_UNORDER
SCTP_DATAG_RX

SCTP_DATAG_TX
SCTP_DEST_ADDR_FAIL
SCTP_ECNE_CHUNK_RX
SCTP_EMPTY_DATAG_ERR
SCTP_EXPIRED_COOKIE_ERR
SCTP_INVALID_BUNDLE_CHUNK
SCTP_INVALID_CHECKSUM
SCTP_INVALID_COOKIE_SIG
SCTP_INVALID_DATAG_LENGTH
SCTP_INVALID_PARAM_ERR_RX
SCTP_INVALID_STREAM
SCTP_INVALID_STREAM_ERR_RX
SCTP_INVALID_VERIF_TAG
SCTP_MISSING_PARAM_ERR
SCTP_MISSING_PARAM_ERR_RX
SCTP_NO_SPACE_INCOM_ERR
SCTP_NO_USER_DATA_ERR_RX
SCTP_OOTB
SCTP_OUT_OF_RSCR_ERR_RX
SCTP_PARTIAL_CHUNK_ERR
SCTP_PEER_RESTART_ERR
SCTP_STALE_COOKIE_ERR
SCTP_STALE_COOKIE_ERR_RX
SCTP_ULP_QUEUE
SCTP_ULP_READY
SCTP_ULP_RX
SCTP_ULP_TX
SCTP_UNKNOWN_CHUNK_TYPE
SCTP_UNKNOWN_INIT_PARAM
SCTP_UNRECOG_CHUNK_ERR_RX
SCTP_UNRECOG_PARAM_ERR_RX
SCTP_UNRESOLV_ADDR_ERR_RX
SCTP_V6_ADDR_PARAM_RX

Measurement SIA Summary

The Measurement SIA Summary (measurement-sia-summary) table requests a summary report of SIP+ interface adapter (SIA)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SIA-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-sia-summary;
report measurement-sia-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-sia-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent. VARCHAR(8): 1–8 ASCII characters.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-15 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
INTERVAL	Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report. STRING. CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used. ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-15 lists the values for the Measurement SIA Summary Display token.

Table 11-15 Measurement SIA Summary Display Token Values

TIMESTAMP	
NODENAME	
CONDITION	
SIA_ATTENDED_TRANSFER	(Obsolete in Release 4.5)
SIA_AUDIT_BCM_CALL_RELEASED	(Release 4.5)
SIA_AUDIT_CALL_RELEASED	(Release 4.5)
SIA_AUDIT_CCB_FREED	(Release 4.5)
SIA_AUDIT_REGCONTACT_FREED	(Release 4.5)
SIA_CALL_FAIL_BY_EXPIRED_REG	
SIA_INCOM_FAIL	(Release 4.5)
SIA_INCOM_INIT	(Release 4.5)
SIA_INCOM_SUCC	(Release 4.5)
SIA_MWI_NOTIFY_RX	
SIA_MWI_NOTIFY_TX	
SIA_MWI_NOTIFY_TX_FAIL	(Obsolete in Release 4.5)
SIA_OUTG_FAIL	(Release 4.5)
SIA_OUTG_INIT	(Release 4.5)
SIA_OUTG_SUCC	(Release 4.5)
SIA_REFRESHES_TX	
SIA_SECURE_FQDN_VIOLATION_REQ	(Release 4.5)
SIA_SECURE_FQDN_VIOLATION_RESP	(Release 4.5)
SIA_SIP_INCOM_FAIL	(Obsolete in Release 4.5)
SIA_SIP_INCOM_INIT	(Obsolete in Release 4.5)
SIA_SIP_INCOM_SUCC	(Obsolete in Release 4.5)
SIA_SIP_OUTG_FAIL	(Obsolete in Release 4.5)
SIA_SIP_OUTG_INIT	(Obsolete in Release 4.5)

SIA_SIP_OUTG_SUCC	(Obsolete in Release 4.5)
SIA_TOTAL_FAIL	(Obsolete in Release 4.5)
SIA_TOTAL_INCOM_MSG_FAIL	(Obsolete in Release 4.5)
SIA_TOTAL_OUTG_MSG_FAIL	(Obsolete in Release 4.5)
SIA_TOTAL_SESS_TIMER_FAIL	
SIA_TOTAL_SUCC	(Obsolete in Release 4.5)
SIA_UNATTENDED_TRANSFER	(Obsolete in Release 4.5)
SIS_100_RX	(Release 4.5)
SIS_100_TX	(Release 4.5)
SIS_18x_RX	(Release 4.5)
SIS_18x_TX	(Release 4.5)
SIS_200_RX	(Release 4.5)
SIS_200_TX	(Release 4.5)
SIS_3xx_RX	(Release 4.5)
SIS_3xx_TX	(Release 4.5)
SIS_4xx_RX	(Release 4.5)
SIS_4xx_TX	(Release 4.5)
SIS_5xx_RX	(Release 4.5)
SIS_5xx_TX	(Release 4.5)
SIS_6xx_RX	(Release 4.5)
SIS_6xx_TX	(Release 4.5)
SIS_7xx_RX	(Release 4.5)
SIS_7xx_TX	(Release 4.5)
SIS_ACK_RX	(Release 4.5)
SIS_ACK_TX	(Release 4.5)
SIS_BYE_RX	(Release 4.5)
SIS_BYE_TX	(Release 4.5)
SIS_CANCEL_RX	(Release 4.5)
SIS_CANCEL_TX	(Release 4.5)
SIS_INFO_RX	(Release 4.5)
SIS_INFO_TX	(Release 4.5)
SIS_INVITE_REPLACES_RX	(Release 4.5)
SIS_INVITE_REPLACES_TX	(Release 4.5)
SIS_INVITE_RX	(Release 4.5)
SIS_INVITE_TX	(Release 4.5)
SIS_NOTIFY_RX	(Release 4.5)
SIS_NOTIFY_TX	(Release 4.5)
SIS_OPTIONS_RX	(Release 4.5)

SIS_OPTIONS_TX	(Release 4.5)
SIS_PRACK_RX	(Release 4.5)
SIS_PRACK_TX	(Release 4.5)
SIS_PROV_RSP_RETRAN_RX	(Release 4.5)
SIS_PROV_RSP_RETRAN_TX	(Release 4.5)
SIS_REFER_RX	(Release 4.5)
SIS_REFER_TX	(Release 4.5)
SIS_REFER_W_REPLACES_RX	(Release 4.5)
SIS_REGISTER_RX	(Release 4.5)
SIS_REGISTER_TX	(Release 4.5)
SIS_REL100_RX	(Release 4.5)
SIS_REL100_TX	(Release 4.5)
SIS_REQ_RETRAN_RX	(Release 4.5)
SIS_REQ_RETRAN_TX	(Release 4.5)
SIS_RSP_RETRAN_RX	(Release 4.5)
SIS_RSP_RETRAN_TX	(Release 4.5)
SIS_SUBSCRIBE_RX	(Release 4.5)
SIS_SUBSCRIBE_TX	(Release 4.5)
SIS_T1_TIMER_EXPIRED	(Release 4.5)
SIS_T2_TIMER_REACHED	(Release 4.5)
SIS_TOTAL_INCOM_MSG	(Release 4.5)
SIS_TOTAL_OUTG_MSG_ATTMP	(Release 4.5)
SIS_TOTAL_SUCC_INCOM_MSG	(Release 4.5)
SIS_TOTAL_SUCC_OUTG_MSG	(Release 4.5)
SIS_UNSUPPORTED_RX	(Release 4.5)
SIS_UPDATE_RX	(Release 4.5)
SIS_UPDATE_TX	(Release 4.5)

Measurement SIM Summary

The Measurement SIM Summary (measurement-sim-summary) table requests a summary report of Service Interaction Module (SIM)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SIM-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-sim-summary;
report measurement-sim-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-sim-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Change Rules: None.

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent. VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-16 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-16 lists the values for the Measurement Sim Summary Display token.

Table 11-16 Measurement Sim Summary Display Token Values

TIMESTAMP	
NODENAME	
CONDITION	
BCM_MESSAGES_CTR	
CA_ASYNC_MESSAGES_SENT_CTR	
CA_RESTART_MESSAGES_SENT_CTR	
EDP_N_CTR	
EDP_R_CTR	
FS_MESSAGES_RECEIVED_CTR	
FS_MESSAGES_SENT_CTR	
FS_PING_MESSAGES_SENT_CTR	
FS_PING_NO_RESPONSE_FAULTY_CTR	
NSTRUCT_CTR	
NSTRUCT_RESPONSE_CTR	
RELATIONS_CTR	
SIM_AUDIT_CCB_FREED	(Release 4.5)
SIM_AUDIT_SIP_CCB_FREED	(Release 4.5)
SIM_BCM_MSG	
SIM_EDP_N	
SIM_EDP_R	
SIM_FS_ASYNC_MSG_TX	
SIM_FS_MSG_RX	
SIM_FS_MSG_TX	
SIM_FS_PING_MSG_TX	
SIM_FS_PING_NO_RSP_FAULTY	
SIM_FS_RESTART_MSG_TX	
SIM_INSTRUCT	
SIM_INSTRUCT_RSP	
SIM_RELATIONS	
SIM_TDP_N	
SIM_TDP_R	
SIM_TERMINATE_RX	
SIM_TERMINATE_TX	
SIS_100_RX	(Release 4.5)
SIS_100_TX	(Release 4.5)
SIS_18x_RX	(Release 4.5)

SIS_18x_TX	(Release 4.5)
SIS_200_RX	(Release 4.5)
SIS_200_TX	(Release 4.5)
SIS_3xx_RX	(Release 4.5)
SIS_3xx_TX	(Release 4.5)
SIS_4xx_RX	(Release 4.5)
SIS_4xx_TX	(Release 4.5)
SIS_5xx_RX	(Release 4.5)
SIS_5xx_TX	(Release 4.5)
SIS_6xx_RX	(Release 4.5)
SIS_6xx_TX	(Release 4.5)
SIS_7xx_RX	(Release 4.5)
SIS_7xx_TX	(Release 4.5)
SIS_ACK_RX	(Release 4.5)
SIS_ACK_TX	(Release 4.5)
SIS_BYE_RX	(Release 4.5)
SIS_BYE_TX	(Release 4.5)
SIS_CANCEL_RX	(Release 4.5)
SIS_CANCEL_TX	(Release 4.5)
SIS_INFO_RX	(Release 4.5)
SIS_INFO_TX	(Release 4.5)
SIS_INVITE_REPLACES_RX	(Release 4.5)
SIS_INVITE_REPLACES_TX	(Release 4.5)
SIS_INVITE_RX	(Release 4.5)
SIS_INVITE_TX	(Release 4.5)
SIS_NOTIFY_RX	(Release 4.5)
SIS_NOTIFY_TX	(Release 4.5)
SIS_OPTIONS_RX	(Release 4.5)
SIS_OPTIONS_TX	(Release 4.5)
SIS_PRACK_RX	(Release 4.5)
SIS_PRACK_TX	(Release 4.5)
SIS_PROV_RSP_RETRAN_RX	(Release 4.5)
SIS_PROV_RSP_RETRAN_TX	(Release 4.5)
SIS_REFER_RX	(Release 4.5)
SIS_REFER_TX	(Release 4.5)
SIS_REFER_W_REPLACES_RX	(Release 4.5)
SIS_REGISTER_RX	(Release 4.5)
SIS_REGISTER_TX	(Release 4.5)

SIS_REL100_RX	(Release 4.5)
SIS_REL100_TX	(Release 4.5)
SIS_REQ_RETRAN_RX	(Release 4.5)
SIS_REQ_RETRAN_TX	(Release 4.5)
SIS_RSP_RETRAN_RX	(Release 4.5)
SIS_RSP_RETRAN_TX	(Release 4.5)
SIS_SUBSCRIBE_RX	(Release 4.5)
SIS_SUBSCRIBE_TX	(Release 4.5)
SIS_T1_TIMER_EXPIRED	(Release 4.5)
SIS_T2_TIMER_REACHED	(Release 4.5)
SIS_TOTAL_INCOM_MSG	(Release 4.5)
SIS_TOTAL_OUTG_MSG_ATTMP	(Release 4.5)
SIS_TOTAL_SUCC_INCOM_MSG	(Release 4.5)
SIS_TOTAL_SUCC_OUTG_MSG	(Release 4.5)
SIS_UNSUPPORTED_RX	(Release 4.5)
SIS_UPDATE_RX	(Release 4.5)
SIS_UPDATE_TX	(Release 4.5)
SIP_100_RX	
SIP_100_TX	
SIP_18x_RX	
SIP_18x_TX	
SIP_200_RX	
SIP_200_TX	
SIP_3xx_RX	
SIP_3xx_TX	
SIP_4xx_RX	
SIP_4xx_TX	
SIP_5xx_RX	
SIP_5xx_TX	
SIP_6xx_RX	
SIP_6xx_TX	
SIP_7xx_RX	
SIP_7xx_TX	
SIP_ACK_RX	
SIP_ACK_TX	
SIP_BYE_RX	
SIP_BYE_TX	
SIP_CANCEL_RX	

SIP_CANCEL_TX
SIP_IC_CALL_FAILED
SIP_IC_CALL_INIT
SIP_IC_CALL_SUCCEEDED
SIP_INFO_RX
SIP_INFO_TX
SIP_INVITE_RX
SIP_INVITE_REPLACED_RX
SIP_INVITE_REPLACES_TX
SIP_INVITE_TX
SIP_NOTIFY_RX
SIP_NOTIFY_TX
SIP_OG_CALL_INIT
SIP_OG_CALL_SUCCEEDED
SIP_OG_CALL_FAILED
SIP_OPTIONS_RX
SIP_OPTIONS_TX
SIP_PRACK_RX
SIP_PRACK_TX
SIP_PROV_RSP_RETRAN_RX
SIP_PROV_RSP_RETRAN_TX
SIP_REFER_RX
SIP_REFER_W_REPLACES_RX
SIP_REFER_TX
SIP_REGISTER_RX
SIP_REGISTER_TX
SIP_REL100_RX
SIP_REL100_TX
SIP_REQ_RETRAN_RX
SIP_REQ_RETRAN_TX
SIP_RSP_RETRAN_RX
SIP_RSP_RETRAN_TX
SIP_SUBSCRIBE_RX
SIP_SUBSCRIBE_TX
SIP_T1_TIMER_EXPIRED
SIP_T2_TIMER_REACHED
SIP_TOTAL_INCOM_MSG
SIP_TOTAL_OUTG_MSG_ATTMP

SIP_TOTAL_SUCC_INCOM_MSG
SIP_TOTAL_SUCC_OUTG_MSG
SIP_UNSUPPORTED_RX
TDP_N_CTR
TDP_R_CTR
TERMINATE_RECEIVED_CTR
TERMINATE_SENT_CTR
TOTAL_SUCCESS_CALL
TOTAL_UNSUCCESS_CALL
TOTAL_UNSUCCESS_INCOMING_MSG
TOTAL_UNSUCCESS_OUTGOING_MSG

Measurement SNMP Summary

The Measurement SNMP Summary (measurement-snmp-summary) provides a summary report of Simple Network Management Protocol (SNMP)-related statistics that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SNMP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-snmp-summary;
report measurement-snmp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00;output-type=csv;
clear measurement-snmp-summary;
```

Usage Guidelines

Primary Key Token(s): None.
Change Rules: None.

Syntax Description

EM-ID	Mandatory for the clear command. The EM id. VARCHAR(64): 1–64 ASCII characters.

DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: TIMESTAMP NODENAME CONDITION SNMP_GET_NEXT_RX SNMP_GET_NEXT_TX SNMP_GET_RX SNMP_GET_TX SNMP_SET_RX SNMP_SET_TX SNMP_TRAP_TX
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Measurement SUA Protocol Feature Server Summary

The Measurement SUA Summary (measurement-sua-summary) table requests a summary report of SCCP-User Adaptation Layer (SUA)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SUA-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-sua-summary;
```

```
report measurement-sua-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-sua-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent. VARCHAR(8): 1–8 ASCII characters.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-17 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

[Table 11-17](#) lists the values for the Measurement SUA Summary Display token.

Table 11-17 Measurement SUA Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
SUA_ACTIVE_ACK_RX
SUA_ACTIVE_TX
SUA_ASSOC_FAIL
SUA_BEAT_ACK_RX
SUA_BEAT_ACK_TX
SUA_BEAT_RX
SUA_BEAT_TX
SUA_CLDR_RX

SUA_CLDR_TX
SUA_CLDT_RX
SUA_CLDT_TX
SUA_DATA_BYTES_RX
SUA_DATA_BYTES_TX
SUA_DAUD_TX
SUA_DAVA_RX
SUA_DOWN_ACK_RX
SUA_DOWN_TX
SUA_DRST_RX
SUA_DUNA_RX
SUA_DUPU_RX
SUA_ERR_RX
SUA_ERR_TX
SUA_INACTIVE_ACK_RX
SUA_INACTIVE_TX
SUA_INVALID_SCTP_SIGNALS
SUA_MSG_CLASS_ERR
SUA_MSG_INVALID_LENGTH_RX
SUA_MSG_TYPE_ERR
SUA_NETWORK_APPEAR_ERR
SUA_NO_MEMORY_FAIL
SUA_NOTIFY_RX
SUA_NOTIFY_TX
SUA_PARAM_FIELD_ERR
SUA_PARAM_VALUE_ERR
SUA_PROTOCOL_ERR
SUA_ROUTING_CONTEXT_ERR
SUA_SCON_RX
SUA_SCON_TX
SUA_SCTP_TX_FAIL
SUA_SINCE_LAST_RESET_ASSOC
SUA_STREAM_ID_ERR
SUA_UNEXPECT_MSG_ERR
SUA_UNEXPECT_PARAM_ERR
SUA_UP_ACK_RX
SUA_UP_TX
SUA_VERSION_ERR

Measurement TCAP Protocol Summary

The Measurement Transaction Capabilities Application Part (TCAP) Protocol Summary (measurement-tcap-summary) table requests a summary report of TCAP-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-TCAP-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-tcap-summary;  
report measurement-tcap-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27  
06:30:00; call-agent-id=CA146; output-type=csv;  
clear measurement-tcap-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

FEATURE-SERVER-ID	Mandatory for on-demand requests. Foreign key: Feature Server table. The ID of the associated Feature Server. VARCHAR(8): 1–8 ASCII characters in the format fsptcnnn or fsainnnn.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-18 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language

START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

Table 11-18 lists the values for the Measurement TCAP Summary Display token.

Table 11-18 Measurement TCAP Summary Display Token Values

TIMESTAMP
NODENAME
CONDITION
TCAP_ABORT_IND_RX (Release 4.5)
TCAP_ABORT_MSG_RX
TCAP_ABORT_MSG_TX
TCAP_ACT_INVOCATIONS
TCAP_ACT_TRANSACTIONS
TCAP_BAD_STRUCT_COMP_PORT_RX
TCAP_BAD_STRUCT_COMP_PORT_TX
TCAP_BAD_STRUCT_DIALOG_PORT_RX
TCAP_BAD_STRUCT_DIALOG_PORT_TX
TCAP_BAD_STRUCT_TRANS_PORT_RX
TCAP_BAD_STRUCT_TRANS_PORT_TX
TCAP_BEGIN_MSG_RX
TCAP_BEGIN_MSG_TX
TCAP_BIND_CONFIRM_RX (Release 4.5)
TCAP_CLOSE_IND_RX (Release 4.5)
TCAP_COMPONENT_CONFIRM_RX (Release 4.5)
TCAP_COMPONENT_IND_RX (Release 4.5)
TCAP_COMPONENT_REQ_RX (Release 4.5)
TCAP_CONT_MSG_RX
TCAP_CONT_MSG_TX
TCAP_DATA_IND_RX (Release 4.5)
TCAP_DATA_REQ_RX (Release 4.5)
TCAP_DELIMITER_IND_RX (Release 4.5)

TCAP_DELIMITER_REQ_RX	(Release 4.5)
TCAP_DIALOG_CONFIRM_RX	(Release 4.5)
TCAP_DUP_INVOKE_ID_RX	
TCAP_DUP_INVOKE_ID_TX	
TCAP_END_MSG_RX	
TCAP_END_MSG_TX	
TCAP_INCONSIST_DIALOG_PORT_RX	
TCAP_INCONSIST_DIALOG_PORT_TX	
TCAP_INCORRECT_COMP_ENCODE_RX	
TCAP_INCORRECT_COMP_ENCODE_TX	
TCAP_INCORRECT_COMP_PORT_RX	
TCAP_INCORRECT_COMP_PORT_TX	
TCAP_INCORRECT_PARAM_RE_RX	
TCAP_INCORRECT_PARAM_RE_TX	
TCAP_INCORRECT_PARAM_RR_RX	
TCAP_INCORRECT_PARAM_RR_TX	
TCAP_INCORRECT_PARAM_RX	
TCAP_INCORRECT_PARAM_TX	
TCAP_INCORRECT_TRANS_PORT_RX	
TCAP_INCORRECT_TRANS_PORT_TX	
TCAP_INIT_REL_RX	
TCAP_INIT_REL_TX	
TCAP_INVOKE_COMP_RX	
TCAP_INVOKE_COMP_TX	
TCAP_INVOKE_RSCR_LIMIT_PROB_RX	
TCAP_INVOKE_RSCR_LIMIT_PROB_TX	
TCAP_MISSING_DIALOG_PORT_RX	
TCAP_MISSING_DIALOG_PORT_TX	
TCAP_NO_PERMISS_CONVERS_RX	
TCAP_NO_PERMISS_CONVERS_TX	
TCAP_NO_PERMISS_QUERY_RX	
TCAP_NO_PERMISS_QUERY_TX	
TCAP_NOTICE_IND_RX	(Release 4.5)
TCAP_OPEN_CONFIRM_RX	(Release 4.5)
TCAP_OPEN_IND_RX	(Release 4.5)
TCAP_OPERATION_CONFIRM_RX	(Release 4.5)
TCAP_OPERATION_IND_RX	(Release 4.5)
TCAP_OPERATION_REQ_RX	(Release 4.5)

TCAP_PERMISS_CONVERS_RX	
TCAP_PERMISS_CONVERS_TX	
TCAP_PERMISS_QUERY_RX	
TCAP_PERMISS_QUERY_TX	
TCAP_REJECT_COMP_RX	
TCAP_REJECT_COMP_TX	
TCAP_RETURN_ERR_COMP_RX	
TCAP_RETURN_ERR_COMP_TX	
TCAP_RETURN_RESULT_COMP_RX	
TCAP_RETURN_RESULT_COMP_TX	
TCAP_RSCR_LIMIT_RX	
TCAP_RSCR_LIMIT_TX	
TCAP_RSP_RX	
TCAP_RSP_TX	
TCAP_STAT_CONFIRM_RX	(Release 4.5)
TCAP_STAT_IND_RX	(Release 4.5)
TCAP_STATUS_IND_RX	(Release 4.5)
TCAP_TOTAL_COMP_RX	
TCAP_TOTAL_COMP_TX	
TCAP_TOTAL_DROPPED_MSG_RX	
TCAP_TOTAL_MSG_RX	
TCAP_TOTAL_MSG_TX	
TCAP_TOTAL_UNI_MSG_RX	
TCAP_TOTAL_UNI_MSG_TX	
TCAP_TRANS_PORT_PERM_REL_RX	
TCAP_TRANS_PORT_PERM_REL_TX	
TCAP_TRANSACTION_IDS_INUSE	
TCAP_UDATA_IND_RX	(Release 4.5)
TCAP_UNEXPECT_ERR_CODE_RX	
TCAP_UNEXPECT_ERR_CODE_TX	
TCAP_UNEXPECT_LINK_OPER_RX	
TCAP_UNEXPECT_LINK_OPER_TX	
TCAP_UNEXPECT_LINK_RSP_RX	
TCAP_UNEXPECT_LINK_RSP_TX	
TCAP_UNEXPECT_RE_RX	
TCAP_UNEXPECT_RE_TX	
TCAP_UNEXPECT_RR_RX	
TCAP_UNEXPECT_RR_TX	

TCAP_UNRECOG_COMP_RX	
TCAP_UNRECOG_COMP_TX	
TCAP_UNRECOG_DIALOG_PORT_ID_RX	
TCAP_UNRECOG_DIALOG_PORT_ID_TX	
TCAP_UNRECOG_ERR_CODE_RX	
TCAP_UNRECOG_ERR_CODE_TX	
TCAP_UNRECOG_INVOKE_ID_RX	
TCAP_UNRECOG_INVOKE_ID_TX	
TCAP_UNRECOG_LINK_ID_RX	
TCAP_UNRECOG_LINK_ID_TX	
TCAP_UNRECOG_MSG_TYPE_RX	
TCAP_UNRECOG_MSG_TYPE_TX	
TCAP_UNRECOG_OPCODE_RX	
TCAP_UNRECOG_OPCODE_TX	
TCAP_UNRECOG_RE_INVOKE_ID_RX	
TCAP_UNRECOG_RE_INVOKE_ID_TX	
TCAP_UNRECOG_TRANS_ID_RX	
TCAP_UNRECOG_TRANS_ID_TX	
TSA_ABORT_IND_RX	(Release 4.5)
TSA_CLOSE_IND_RX	(Release 4.5)
TSA_COMPONENT_CONFIRM_RX	(Release 4.5)
TSA_COMPONENT_IND_RX	(Release 4.5)
TSA_COMPONENT_REQ_RX	(Release 4.5)
TSA_DATA_IND_RX	(Release 4.5)
TSA_DATA_REQ_RX	(Release 4.5)
TSA_DELIMITER_IND_RX	(Release 4.5)
TSA_DELIMITER_REQ_RX	(Release 4.5)
TSA_DIALOG_CONFIRM_RX	(Release 4.5)
TSA_INAP_BIND_CONFIRM_RX	(Release 4.5)
TSA_INAP_NOTICE_IND_RX	(Release 4.5)
TSA_INAP_STAT_CONFIRM_RX	(Release 4.5)
TSA_INAP_STAT_IND_RX	(Release 4.5)
TSA_OPEN_CONFIRM_RX	(Release 4.5)
TSA_OPEN_IND_RX	(Release 4.5)
TSA_OPERATION_CONFIRM_RX	(Release 4.5)
TSA_OPERATION_IND_RX	(Release 4.5)
TSA_OPERATION_REQ_RX	(Release 4.5)
TSA_STATUS_IND_RX	(Release 4.5)

TSA_TCAP_BIND_CONFIRM_RX	(Release 4.5)
TSA_TCAP_NOTICE_IND_RX	(Release 4.5)
TSA_TCAP_STAT_CONFIRM_RX	(Release 4.5)
TSA_TCAP_STAT_IND_RX	(Release 4.5)
TSA_UDATA_IND_RX	(Release 4.5)

Trunk Group Usage Summary

The Trunk Group Usage Summary (tg-usage-summary) table provides trunk group usage information.

Table Name: TG-USAGE-SUMMARY

Table Containment Area: OAMP

Command Types

Report and show

Examples

```
show measurement-tg-usage-summary;  
report measurement-tg-usage-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27  
12:00:00; tgn-id=dallas01; call-agent-id=CA146; output=tg-report; output-type=csv;
```

The following example uses the reporting option to gather statistics on a per-POP basis:

```
report measurement-tg-usage-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27  
12:00:00; trkgrp-exchange=RONLVA31GT; trkgrp-name=RONKVACSDS0_LC; call-agent-id=CA146;  
output=tg-report; output-type=csv;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): tgn-id



Note

This table does not support on-demand requests.

Syntax Description

CALL-AGENT-ID	The identity of the call agent that collected the measurement data. VARCHAR(8): 1–8 ASCII characters. The form of the id is CAnnn or cannn where nnn = 000 to 999.

DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. Permitted values are: CONDITION INCOMING_BSY_TRK INCOMING_CALL_ATTMP INCOMING_USAGE NODENAME NUM_OF_OOS_TRK NUM_OF_OVERFLOW NUM_OF_TRUNK OUTBOUND_CALL_FAIL OUTGOING_BSY_TRK OUTGOING_CALL_ATTMP OUTGOING_USAGE TIMESTAMP TOTAL_USAGE TRK_GRP_ID TRK_GRP_TYPE TRKGRP_AVERAGE_USAGE TRKGRP_EXCHANGE (Release 4.5) TRKGRP_GLARE_COUNT (Release 4.5) TRKGRP_INCOM_ATTMP TRKGRP_INCOM_BUSY_TRK TRKGRP_INCOM_USAGE TRKGRP_LBLK_TRK_USAGE (Release 4.5) TRKGRP_MAINT_TRK_USAGE (Release 4.5) TRKGRP_NAME (Release 4.5) TRKGRP_OOS_TRK_USAGE (Release 4.5) TRKGRP_OUTBOUND_FAIL TRKGRP_OUTG_ATTMP TRKGRP_OUTG_BUSY_TRK TRKGRP_OUTG_USAGE TRKGRP_RBLK_TRK_USAGE (Release 4.5) TRKGRP_TOTAL_INS_TRK (Release 4.5) TRKGRP_TOTAL_OOS_TRK TRKGRP_TOTAL_OVERFLOW TRKGRP_TOTAL_TRK TRKGRP_TOTAL_USAGE TRKGRP_UEQP_TRK_USAGE (Release 4.5)
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.

OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). DATE and TIME: YYYY-MM-DD HH:MM:SS.
TGN-ID (or TG)	Mandatory for on-demand requests. Foreign key: Trunk Group table. Trunk group ID. You can use TG instead of tgn-id. INTEGER: 1–99999999.
TRKGRP-EXCHANGE (Release 4.5)	The trunk group exchange to report measurement data for. This value directly maps to the CLLI Code Id field in the Pop table. Applies only to the tg-usage measurement type. VARCHAR(11): 1–11 ASCII characters.
TRKGRP-NAME (Release 4.5)	The trunk group name to report measurement data for. This value directly maps to the CLLI field in the Trunk Group table. Applies only to the tg-usage measurement type. VARCHAR(15): 1–15 ASCII characters.

Measurement TSA Summary



Note

This table is obsoleted in Release 4.5. Display values are now in the Measurement TCAP Summary table.

The Measurement TCAP Signaling Adapter (TSA) Summary (measurement-tsa-summary) table requests a summary report of TSA-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-TSA-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-tsa-summary;
report measurement-tsa-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-tsa-summary call-agent-id=CA146;
```

Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Syntax Description

CALL-AGENT-ID	Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent. VARCHAR(8): 1–8 ASCII characters.
DISPLAY	Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-). STRING. See Table 11-19 for permitted values.
END-TIME	Ending time for measurement summary. Enter all 19 ASCII characters as shown. DATE and TIME: YYYY-MM-DD HH:MM:SS.
OUTPUT-TYPE	Specifies the desired output format. Permitted values are: CSV (Default)—Comma-separated view XML—Extensible Markup Language
START-TIME	Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed. DATE and TIME: YYYY-MM-DD HH:MM:SS.
SUM	Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y). CHAR(1): Y/N (Default = N).

[Table 11-19](#) lists the values for the Measurement TSA Summary Display token.

Table 11-19 Measurement TSA Summary Display Token Values

TSA_ABORT_IND_RX
TSA_CLOSE_IND_RX
TSA_COMPONENT_CONFIRM_RX
TSA_COMPONENT_IND_RX
TSA_COMPONENT_REQ_RX
TSA_DATA_IND_RX
TSA_DATA_REQ_RX
TSA_DELIMITER_IND_RX
TSA_DELIMITER_REQ_RX
TSA_DIALOG_CONFIRM_RX
TSA_INAP_BIND_CONFIRM_RX
TSA_INAP_NOTICE_IND_RX
TSA_INAP_STAT_CONFIRM_RX
TSA_INAP_STAT_IND_RX

TSA_OPEN_CONFIRM_RX
TSA_OPEN_IND_RX
TSA_OPERATION_CONFIRM_RX
TSA_OPERATION_IND_RX
TSA_OPERATION_REQ_RX
TSA_STATUS_IND_RX
TSA_TCAP_BIND_CONFIRM_RX
TSA_TCAP_NOTICE_IND_RX
TSA_TCAP_STAT_CONFIRM_RX
TSA_TCAP_STAT_IND_RX
TSA_UDATA_IND_RX



CHAPTER 12

Media Gateway Provisioning Command (Obsolete as of Release 4.4.0)

Revised: July 24, 2009, OL-3743-42

The Media Gateway Provisioning (MGP) command allows direct command access to the gateway, and is used to provision configurations on the gateway through the Cisco BTS 10200 Softswitch. It is not associated with any table. After an MGP entry is added to the system, you can access the gateway via the escape command sequence at the command line interface (CLI), FTP adapter, or by using the MGP object interface in the Common Object Request Broker Architecture (CORBA) Adapter.

This command applies only to the following media gateway types:

- Cisco AS5850
- Cisco MGX 8850
- Cisco AS5400



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Command Types

Show, add, change, and delete

Examples

```
show mgp;  
add mgp ip-addr=10.89.224.10; type=As5400; user-name=cisco; password=cisco123;
```



Note

After adding a gateway, use your applicable vendor documentation to configure the gateway using the escape command. The format for the escape command is: `mgp <IPaddress> gateway command <ENTER>`.

The `mgp` keyword indicates to the CLI that the command is not for the Cisco BTS 10200 Softswitch. It is to be sent to the gateway defined by the IP address. This is the same address as the one used to create the MGP entry in the `add mgp` command.

```
change mgp gateway1.cisco.com; password=cisco; type=AS5850;  
delete mgp ip-addr=10.89.224.10;
```

Syntax Description

IPADDR	Mandatory for the add and change commands. The domain name or physical IP address of the device to manage. This may or may not be the same value as the tsap-addr token, used when adding a gateway for subscriber provisioning. VARCHAR(80): 1–80 ASCII characters.
TYPE	Mandatory for the add and change commands. Type of gateway. VARCHAR(7): 1–7 ASCII characters. Permitted values are: MGX8260 (Not supported) MGX8850 AS5400 AS5850
USER-NAME	Mandatory for the add command. Username to access the gateway. VARCHAR(30): 1–30 ASCII characters.
PASSWORD	Mandatory for the add command. Password to access the gateway. VARCHAR(30): 1–30 ASCII characters.



CHAPTER 14

Query

Revised: July 24, 2009, OL-3743-42

This chapter describes the Cisco BTS 10200 Softswitch Query commands. For information regarding using query commands in troubleshooting, see the *Cisco BTS 10200 Softswitch Troubleshooting Guide*.

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Query Call Trace (Release 4.5)

This section describes the query call trace command, which displays the call information of a currently active call. The command applies to originating or terminating calls. With this command, a service provider can enter a directory number (DN) or other suitable input and retrieve information about any call(s) the subscriber is currently involved in. This type of trace is made on a call in progress.

Command parameters are any subscriber specific information such as DN or Fully Qualified Domain Name (FQDN) of a residential gateway. The call processing information displayed includes originating number, terminating number, residential gateway(s) and Session Description Protocol (SDP) IP addresses involved, trunk group number and Carrier Identification Code (CIC) as applicable (such as off-net calling) as well as any other information pertaining to the call made by the subject.

Command Types

Query

Examples

```
query call-trace dn=4695551234;
query call-trace mlhg-id=mlhg1 terminal=23;
query call-trace ctxg-id=ctxg1 ext=1234;
query call-trace tgn-id=123 trunk-id=456;
query call-trace sip-call-id=1494777952@sial.test.cisco.com;
query call-trace h323-call-id=29C51D96AC1C11D98007C67E816B4BFB;
query call-trace term=aaln/2@x1-6-00-00-ca-30-88-79.ctlab.cisco.com; (This example uses
the MGW termination and FQDN to identify term.)
query call-trace term=aaln/2@10.101.140.231; (This example uses the MGW termination and IP
address to identify term.)
query call-trace rgw=x1-6-00-00-ca-30-88-79.ctlab.cisco.com; (This example uses the FQDN
of the RGW.)
query call-trace rgw=10.101.140.231; (This example uses the IP address of the RGW.)
```

Usage Guidelines

Foreign keys: ctxg-id, ext, dn, mgw, mlhg-id, terminal, term, tgn-id, trunk-id.

The mode token is optional (default=brief).

One token (or token pair) from the following list is mandatory for this command (see the examples):

- ctxg-id and ext
- dn
- h323-call-id
- mlhg-id and terminal
- rgw
- sip-call-id
- term
- tgn-id and trunk-id

Syntax Description

CTXG-ID	Foreign key: Centrex Group table. Valid Centrex group ID. Use for POTS Centrex subscribers. Note Use with the EXT token. VARCHAR(16): 1–16 ASCII characters.
DN	Foreign key: Subscriber table. Directory number. Use for POTS/H323/SIP subscribers. VARCHAR(10): 10 digits in the format npaxxxxxxx.
EXT	Foreign key: Extension2Subscriber table. Valid extension in the Centrex group. Note Use with the CTXG-ID token. VARCHAR(7): 1–7 digits.
H323-CALL-ID	Where the call originated. Can be obtained from a Call Agent logfile. Use for H.323 trunks.
MLHG-ID	Foreign key: Multiline Hunt Group table. ID for this MLHG in the Multiline Hunt Group table. Use for POTS MLHG terminals. Note Use with the TERMINAL token. VARCHAR(16): 1–16 ASCII characters.
MODE	Specifies the information returned by the command. VARCHAR(8): 1–8 ASCII characters (Default = BRIEF). Permitted values are: BRIEF—See Table 14-1 . VERBOSE—See Table 14-1 .
RGW	Foreign key: Media Gateway table. The residential gateway TSAP address (either FQDN or IP address) from the MGW table. VARCHAR(32): 1–32 ASCII characters.

SIP-CALL-ID	The SIP call identification. The SIP call id can be obtained from a Call Agent logfile or any switch connected to the Cisco BTS 10200 Softswitch. Use for SIP trunks.
TERM	Foreign keys: Termination table, MGW table. Enter the termination ID (from the Termination table), the @ symbol, and the TSAP address of the MGW (either FQDN or IP address) from the MGW table. See the examples. VARCHAR(32): 1–32 ASCII characters.
TERMINAL	Foreign key: Multiline Hunt Group Terminal table. Valid terminal in the MLHG. Note Use with the MLHG-ID token. SMALLINT: 1–512.
TGN-ID	Foreign key: Trunk Group table. Trunk group ID. Use for SS7, ISDN, and CAS trunks. Note Use with the TRUNK-ID token. INTEGER: 1–99999999.
TRUNK-ID	Foreign key: Trunk table. Valid trunk ID. Note Use with the TGN-ID token. INTEGER: 1–4095. INTEGER: 1–16383 (Release 4.5.1).

Table 14-1 shows the response fields returned when using brief or verbose modes.

Table 14-1 Brief and Verbose Mode Response Fields

Mode	Fields
Brief	CALL-STATE—The state of the call: IDLE OOS CALL-SETUP ALERTING CONNECTED. TYPE—The trunk type: POTS-SUB POTS-MLHG POTS-CTXG SIP-SUB H323-SUB SS7 ISDN CAS SIP-TG H323-TG. CALLING-PARTY-INFO/CALLED-PARTY-INFO—The calling or called party information can be one of the following for POTS/H323/SIP subscribers: DN MLHG-ID TERMINAL CTXG-ID EXT TGN-ID TRUNK-ID SIP-CALL-ID H323-CALL-ID.
Verbose	CALL-STATE—The state of the call: IDLE OOS CALL-SETUP ALERTING CONNECTED. CALLED-NUMBER—The called number. CALLING-NUMBER—The calling number. CALL-STATE—IDLE OOS CALL-SETUP ALERTING CONNECTED CHARGE-NUMBER—The charge number if available. CTXG-ID—The Centrex id. EXT—The Centrex extension. FULL-ENDPOINT-ID—The termination id plus the media gateway id for all POTS subscribers. H323-CALL-ID—The H.323 call id for H.323 trunks. MLHG-ID—The multiline hunt group id. MLHG-TERMINAL—The multiline hung group terminal. ORIGINAL-CALLED-NUMBER—The original called number if available. REDIRECTED-NUMBER—The redirected number if available. SDP-IP-ADDR—The SIP IP address. SDP-IP-PORT—The SDP IP port. SIP-CALL-ID—The SIP call id for SIP trunk groups. TERMINAL-ALIAS—The terminal alias for H323 trunk groups. TG-ID/TGN-ID—The trunk group id for SS7, ISDN and CAS trunks. TYPE—Type of trunk: POTS-SUB POTS-MLHG POTS-CTXG SIP-SUB H323-SUB SS7 ISDN CAS SIP-TG H323-TG.



Note

For call-trace scenarios involving forwarded calls and multileg calls, plus an example of a system response display, see the “[Operations](#)” chapter of the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide*.

Query Verification (Release 4.4)

The Query Verification command generates Transaction Capabilities Application Part (TCAP) queries to external databases. The command supports the following query types:

- Line Information Database (LIDB)-Generated by the POTS Feature Server
- Toll-Free-Generated by the AIN Feature Server
- LNP-Generated by the AIN Feature Server



Note

These query verification commands may also be collectively referred to in documentation as the query verification tool (QVT).

Line Information Database

This section describes the LIDB query verification command.

Command Types

Query

Examples

```
query lidb calling-dn=8002550002; opc-id=opc;
```

Usage Guidelines

Foreign key(s): opc-id

Syntax

* OPC-ID	Foreign key: Origination Point Code (OPC) table. Specifies the OPC to use for TCAP queries originating on behalf of subscribers assigned to this POP. VARCHAR(16): 1–16 ASCII characters.
* CALLING-DN	The caller’s directory number. VARCHAR(10): 10 digits in the format npaxxxxxxx.
TABLE-INFO	Specifies whether to show the tables that are accessed when processing the query. CHAR(1): Y/N (Default = N).

Toll-Free and Toll Free Message Type

This section describes the toll-free query verification commands. Use the toll free message type query to determine if the toll free number is IN/1 or AIN0.1.

Command Types

Query

Examples

```
query toll-free opc-id=opc; called-dn=8002550002; user-type=calling-dn;
user-id=2182640018; lata=100;
```

```
query toll-free-msg-type opc-id=opc; (An opc-id is the only needed token for this query.
Queries if the toll free is using IN1 or AIN0.1.)
```

Usage Guidelines

Foreign key(s): opc-id

Syntax Description

* CALLED-DN	The called DN. VARCHAR(32): 1–32 ASCII characters in the format: npa-nxx-xxxx.
* CALLING-DN	The caller's directory number. VARCHAR(10): 10 digits in the format npaxxxxxxx.
* LATA	Local access and transport area. INTEGER: 100–65535 (3–5 numeric digits). INTEGER: 100–99999 (Default = 99999) (3–5 numeric digits). (Release 4.5) Note There are 5 spaces for entering the LATA code. The last two digits are for entering the LATA sub-zone (only Florida has 5-digit LATA numbers, which represent Equal Access Exchange Areas [EAEAs]), if applicable.
* OPC-ID	Foreign key: Origination Point Code (OPC) table. Specifies the OPC to use for TCAP queries originating on behalf of subscribers assigned to this POP. VARCHAR(16): 1–16 ASCII characters.
* USER-ID	Mandatory for AIN0.1 queries. The trunk group id or calling DN, depending on what was entered for user-type. Not used in IN/1 queries. VARCHAR(32): 1–32 ASCII characters.
* USER-TYPE	Mandatory for AIN0.1 queries. Specifies whether the user-id is a trunk group id or the calling DN. Not used in IN/1 queries. VARCHAR(12): 1–12 ASCII character. Permitted values: TGN_ID CALLING_DN

BEARER-CAPABILITY	Specifies the bearer capability. VARCHAR(12): 1–12 ASCII characters. Permitted values are: SPEECH F31KHZAUDIO B56KBPS B64KBPS
TABLE-INFO	Specifies whether to show the tables that are accessed when processing the query. CHAR(1): Y/N (Default = N).
TRIGGER-CRITERIA	Specifies whether the trigger is npa or npanxxx. Permitted values are: 3—npa 6—npaxxx 7—npaxxxx 8—npaxxxxx 9—npaxxxxxx 10—npaxxxxxxx

Local Number Portability

This section describes the LNP query verification command.

Command Types

Query

Examples

```
query lnp opc-id=opc_tx; user-id=2182640018; called-dn=4692552002; user-type=calling-dn;
lata=100;
```

Usage Guidelines

Foreign key(s): opc-id

Syntax Description

* CALLED-DN	The called DN. VARCHAR(32): 1–32 ASCII characters in the format: npa-nxx-xxxx.
* CALLING-DN	The caller's directory number. VARCHAR(10): 10 digits in the format npaxxxxxxx.

* LATA	Local access and transport area. INTEGER: 100–65535 (3–5 numeric digits). INTEGER: 100–99999 (Default = 99999) (3–5 numeric digits). (Release 4.5) There are 5 spaces for entering the LATA code. The last two digits are for entering the LATA sub-zone (only Florida has 5-digit LATA numbers, which represent Equal Access Exchange Areas [EAEAs]), if applicable.
* OPC-ID	Foreign key: Origination Point Code (OPC) table. Specifies the OPC to use for TCAP queries originating on behalf of subscribers assigned to this POP. VARCHAR(16): 1–16 ASCII characters.
* USER-ID	Mandatory for AIN0.1 queries. The trunk group id or calling DN, depending on what was entered for user-type. Not used in IN/1 queries. VARCHAR(32): 1–32 ASCII characters.
* USER-TYPE	Mandatory for AIN0.1 queries. Specifies whether the user-id is a trunk group id or the calling DN. Not used in IN/1 queries. VARCHAR(12): 1–12 ASCII character. Permitted values are: TGN-ID CALLING-DN
BEARER-CAPABILITY	Specifies the bearer capability. VARCHAR(12): 1–12 ASCII characters. Permitted values are: SPEECH F31KHZAUDIO B56KBPS B64KBPS
OLI	Originating line information; used if message-type = IN/1. SMALLINT: 0–99 or 255. (Default = 0 (POTS)).
TABLE-INFO	Specifies whether to show the tables that are accessed when processing the query. CHAR(1): Y/N (Default = N).
TRIGGER-CRITERIA	Specifies whether the trigger is npa or npanxxx. Permitted values are: 3—npa 6—npaxxx 7—npaxxxx 8—npaxxxxx 9—npaxxxxxx 10—npaxxxxxxx



CHAPTER 15

Security

Revised: July 24, 2009, OL-3743-42

Security tables are used to report user activities and manage user accounts.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Activity Summary

See [Chapter 9, “History.”](#)

Command Level

The Command Level (command-level) table identifies the ten command levels and their descriptions.

Table Name: COMMAND-LEVEL

Table Containment Area: OAMP

Command Types

Show and change

Examples

```
show command-level id=10;  
change command-level id=10; description=This is the highest level administration access;
```

Usage Guidelines

Primary Key Token(s): id

Change Rules: None.

Syntax Description

* ID	Primary key. Command level number. NUMERIC: 1–10.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DESCRIPTION (EMS-only field)	Mandatory for change command; optional for show command. Described by the service provider. VARCHAR(64): 1–64 ASCII characters.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).

Command Table

The Command Table (command-table) table allows a system administrator to show, change, and reset the command privilege level (CPL) of a specific noun-verb pair. Higher command privilege levels are granted all lower level privileges.

Table Name: COMMAND-TABLE

Table Containment Area: OAMP

Command Types

Show, change, and reset

Examples

```
show command-table noun=mgw; verb=add;
change command-table noun=mgw; verb=add; sec-level=9;
reset command-table noun=mgw; verb=add;
```

Usage Guidelines

Primary Key Token(s): noun

Change Rules: Noun and verb must exist.

Syntax Description

* NOUN	Primary key. The table or command name, such as User, MGW, CA, TGN-ID. VARCHAR(65): 1–65 ASCII characters.
* VERB	Verb used in the reported command. Valid verbs are add, audit, change, clear, control, delete, report, reset, show, and status. VARCHAR(8): 1–8 ASCII characters.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.

ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
SEC-LEVEL	Mandatory for change command. Security level. Used only in the change command. NUMERIC: 1–10.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).
WORK-GROUPS	Assigns a command to a given workgroup. A workgroup is a logical collection of commands created by the service provider. Valid only for the change command. Use the equal sign (=) to add a command to a workgroup for the first time, or to replace all existing workgroups of that command with one or more new workgroups. A plus sign (+) before the work-groups name adds one or more workgroups to a command. A minus sign (–) before the work-groups name removes one or more workgroups from a command. For example: change command-table noun=somenoun; verb=someverb; work-groups=newworkgroup; VARCHAR(64): 1–64 ASCII characters.

Password

The Password command allows the system administrator to reset any user's password. It also allows setting the number of days that the password is valid and the number of days before password expiration that the user is warned. It also forces the system administrator to enter a new password. Once the user logs in for the first time, the user should execute this command again to change the password.

Users can only reset their own passwords. Users are allowed to reset the days a password is valid, the number of days before password expiration, and the user must enter a new password when executing this command.

This command is not directly associated with any table. It checks if a user exists and manages the system password attributes.

Command Types

Reset

Examples

```
reset password name=wilburwabash; days-valid=15; warn=2; new-password=table1R;
```

Usage Guidelines

Primary Key Token(s): name

Reset Rules: User must exist.

You must construct passwords to meet the following UNIX standards:

- A password must have at least six characters. If it is longer than six characters, only the first eight characters are significant.
- A password must contain at least two alphabetic characters and at least one numeric or special character. In this case, *alphabetic* refers to all upper- or lowercase letters.
- A password must differ from the user's login name and any reverse or circular shift of that login name. For comparison purposes, an uppercase letter and its corresponding lowercase letter are equivalent.
- New passwords must differ from the old by in the first three characters. For comparison purposes, an uppercase letter and its corresponding lowercase letter are equivalent.

Syntax Description

* NAME	Primary key. Username, entered into the system by the system administrator. VARCHAR(16): 1–16 ASCII characters.
* NEW-PASSWORD	Specifies a password for a user. VARCHAR(12): 6–12 ASCII characters.
DAYS-VALID	Number of days a password is valid. NUMERIC: 0–364 (Default = 30).
WARN	Number of days before password expiration to start warning the user. NUMERIC: 0–10 (Default = 4).

Security Summary

The Security Summary (security-summary) command provides a summary report of security infractions by source and start/stop times from the Security Log (securitylog) table. The table logs at least 30 days of infractions. It writes and deletes only when infractions occur. For example, if a security infraction occurred 10 days ago, and none since, that infraction will show up in the database today when a show is performed. On the next infraction, all security violations 7 days prior to the current infraction are lost.

Table Name: SECURITYLOG

Table Containment Area: OAMP

Command Types

Report

Examples

```
report security-summary start-time=2002-03-27 00:00:00; end-time=2002-03-27 00:00:00;
source=all;
```

**Note**

If this command is entered without any tokens, the report shows all security infractions.

Usage Guidelines

Primary Key Token(s): None.

Syntax Description

START-TIME	Starting time for a security summary. Enter all 19 ASCII characters as shown. If you enter a start-time—but not an end-time—the report will show security infractions from the start-time to the present. Start-time must occur before end-time. Security items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If you enter this command without any tokens, the report returns all security infractions. DATE and TIME: yyyy-mm-dd hh:mm:ss.
END-TIME	Ending time for security summary. Enter all 19 ASCII characters as shown. If you enter an end-time—but not a start-time—the report returns all security infractions up to the end-time. DATE and TIME: yyyy-mm-dd hh:mm:ss.
SOURCE	Source of the infraction—name in the Users table. Source is actually the username. If you enter source without a start-time or end-time, all infractions are shown. VARCHAR(16): 1–16 ASCII characters.
AUTO-REFRESH	Specifies whether to display cached data on the screen. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
LIMIT	Specifies the number of rows to display on the screen. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START-ROW	Specifies to begin displaying data on the screen at a specific row. INTEGER: 1–100000000 (Default = 1).

Users

The User (user) command identifies each user with the designated command level in the Security Level (securitylevels) table. The system administrator enters the command level for each user.

Table Name: SECURITYLEVELS

Table Containment Area: OAMP

Command Types

Show, add, change, and delete

Examples

```
show user name=john smith;
add user name=john smith; command-level=1;work-groups=thisworkgroup, thatworkgroup;
```



Note

As of Release 4.5, setting a user password is done in one step by using the new mandatory password token in the add user command. For example:

```
add user name=UserABC;command_level=9;warn=5;days-valid=50;shell=CLI;password=secret01;
```



Note

```
change user name=john smith; command-level=5;
```

To change a user's shell, delete the user and re-add specifying **shell=maint** or **cli**. To change a password, use the **reset password** command. See the [Password](#) section for more information.

As of Release 4.5, it is possible to change user attributes days-valid and warn by using the change user command. For example:

```
change user name=john; command-level=5;warn=1;
change user name=jobh; command-level=5;warn=2;days-valid=45;
change user name=john; command-level=1;days-valid=4;
```

```
delete user name=john smith;
```

Usage Guidelines

Primary Key Token(s): name

Add Rules:

- user must not exist in the User table.
- name and command-level must both be entered in the add command.
- password must be entered.

Change Rules: User must exist in the User table. Name and command-level must both be entered in the change command.

Delete Rules: User must exist in the User table.



Note

A user's actual password is stored in the Cisco BTS 10200 Softswitch EMS. It is not included here. A new user is not prompted to change a new password at first login. Users must change their password themselves at first login. Thereafter, they enter that password upon login to the EMS.

Syntax Description

* COMMAND-LEVEL	User command level, entered into the system by the system administrator. This token is optional for the show command; it is mandatory for the add and change commands. NUMERIC: 1–10.
* NAME	Primary key. Username, entered into the system by the system administrator. VARCHAR(16): 1–16 ASCII characters.
* PASSWORD (Release 4.5)	User password. See the Password section for user password creation requirements. VARCHAR(12): 6–12 ASCII characters.
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DAYS-VALID	Number of days a password is valid. NUMERIC: 0–364 (Default = 30).
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
FIRST	Not provisionable. Indicates whether an account has been used more than once. On a second login, the “true” indicator of a new account is changed to “false.” CHAR(1): T/F (Default = T).
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.
ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.

SHELL	Specifies the type of interface for the user. This token is valid only for the add command. Delete and then re-add the user to change the type of shell. VARCHAR(5): CLI or MAINT (Default = CLI). CLI—User interface for entering commands and their parameters in command-line format. A user must log in to the active EMS. The session terminates if it is idle for a provisionable number of minutes (see the idle-time parameter in the Session table, default = 30 minutes) or if there is an EMS switchover from active to standby. This shell displays the CLI> prompt. MAINT—Maintenance interface for CLI commands that does not time out or disconnect on switchover. This shell can be used, when necessary, for maintenance and recovery purposes. The MAINT user can login to either the active or standby EMS. This interface displays a prompt based on the username, rather than a CLI> prompt.
Caution The MAINT shell is not intended for normal provisioning activities. Use it only if the CLI shell is unusable in a maintenance or recovery scenario. An unattended MAINT session does not autodisconnect.	
START-DATE	Not provisionable. Specifies the date the account was first used. Used to track and age idle accounts. DATE: YYYY-MM-DD.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).
WARN	Number of days before password expiration to start warning the user. NUMERIC: 0–10 (Default = 4).

WORK-GROUPS

Logical collection of commands created by the service provider. Valid only for the change command.

Use the equal sign (=) to add a user to a work-group for the first time, or to replace all existing workgroups of that user with one or more new workgroups.

A plus sign (+) before the work-group name adds one or more workgroups to an existing user via the change command. This does not replace any already existing workgroups.

A minus sign (–) before the work-group name removes one or more workgroups from an existing user via the change command.

The following examples show the ways to specify values for the work-group token:

- Specifying work-groups = +somewkgrp adds the user somewkgrp to the workgroups.
- Specifying work-groups = -someoldwkgrp deletes the user someoldwkgrp from the work-groups.
- Specifying work-groups = somenewworkgroup either adds somenewworkgroup for the first time, or replaces any previously existing work-groups with somenewworkgroup.

Note The plus or minus sign is not allowed when adding a new user. Use the plus or minus sign only with the change command.

VARCHAR(64): 1–64 ASCII characters.



CHAPTER 16

Session Manager

Revised: July 24, 2009, OL-3743-42

The Session Manager (SMG) user management tool tracks the session clients (users) that have logged in to the Cisco BTS 10200 Softswitch. The commands listed in this chapter display and control the behavior of users in the system. For example, when user *wilmer7* logs in to the system, the SMG assigns a terminal ID to the user. A terminal ID is similar in concept to a UNIX terminal port. This terminal ID is then used in the commands below. It allows a service provider to force users off the system during a maintenance procedure such as a database backup.

The SMG supports a craft command interface by messages. These can be incorporated into a RequestManager implementation for use in the Cisco BTS 10200 Softswitch commands. This allows a craft to control the operations of the SMG.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Session Management Activity Commands

This section describes the session management activity commands.

Note The **block session terminal** command is not supported during a maintenance (MNT) session. All other block and unblock commands are only available during a MNT session. Mode is for the entire EMS and not just for a specific session.

Command Types

The supported commands are as follows:

- **show**—The interface supports a query listing all terminals in the system. The SMG returns a list of currently defined terminals. It allows the service provider to differentiate the list based on a user ID. If the terminal is not listed, all terminals are shown. The asterisk wildcard (*) is not supported.

```
show session terminal={1-32 characters}
show session terminal={4-5 characters} (Release 4.5.1)
show block-information (Release 4.5.1)
```

- **block**—This command requires a single terminal ID. The terminal is then blocked and a notification is sent to the terminal to suspend all further operation. The state of the specified terminal is changed to *blocked*.

```
block session [terminal={1-32 characters}]
block session [terminal | user | type=#]; (Release 4.5.1)
block session mode = MAINTENANCE | UPGRADE (Release 4.5.1)
block session < type | user> =#; [ level=PROVISION | COMPLETE ] (Release 4.5.1)
```

**Caution**

If the terminal type of a terminal is associated with either an FTP or SNMP application (such as type=ftp or type=snmp), the FTP or SNMP application is blocked as well.

- **change**—This command requires the idle-time token. See the syntax description for its properties.

```
change session idle-time=20;
```

- **unblock**—This command requires a single terminal ID. The terminal is then unblocked and notification is sent to the terminal for the user to resume normal operation. The state of the specified terminal is changed to *unblocked*.

```
unblock session [terminal={1-32 characters}]
unblock session [terminal | type | user] (Release 4.5.1)
unblock session (Release 4.5.1)
unblock session <type | user> =#; (Release 4.5.1)
```

- **stop**—This command requires a single terminal ID. The selected terminal is then notified to terminate and its associated terminal definition in the SMG is removed.

```
stop session [terminal={1-32 characters}]
stop session [terminal={4-52 characters}] (Release 4.5.1)
```

**Note**

The **stop**, **block**, and **unblock** commands cannot be executed on the terminal from which the command was entered.

**Note**

Command information in square brackets ([]) is mandatory. There is no mandatory information for the show command.

Command information in curly braces ({ }) is optional.

Examples

```
show session
stop session terminal=USR5
block session terminal=USR5
unblock session terminal=USR5
change session idle-time=20;
```

Syntax Description

*IDLE-TIME	This token defines the number of minutes that a user can be idle on the CLI interface before being automatically logged off the Cisco BTS 10200 Softswitch. INTEGER: 10–30 (Default = 30).
MODE (Release 4.5.1)	Mandatory for the block and unblock commands as of Release 4.5.1. Specifies the operator mode. VARCHAR(12): 1–12 ASCII characters. Permitted values are: MAINTENANCE—Regular maintenance window UPGRADE—Upgrade
TERMINAL	Mandatory for the stop command. Terminal id. VARCHAR(5) 4–5 ASCII characters.
TYPE (Release 4.5.1)	Mandatory for the block and unblock commands as of Release 4.5.1. Blocks or unblocks sessions based on type definition. Must be used in conjunction with the user token. Valid only for the block or unblock command. VARCHAR(6): 1–6 ASCII characters. Permitted values are: ALL—all sessions with type CLI, CORBA, FTP, or SNMP are blocked CLI—all sessions with type CLI are blocked CORBA—all sessions with type CORBA are blocked FTP—all sessions with type FTP are blocked SNMP—all sessions with type SNMP are blocked Note MNT is never blocked.
USER (Release 4.5.1)	Mandatory for the block and unblock commands as of Release 4.5.1. Specifies whether one or all users are blocked or unblocked. Must be used in conjunction with the type token. Valid only for the block or unblock command. VARCHAR(16): 1–16 ASCII characters. Permitted values are: <name>—Block or unblock sessions by of a specific user name. suppose <%>—Block or unblock all users. For example, user=% blocks or unblocks all users.
LEVEL (Release 4.5.1)	Specifies the block level. Valid only for the block or unblock command. VARCHAR(10): 1–10 ASCII characters (Default = complete). Permitted values are: PROVISION—All provisioning commands are blocked (change, delete, add, clear, sync, audit, reset, stop, and start) COMPLETE—All commands are blocked.



CHAPTER 17

Simple Network Management Protocol

Revised: July 24, 2009, OL-3743-42

This chapter describes the tables and commands pertaining to the Simple Network Management Protocol (SNMP) in the Cisco BTS 10200 Softswitch.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Simple Network Management Protocol Community

The Simple Network Management Protocol (SNMP) Agent uses the SNMP Community (snmpcommunity) table using the snmpconfig command to:

- manually block particular IP addresses (or hostnames) due to abuse, unauthorized access, or access attempts using the SNMP blocking command. In addition, if the Agent detects what appear to be multiple failed attempts from a particular source, it automatically blocks that source IP address, or hostname. To unblock either the manual or automatically blocked hosts, the blocked entries from this table must be manually deleted.
- configure settings for conformance to RFC 1213 using the MIB to System (MIB2SYS) configuration command.
- couple or decouple the SNMP Agent to the Sun Solaris SNMP subagent using the SNMP setting command.
- stores community strings for SNMP agents, which can be modified using the snmpconfig command. A community string is a password-like variable used for Cisco BTS 10200 Softswitch SNMP Agent access.

At installation, this table is initially provisioned with the value PUBLIC for both the READCOMMUNITY and WRITECOMMUNITY tokens. Service providers can delete either value and specify their own value(s). During upgrades, whatever values are in these tables are maintained. READCOMMUNITY and WRITECOMMUNITY are case insensitive. The PUBLIC value is case sensitive.

Table Name: SNMPCOMMUNITY

Table Containment Area: OAMP

Command Types

Show, add change and delete

Examples

Block Command Examples:

```
show snmpconfig type=MANUALBLOCKED
show snmpconfig type=AUTOBLOCKED
add snmpconfig type=MANUALBLOCKED; value=hostnameABC
add snmpconfig type=MANUALBLOCKED; value=192.168.1.192
delete snmpconfig type=MANUALBLOCKED; value=hostnameABC
delete snmpconfig type=AUTOBLOCKED; value=hostnameABC
```

MIB2SYS Command Examples:

```
show snmpconfig type=MIB2SYS; value=sys_name;
add snmpconfig type=MIB2SYS; value=sys_name;
change snmpconfig type=MIB2SYS; value=sys_location; value1=Cisco Systems
delete snmpconfig type=MIB2SYS; value=sys_name;
```

Setting Command Examples:

```
show snmpconfig type=SETTING;
add snmpconfig type=SETTING; value=COUPLE_SUN_AGENT;
delete snmpconfig type=SETTING;
```

Store Command Examples:

```
show snmpconfig type=readcommunity
show snmpconfig type=writecommunity
add snmpconfig type=readcommunity; Value=whateverreadvalue
add snmpconfig type=writecommunity; Value=whateverwritevalue
delete snmpconfig type=readcommunity; Value=whateverreadvalue
delete snmpconfig type=writecommunity; Value=whateverwritevalue
```

Usage Guidelines

Primary Key Token(s): type, value

Add Rules: None.

Delete Rules: None.

Syntax Description

* TYPE	Primary key. Mandatory for show, add, change and delete. Type of blockage. VARCHAR(64): 1–64 ASCII characters. Permitted values are: AUTOBLOCKED—SNMP Agent detects what it perceives are suspicious sources trying to access the system. MANUALBLOCKED—Operator manually blocks a source from accessing the system using SNMP. MIB2SYS—MIB2 definition. SETTING—Setting using the add command couples Agents; setting using the delete command uncouples Agents. READCOMMUNITY—Variable to read agent data. WRITECOMMUNITY—Variable to set agent data.
* VALUE	Mandatory for add, change and delete. Valid for commands: show, add, change and delete. Primary key. IP Address or hostname of the blocked source. VARCHAR(64): 1–64 ASCII characters. Actual value of a community string. Valid only if type=READCOMMUNITY or WRITECOMMUNITY. SYS_NAME—System name. Valid only if type=MIB2SYS. SYS_CONTACT—System contact. Valid only if type=MIB2SYS. SYS_LOCATION—System location. Valid only if type=MIB2SYS. COUPLE_SUN_AGENT—Couples the Cisco BTS 10200 Softswitch SNMP Agent with the Sun SNMP Agent. Valid only if type=SETTING. Use underscores (_) for this value. Do not use hyphens (-).
KEY1	Valid for Commands: show, add, change and delete. Used to specify a privilege level similar to the CLI noun privilege level. This is required when accessing “status” command branches for the SNMP MIB such as when accessing statuses of a media gateway, Call Agent, and so forth. See the Command Level section in the Security chapter for more information. VARCHAR (14): 1–14 ASCII characters. Permitted value is COMMAND-LEVEL.
VALUE1	Valid for commands: show, add, change and delete. Used to further define the type and value tokens. Defined by service provider. VARCHAR(64): 1–64 ASCII characters.

Simple Network Management Protocol Trap Destination

The Simple Network Management Protocol (SNMP) Agent uses the SNMP Trap Destination (snmptrapdest) table to send traps to the network management systems (NMSs) listed in the table. This provides the SNMP Agent with a persistent list of NMSs to send SNMP traps to. When performing trap retransmission, valid destination addresses must be provisioned here.

Table Name: SNMPTRAPDEST

Table Containment Area: EMS

Command Types

Show, add, change, and delete

Examples

```
show snmptrapdest;
add snmptrapdest; trapdestaddress=190.10.100.199; trapdestport=162;
change snmptrapdest trapdestindex=1; trapdestport=16222;
delete snmptrapdest trapdestindex=1;
```

Usage Guidelines

Primary Key Token(s): trapdestindex

Add Rules: None.

Change Rules: None.

Delete Rules: None.

*TRAPDESTADDRESS	IP address, or host name, of the NMS machine. VARCHAR(15): 7–15 ASCII characters in formats ranging from: n.n.n.n to nnn.nnn.nnn.nnn.
*TRAPDESTPORT	Port number to which the NMS machine is listening for incoming traps. INTEGER: 1–65535.
TRAPDESTINDEX	Primary Key. Mandatory for change and delete. Index into the table. INTEGER: 1–4294967296.
TRAPDEST COMMUNITY (Not used)	Community name associated with the trap to be sent to the NMS. VARCHAR(64): 1–64 ASCII characters.
TRAPDESTOWNER (Not used)	Owner of this NMS. VARCHAR(64): 1–64 ASCII characters.
TRAPDESTSTATUS (Not used)	Status state of this entry. INTEGER: 1–6.

FILTERTYPES	Specifies which subsystem events to filter on, or permit to be sent to, this address. Used in combination with FILTERLEVELS to provide a granular filter for traps from the SNMP Agent side. VARCHAR(12) 1–12 ASCII characters. Permitted values are: BILLING CALLP CONFIG DATABASE MAINTENANCE OSS SECURITY SIGNALING STATISTICS SYSTEM AUDIT
FILTERLEVELS	Specifies which event levels to filter on, or permit to be sent to, this address. Used in combination with FILTERTYPES to provide a granular filter for traps from the SNMP Agent side. VARCHAR(8) 1–8 ASCII characters. Permitted values are: DEBUG INFO WARNING MINOR MAJOR CRITICAL



CHAPTER 18

Transactions

Revised: July 24, 2009, OL-3743-42

This chapter describes the following Cisco BTS 10200 Softswitch transaction commands:

- Transaction Queue
- Queue Throttle



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Transaction Queue

The Transaction Queue (transaction-queue) table allows users to view and delete entries in a transaction-queue, if any exist. The Transaction Queue table tracks updates into the database, as well as into the shared memory of the Call Agent and Feature Servers. Entries should never remain in the transaction-queue for more than a few seconds, unless an Element Management System (EMS), Call Agent (CA), or Feature Server (FS) is in an error state. In the case of an error state, the Transaction Queue table continues to store entries for later updates.

Table Name: TRANSACTION-QUEUE

Table Containment Area: OAMP

Command Types

Show and delete

Examples

```
show transaction-queue target=CA146
delete transaction-queue target=CA146 transaction-id=<id>
```



Caution

Only a operator of “ciscouser” authority can execute a delete transaction-queue command. No other user can execute this command. Contact the Cisco Technical Assistance Center for assistance. (Release 4.5)

The delete transaction-queue command causes a database inconsistency. Contact the Cisco Technical Assistance Center to determine usage necessity.

**Note**

The **transaction-id** parameter enables you to delete only one transaction at a time from the transaction_queue table. Note that to delete an entry from the transaction-queue, you should login as **ciscouser**.

If there are thousands of entries stuck in the transaction queue, it is recommended to flush all the entries from Oracle after logging in as **oamp** user.

Usage Guidelines

Primary Key Token(s): transaction-id, target

Delete Rules: Transaction-queue must exist; must specify a target.

Syntax Description

ACTIVE-TARGET	System generated. Specifies whether the target is in an active or standby state. CHAR(1): Y/N (Default = Y). Y—Target is in an active state. N—Target is in a standby state.
SEQUENCE-NUM	System generated. Numerical representation of the order of the statement in the transaction. INTEGER: 0–nnn, where nnn represents the number of the transaction in the queue.
STATEMENT	System generated. Oracle and DBM SQL statement applied to the transaction. VARCHAR(4000).
AUTO-REFRESH	Specifies whether to display cached data on the screen. Valid only for the show command. CHAR(1): Y/N (Default = Y). Y—Queries the database for the most current data. N—Queries the database for the most current data only if the cached data is unavailable.
DISPLAY	Specifies what token information to display on the screen. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
LIMIT	Specifies the number of rows to display on the screen. Valid only for the show command. INTEGER: 1–100000000 (Default = 100000000). Note The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.

ORDER	Specifies whether to display data on the screen in a sorted order. Valid only for the show command. VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.
START-ROW	Specifies to begin displaying data on the screen at a specific row. Valid only for the show command. INTEGER: 1–100000000 (Default = 1).

STATUS (Release 4.5)	Status of the transaction. VARCHAR(32): 1-32 ASCII characters. Permitted values are: PENDING - The transaction is queued for execution. ERROR - Got an erroneous response from the TARGET or Request timed out from the OAM. DB_DUPLICATE DB_NOT_FOUND DB_INVALID_ARGS DB_INVALID_DATA DB_OPERATION_FAIL DB_SET_FAIL DB_OUT_OF_MEMORY DB_INVALID_INDEX DB_FREE_INDEX DB_SET_VALIDATE_FAIL ERR_INIT_DEFAULT_BUFFERS ERR_MALLOC_FAILED ERR_UPDATE_INFO_ARR_OVERFLOW ERR_INTERNAL_ERROR ERR_SQL_UPDATE_INFO_ARR_OVERFLOW ERR_INVALID_COL_TYPE ERR_INVALID_TBL_ID ERR_INVALID_ACTION_TYPE ERR_UNKOWN_TABLE_ID ERR_INVALID_TABLE_NAME ERR_COL_VALUE_LIST_MISMATCH ERR_PRIMARY_KEY_SQL_UPDATE ERR_INVALID_COL_NAME ERR_TOO_MANY_FOREIGN_KEYS ERR_INVALID_ENUM_NAME ERR_U8_VALUE_OUT_OF_RANGE ERR_U16_VALUE_OUT_OF_RANGE GENERIC OAM ERROR ERR_NO_REPLY
TARGET	Primary Key. ID of the CA, FS, or EMS where the transaction resides. VARCHAR(32): 1-32 ASCII characters. For example: CAnnn, FSPTCnnn, or FSAInnnn where nnn is the numeric ID of the target.

TERMINAL-ID (Release 4.5)	Unique terminal ID for a user. VARCHAR2(32): 1-32 ASCII characters.
TIMESTAMP	System generated. Day and time of the transaction. DATE and TIME: YYYY-MM-DD HH:MM:SS.
TRANSACTION-ID	System generated. Mandatory for the delete command in Release 4.5.1. Primary key. Transaction number. The numerical value of transaction. The value can be any number larger than 900,000,000,000. The actual value depends on the current system time on the EMS and the time that the command was executed. INTEGER: 12-digit number.
USER-ID (Release 4.5)	Unique user id. VARCHAR(32): 1-32 ASCII characters.

Queue Throttle

The Queue Throttle (queue-throttle) table holds the maximum download capacity used for transaction queuing. Show is the only valid command for this table.

Table Name: QUEUE-THROTTLE

Table Containment Area: OAMP

Command Types

Show

Examples

```
show queue-throttle
```



Note

The response to the show command is “The Queuing Manager is operating within normal parameters. Queuing Manager activity can be suspended using the block session command.”



CHAPTER 19

Translation (Release 4.4)

Revised: July 24, 2009, OL-3743-42

This chapter describes the Cisco BTS 10200 Softswitch Translation Verification command is a diagnostic command that simulates a call from the originator to a specific destination based on dialed digits. The command checks system translations and permits determining if routing will occur as expected without making a call. However, it may be necessary to use both a call trace query and a translation query to determine the routing of a call. If the results of a translate command indicate that a toll-free or local number portability (LNP) call is generated, execute a toll-free or LNP query command. Use the results of the toll-free or LNP query to generate another translation query. For more information regarding using the translation command in troubleshooting, see the *Cisco BTS 10200 Softswitch Troubleshooting Guide*.



Note

The translation verification command may also be referred to in documentation as the translation verification tool (TVT).



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

Command Types

Translate line, translate trunk

Examples



Caution

```
translate line calling-dn=2189722345; called-dn=8002550005
```

Translate line is not supported for Centrex groups.

```
translate trunk tgn-id= 1; called-dn=7034321234;
```

Usage Guidelines

Foreign key(s): tgn-id

Syntax Description

* CALLED-DN	Mandatory for line and trunk translation. The called DN. VARCHAR(32): 1–32 ASCII characters in the format: npa-nxx-xxxx.
CALLING-DN	Mandatory for line translation. The caller's directory number. VARCHAR(10): 10 digits in the format npaxxxxxxx.
TGN-ID	Mandatory for trunk translation. Foreign key: Trunk Group table. Trunk group ID. Use for SS7 and ISDN trunks. INTEGER: 1–99999999.
GAP	The generic address parameter. Used for trunk translation. INTEGER(10): 10 numeric digits.



Appendixes



APPENDIX 2

Predefined Database Usage Defaults

Revised: July 24, 2009, OL-3743-42

This appendix details the predefined defaults for the Database Usage tables for configurations in Releases 4.1 through 4.5. This appendix contains the following sections:

- [Common Database Usage Defaults and Sizing Rules](#)
- [Release 4.1](#)
- [Release 4.2](#)
- [Release 4.4.x](#) (Includes 4.4.0 and 4.4.1)
- [Release 4.5](#)
- [Release 4.5.1](#)

Within the tables in the following sections, *Maximum record count* is the total number of records that shared memory allows. For example, this is the total number of subscribers a particular switch or hardware configuration allows. *Licensed record count* indicates the number of records a customer is allowed by purchase. For example, the number of subscriber records that are licensed.

Common Database Usage Defaults and Sizing Rules

[Table 2-1](#) shows the database usage defaults and sizing rules that apply to all configurations and all releases.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
AAA-SERVER-GRP	N	Y	50	0		10 percent of POPs.
ACTIVITY	N	Y	100	0		None.
ACTIVITY-BASE	N	N	100	0		Same as number in the Activity table.
AGGR	N	Y	1000	0		100 Embedded Media Terminal Adapters (MTAs) (media gateways (MGWs)) per Cable Modem Termination System (CMTS).

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
AGGR-PROFILE	N	Y	0	100		No rules.
ANI	Y	Y	400000	0		None. If the Split NPA feature is invoked, not all ANI records are provisioned. Leave room for the split NPA feature.
ANI-SCREENING	Y	Y	12500	6300		10 entries per ANI screening profile.
ANI-SCREENING-PROFILE	N	Y	1000	500		Same as the number of PRI trunk groups.
ANI-WB-LIST	Y	Y	31250	0		Used for 800 service. 10 times the number of customer groups.
ANNC-TG-PROFILE	N	Y	100	0		None.
ANNC-TRUNK	N	Y	12000	0		24 times the number of POPs
ANNOUNCEMENT	N	Y	1000	0		None.
AOR2SUB	N	Y	50000	0		Number of SIP subscribers.
AUDIO-SEGMENT	N	Y	5000	0		5 segments per audio sequence.
AUDIO-SEQ	N	Y	1000	0		10 audio sequences per feature.
AUTH-CODE	N	Y	250000	0		None.
AUTH-CODE-GRP	N	Y	25000	0		Number of authorization codes divided by 10.
AUTH-REALM	N	Y	1000	0		Same as the number of serving domains
BACKHAUL-SET	N	Y	1500 2500 (Release 4.5.1)	0		Number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 2000 active D-channels to process although the system supports 2500. Only 2000 D-channels are available for use.
CA-CONFIG	Y	Y	1000	0		None.
CALL-AGENT	N	Y	10	0	10	None.
CALL-AGENT-PROFILE	N	Y	10	0	10	None.
CALL-CTRL-ROUTE	N	Y	4096	0		2 times the number of DPCs.
CALL-SUBTYPE						
CALL-TYPE	N	N	100	0		None.
CARRIER	N	Y	10000	0		Based on the 4-digit carrier ID.
CAS-TG-PROFILE	N	Y	100	0		None.
CASUAL-WB-LIST	N	Y	75000	0		10 entries for 10 percent of the COS restrict ids.
CAUSE-CODE-MAP	N	Y	2000	0		20 times the number of cause code map profiles.
CAUSE-CODE-MAP-PROFILE	N	Y	100	0		None.
CENTREX-GRP	N	Y	500	0		Number of Centrex groups.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
CHANGED-NUMBER	Y	Y	2000	0		1 percent of directory numbers (DNs) to save as changed numbers
CIPHERSUITE	N	Y	1000	0		Same as the number of QoSs.
CIPHERSUITE-PROFILE	N	N	1000	0		Same as the number of quality of services (QoSs).
CIRCUIT-CODE	N	Y	500	0		Circuit Code table is AT trunk group specific. Used to populate the Transit Network Selection (TNS) parameter in an SS7 message. Same as the number of POPs.
CLLI-CODE	N	Y	500	0		Same as number of POPs. One local (self) CLLI code is allowed per POP.
COS-RESTRICT	N	Y	75000	0		75percent of subscribers with individual COS restrict ids.
CPSG	N	Y	1000	0		2 times the number of Centrex groups.
CUST-GRP	N	Y	2500	0		100 DNs (800) per DN2customer group.
CUSTOM-DIAL-PLAN	N	Y	10000	0		20 custom dial plan entries per Centrex group.
CUSTOM-DIAL-PLAN-PROFILE	N	N	500	0		Number of Centrex groups.
DB-THRESHOLDS	N	N	1000	0		None.
DB-USAGE	N	N	1000	0		None.
DESTINATION	N	Y	5000	0		10 destinations per POP.
DIAL-PLAN	N	Y	1000000	0		1000 records per dial plan profile.
DIAL-PLAN-PROFILE	N	Y	1000	0		Same as the number of POPs.
DIGIT-MAP	N	Y	1000	0		Number of digit maps. Calculated based on number of POPs plus the number of Centrex Groups.
DIGMAN	N	Y	13500	0		5 rules times the number of digman profiles.
DIGMAN-PROFILE	N	Y	2700	0		2 times the number of dial plan profiles plus 10 percent of the routes plus 10 percent of the destination ids.
DN2CUST-GRP	N	Y	250000	0		Number of supported 800 DNs.
DN2GN	N	Y	100	0		Number of DN2GN records. Used when the LNP database is local to the AIN Feature Server.
DN2SUBSCRIBER	N	Y	150000	0		Number of DNs. Calculated as 1.5 times the number of subscribers. Rule does not apply to Tandem deployments.
DOMAIN2ROUTE	N	Y	1000	0		None.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
DPC	N	Y	2048	0		256 times the number of OPCs
DS1	N	Y	4200	0		Number of DS1s.
EMERGENCY-NUMBER- LIST	N	Y	50	0		None.
ENUM-CALL-TYPE	N	Y	100	0		None.
ENUM-PROFILE	N	Y	50	0		10 percent of POPs.
ESS	N	Y	500	0		Same as number of POPs.
EXCHANGE-CODE	N	Y	50000	0		Number of exchange codes.
EXT2SUBSCRIBER	N	Y	25000	0		50 times the number of Centrex groups.
FEATURE	N	Y	1000	0		None.
FEATURE-CONFIG	N	Y	1000	0		Number of configurable parameters.
FEATURE-CONFIG-BASE	N	N	1000	0		None.
FEATURE-CONFIG-BASE-P OS-VAL	N	N	1000	0		None.
FEATURE-PROFILE-BASE						
FEATURE-SERVER	N	Y	10	0	10	None.
FS-AUDIT-PROFILE	N	Y	10	0	10	Same as number of Feature Servers .
GTD-PARM-VALUES	N	N	100	0		None.
H323-GW	N	Y	4	0	4	Fixed at 4 media gateways.
H323-GW2GK	N	Y	100	0		25times the number of gateways.
H323-TERM	N	Y	10000	0		Number of H323 endpoints (subscribers).
H323-TERM-PROFILE	N	Y	200	0		2 times the number of H323 trunk group profiles.
H323-TG-PROFILE	N	Y	100	0		None.
HTTP-FEATURE-SERVER	N	Y	1	0	1	None.
II-RESTRICT-LIST	N	Y	2500	0		10 times 10 percent times the number of customer groups.
II-WB-LIST	N	Y	9375	0		12.5 percent of the number of COS restricts. Used for Tandem applications.
INTL-DIAL-PLAN	N	Y	60000	0		300 times the number of international dial plan profiles.
INTL-DIAL-PLAN-PROFILE	N	Y	200	0		None.
INTL-WB-LIST	N	Y	75000	0		10 entries for 10 percent of COS restricts.
IPSEC-KERBEROS	N	Y	1	0	1	Only 1 entry is allowed.
IPSEC-KERBEROS-KEYS	N	Y	256	0		Based on the krb-max-old-srv-keys values defined in the IPSEC Kerberos table.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
IPSEC-POLICY	N	Y	1000	0		Same as number of aggregations.
IPSEC-SA	N	Y	256	0		None.
ISDN-BCHAN	N	Y	36000 60000 (Release 4.5.1)	0		24 times the number of ISDN interfaces.
ISDN-DCHAN	N	Y	1500 2500 (Release 4.5.1)	0		Number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 2000 active D-channels to process although the system supports 2500. Only 2000 d-channels are available for use.
ISDN-INTF	N	Y	1500 2500 (Release 4.5.1)	0		Number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 2000 active D-channels to process although the system supports 2500. Only 2000 d-channels are available for use.
ISDN-TG-PROFILE	N	Y	250	0		Number of ISDN trunk group profiles.
IVR-SCRIPT-PROFILE	N	Y	100	0		100 features requiring IVR.
LANGUAGE	N	N	1000	0		None.
LATA	N	Y	1000	0		Number of LATAs.
LATA-MAP	N	Y	150000	0		150 NPAs divided by the number of NPANXXs per LATA.
LNP-PROFILE	N	Y	10	0	10	Number of LNP profiles.
LSA	Y	Y	30000	0		30 NPAs divided by the number of NXXs per LSA.
LSA-PROFILE	N	N	1000	0		Number of local serving areas.
MAC2SUB	N	Y	50000	0		Same as AOR2SUB.
MGCP-RETCODE-ACTION	N	Y	2000	0		10 codes per MGW profile.
MGW	N	Y	100000	0		Number of MTAs divided by the number of MGWs divided by the number of trunking gateways.
MGW-PROFILE	N	Y	100	0		Number of MGW profiles.
MLHG	N	Y	20000	0		Number of Multiline Hunt groups (MLHGs).
MLHG-PREF-LIST	N	Y	2000	0		10 percent of MLHGs.
MLHG-TERMINAL	N	Y	100000	0		5 terminals per MLHG.
NATIONAL-WB-LIST	Y	Y	94000	0		10 entries for 10 percent of the COS restricts.
NDC	N	Y	800	0		Number of supported local area codes.
NOA	N	N	0	0	0	Not used.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
NOD	N	N	100	0		Nature of Dial table.
NOD-RESTRICT-LIST	N	Y	1000	0		10 NOD for 10 percent of the features.
NOD-WB-LIST	N	Y	7500	0		10 times the 1 percent of the COS restricts.
OCB-K-VALUE	N	Y	1350	0		Number of OCB profiles times the number of K-values (9) times the number of Call Types (3).
OCB-PROFILE	N	Y	50	0		10 percent of POPs.
OFFICE-CODE	Y	Y	50000	0		Number supported office codes.
OPC	N	Y	8	0	8	Number of supported OPCs.
POLICY-NXX	N	Y	400	0		Number of Policy NXX records.
POLICY-ODR	Y	Y	10000	0		Number of Policy ODR records.
POLICY-OLI	N	Y	100	0		Number of Policy OLI records.
POLICY-PERCENT	N	Y	400	0		Number of Policy Percent records
POLICY-POP	N	Y	12500	0		Number of Policy POP records.
POLICY-PREFIX	N	Y	10000	0		Number of Policy Prefix entries. 1 entry is allowed per carrier.
POLICY-REGION	N	Y	1100	0		Number of Policy Region records.
POLICY-TOD	N	Y	400	0		Number of Policy Time of Day records.
POP	N	Y	500	0		Number of POPs.
PORTED-OFFICE-CODE	Y	Y	640000	0		Number of area codes times 800 NXX codes.
QOS	N	Y	1000	0		One QOS record per 100 MTAs (same as number of AGGRs).
RADIUS-PROFILE	N	Y	20	0		2 per Call Agent—the primary divided by the secondary.
REGION-CODE	N	Y	0	800		Used in NANP installations that require EAOSS signaling.
REGION-PROFILE	Y	Y	25000	0		Number of Region Profile entries. Defines regions based on the NPA or the NPA-NXX or the NPA-NXX-X(X)(X)(X).
RELEASE-CAUSE	N	Y	10000	0		None.
ROUTE	N	Y	2000	0		Number of routes.
ROUTE-GUIDE	N	Y	1000	0		Number of route guides (required for Policy Routing).
ROUTING-KEY	N	Y	4096	0		2 times the number of DPCs.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
RUDP-BACKHAUL-SESSION	N	Y	6000 10000 (Release 4.5.1)	0		4 times the number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 8000 sessions to process although the system supports 10000. Only 8000 sessions are available for use.
SC1D	N	Y	20000	0		20 percent of the subscribers with 1 digit speed call.
SC2D	N	Y	1000	0		1 percent of the subscribers with 2 digit speed call.
SCCP-NW	N	Y	255	0		None.
SCCP-ROUTE	N	Y	32768	0		Number of DPC times the number of subsystems.
SCRIPT	N	Y	1000	0		None.
SCTP-ASSOC	N	Y	240	0		2 times the number of SCTP association profiles.
SCTP-ASSOC-PROFILE	N	Y	120	0		3 times the number of SGPs (1 for each platform).
SERVICE	N	Y	2000	0		Number of services.
SERVICE-PROVIDER	N	Y	1000	0		Number of service providers. Used primarily for Tandem or route server configurations.
SERVICE-TRIGGER	N	Y	20000	0		10 triggers per service.
SERVING-DOMAIN-NAME	N	Y	1000	0		Number of supported serving domains.
SG	N	Y	20	0		None.
SG-GRP	N	Y	20	0		1 SG per pair.
SGP	N	Y	40	0		2 SGPs per SG.
SIPT-ISUP-VER-ALIAS	N	Y	200	0		None.
SLE	N	Y	20000	0		20 entries per feature (1 feature) for 1 percent of the subscribers.
SLHR	N	Y	96	32		Number of services times the number of OPCs.
SLHR-PROFILE	N	N	16	0		Number of SCCP based services.
SOFTSW-TG-PROFILE	N	Y	100	0		Number of SIP (Soft Switch) trunk group profiles.
SPECIAL-CALL-TYPE	N	Y	100	0		Number of special call type entries.
SPLIT-NPA	N	Y	1100	0		Number of Split NPA records.
SS7_Q761_TG_PROFILE	N	Y	100	0		None.
SS7_Q767_TG_PROFILE	N	Y	100	0		None.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
SS7-ANSI-TG-PROFILE	N	Y	100	0		None.
SS7-CIC	N	Y	96000	0		Maximum number of supported SS7 CICs.
STATIC-CONTACT	N	Y	5000	0		10 percent of SIP subscribers configured with static contact.
SUBSCRIBER	N	Y	100000	0		Maximum number of supported subscribers.
SUBSCRIBER-FEATURE-DATA	N	Y	600000	0		3 feature data records per subscriber.
SUBSCRIBER-PROFILE	N	Y	5000	0		10 subscriber profiles per POP.
SUBSCRIBER-SERVICE-PROFILE	N	Y	500000	0		Number of service records based on number of subscribers.
SUBSCRIBER-TOD-SCHEDULE	N	Y	1000	0		1 percent of subscribers requiring a time of day (TOD) schedule.
SUBSYSTEM	N	Y	16	0		Number of supported subsystems.
SUBSYSTEM-PROFILE	N	Y	16	0		Number of supported subsystems.
TECH-PREFIX-GRP	N	Y	1000	0		Number of technical prefix records. Used in H323 networks.
TECH-PREFIX-GRP-PROFILE	N	Y	4	0	4	Number of configurable H323 gateways on Cisco BTS 10200 Softswitch.
TERMINATION	N	Y	180000	0		Maximum number of supported terminations.
TIMEZONE	N	N	200	0		None.
TRIGGER-DETECTION-POINT	N	N	50	0		None.
TRIGGER-ID	N	N	100	0		None.
TRIGGER-NOD-ESCAPE-LIST	N	Y	100	0		None.
TRUNK	N	Y	100000	0		Number of supported trunks.
TRUNK-GRP	N	Y	10000	0		Number of trunk groups.
TRUNK-GRP-FEATURE-DATA	N	Y	1000	0		10 percent times the number of trunk groups. Used in Tandem applications.
TRUNK-GRP-SERVICE-PROFILE	N	Y	1100	0		11percent times the number of trunk groups.
USER-AUTH	N	Y	50000	0		Same as number of AOR2SUB records
USER-PART-VARIANT	N	Y	200	0		None.
VAR-DEFAULT	N	N	1000	0		None.
VSC	N	Y	1000	0		Vertical Service Code table.

Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)

EMS Filename	Split NPA	Audit Table	Maximum Record Count (Old)	Diff (New -Old)	Display if <=10	Sizing Rules
WIRETAP	Y	Y	2500	0		2 percent of subscribers.
ZZZ-CODE	N	Y	0	500		ZZZ Code table is used in NANP installations that require EAOSS signaling.

Release 4.1

This section describes the Database Usage tables for small and medium configurations in Release 4.1.

Small Configuration Database Usage Defaults

[Table 2-2](#) details the predefined defaults for the Database Usage table for a small configuration for Release 4.1.

Table 2-2 Release 4.1 Small Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
ANI	100000	100000	100000	N	Y	N
ANI-WB-LIST	5000	6250	6250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	1200	1200	1200	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	4500	4500	4500	Y	N	N
AUTH-CODE	50000	50000	50000	N	Y	N
AUTH-CODE-GRP	5000	5000	5000	N	Y	N
AUTH-REALM	4500	4500	4500	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2048	2048	2048	Y	N	N
CALL-TYPE	100	100	100	N	N	N

Table 2-2 Release 4.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	9000	9000	9000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	1100	1100	1100	Y	N	N
CIPHERSUITE-PROFILE	1100	1100	1100	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	9000	9000	9000	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	500	500	500	N	N	Y
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	500	500	500	Y	N	N
DIAL-PLAN	200000	200000	200000	Y	N	N
DIAL-PLAN-PROFILE	200	200	200	Y	N	N
DIGIT-MAP	150	150	150	Y	N	N
DIGMAN	2375	2375	2375	Y	N	N
DIGMAN-PROFILE	475	475	475	Y	N	N
DN2CUST-GRP	50000	50000	50000	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DPC	1024	1024	1024	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
ESS	50	50	50	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N

Table 2-2 Release 4.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	500	500	500	N	N	Y
II-WB-LIST	1125	1125	1125	N	Y	N
INTL-DIAL-PLAN	1200	1200	1200	Y	N	N
INTL-DIAL-PLAN-PROFILE	4	4	4	Y	N	N
INTL-WB-LIST	9000	9000	9000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	39070	39070	39070	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	3000	3000	3000	Y	Y	N
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	4500	4500	4500	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	9000	11250	11250	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	900	900	900	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	4	4	4	Y	Y	Y
POLICY-NXX	100	100	100	Y	N	Y
POLICY-ODR	2500	2500	2500	Y	N	Y

Table 2-2 Release 4.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
POLICY-OLI	25	25	25	Y	N	Y
POLICY-PERCENT	100	100	100	Y	N	Y
POLICY-POP	625	625	625	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	275	275	275	Y	N	Y
POLICY-TOD	100	100	100	Y	N	Y
POP	50	50	50	Y	Y	Y
PORTED-OFFICE-CODE	120000	120000	120000	Y	N	N
QOS	1100	1100	1100	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	25000	31250	31250	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	250	250	250	Y	N	N
ROUTE-GUIDE	250	250	250	Y	N	Y
ROUTING-KEY	2048	2048	2048	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	16384	16384	16384	N	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	100	100	100	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	9000	9000	9000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N

Table 2-2 Release 4.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	4500	4500	4500	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	135000	135000	135000	N	Y	N
SUBSCRIBER-PROFILE	500	500	500	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	110	110	110	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	1000	1000	1000	Y	N	N
TRUNK-GRP-FEATURE-DATA	100	100	100	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	110	110	110	Y	Y	N
USER-AUTH	4500	4500	4500	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N

Medium Configuration Database Usage Defaults

Table 2-3 details the predefined defaults for the Database Usage table for a medium configuration for Release 4.1.

Table 2-3 Release 4.1 Medium Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	10000	10000	10000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	10000	10000	10000	Y	N	N
BACKHAUL-SET	1100	1100	1100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	20000	20000	20000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE	1100	1100	1100	Y	N	N
CIPHERSUITE-PROFILE	1100	1100	1100	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	20000	20000	20000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N

Table 2-3 Release 4.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	2550	2550	2550	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	12275	12275	12275	Y	N	N
DIGMAN-PROFILE	2455	2455	2455	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	50000	5000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	2500	2500	2500	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	20000	20000	20000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	101275	101275	101275	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	26400	26400	26400	Y	N	N
ISDN-DCHAN	1100	1100	1100	Y	N	N
ISDN-INTF	1100	1100	1100	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	3000	3000	3000	Y	Y	N

Table 2-3 Release 4.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	10000	10000	10000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	20000	25000	25000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	2000	2000	2000	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12750	12750	12750	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE- CODE	640000	640000	640000	Y	N	N
QOS	1100	1100	1100	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	100000	125000	125000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y

Table 2-3 Release 4.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
RUDP-BACKHAUL-SESSION	4400	4400	4400	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	1000	1000	1000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	20000	20000	20000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	10000	10000	10000	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	300000	300000	300000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	500000	500000	500000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	110	110	110	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N

Table 2-3 Release 4.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TRIGGER-ID	100	100	100	N	N	N
TRUNK	134400	134400	134400	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	10000	10000	10000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N

Release 4.2

This section describes the Database Usage tables for small and medium configurations, Routeserver and Local Number Portability (LNP) in Release 4.2.

Small Configuration Database Usage Defaults

[Table 2-4](#) details the predefined defaults for the Database Usage table for a small configuration for Release 4.2.

Table 2-4 Release 4.2 Small Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	100000	100000	100000	N	Y	N
ANI-WB-LIST	5000	6250	6250	N	N	Y
ANNC-TG- PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	1200	1200	1200	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	45000	45000	45000	Y	N	N
AUTH-CODE	50000	50000	50000	N	Y	N

Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AUTH-CODE-GRP	5000	5000	5000	N	Y	N
AUTH-REALM	45000	45000	45000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT- PROFILE	10	10	10	Y	Y	Y
CALL-CTRL- ROUTE	2048	2048	2048	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	9000	9000	9000	N	Y	N
CAUSE-CODE- MAP	2000	2000	2000	Y	N	N
CAUSE-CODE- MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED- NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE- PROFILE	3000	3000	3000	N	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	9000	9000	9000	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	500	500	500	N	N	Y
CUSTOM-DIAL- PLAN	2000	2000	2000	N	Y	N
CUSTOM- DIAL-PLAN- PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	500	500	500	Y	N	N
DIAL-PLAN	200000	200000	200000	Y	N	N

Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DIAL-PLAN- PROFILE	200	200	200	Y	N	N
DIGIT-MAP	150	150	150	Y	N	N
DIGMAN- PROFILE	475	475	475	Y	N	N
DIGMAN	2375	2375	2375	Y	N	N
DN2CUST-GRP	50000	50000	50000	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DPC	1024	1024	1024	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
ESS	50	50	50	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE- SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	500	500	500	N	N	Y
II-WB-LIST	1125	1125	1125	N	Y	N
INTL-DIAL-PLAN	1200	1200	1200	Y	N	N
INTL-DIAL-PLAN- PROFILE	4	4	4	Y	N	N
INTL-WB-LIST	9000	9000	9000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC- KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	42000	42000	42000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
LATA	1000	1000	1000	Y	Y	N

Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
LATA-MAP	150000	150000	150000	Y	Y	N
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	45000	45000	45000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	9000	11250	11250	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	900	900	900	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	4	4	4	Y	Y	Y
POLICY-NXX	100	100	100	Y	N	Y
POLICY-ODR	2500	2500	2500	Y	N	Y
POLICY-OLI	25	25	25	Y	N	Y
POLICY-PERCENT	100	100	100	Y	N	Y
POLICY-POP	625	625	625	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	275	275	275	Y	N	Y
POLICY-TOD	100	100	100	Y	N	Y
POP	50	50	50	Y	Y	Y
PORTED-OFFICE-CODE	120000	120000	120000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	25000	31250	31250	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	250	250	250	Y	N	N

Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ROUTE-GUIDE	250	250	250	Y	N	Y
ROUTING-KEY	2048	2048	2048	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	16384	16384	16384	N	Y	Y
SCTP-ASSOC- PROFILE	120	120	120	Y	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE- PROVIDER	100	100	100	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	9000	9000	9000	N	Y	N
SLHR-PROFILE	16	16	16	N	N	N
SLHR	96	96	96	N	Y	Y
SOFTSW-TG- PROFILE	100	100	100	Y	N	N
SPECIAL-CALL- TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-CIC	18000	18000	18000	Y	N	N
SS7-Q761-TG- PROFILE	100	100	100	Y	N	N
SS7-Q767-TG- PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG- PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	45000	45000	45000	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER- FEATURE-DATA	135000	135000	135000	N	Y	N

Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SUBSCRIBER- PROFILE	500	500	500	Y	Y	N
SUBSCRIBER- SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSYSTEM- PROFILE	16	16	16	N	Y	Y
SUBSYSTEM	16	16	16	N	Y	Y
TECH-PREFIX-GRP	110	110	110	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TRIGGER- DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	1000	1000	1000	Y	N	N
TRUNK-GRP- FEATURE-DATA	100	100	100	N	Y	N
TRUNK-GRP- SERVICE-PROFILE	110	110	110	Y	Y	N
USER-AUTH	45000	45000	45000	Y	N	N
USER-PART- VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N
ANI-SCREENING	1000	1250	1250	Y	N	N
LNP-PROFILE	10	10	10	Y	Y	Y
DN2GN	2000000	2000000	2000000	N	N	Y
H323-TERM- PROFILE	200	200	200	Y	N	N
H323-TERM	45000	45000	45000	Y	N	N
ANI-SCREENING- PROFILE	100	100	100	Y	N	N
SIPT-ISUP-VER- ALIAS	200	200	200	Y	N	N

Medium Configuration Database Usage Defaults

Table 2-5 details the predefined defaults for the Database Usage table for a medium configuration in Release 4.2.

Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	100000	100000	100000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	100000	100000	100000	Y	N	N
BACKHAUL-SET	1100	1100	1100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	20000	20000	20000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	20000	20000	20000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y

Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	2500	2500	2500	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	20000	20000	20000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	154000	154000	154000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	26400	26400	26400	Y	N	N
ISDN-DCHAN	1100	1100	1100	Y	N	N

Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ISDN-INTF	1100	1100	1100	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	100000	100000	100000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	150000	150000	150000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	20000	25000	25000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	2000	2000	2000	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	25000	25000	25000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	100000	125000	125000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N

Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y
RUDP-BACKHAUL-SESSION	4400	4400	4400	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	1000	1000	1000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	20000	20000	20000	N	Y	N
SLHR-PROFILE	16	16	16	N	N	N
SLHR	96	96	96	N	Y	Y
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	100000	100000	100000	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	300000	300000	300000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	500000	500000	500000	Y	Y	N
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
SUBSYSTEM	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N

Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	134400	134400	134400	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	100000	100000	100000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N
ANI-SCREENING	10000	12500	12500	Y	N	N
LNP-PROFILE	10	10	10	Y	Y	Y
DN2GN	10000	10000	10000	N	N	Y
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TERM	100000	100000	100000	Y	N	N
ANI-SCREENING-PROFILE	1000	1000	1000	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N

Routerserver Database Usage Defaults

Table 2-6 details the predefined defaults for the Database Usage table for a Routerserver in Release 4.2.

Table 2-6 Release 4.2 Routerserver Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N

Table 2-6 Release 4.2 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	45000	45000	45000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	45000	45000	45000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT- PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	9000	9000	9000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED- NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE- PROFILE	3000	3000	3000	N	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	9000	9000	9000	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL- PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL- PLAN-PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	1000000	1000000	1000000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N

Table 2-6 Release 4.2 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	355	355	355	Y	N	N
DIGMAN-PROFILE	5000	5000	5000	Y	N	N
DIGMAN	25000	25000	25000	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	1125	1125	1125	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	9000	9000	9000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	42000	42000	42000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N

Table 2-6 Release 4.2 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	45000	45000	45000	N	Y	N
MGCP-RETCODE- ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	9000	11250	11250	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT- LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	900	900	900	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	8000	8000	8000	Y	N	Y
POLICY-ODR	80000	80000	80000	Y	N	Y
POLICY-OLI	8000	8000	8000	Y	N	Y
POLICY-PERCENT	80000	80000	80000	Y	N	Y
POLICY-POP	80000	80000	80000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	88000	88000	88000	Y	N	Y
POLICY-TOD	120000	120000	120000	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE- CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	80000	100000	100000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	600000	600000	600000	Y	N	N

Table 2-6 Release 4.2 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ROUTE-GUIDE	80000	80000	80000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y
RUDDP-BACKHAUL- SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCTP-ASSOC- PROFILE	120	120	120	Y	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	9000	9000	9000	N	Y	N
SLHR-PROFILE	16	16	16	N	N	N
SLHR	96	96	96	N	Y	Y
SOFTSW-TG- PROFILE	100	100	100	Y	N	N
SPECIAL-CALL- TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-CIC	18000	18000	18000	Y	N	N
SS7-Q761-TG- PROFILE	100	100	100	Y	N	N
SS7-Q767-TG- PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG- PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	45000	45000	45000	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER- FEATURE-DATA	135000	135000	135000	N	Y	N

Table 2-6 Release 4.2 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SUBSCRIBER- PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER- SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSYSTEM- PROFILE	16	16	16	N	Y	Y
SUBSYSTEM	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TRIGGER- DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	25000	25000	25000	Y	N	N
TRUNK-GRP- FEATURE-DATA	2500	2500	2500	N	Y	N
TRUNK-GRP- SERVICE-PROFILE	2750	2750	2750	Y	Y	N
USER-AUTH	45000	45000	45000	Y	N	N
USER-PART- VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N
ANI-SCREENING	25000	31250	31250	Y	N	N
LNP-PROFILE	10	10	10	Y	Y	Y
DN2GN	10000	10000	10000	N	N	Y
H323-TERM- PROFILE	200	200	200	Y	N	N
H323-TERM	45000	45000	45000	Y	N	N
ANI-SCREENING- PROFILE	2500	2500	2500	Y	N	N
SIPT-ISUP-VER- ALIAS	200	200	200	Y	N	N

Local Number Portability Database Usage Defaults

Table 2-7 details the predefined defaults for the Database Usage table for Local Number Portability in Release 4.2.

Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	10000	12500	12500	Y	N	N
ANI-SCREENING-PROFILE	1000	1000	1000	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG- PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCE MENT	1000	1000	1000	Y	N	N
AOR2SUB	100000	100000	100000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE- GRP	25000	25000	25000	N	Y	N
AUTH-REALM	100000	100000	100000	Y	N	N
BACKHAUL-SET	1100	1100	1100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	20000	20000	20000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N

Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	20000	20000	20000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	5000000	5000000	5000000	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	100000	100000	100000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	2500	2500	2500	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	20000	20000	20000	N	Y	N

Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	104000	104000	104000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	26400	26400	26400	Y	N	N
ISDN-DCHAN	1100	1100	1100	Y	N	N
ISDN-INTF	1100	1100	1100	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	100000	100000	100000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	20000	25000	25000	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	2000	2000	2000	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	25000	25000	25000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y

Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	100000	125000	125000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y
RUDP-BACKHAUL-SESSION	4400	4400	4400	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	1000	1000	1000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	20000	20000	20000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N

Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
STATIC-CONTACT	100000	100000	100000	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	300000	300000	300000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	500000	500000	500000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	134400	134400	134400	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	100000	100000	100000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N

Release 4.4.x

This section describes the Database Usage tables for Release 4.4.0 and 4.4.1.

Small Configuration Database Usage Defaults

[Table 2-8](#) details the predefined defaults for the Database Usage table for a small configuration in Release 4.4.

Table 2-8 Release 4.4.x Small Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	100000	100000	100000	N	Y	N
ANI-SCREENING	1000	1250	1250	Y	N	N
ANI-SCREENING-PROFILE	100	100	100	Y	N	N
ANI-WB-LIST	5000	6250	6250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	1200	1200	1200	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	45000	45000	45000	Y	N	N
AUDIO-SEGMENT	25000	25000	25000	N	Y	Y
AUDIO-SEQ	5000	5000	5000	N	Y	Y
AUTH-CODE	50000	50000	50000	N	Y	N
AUTH-CODE-GRP	5000	5000	5000	N	Y	N
AUTH-REALM	45000	45000	45000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2048	2048	2048	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	9000	9000	9000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	9000	9000	9000	N	Y	N
CPSG	200	200	200	Y	Y	N

Table 2-8 Release 4.4.x Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUST-GRP	500	500	500	N	N	Y
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	100	100	100	Y	N	N
DIAL-PLAN	200000	200000	200000	Y	N	N
DIAL-PLAN-PROFILE	200	200	200	Y	N	N
DIGIT-MAP	150	150	150	Y	N	N
DIGMAN	2375	2375	2375	Y	N	N
DIGMAN-PROFILE	475	475	475	Y	N	N
DN2CUST-GRP	50000	50000	50000	N	N	Y
DN2GN	2000000	2000000	2000000	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DPC	1024	1024	1024	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
ESS	50	50	50	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2 SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	45000	45000	45000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	500	500	500	N	N	Y
II-WB-LIST	1125	1125	1125	N	Y	N
INTL-DIAL-PLAN	1200	1200	1200	Y	N	N
INTL-DIAL-PLAN-PROFILE	4	4	4	Y	N	N

Table 2-8 Release 4.4.x Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
INTL-WB-LIST	9000	9000	9000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	42000	42000	42000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	45000	45000	45000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	9000	11250	11250	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	900	900	900	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	4	4	4	Y	Y	Y
POLICY-NXX	100	100	100	Y	N	Y
POLICY-ODR	2500	2500	2500	Y	N	Y
POLICY-OLI	25	25	25	Y	N	Y
POLICY-PERCENT	100	100	100	Y	N	Y

Table 2-8 Release 4.4.x Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
POLICY-POP	625	625	625	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	275	275	275	Y	N	Y
POLICY-TOD	100	100	100	Y	N	Y
POP	50	50	50	Y	Y	Y
PORTED-OFFICE-CODE	120000	120000	120000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	25000	31250	31250	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	250	250	250	Y	N	N
ROUTE-GUIDE	250	250	250	Y	N	Y
ROUTING-KEY	2048	2048	2048	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	16384	16384	16384	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE- PROVIDER	100	100	100	Y	N	N
SERVICE- TRIGGER	20000	20000	20000	Y	N	N
SERVING- DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	9000	9000	9000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N

Table 2-8 Release 4.4.x Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	45000	45000	45000	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	135000	135000	135000	N	Y	N
SUBSCRIBER-PROFILE	500	500	500	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	110	110	110	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TIMEZONE	200	200	200	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	1000	1000	1000	Y	N	N
TRUNK-GRP-FEATURE-DATA	100	100	100	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	110	110	110	Y	Y	N
USER-AUTH	45000	45000	45000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N

Medium Configuration Database Usage Defaults

Table 2-9 details the predefined defaults for the Database Usage table for a medium configuration in Release 4.4.

Table 2-9 Release 4.4.x Medium Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	100000	100000	100000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	100000	100000	100000	Y	N	N
BACKHAUL-SET	1100	1100	1100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	20000	20000	20000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	20000	20000	20000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N

Table 2-9 **Release 4.4.x Medium Configuration Database Usage Defaults (continued)**

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	2500	2500	2500	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	20000	20000	20000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	154000	154000	154000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	26400	26400	26400	Y	N	N
ISDN-DCHAN	1100	1100	1100	Y	N	N
ISDN-INTF	1100	1100	1100	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
LATA	1000	1000	1000	Y	Y	N

Table 2-9 Release 4.4.x Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
LATA-MAP	150000	150000	150000	Y	Y	N
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	100000	100000	100000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	150000	150000	150000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	20000	25000	25000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	2000	2000	2000	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	25000	25000	25000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	100000	125000	125000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y

Table 2-9 Release 4.4.x Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
RUDP-BACKHAUL-SESSION	4400	4400	4400	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	1000	1000	1000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	20000	20000	20000	N	Y	N
SLHR-PROFILE	16	16	16	N	N	N
SLHR	96	96	96	N	Y	Y
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	100000	100000	100000	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	300000	300000	300000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE- PROFILE	500000	500000	500000	Y	Y	N
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
SUBSYSTEM	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N

Table 2-9 Release 4.4.x Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	134400	134400	134400	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	100000	100000	100000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N
ANI-SCREENING	10000	12500	12500	Y	N	N
LNP-PROFILE	10	10	10	Y	Y	Y
DN2GN	10000	10000	10000	N	N	Y
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TERM	100000	100000	100000	Y	N	N
ANI-SCREENING-PROFILE	1000	1000	1000	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
TIMEZONE	200	200	200	N	N	N
SCRIPT	1000	1000	1000	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
AUDIO-SEQ	5000	5000	5000	N	Y	Y
AUDIO-SEGMENT	25000	25000	25000	N	Y	Y
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N

Large Configuration Database Usage Defaults

Table 2-10 details the predefined defaults for the Database Usage table for a large configuration in Release 4.4.x.

Table 2-10 Release 4.4.x Large Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	10000	12500	12500	Y	N	N
ANI-SCREENING-PROFILE	1000	1000	1000	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	300000	300000	300000	Y	N	N
AUDIO-SEGMENT	25000	25000	25000	N	Y	Y
AUDIO-SEQ	5000	5000	5000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	300000	300000	300000	Y	N	N
BACKHAUL-SET	2000	2000	2000	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	60000	60000	60000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	1000	1000	1000	Y	Y	N
CHANGED-NUMBER	4500	6000	6000	Y	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	60000	60000	60000	N	Y	N
CPSG	2000	2000	2000	Y	Y	N

Table 2-10 Release 4.4.x Large Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	20000	20000	20000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	1000	1000	1000	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1500	1500	1500	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	10000	10000	10000	N	N	Y
DN2SUBSCRIBER	450000	450000	450000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	5000	5000	5000	Y	N	N
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	50000	50000	50000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	300000	300000	300000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	7500	7500	7500	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	60000	60000	60000	N	Y	N

Table 2-10 Release 4.4.x Large Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	254000	254000	254000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	48000	48000	48000	Y	N	N
ISDN-DCHAN	2000	2000	2000	Y	N	N
ISDN-INTF	2000	2000	2000	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	300000	300000	300000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	250000	250000	250000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	60000	75000	75000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	6000	6000	6000	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y

Table 2-10 Release 4.4.x Large Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
POLICY-POP	25000	25000	25000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	100000	125000	125000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	8000	8000	8000	Y	N	N
SC1D	60000	60000	60000	N	Y	N
SC2D	3000	3000	3000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	122880	122880	122880	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	60000	60000	60000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N

Table 2-10 Release 4.4.x Large Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	128000	128000	128000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	300000	300000	300000	Y	N	N
SUBSCRIBER	300000	300000	300000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE- PROFILE	1500000	1500000	1500000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	400000	400000	400000	Y	N	N
TIMEZONE	200	200	200	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	160000	160000	160000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	300000	300000	300000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	6000	7500	7500	Y	N	N

Routeserver Database Usage Defaults

Table 2-11 details the predefined defaults for the Database Usage table for a small configuration in Release 4.4.

Table 2-11 Release 4.4.x Routeserver Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	25000	31250	31250	Y	N	N
ANI-SCREENING-PROFILE	2500	2500	2500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	45000	45000	45000	Y	N	N
AUDIO-SEGMENT	25000	25000	25000	N	Y	Y
AUDIO-SEQ	5000	5000	5000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	45000	45000	45000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	9000	9000	9000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	9000	9000	9000	N	Y	N
CPSG	200	200	200	Y	Y	N

Table 2-11 Release 4.4.x Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	1000000	1000000	1000000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	355	355	355	Y	N	N
DIGMAN	25000	25000	25000	Y	N	N
DIGMAN-PROFILE	5000	5000	5000	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	10000	10000	10000	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
ESS	255	255	255	Y	N	N
EXCHANGE- CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	45000	45000	45000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	1125	1125	1125	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N

Table 2-11 Release 4.4.x Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
INTL-WB-LIST	9000	9000	9000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	42000	42000	42000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	45000	45000	45000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	9000	11250	11250	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	900	900	900	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	8000	8000	8000	Y	N	Y
POLICY-ODR	80000	80000	80000	Y	N	Y
POLICY-OLI	8000	8000	8000	Y	N	Y
POLICY-PERCENT	80000	80000	80000	Y	N	Y

Table 2-11 Release 4.4.x Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
POLICY-POP	80000	80000	80000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	88000	88000	88000	Y	N	Y
POLICY-TOD	120000	120000	120000	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	800000	1000000	1000000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	600000	600000	600000	Y	N	N
ROUTE-GUIDE	80000	80000	80000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	9000	9000	9000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N

Table 2-11 Release 4.4.x Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	45000	45000	45000	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	135000	135000	135000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TIMEZONE	200	200	200	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	25000	25000	25000	Y	N	N
TRUNK-GRP-FEATURE-DATA	2500	2500	2500	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	2750	2750	2750	Y	Y	N
USER-AUTH	45000	45000	45000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N

Local Number Portability Database Usage Defaults

Table 2-12 details the predefined defaults for the Database Usage table for a small configuration in Release 4.4.x.

Table 2-12 Release 4.4.x Local Number Portability Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	10000	12500	12500	Y	N	N
ANI-SCREENING-PROFILE	1000	1000	1000	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	100000	100000	100000	Y	N	N
AUDIO-SEGMENT	25000	25000	25000	N	Y	Y
AUDIO-SEQ	5000	5000	5000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	100000	100000	100000	Y	N	N
BACKHAUL-SET	1100	1100	1100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	2560	2560	2560	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	20000	20000	20000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
COS-RESTRICT	20000	20000	20000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N

Table 2-12 Release 4.4.x Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	5000000	5000000	5000000	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DPC	1280	1280	1280	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	100000	100000	100000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	2500	2500	2500	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	20000	20000	20000	N	Y	N

Table 2-12 Release 4.4.x Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	104000	104000	104000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	26400	26400	26400	Y	N	N
ISDN-DCHAN	1100	1100	1100	Y	N	N
ISDN-INTF	1100	1100	1100	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	100000	100000	100000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	20000	25000	25000	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	2000	2000	2000	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	5	5	5	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	25000	25000	25000	Y	N	Y

Table 2-12 Release 4.4.x Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	N	N
REGION-PROFILE	100000	125000	125000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	2560	2560	2560	Y	Y	Y
RUDP-BACKHAUL-SESSION	4400	4400	4400	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	1000	1000	1000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	20480	20480	20480	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIPT-ISUP-VER- ALIAS	200	200	200	Y	N	N
SLE	20000	20000	20000	N	Y	N
SLHR	96	96	96	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N

Table 2-12 Release 4.4.x Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7-Q761-TG-PROFILE	100	100	100	Y	N	N
SS7-Q767-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	100000	100000	100000	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	300000	300000	300000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	500000	500000	500000	Y	Y	N
SUBSYSTEM	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TIMEZONE	200	200	200	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	134400	134400	134400	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	100000	100000	100000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N

Release 4.5

This section describes the Database Usage tables for small, medium, routeserver, LNP and Cable8 configurations in Release 4.5.

Small Configuration Database Usage Defaults

Table 2-13 details the predefined defaults for the Database Usage table for a small configuration in Release 4.5.

Table 2-13 Release 4.5 Small Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	1	1	1	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
AGGR	380	380	380	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	100000	100000	100000	N	Y	N
ANI-SCREENING	1000	1300	1300	Y	N	N
ANI-SCREENING-PROFILE	100	100	100	Y	N	N
ANI-WB-LIST	5000	6250	6250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	240	240	240	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	22500	22500	22500	Y	N	N
APP-SERVER	10	10	10	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	50000	50000	50000	N	Y	N
AUTH-CODE-GRP	5000	5000	5000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	4096	4096	4096	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	33750	33750	33750	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	380	380	380	Y	N	N

Table 2-13 Release 4.5 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CIPHERSUITE-PROFILE	380	380	380	N	N	N
CIRCUIT-CODE	10	10	10	Y	N	N
CLLI-CODE	10	10	10	N	N	N
COS-RESTRICT	33750	33750	33750	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	500	500	500	N	N	Y
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DESTINATION	100	100	100	Y	N	N
DIAL-PLAN	200000	200000	200000	Y	N	N
DIAL-PLAN-PROFILE	200	200	200	Y	N	N
DIGIT-MAP	110	110	110	Y	N	N
DIGMAN	2175	2175	2175	Y	N	N
DIGMAN-PROFILE	435	435	435	Y	N	N
DN2CUST-GRP	50000	50000	50000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	2048	2048	2048	Y	Y	Y
DS1	800	800	800	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	1	1	1	Y	N	Y
ESS	10	10	10	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	4500	4500	4500	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N

Table 2-13 Release 4.5 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	500	500	500	N	N	Y
II-WB-LIST	4219	4219	4219	N	Y	N
INTL-DIAL-PLAN	1200	1200	1200	Y	N	N
INTL-DIAL-PLAN-PROFILE	4	4	4	Y	N	N
INTL-WB-LIST	33750	33750	33750	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	380	380	380	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	22500	22500	22500	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	33750	43000	43000	N	Y	N
NDC	50	50	50	Y	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	3375	3375	3375	N	Y	N
OCB-K-VALUE	27	27	27	N	Y	N
OCB-PROFILE	1	1	1	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N

Table 2-13 Release 4.5 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
OPC	8	8	30	Y	Y	Y
POLICY-NXX	100	100	100	Y	N	Y
POLICY-ODR	2500	2500	2500	Y	N	Y
POLICY-OLI	25	25	25	Y	N	Y
POLICY-PERCENT	100	100	100	Y	N	Y
POLICY-POP	125	125	125	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	275	275	275	Y	N	Y
POLICY-TOD	100	100	100	Y	N	Y
POP	10	10	10	Y	Y	Y
PORTED-OFFICE-CODE	120000	120000	120000	Y	N	N
QOS	380	380	380	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	5000	7000	7000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	250	250	250	Y	N	N
ROUTE-GUIDE	250	250	250	Y	N	Y
ROUTING-KEY	4096	4096	4096	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	100	100	100	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N

Table 2-13 Release 4.5 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	9000	9000	9000	N	Y	N
SLHR	128	128	128	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
STATIC-CONTACT	2250	2250	2250	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	270000	270000	270000	N	Y	N
SUBSCRIBER-PROFILE	100	100	100	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	450	450	450	N	Y	N
SUBSYSTEM	128	128	128	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
TECH-PREFIX-GRP	110	110	110	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	24000	24000	24000	Y	N	N
TRUNK-GRP	1000	1000	1000	Y	N	N
TRUNK-GRP-FEATURE-DATA	100	100	100	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	110	110	110	Y	Y	N
USER-AUTH	22500	22500	22500	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N
ZZZ-CODE	10	10	10	Y	N	N

Medium Configuration Database Usage Defaults

Table 2-14 details the predefined defaults for the Database Usage table for a medium configuration in Release 4.5.

Table 2-14 **Release 4.5 Medium Configuration Database Usage Defaults**

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	50	50	50	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
AGGR	1000	1000	1000	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	50000	50000	50000	Y	N	N
APP-SERVER	500	500	500	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	112500	112500	112500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	2250	3000	3000	Y	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N

Table 2-14 Release 4.5 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIRCUIT-CODE	500	500	500	Y	N	N
CLLI-CODE	500	500	500	N	N	N
COS-RESTRICT	112500	112500	112500	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2SUBSCRIBER	225000	225000	225000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	50	50	50	Y	N	Y
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	15000	15000	15000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N

Table 2-14 Release 4.5 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	14063	14063	14063	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	112500	112500	112500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	50000	50000	50000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	20000	20000	20000	Y	Y	N
MLHG-PREF-LIST	2000	2000	2000	Y	N	N
MLHG-TERMINAL	100000	100000	100000	Y	N	N
NATIONAL-WB-LIST	112500	141000	141000	N	Y	N
NDC	800	800	800	Y	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	11250	11250	11250	N	Y	N
OCB-K-VALUE	1350	1350	1350	N	Y	N
OCB-PROFILE	50	50	50	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N

Table 2-14 Release 4.5 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	30000	30000	30000	N	Y	N
SC2D	1500	1500	1500	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N

Table 2-14 Release 4.5 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	30000	30000	30000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
STATIC-CONTACT	5000	5000	5000	Y	N	N
SUBSCRIBER	150000	150000	125000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	750000	750000	750000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	1500	1500	1500	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	50000	50000	50000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	3000	3750	3750	Y	N	N
ZZZ-CODE	500	500	500	Y	N	N

Medium Database Usage Defaults - Generic Routing

Table 2-15 details the predefined defaults for the Database Usage table for a medium generic routing configuration in Release 4.5.

Table 2-15 Release 4.5 Medium Database Usage Defaults - Generic Routing

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	33000	33000	33000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	75000	75000	75000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N
CIRCUIT-CODE	500	500	500	Y	N	N
COS-RESTRICT	75000	75000	75000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y

Table 2-15 Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	9375	9375	9375	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	75000	75000	75000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N

Table 2-15 Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ISDN-TG-PROFILE	250	250	250	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	33000	33000	33000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	20000	20000	20000	Y	Y	N
MLHG-PREF-LIST	2000	2000	2000	Y	N	N
MLHG-TERMINAL	100000	100000	100000	Y	N	N
NATIONAL-WB-LIST	75000	94000	94000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	7500	7500	7500	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N

Table 2-15 Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	20000	20000	20000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SCTP-ASSOC	240	240	240	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	20000	20000	20000	N	Y	N
SLHR-PROFILE	16	16	16	N	N	N
SLHR	480	480	480	N	Y	Y
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	3300	3300	3300	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	600000	600000	600000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1000000	1000000	1000000	Y	Y	N
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM	480	480	480	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N

Table 2-15 Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	33000	33000	33000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N
ANI-SCREENING	15000	18800	18800	Y	N	N
LNP-PROFILE	10	10	10	Y	Y	Y
DN2GN	100	100	100	N	N	Y
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TERM	10000	10000	10000	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
TIMEZONE	400	400	400	N	N	N
SCRIPT	1000	1000	1000	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
OCB-PROFILE	50	50	50	N	Y	N
OCB-K-VALUE	1350	1350	1350	N	Y	N
ENUM-PROFILE	50	50	50	Y	N	Y
ENUM-CALL-TYPE	100	100	100	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
CLLI-CODE	500	500	500	N	N	N
SUBSCRIBER-TOD-SCHEDULE	1000	1000	1000	N	Y	N

Table 2-15 Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
GTD-PARM-VALUES	100	100	100	N	N	N
AAA-SERVER-GRP	50	50	50	N	Y	N
REGION-CODE	800	800	800	Y	N	N
ZZZ-CODE	500	500	500	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
APP-SERVER	500	500	500	Y	Y	N
SIP-TIMER-PROFILE	10	10	10	Y	N	N
ENUM-ROOT	10	10	10	Y	N	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
CALL-TYPE-PROFILE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOA-ROUTE	100	100	100	Y	N	N
DN2RN	100	100	100	N	N	Y

Routerserver Database Usage Defaults

Table 2-16 details the predefined defaults for the Database Usage table for a routerserver configuration in Release 4.5.

Table 2-16 Release 4.5 Routerserver Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	26	26	26	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
AGGR	380	380	380	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	1000	1300	1300	Y	N	N
ANI-SCREENING-PROFILE	100	100	100	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y

Table 2-16 Release 4.5 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	4500	4500	4500	Y	N	N
APP-SERVER	255	255	255	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	10240	10240	10240	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	33750	33750	33750	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	380	380	380	Y	N	N
CIPHERSUITE-PROFILE	380	380	380	N	N	N
CIRCUIT-CODE	255	255	255	Y	N	N
CLLI-CODE	255	255	255	N	N	N
COS-RESTRICT	33750	33750	33750	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DESTINATION	1000000	1000000	1000000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N

Table 2-16 Release 4.5 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DIGMAN	25000	25000	25000	Y	N	N
DIGMAN-PROFILE	5000	5000	5000	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	10000	10000	10000	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	5120	5120	5120	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	26	26	26	Y	N	Y
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	4500	4500	4500	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	4219	4219	4219	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	33750	33750	33750	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	380	380	380	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N

Table 2-16 Release 4.5 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	4500	4500	4500	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	33750	43000	43000	N	Y	N
NDC	800	800	800	Y	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	3375	3375	3375	N	Y	N
OCB-K-VALUE	689	689	689	N	Y	N
OCB-PROFILE	26	26	26	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	20	20	30	Y	Y	Y
POLICY-NXX	8000	8000	8000	Y	N	Y
POLICY-ODR	80000	80000	80000	Y	N	Y
POLICY-OLI	8000	8000	8000	Y	N	Y
POLICY-PERCENT	80000	80000	80000	Y	N	Y
POLICY-POP	80000	80000	80000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	88000	88000	88000	Y	N	Y
POLICY-TOD	120000	120000	120000	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	380	380	380	Y	N	N

Table 2-16 Release 4.5 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	800000	1000000	1000000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	600000	600000	600000	Y	N	N
ROUTE-GUIDE	80000	80000	80000	Y	N	Y
ROUTING-KEY	10240	10240	10240	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	450	450	450	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	9000	9000	9000	N	Y	N
SLHR	320	320	320	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
STATIC-CONTACT	450	450	450	Y	N	N

Table 2-16 Release 4.5 Routeserver Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	270000	270000	270000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	450	450	450	N	Y	N
SUBSYSTEM	320	320	320	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	25000	25000	25000	Y	N	N
TRUNK-GRP-FEATURE-DATA	2500	2500	2500	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	2750	2750	2750	Y	Y	N
USER-AUTH	4500	4500	4500	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N
ZZZ-CODE	255	255	255	Y	N	N

Local Number Portability Database Usage Defaults

[Table 2-17](#) details the predefined defaults for the Database Usage table for an LNP configuration in Release 4.5.

Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	26	26	26	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
AGGR	1000	1000	1000	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N

Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	50000	50000	50000	Y	N	N
APP-SERVER	255	255	255	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	112500	112500	112500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	2250	3000	3000	Y	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIRCUIT-CODE	255	255	255	Y	N	N
CLLI-CODE	255	255	255	N	N	N
COS-RESTRICT	112500	112500	112500	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N

Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	5000000	5000000	5000000	N	N	Y
DN2SUBSCRIBER	225000	225000	225000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	26	26	26	Y	N	Y
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	15000	15000	15000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	14063	14063	14063	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	112500	112500	112500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N

Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	50000	50000	50000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	112500	141000	141000	N	Y	N
NDC	50	50	50	Y	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	11250	11250	11250	N	Y	N
OCB-K-VALUE	689	689	689	N	Y	N
OCB-PROFILE	26	26	26	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y

Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	30000	30000	30000	N	Y	N
SC2D	1500	1500	1500	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	30000	30000	30000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N

Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SS7-CIC	96000	96000	96000	Y	N	N
STATIC-CONTACT	5000	5000	5000	Y	N	N
SUBSCRIBER	150000	150000	125000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	750000	750000	750000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	1500	1500	1500	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	50000	50000	50000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	3000	3750	3750	Y	N	N
ZZZ-CODE	255	255	255	Y	N	N

Local Number Portability Database Usage Defaults - Routing Number

Table 2-18 details the predefined defaults for the Database Usage table for an LNP routing number configuration in Release 4.5. Used for Europe, the Middle East and Africa (EMEA).

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
ANI	400000	400000	400000	N	Y	N

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	50000	50000	50000	Y	N	N
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-TYPE	100	100	100	N	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	112500	112500	112500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	2250	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N
CIRCUIT-CODE	255	255	255	Y	N	N
COS-RESTRICT	112500	112500	112500	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2SUBSCRIBER	225000	225000	225000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-SERVER	10	10	10	Y	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	14063	14063	14063	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	112500	112500	112500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	50000	50000	50000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	112500	141000	141000	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	11250	11250	11250	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	30000	30000	30000	N	Y	N
SC2D	30000	30000	30000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SCTP-ASSOC	240	240	240	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SLE	30000	30000	30000	N	Y	N
SLHR-PROFILE	16	16	16	N	N	N
SLHR	480	480	480	N	Y	Y
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7-CIC	96000	96000	96000	Y	N	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
STATIC-CONTACT	5000	5000	5000	Y	N	N
SUBSCRIBER	150000	150000	125000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1500000	1500000	1500000	Y	Y	N
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM	480	480	480	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	50000	50000	50000	Y	N	N

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	3000	3750	3750	Y	N	N
ANI-SCREENING	15000	18800	18800	Y	N	N
LNP-PROFILE	10	10	10	Y	Y	Y
DN2GN	100	100	100	N	N	Y
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TERM	15000	15000	15000	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
TIMEZONE	400	400	400	N	N	N
SCRIPT	1000	1000	1000	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
OCB-PROFILE	26	26	26	N	Y	N
OCB-K-VALUE	689	689	689	N	Y	N
ENUM-PROFILE	26	26	26	Y	N	Y
ENUM-CALL-TYPE	100	100	100	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
CLLI-CODE	255	255	255	N	N	N
SUBSCRIBER-TOD-SCHEDULE	1500	1500	1500	N	Y	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
GTD-PARM-VALUES	100	100	100	N	N	N
AAA-SERVER-GRP	26	26	26	N	Y	N
REGION-CODE	800	800	800	Y	N	N
ZZZ-CODE	255	255	255	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N

Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CALL-SUBTYPE	1000	1000	1000	N	N	N
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
APP-SERVER	255	255	255	Y	Y	N
SIP-TIMER-PROFILE	10	10	10	Y	N	N
ENUM-ROOT	10	10	10	Y	N	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
CALL-TYPE-PROFILE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOA-ROUTE	100	100	100	Y	N	N
DN2RN	5000000	5000000	5000000	N	N	Y

Cable8 Database Usage Defaults

Table 2-19 details the predefined defaults for the Database Usage table for a Cable8 configuration in Release 4.5.

Table 2-19 Release 4.5 Cable8 Database Usage Defaults

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	100	100	100	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
AGGR	2100	2100	2100	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	24000	24000	24000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	10000	10000	10000	Y	N	N
APP-SERVER	1000	1000	1000	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N

Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	187500	187500	187500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	1000	1000	1000	Y	Y	N
CHANGED-NUMBER	3750	5000	5000	Y	N	N
CIPHERSUITE	2100	2100	2100	Y	N	N
CIPHERSUITE-PROFILE	2100	2100	2100	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
CLLI-CODE	1000	1000	1000	N	N	N
COS-RESTRICT	187500	187500	187500	N	Y	N
CPSG	2000	2000	2000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	20000	20000	20000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	1000	1000	1000	N	N	N
DESTINATION	10000	10000	10000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	2000	2000	2000	Y	N	N
DIGMAN	16000	16000	16000	Y	N	N
DIGMAN-PROFILE	3200	3200	3200	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2SUBSCRIBER	375000	375000	375000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	5000	5000	5000	Y	N	N

Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	100	100	100	Y	N	Y
ESS	1000	1000	1000	Y	N	N
EXCHANGE-CODE	64000	64000	64000	Y	N	N
EXT2SUBSCRIBER	50000	50000	50000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	250	250	250	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	23438	23438	23438	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	187500	187500	187500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	2100	2100	2100	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N

Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	10000	10000	10000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	210000	210000	210000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	20000	20000	20000	Y	Y	N
MLHG-PREF-LIST	2000	2000	2000	Y	N	N
MLHG-TERMINAL	100000	100000	100000	Y	N	N
NATIONAL-WB-LIST	187500	235000	235000	N	Y	N
NDC	800	800	800	Y	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	18750	18750	18750	N	Y	N
OCB-K-VALUE	2700	2700	2700	N	Y	N
OCB-PROFILE	100	100	100	N	Y	N
OFFICE-CODE	200000	200000	200000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	25000	25000	25000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	1000	1000	1000	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	2100	2100	2100	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N

Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SC1D	50000	50000	50000	N	Y	N
SC2D	2500	2500	2500	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	10	10	10	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	50000	50000	50000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	60000	60000	60000	Y	N	N
STATIC-CONTACT	1000	1000	1000	Y	N	N
SUBSCRIBER	250000	250000	250000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	1500000	1500000	1500000	N	Y	N
SUBSCRIBER-PROFILE	10000	10000	10000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1250000	1250000	1250000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	2500	2500	2500	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
TECH-PREFIX-GRP	10	10	10	Y	N	N

Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	370000	370000	370000	Y	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	120000	120000	120000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	10000	10000	10000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	5000	6250	6250	Y	N	N
ZZZ-CODE	1000	1000	1000	Y	N	N

Release 4.5.1

This section describes the Database Usage tables for small, medium, routeserver, LNP and Cable8 configurations in Release 4.5.1.

Small Configuration Database Usage Defaults

[Table 2-20](#) details the predefined defaults for the Database Usage table for a small configuration in Release 4.5.1.

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	1	1	1	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	380	380	380	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	100000	100000	100000	N	Y	N
ANI-SCREENING	1000	1300	1300	Y	N	N
ANI-SCREENING-PROFILE	100	100	100	Y	N	N

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ANI-WB-LIST	5000	6250	6250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	240	240	240	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	22500	22500	22500	Y	N	N
APP-SERVER	10	10	10	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	50000	50000	50000	N	Y	N
AUTH-CODE-GRP	5000	5000	5000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	4096	4096	4096	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	33750	33750	33750	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	380	380	380	Y	N	N
CIPHERSUITE-PROFILE	380	380	380	N	N	N
CIRCUIT-CODE	10	10	10	Y	N	N
CLLI-CODE	10	10	10	N	N	N
COS-RESTRICT	33750	33750	33750	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	500	500	500	N	N	Y

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	500	500	500	Y	N	N
DIAL-PLAN	200000	200000	200000	Y	N	N
DIAL-PLAN-PROFILE	200	200	200	Y	N	N
DIGIT-MAP	110	110	110	Y	N	N
DIGMAN	2175	2175	2175	Y	N	N
DIGMAN-PROFILE	435	435	435	Y	N	N
DN2CUST-GRP	50000	50000	50000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2RN	100	100	100	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	2048	2048	2048	Y	Y	Y
DS1	800	800	800	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	1	1	1	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	10	10	10	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	4500	4500	4500	Y	N	N

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	500	500	500	N	N	Y
II-WB-LIST	4219	4219	4219	N	Y	N
INTL-DIAL-PLAN	1200	1200	1200	Y	N	N
INTL-DIAL-PLAN-PROFILE	4	4	4	Y	N	N
INTL-WB-LIST	33750	33750	33750	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	380	380	380	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	22500	22500	22500	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	33750	43000	43000	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	3375	3375	3375	N	Y	N
OCB-K-VALUE	27	27	27	N	Y	N
OCB-PROFILE	1	1	1	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	8	8	30	Y	Y	Y
POLICY-NXX	100	100	100	Y	N	Y
POLICY-ODR	2500	2500	2500	Y	N	Y
POLICY-OLI	25	25	25	Y	N	Y
POLICY-PERCENT	100	100	100	Y	N	Y
POLICY-POP	125	125	125	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	275	275	275	Y	N	Y
POLICY-TOD	100	100	100	Y	N	Y
POP	10	10	10	Y	Y	Y
PORTED-OFFICE-CODE	120000	120000	120000	Y	N	N
QOS	380	380	380	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	5000	7000	7000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	250	250	250	Y	N	N
ROUTE-GUIDE	250	250	250	Y	N	Y
ROUTING-KEY	4096	4096	4096	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	9000	9000	9000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	100	100	100	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	9000	9000	9000	N	Y	N
SLHR	128	128	128	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
STATIC-CONTACT	2250	2250	2250	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	270000	270000	270000	N	Y	N
SUBSCRIBER-PROFILE	100	100	100	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	450	450	450	N	Y	N
SUBSYSTEM	128	128	128	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	110	110	110	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	60000	60000	60000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N

Table 2-20 Release 4.5.1 Small Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	24000	24000	24000	Y	N	N
TRUNK-GRP	1000	1000	1000	Y	N	N
TRUNK-GRP-FEATURE-DATA	100	100	100	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	110	110	110	Y	Y	N
USER-AUTH	22500	22500	22500	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N
ZZZ-CODE	10	10	10	Y	N	N

Medium Configuration Database Usage Defaults

[Table 2-21](#) details the predefined defaults for the Database Usage table for a medium configuration in Release 4.5.1.

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	50	50	50	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	3000	3000	3000	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	50000	50000	50000	Y	N	N

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
APP-SERVER	500	500	500	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	2500	2500	2500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	112500	112500	112500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	2250	3000	3000	Y	N	N
CIPHERSUITE	3000	3000	3000	Y	N	N
CIPHERSUITE-PROFILE	3000	3000	3000	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
CLLI-CODE	500	500	500	N	N	N
COS-RESTRICT	112500	112500	112500	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2RN	100	100	100	N	N	Y
DN2SUBSCRIBER	225000	225000	225000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	50	50	50	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	15000	15000	15000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	14063	14063	14063	N	Y	N

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	112500	112500	112500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	3000	3000	3000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	60000	60000	60000	Y	N	N
ISDN-DCHAN	2500	2500	2500	Y	N	N
ISDN-INTF	2500	2500	2500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	50000	50000	50000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	150000	150000	150000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	20000	20000	20000	Y	Y	N
MLHG-PREF-LIST	2000	2000	2000	Y	N	N
MLHG-TERMINAL	100000	100000	100000	Y	N	N
NATIONAL-WB-LIST	112500	141000	141000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	11250	11250	11250	N	Y	N
OCB-K-VALUE	1350	1350	1350	N	Y	N

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
OCB-PROFILE	50	50	50	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	3000	3000	3000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	30000	30000	30000	N	Y	N
SC2D	30000	30000	30000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	30000	30000	30000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
STATIC-CONTACT	5000	5000	5000	Y	N	N
SUBSCRIBER	150000	150000	125000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1500000	1500000	1500000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	1500	1500	1500	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N

Table 2-21 Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
USER-AUTH	50000	50000	50000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	3000	3750	3750	Y	N	N
ZZZ-CODE	1000	1000	1000	Y	N	N

Medium Configuration Database Usage Defaults - Generic Routing

Table 2-22 details the predefined defaults for the Database Usage table for a medium configuration - generic routing in Release 4.5.1.

Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing

Table Name or Noun	Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTCS	Route FSAIN
AAA-SERVER-GRP	50	50	50	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	12000	12000	12000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	33000	33000	33000	Y	N	N
APP-SERVER	500	500	500	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N

Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTCS	Route FSAIN
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	75000	75000	75000	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	1500	2000	2000	Y	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIRCUIT-CODE	500	500	500	Y	N	N
CLLI-CODE	500	500	500	N	N	N
COS-RESTRICT	75000	75000	75000	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	100	100	100	N	N	Y

Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTCS	Route FSAIN
DN2RN	100	100	100	N	N	Y
DN2SUBSCRIBER	150000	150000	150000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	50	50	50	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	500	500	500	Y	N	N
EXCHANGE-CODE	50000	50000	50000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	10000	10000	10000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	9375	9375	9375	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	75000	75000	75000	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N

Table 2-22 **Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)**

Table Name or Noun	Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTCS	Route FSAIN
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	33000	33000	33000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	20000	20000	20000	Y	Y	N
MLHG-PREF-LIST	2000	2000	2000	Y	N	N
MLHG-TERMINAL	100000	100000	100000	Y	N	N
NATIONAL-WB-LIST	75000	94000	94000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	7500	7500	7500	N	Y	N
OCB-K-VALUE	1350	1350	1350	N	Y	N
OCB-PROFILE	50	50	50	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y

Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTCS	Route FSAIN
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	500	500	500	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	20000	20000	20000	N	Y	N
SC2D	20000	20000	20000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	20000	20000	20000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N

Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)

Table Name or Noun	Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTCS	Route FSAIN
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
STATIC-CONTACT	3300	3300	3300	Y	N	N
SUBSCRIBER	100000	100000	100000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	600000	600000	600000	N	Y	N
SUBSCRIBER-PROFILE	5000	5000	5000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1000000	1000000	1000000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	1000	1000	1000	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	33000	33000	33000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	2000	2500	2500	Y	N	N
ZZZ-CODE	500	500	500	Y	N	N

Routeserver Configuration Database Usage Defaults

Table 2-19 details the predefined defaults for the Database Usage table for a routeserver configuration in Release 4.5.1.

Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	26	26	26	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	380	380	380	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	25000	31300	31300	Y	N	N
ANI-SCREENING-PROFILE	2500	2500	2500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	4500	4500	4500	Y	N	N
APP-SERVER	255	255	255	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	100	100	100	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	10240	10240	10240	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	33750	33750	33750	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	100	100	100	Y	Y	N

Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CHANGED-NUMBER	675	1000	1000	Y	N	N
CIPHERSUITE	380	380	380	Y	N	N
CIPHERSUITE-PROFILE	380	380	380	N	N	N
CIRCUIT-CODE	255	255	255	Y	N	N
CLLI-CODE	255	255	255	N	N	N
COS-RESTRICT	33750	33750	33750	N	Y	N
CPSG	200	200	200	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	2000	2000	2000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	100	100	100	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	1000000	1000000	1000000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	25000	25000	25000	Y	N	N
DIGMAN-PROFILE	5000	5000	5000	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	10000	10000	10000	N	N	Y
DN2RN	100	100	100	N	N	Y
DN2SUBSCRIBER	67500	67500	67500	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	5120	5120	5120	Y	Y	Y
DS1	1000	1000	1000	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	26	26	26	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	5000	5000	5000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N

Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	4500	4500	4500	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	4219	4219	4219	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	33750	33750	33750	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	380	380	380	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	2400	2400	2400	Y	N	N
ISDN-DCHAN	100	100	100	Y	N	N
ISDN-INTF	100	100	100	Y	N	N
ISDN-TG-PROFILE	100	100	100	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	4500	4500	4500	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	38000	38000	38000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	100	100	100	Y	Y	N

Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
MLHG-PREF-LIST	10	10	10	Y	N	N
MLHG-TERMINAL	500	500	500	Y	N	N
NATIONAL-WB-LIST	33750	43000	43000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	3375	3375	3375	N	Y	N
OCB-K-VALUE	689	689	689	N	Y	N
OCB-PROFILE	26	26	26	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	20	20	30	Y	Y	Y
POLICY-NXX	8000	8000	8000	Y	N	Y
POLICY-ODR	80000	80000	80000	Y	N	Y
POLICY-OLI	8000	8000	8000	Y	N	Y
POLICY-PERCENT	80000	80000	80000	Y	N	Y
POLICY-POP	80000	80000	80000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	88000	88000	88000	Y	N	Y
POLICY-TOD	120000	120000	120000	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	380	380	380	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	800000	1000000	1000000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	600000	600000	600000	Y	N	N
ROUTE-GUIDE	80000	80000	80000	Y	N	Y
ROUTING-KEY	10240	10240	10240	Y	Y	Y
RUDP-BACKHAUL-SESSION	400	400	400	Y	N	N
SC1D	9000	9000	9000	N	Y	N
SC2D	9000	9000	9000	N	Y	N

Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	9000	9000	9000	N	Y	N
SLHR	320	320	320	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	18000	18000	18000	Y	N	N
STATIC-CONTACT	450	450	450	Y	N	N
SUBSCRIBER	45000	45000	45000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	270000	270000	270000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	225000	225000	225000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	450	450	450	N	Y	N
SUBSYSTEM	320	320	320	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N

Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
TERMINATION	60000	60000	60000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	32000	32000	32000	Y	N	N
TRUNK-GRP	25000	25000	25000	Y	N	N
TRUNK-GRP-FEATURE-DATA	2500	2500	2500	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	2750	2750	2750	Y	Y	N
USER-AUTH	4500	4500	4500	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	900	1125	1125	Y	N	N
ZZZ-CODE	255	255	255	Y	N	N

Local Number Portability Database Usage Defaults

Table 2-24 details the predefined defaults for the Database Usage table for Local Number Portability in Release 4.5.1.

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	26	26	26	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	50000	50000	50000	Y	N	N
APP-SERVER	255	255	255	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	112500	112500	112500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	2250	3000	3000	Y	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIRCUIT-CODE	255	255	255	Y	N	N
CLLI-CODE	255	255	255	N	N	N
COS-RESTRICT	112500	112500	112500	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	5000000	5000000	5000000	N	N	Y
DN2RN	100	100	100	N	N	Y
DN2SUBSCRIBER	225000	225000	225000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	4200	4200	4200	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	26	26	26	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	15000	15000	15000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	14063	14063	14063	N	Y	N

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	112500	112500	112500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	50000	50000	50000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	112500	141000	141000	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	11250	11250	11250	N	Y	N
OCB-K-VALUE	689	689	689	N	Y	N
OCB-PROFILE	26	26	26	N	Y	N

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	30000	30000	30000	N	Y	N
SC2D	30000	30000	30000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	30000	30000	30000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N
STATIC-CONTACT	5000	5000	5000	Y	N	N
SUBSCRIBER	150000	150000	125000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1500000	1500000	1500000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	1500	1500	1500	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	50000	50000	50000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N

Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
VSC	1000	1000	1000	N	Y	N
WIRETAP	3000	3750	3750	Y	N	N
ZZZ-CODE	255	255	255	Y	N	N

Local Number Portability Database Usage Defaults - Routing Number

Table 2-25 details the predefined defaults for the Database Usage table for Local Number Portability - Routing Number in Release 4.5.1.

Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	26	26	26	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	1000	1000	1000	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	6120	6120	6120	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	50000	50000	50000	Y	N	N
APP-SERVER	255	255	255	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y

Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	112500	112500	112500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N
CENTREX-GRP	500	500	500	Y	Y	N
CHANGED-NUMBER	2250	3000	3000	Y	N	N
CIPHERSUITE	1000	1000	1000	Y	N	N
CIPHERSUITE-PROFILE	1000	1000	1000	N	N	N
CIRCUIT-CODE	255	255	255	Y	N	N
CLLI-CODE	255	255	255	N	N	N
COS-RESTRICT	112500	112500	112500	N	Y	N
CPSG	1000	1000	1000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	10000	10000	10000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	500	500	500	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	5000	5000	5000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	1000	1000	1000	Y	N	N
DIGMAN	13500	13500	13500	Y	N	N
DIGMAN-PROFILE	2700	2700	2700	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2RN	5000000	5000000	5000000	N	N	Y
DN2SUBSCRIBER	225000	225000	225000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y

Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
DS1	4200	4200	4200	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	26	26	26	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	255	255	255	Y	N	N
EXCHANGE-CODE	5000	5000	5000	Y	N	N
EXT2SUBSCRIBER	25000	25000	25000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	15000	15000	15000	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	14063	14063	14063	N	Y	N
INTL-DIAL-PLAN	3000	3000	3000	Y	N	N
INTL-DIAL-PLAN-PROFILE	10	10	10	Y	N	N
INTL-WB-LIST	112500	112500	112500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	1000	1000	1000	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y

Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	50000	50000	50000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N
MGW	100000	100000	100000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	10000	10000	10000	Y	Y	N
MLHG-PREF-LIST	1000	1000	1000	Y	N	N
MLHG-TERMINAL	50000	50000	50000	Y	N	N
NATIONAL-WB-LIST	112500	141000	141000	N	Y	N
NDC	50	50	50	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	11250	11250	11250	N	Y	N
OCB-K-VALUE	689	689	689	N	Y	N
OCB-PROFILE	26	26	26	N	Y	N
OFFICE-CODE	50000	50000	50000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	12500	12500	12500	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	255	255	255	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N

Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
QOS	1000	1000	1000	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	30000	30000	30000	N	Y	N
SC2D	30000	30000	30000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	1000	1000	1000	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	30000	30000	30000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	96000	96000	96000	Y	N	N

Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
STATIC-CONTACT	5000	5000	5000	Y	N	N
SUBSCRIBER	150000	150000	125000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	900000	900000	900000	N	Y	N
SUBSCRIBER-PROFILE	2550	2550	2550	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	1500000	1500000	1500000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	1500	1500	1500	N	Y	N
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	1000	1000	1000	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	180000	180000	180000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	100000	100000	100000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	50000	50000	50000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	3000	3750	3750	Y	N	N
ZZZ-CODE	255	255	255	Y	N	N

Cable8 Database Usage Defaults

Table 2-26 details the predefined defaults for the Database Usage table for Cable 8 in Release 4.5.1.

Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
AAA-SERVER-GRP	100	100	100	N	Y	N
ACTIVITY	100	100	100	Y	Y	Y
ACTIVITY-BASE	100	100	100	N	N	N
AGGR	2100	2100	2100	Y	N	N
AGGR-PROFILE	10	10	10	Y	N	N
ANI	400000	400000	400000	N	Y	N
ANI-SCREENING	15000	18800	18800	Y	N	N
ANI-SCREENING-PROFILE	1500	1500	1500	Y	N	N
ANI-WB-LIST	25000	31250	31250	N	N	Y
ANNC-TG-PROFILE	100	100	100	Y	N	N
ANNC-TRUNK	24000	24000	24000	Y	N	N
ANNOUNCEMENT	1000	1000	1000	Y	N	N
AOR2SUB	10000	10000	10000	Y	N	N
APP-SERVER	1000	1000	1000	Y	Y	N
AUDIO-SEGMENT	5000	5000	5000	N	Y	Y
AUDIO-SEQ	1000	1000	1000	N	Y	Y
AUTH-CODE	250000	250000	250000	N	Y	N
AUTH-CODE-GRP	25000	25000	25000	N	Y	N
AUTH-REALM	1000	1000	1000	Y	N	N
BACKHAUL-SET	1500	1500	1500	Y	N	N
CA-CONFIG	1000	1000	1000	Y	Y	Y
CA-CONFIG-BASE	1000	1000	1000	Y	Y	Y
CALL-AGENT	10	10	10	Y	Y	Y
CALL-AGENT-PROFILE	10	10	10	Y	Y	Y
CALL-CTRL-ROUTE	15360	15360	15360	Y	N	N
CALL-SUBTYPE	1000	1000	1000	N	N	N
CALL-TYPE	100	100	100	N	N	N
CALL-TYPE-PROFILE	100	100	100	Y	N	N
CARRIER	10000	10000	10000	Y	N	N
CAS-TG-PROFILE	100	100	100	Y	N	N
CASUAL-WB-LIST	187500	187500	187500	N	Y	N
CAUSE-CODE-MAP	2000	2000	2000	Y	N	N
CAUSE-CODE-MAP-PROFILE	100	100	100	Y	N	N

Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
CENTREX-GRP	1000	1000	1000	Y	Y	N
CHANGED-NUMBER	3750	5000	5000	Y	N	N
CIPHERSUITE	2100	2100	2100	Y	N	N
CIPHERSUITE-PROFILE	2100	2100	2100	N	N	N
CIRCUIT-CODE	1000	1000	1000	Y	N	N
CLLI-CODE	1000	1000	1000	N	N	N
COS-RESTRICT	187500	187500	187500	N	Y	N
CPSG	2000	2000	2000	Y	Y	N
CUST-GRP	2500	2500	2500	N	N	Y
CUSTOM-DIAL-PLAN	20000	20000	20000	N	Y	N
CUSTOM-DIAL-PLAN-PROFILE	1000	1000	1000	N	N	N
DB-THRESHOLDS	1000	1000	1000	N	N	N
DB-USAGE	1000	1000	1000	N	N	N
DESTINATION	10000	10000	10000	Y	N	N
DIAL-PLAN	1000000	1000000	1000000	Y	N	N
DIAL-PLAN-PROFILE	1000	1000	1000	Y	N	N
DIGIT-MAP	2000	2000	2000	Y	N	N
DIGMAN	16000	16000	16000	Y	N	N
DIGMAN-PROFILE	3200	3200	3200	Y	N	N
DN2CUST-GRP	250000	250000	250000	N	N	Y
DN2GN	100	100	100	N	N	Y
DN2RN	100	100	100	N	N	Y
DN2SUBSCRIBER	375000	375000	375000	Y	N	N
DOMAIN2ROUTE	1000	1000	1000	Y	N	N
DPC	7680	7680	7680	Y	Y	Y
DS1	5000	5000	5000	Y	N	N
EMERGENCY-NUMBER-LIST	50	50	50	Y	N	N
ENUM-CALL-TYPE	100	100	100	Y	N	N
ENUM-PROFILE	100	100	100	Y	N	Y
ENUM-ROOT	10	10	10	Y	N	Y
ESS	1000	1000	1000	Y	N	N
EXCHANGE-CODE	64000	64000	64000	Y	N	N
EXT2SUBSCRIBER	50000	50000	50000	Y	Y	N
FEATURE	1000	1000	1000	N	Y	N

Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
FEATURE-CONFIG	1000	1000	1000	N	Y	Y
FEATURE-CONFIG-BASE	1000	1000	1000	N	N	N
FEATURE-CONFIG-BASE-POS-VAL	1000	1000	1000	N	N	N
FEATURE-SERVER	10	10	10	Y	Y	Y
FS-AUDIT-PROFILE	10	10	10	N	Y	Y
GTD-PARM-VALUES	100	100	100	N	N	N
H323-GW	4	4	4	Y	N	N
H323-GW2GK	100	100	100	Y	N	N
H323-TERM	250	250	250	Y	N	N
H323-TERM-PROFILE	200	200	200	Y	N	N
H323-TG-PROFILE	100	100	100	Y	N	N
HTTP-FEATURE-SERVER	1	1	1	N	Y	N
II-RESTRICT-LIST	2500	2500	2500	N	N	Y
II-WB-LIST	23438	23438	23438	N	Y	N
INTL-DIAL-PLAN	60000	60000	60000	Y	N	N
INTL-DIAL-PLAN-PROFILE	200	200	200	Y	N	N
INTL-WB-LIST	187500	187500	187500	N	Y	N
IPSEC-KERBEROS	1	1	1	Y	N	N
IPSEC-KERBEROS-KEYS	256	256	256	Y	N	N
IPSEC-POLICY	2100	2100	2100	Y	N	N
IPSEC-SA	256	256	256	Y	N	N
ISDN-BCHAN	36000	36000	36000	Y	N	N
ISDN-DCHAN	1500	1500	1500	Y	N	N
ISDN-INTF	1500	1500	1500	Y	N	N
ISDN-TG-PROFILE	250	250	250	Y	N	N
IVR-SCRIPT-PROFILE	100	100	100	N	Y	Y
LANGUAGE	1000	1000	1000	N	N	N
LATA	1000	1000	1000	Y	Y	N
LATA-MAP	150000	150000	150000	Y	Y	N
LNP-PROFILE	10	10	10	Y	Y	Y
LSA	30000	30000	30000	Y	N	N
LSA-PROFILE	1000	1000	1000	N	N	N
MAC2SUB	10000	10000	10000	N	Y	N
MGCP-RETCODE-ACTION	2000	2000	2000	Y	N	N

Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
MGW	210000	210000	210000	Y	N	N
MGW-PROFILE	100	100	100	Y	N	N
MLHG	30000	30000	30000	Y	Y	N
MLHG-PREF-LIST	3000	3000	3000	Y	N	N
MLHG-TERMINAL	150000	150000	150000	Y	N	N
NATIONAL-WB-LIST	187500	235000	235000	N	Y	N
NDC	800	800	800	Y	N	N
NOA	0	0	0	N	N	N
NOA-ROUTE	100	100	100	Y	N	N
NOA-ROUTE-PROFILE	100	100	100	Y	N	N
NOD	100	100	100	N	N	N
NOD-RESTRICT-LIST	1000	1000	1000	N	Y	N
NOD-WB-LIST	18750	18750	18750	N	Y	N
OCB-K-VALUE	2700	2700	2700	N	Y	N
OCB-PROFILE	100	100	100	N	Y	N
OFFICE-CODE	200000	200000	200000	Y	Y	N
OPC	30	30	30	Y	Y	Y
POLICY-NXX	400	400	400	Y	N	Y
POLICY-ODR	10000	10000	10000	Y	N	Y
POLICY-OLI	100	100	100	Y	N	Y
POLICY-PERCENT	400	400	400	Y	N	Y
POLICY-POP	25000	25000	25000	Y	N	Y
POLICY-PREFIX	10000	10000	10000	Y	N	Y
POLICY-REGION	1100	1100	1100	Y	N	Y
POLICY-TOD	400	400	400	Y	N	Y
POP	1000	1000	1000	Y	Y	Y
PORTED-OFFICE-CODE	640000	640000	640000	Y	N	N
QOS	2100	2100	2100	Y	N	N
RADIUS-PROFILE	20	20	20	Y	Y	N
REGION-CODE	800	800	800	Y	N	N
REGION-PROFILE	20000	25000	25000	Y	N	Y
RELEASE-CAUSE	10000	10000	10000	Y	N	N
ROUTE	2000	2000	2000	Y	N	N
ROUTE-GUIDE	1000	1000	1000	Y	N	Y

Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
ROUTING-KEY	15360	15360	15360	Y	Y	Y
RUDP-BACKHAUL-SESSION	6000	6000	6000	Y	N	N
SC1D	50000	50000	50000	N	Y	N
SC2D	50000	50000	50000	N	Y	N
SCCP-NW	255	255	255	N	Y	Y
SCCP-ROUTE	65535	65535	65535	N	Y	Y
SCRIPT	1000	1000	1000	Y	N	N
SCTP-ASSOC	240	240	240	Y	Y	Y
SCTP-ASSOC-PROFILE	120	120	120	Y	Y	Y
SERVICE	2000	2000	2000	N	Y	N
SERVICE-PROVIDER	10	10	10	Y	N	N
SERVICE-TRIGGER	20000	20000	20000	Y	N	N
SERVING-DOMAIN-NAME	1000	1000	1000	Y	N	N
SG	20	20	20	Y	Y	Y
SG-GRP	20	20	20	Y	Y	Y
SGP	40	40	40	Y	Y	Y
SIP-TIMER-PROFILE	10	10	10	Y	N	N
SIPT-ISUP-VER-ALIAS	200	200	200	Y	N	N
SLE	50000	50000	50000	N	Y	N
SLHR	480	480	480	N	Y	Y
SLHR-PROFILE	16	16	16	N	N	N
SOFTSW-TG-PROFILE	100	100	100	Y	N	N
SPECIAL-CALL-TYPE	100	100	100	Y	N	N
SPLIT-NPA	1100	1100	1100	Y	Y	N
SS7_Q761_TG_PROFILE	100	100	100	Y	N	N
SS7_Q767_TG_PROFILE	100	100	100	Y	N	N
SS7-ANSI-TG-PROFILE	100	100	100	Y	N	N
SS7-CIC	60000	60000	60000	Y	N	N
STATIC-CONTACT	1000	1000	1000	Y	N	N
SUBSCRIBER	250000	250000	250000	Y	Y	N
SUBSCRIBER-FEATURE-DATA	1500000	1500000	1500000	N	Y	N
SUBSCRIBER-PROFILE	10000	10000	10000	Y	Y	N
SUBSCRIBER-SERVICE-PROFILE	2500000	2500000	2500000	Y	Y	N
SUBSCRIBER-TOD-SCHEDULE	2500	2500	2500	N	Y	N

Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults (continued)

Table Name or Noun	Number of Records Before Split-NPA	Maximum Record Count	Licensed Record Count	Route CA	Route FSPTC	Route FSAIN
SUBSYSTEM	480	480	480	N	Y	Y
SUBSYSTEM-GRP	16	16	16	N	Y	Y
SUBSYSTEM-PROFILE	16	16	16	N	Y	Y
TECH-PREFIX-GRP	10	10	10	Y	N	N
TECH-PREFIX-GRP-PROFILE	4	4	4	Y	N	N
TERMINATION	370000	370000	370000	Y	N	N
TIMEZONE	400	400	400	N	N	N
TRIGGER-DETECTION-POINT	50	50	50	N	N	N
TRIGGER-ID	100	100	100	N	N	N
TRIGGER-NOD-ESCAPE-LIST	100	100	100	Y	N	N
TRUNK	120000	120000	120000	Y	N	N
TRUNK-GRP	10000	10000	10000	Y	N	N
TRUNK-GRP-FEATURE-DATA	1000	1000	1000	N	Y	N
TRUNK-GRP-SERVICE-PROFILE	1100	1100	1100	Y	Y	N
USER-AUTH	10000	10000	10000	Y	N	N
USER-PART-VARIANT	200	200	200	Y	N	N
VAR-DEFAULT	1000	1000	1000	N	N	N
VSC	1000	1000	1000	N	Y	N
WIRETAP	5000	6250	6250	Y	N	N
ZZZ-CODE	1000	1000	1000	Y	N	N



APPENDIX 3

ISUP Message Counters (Release 4.4.1)

Revised: July 24, 2009, OL-3743-42

Table 3-1 illustrates which message counters are applicable to a given ISUP variant.



ISUPs for Chile and Australia are not supported.

Table 3-1 ISUP Message Counters

Message	ANSI	China	Mexico	Thailand	Hong Kong	Chile	Australia	Israel	ETSIv2	Hungary
ACM	X	X	X	X	X	X	X	X	X	X
ANM	X	X	X	X	X	X	X	X	X	X
ARR				X						
BLA	X	X	X	X	X	X	X	X	X	X
BLO	X	X	X	X	X	X	X	X	X	X
CCL		X	X				X	X	X	
CCR	X	X	X	X		X	X	X	X	X
CFN	X		X	X	X					X
CGB	X	X	X	X	X	X	X	X	X	X
CGBA	X	X	X	X	X	X	X	X	X	X
CGU	X	X	X	X	X	X	X	X	X	X
CGUA	X	X	X	X	X	X	X	X	X	X
CON		X	X	X	X	X	X	X	X	X
COT	X	X	X	X	X	X	X	X	X	X
CPG	X	X	X	X	X	X	X	X	X	X
CQM	X		X	X						
CQR	X		X	X						
CRA	X									
CRM	X									
CRG						X				

Table 3-1 *ISUP Message Counters (continued)*

Message	ANSI	China	Mexico	Thailand	Hong Kong	Chile	Australia	Israel	ETSIv2	Hungary
CVR	X									
CVT	X									
EXM	X									
FAA									X	X
FAC	X				X					X
FAR						X				
FOT	X									
FRJ						X				
FWT						X				
GRA	X	X	X	X	X	X	X	X	X	X
GRS	X	X	X	X	X	X	X	X	X	X
IAM	X	X	X	X	X	X	X	X	X	X
IDR						X				X
INF	X		X	X	X	X				X
INR			X	X	X	X				X
IRS						X				X
ITX										
LPA	X									
LPM						X				
NRM					X	X				
OLM										X
OPR							X	X	X	
PAM	X				X	X				
PRI						X				
REL	X	X	X	X	X	X	X	X	X	X
RES	X	X	X	X	X	X	X	X	X	X
RLC	X	X	X	X	X	X	X	X	X	X
RSC	X	X	X	X	X	X	X	X	X	X
SAM		X	X	X	X	X	X	X	X	X
SGM		X			X	X	X	X	X	X
SUS	X	X	X	X	X	X	X	X	X	X
TXA										
UBA	X	X		X	X	X	X	X	X	X
UBL	X	X	X	X		X	X	X	X	X
UCIC	X		X	X		X				
UPA										X

Table 3-1 *ISUP Message Counters (continued)*

Message	ANSI	China	Mexico	Thailand	Hong Kong	Chile	Australia	Israel	ETSIv2	Hungary
UPT										X
USR	X					X				X



ISUP Measurement Counters (Release 4.5/4.5.1)

Revised: July 24, 2009, OL-3743-42

This appendix illustrates which message counters are applicable to a given ISUP variant. The total message, abnormal release, unexpected and unrecognized message counter are applicable to all variants. These counters are used as display values in the [Measurements](#) chapter. ISUPs for Israel, Chile and Australia are not supported.

Table 4-1 *ISUP Measurement Counters by Variant*

Message	ANSI	China	Mexico	Thailand	Hong Kong	ETSIv2	Hungary	France (Release 4.5.1)	Poland (Release 4.5.1)	Columbia (Release 4.5.1)
ACM	X	X	X	X	X	X	X	X	X	X
ANM	X	X	X	X	X	X	X	X	X	X
ARR				X						
BLA	X	X	X	X	X	X	X	X	X	X
BLO	X	X	X	X	X	X	X	X	X	X
CCL		X	X			X				
CCR	X	X	X	X		X	X	X		
CFN	X		X	X	X		X	X		X
CGB	X	X	X	X	X	X	X	X	X	X
CGBA	X	X	X	X	X	X	X	X	X	X
CGU	X	X	X	X	X	X	X	X	X	X
CGUA	X	X	X	X	X	X	X	X	X	X
CON		X	X	X	X	X	X	X	X	X
COT	X	X	X	X	X	X	X	X	X	X
CPG	X	X	X	X	X	X	X	X	X	X
CQM	X		X	X						
CQR	X		X	X						
CRA	X									
CRM	X									

Table 4-1 *ISUP Measurement Counters by Variant*

Message	ANSI	China	Mexico	Thailand	Hong Kong	ETSIv2	Hungary	France (Release 4.5.1)	Poland (Release 4.5.1)	Columbia (Release 4.5.1)
CRG										X
CVR	X									
CVT	X									
EXM	X									
FAA						X	X	X	X	X
FAC	X				X		X	X	X	
FAR										X
FOT	X									
FRJ										X
FWT										
GRA	X	X	X	X	X	X	X			X
GRS	X	X	X	X	X	X	X			X
IAM	X	X	X	X	X	X	X			X
IDR							X			
INF	X		X	X	X		X			X
INR			X	X	X		X			X
IRS							X			
ITX								X	X	
LPA	X									
LPM										
NRM					X					
OLM							X	X	X	
OPR		X				X				
PAM	X				X					
PRI										
REL	X	X	X	X	X	X	X	X	X	X
RES	X	X	X	X	X	X	X	X	X	X
RLC	X	X	X	X	X	X	X	X	X	X
RSC	X	X	X	X	X	X	X	X	X	X
SAM		X	X	X	X	X	X	X	X	X
SGM		X			X	X	X	X	X	
SUS	X	X	X	X	X	X	X	X	X	X
UBA	X	X		X	X	X	X	X	X	X
UBL	X	X	X	X		X	X	X	X	X
UCIC	X		X	X						X

Table 4-1 *ISUP Measurement Counters by Variant*

Message	ANSI	China	Mexico	Thailand	Hong Kong	ETSIv2	Hungary	France (Release 4.5.1)	Poland (Release 4.5.1)	Columbia (Release 4.5.1)
UPA							X	X	X	
UPT							X	X	X	
USR	X						X	X	X	X



Glossary

Revised: July 24, 2009, OL-3743-42

The following glossary terms and acronyms may be used in this document.

A

AAA	authentication, authorization, and accounting
AAL	ATM adaptation layer
AAL1	ATM adaption layer 1
AAL2	ATM adaption layer 2
AAL3/4	ATM adaption layer 3 and 4
AAL5	ATM adaption layer 5
ABM	Asynchronous Balanced Mode
AC	automatic callback
AC_ACT	Automatic callback activation
AC_DEACT	Automatic callback deactivation
ACL	automatic congestion level
ACR	Anonymous call rejection
ACR_ACT	ACR activation code
ACR_DEACT	ACR deactivation code
ADI	activation, deactivation and interrogation
ADM	Administration, Diagnostics, and Maintenance
AIN	Advanced Intelligent Network
Airlines	airlines information and reservation
AMA	Automated Message Accounting
ANI	automatic number identification
ANNC	announcement

Annex E	Connection Over UDP—Relates to sending signaling over UDP (User Data Protocol) for quicker call establishment. UDP does not replace TCP/IP. Annex E optimizes the gatekeeper-routed call model.
Annex F	Inter-Domain Communications—A domain is several zones grouped together. Inter-domain communications focuses on address resolution between domains.
ANS	announcement server
APP	application
AR	automatic recall
AR_ACT	Automatic recall activation
AR_DEACT	Automatic recall deactivation
ASPC	analog stored program control switch
AT	access tandem
ATM	Asynchronous Transfer Mode
AUEP	Audit Endpoint
B	
B Channel	bearer channel
BAF	Bellcore AMA Format
BCID	billing correlation identifier
BCM	Basic Call Module
BDMS	Bulk Data Management System of the Cisco BTS 10200 Softswitch.
BE	best effort
BEC	Backward Error Correction
Bit	binary digit
Block-DA	Block Directory Assistance.
Block-INTL	Block International Operator Assistance
Block-TW	Block Time and Weather
BLV	Busy Line Verification
BOC	Bell Operating Company
BRI	Basic Rate Interface
BTS	Broadband Telephony Services

C

CA	Call Agent. Component of the Cisco BTS 10200 Softswitch.
CA-Config	Call Agent configuration
CALEA	Communications Assistance for Law Enforcement Act
CALLp	call processing
CAP	competitive access provider
CAS	channel-associated signaling
CAS-TG	channel-associated signaling trunk group
CAT	customer access treatment
CBLK	Call block—reject caller
CBR	constant bit rate
CC	country code or courtesy call
CCC	call content channel
CCM	Cisco CallManager
CC-NN	country code—national number
CCR	continuity check request message
CCSS7	Common Channel Signaling System 7
CCT	circuit
CCW	Cancel call waiting
CDB	call detail block
CDC	call data channel
CDP	Customize dial plan
CDR	call detail record
Centrex	Central Office Exchange
CFB	call forwarding busy
CFBI	Call forwarding busy interrogation
CFBVA	Call forwarding busy activation
CFBVD	Call forwarding busy deactivation
CFC	Call forwarding combination

CFC_ACT	Call forwarding combination activation
CFC_DEACT	Call forwarding combination deactivation
CFC_DN_CHG_ACT	Call forwarding combination DN change with activation
CFCI	CFC interrogation with DN verification
CFCI_NO_DN_VRFY	CFC interrogation with no DN verification
CFN	confusion message
CFNA	call forwarding no answer
CFNA	Call forwarding no answer
CFNAI	CFNA variable interrogation
CFNAVA	CFNA variable activation
CFNAVD	CFNA variable deactivation
CFU	call forwarding unconditional
CFUA	CFU activation
CFUD	CFU deactivation
CFUI	CFU interrogation
CFVABBG	Call forwarding variable activation for business groups
CHD	Call hold
CIC	Circuit Identification Code
CIC	Carrier Identification Code. A unique 3- or 4-digit access identification code assigned by Telcordia (formerly Bellcore). It identifies the long-distance carrier of a caller.
CIDCW	call identity with call waiting
CIDCW	Caller ID with call waiting
CIDS	Calling identity delivery and suppression per call
CIDSD	Calling identity delivery and suppression, delivery part per call
CIDSS	Calling identity delivery and suppression, suppression part per call
CIP	carrier information parameter
Cisco BTS 10200	Cisco System's Broadband Telephony Services Softswitch 10200
CLEC	competitive local exchange carrier
CLH	circular line hunt

CLI	command-line interface
CLIP	calling line information presentation
CLIP	Calling line identity presentation
CLIR	calling line information restriction
CLIR	Calling line identity restriction
CLLI	Common Language Location Identifier. An 11-character descriptor field assigned to a class 4/5 switch.
CM	cable modem
CMS	call management system
CMTS	Cable Modem Termination System
CNAB	calling name delivery blocking
CNAB	Calling name delivery blocking
CNAM	Calling name
CND	Calling number delivery
CNDB	calling number delivery blocking
CNM	Connection Manager
CO	Central Office
CONFIG	configuration
COPS	Common Open Policy Service
COS	Class of service screening
COT	continuity test
COT	Customer-originated trace
CPL	Command Privilege Level
CPOL	Cisco Patent On-line
CPRK	Call park access code
CPRK_RET	Call park retrieval access code
CPSG-ID	call park subscriber group identification
CPU	central processing unit
CRA	circuit reservation acknowledgement
CRCX	MGCP create connection message type

CRG	charge information (message)
CRM	circuit reservation message
CRMCRA	circuit reservation message/circuit reservation acknowledgment
CT	call transfer
CVR	circuit validation response
CVT	circuit validation test
CW	call waiting
CWD	call waiting deluxe
D	
D Channel	data channel
DA	directory assistance
DACWI	distinctive alerting/call waiting on incoming on DID calls
DA-CWI	distinctive alerting/call waiting on incoming
DA-Toll	1+411, 1+NPA-555-1212 calls.
DChan-Port	D-Channel Port Number
DChan-Slot	D-Channel Slot
DHCP	Dynamic Host Control Protocol
DID	direct inward dialing
DID/DNIS	direct inward dialing/Dialed Number Identification Service
DLCX	MGCP delete connection message type
DN	directory number
DND	do not disturb
DND_ACT	do not disturb activation
DND_DEACT	do not disturb deactivation
DNIS Pattern	Dialed Number ID Service
DNS	Domain Name Server
DOCSIS	Data Over Cable System Interface Specification
DOW	day of week
DOY	date of year

DP	detection point
DPC	destination point code
DPN	directed call pickup with barge-in
DPU	directed call pickup
DQOS	dynamic quality of service
DRCW	distinctive ringing call waiting
DRCW_ACT	DRCW activation code
DSCP	DiffServ Code Point
DSPC	Digital Stored Program Control Switch
DTMF	dual tone multifrequency. Tones that are generated when a button on a touch-tone phone is pressed. When the tone is generated, it is compressed, transported to the other party, and decompressed.
DTMF-Groundstart	dual tone multifrequency Ground Start
DTMF-IMStart	dual tone multifrequency Immediate Start
DTMF-Loopstart	dual tone multifrequency Loop Start
DTMF-Winkstart	dual tone multifrequency Wink Start
DUP-Records	duplicate records
E	
E Channel	echo channel
E&M	recEive and transMit
EM	event message
E.164	The ITU-T international public telecommunications numbering plan standard
EAEA	Equal Access Exchange Area
EAEO	Equal Access End Office
EAIN	Bellcore FGD Exchange Access International Signaling
EANA	Bellcore FGD Exchange Access North American Signaling
EC	echo cancellation
ECD	Echo Control Device (normally an echo suppressor or echo canceller)
E-ISUP	extended-ISUP
EM	Event Message or Messaging

EMA	Event Message Adapter
EMG	Emergency (911) Call
EMS	Element Management System
EMTA	Embedded Media Terminal Adapter
ENUM	Electronic Number Mapping
EO	end office
ESA	Electronic Surveillance Adapter
EXM	exit message
EXT	extension
F	
FAIL-CNT	failure count
FCLI	Functional Command Line Interface
FCP	Feature Control Protocol
FDT	final dial tone
FEID	Financial Entity Identifier
FGD	Feature Group D
FIM	feature interaction manager
FName	feature name
FQDN	Fully Qualified Domain Name
FS	Feature Server in the Cisco BTS 10200 Softswitch
FSAIN	AIN Feature Server
SFPTC	POTS, Tandem, Centrex Feature Server
FTP	File Transfer Protocol
G	
G	guaranteed
GAP	generic address parameter
GC	gate controller
GK	gatekeeper—A device that does E.164 to IP address resolution, bandwidth management and load balancing.

GN	generic name
GN	gateway number (Hong Kong)
GPRS	general packet radio service
GRE	generic routing encapsulation
GSC1D	1-digit group speed calling
GSC2D	2-digit group speed calling
GTD	Generic Transport Descriptor—ASCII based encoding scheme used to pass signaling information end-to-end.
GTP	GPRS tunneling protocol
GW	gateway
H	
H.225	The call signaling protocol of H.323. H.225 uses messages similar to messages defined in Q.931 ITU-T Recommendation.
H.245	The resource exchange protocol of H.323. H.245 is used to help the two peers determine the master-slave relationship, the exchange of capabilities, and the opening or closing of logical channels.
H.323	ITU-T recommendation adopted by the VoIP Forum as the call signaling protocol over a LAN
H3A	The H.323 signaling adapter subsystem of the Cisco BTS 10200 Softswitch
HFC	hybrid fiber coaxial
HMAC	hash-based message authentication code
HMAC-MD5	hashed message authentication code with MD5 (RFC 2104)
HMN	hardware monitor
HOTLINE	hotline
HOTV	hotline variable
HOTVA	hotline variable activation
HOTVD	hotline variable deactivation
HOTVI	hotline variable interrogation
HPTIME	higher packetization time
I	
IAD	integrated access device
IC	Interexchange Carrier

ICMP	Internet Control Message Protocol
IDEA	International Data Encryption Algorithm
IETF	Internet Engineering Task Force
IKE	Internet Key Exchange
ILEC	Incumbent local exchange carrier
IMAP	Internet Message Access Protocol
INAP	Intelligent Network Application Part
INFO	Information services calls
INS	In-Service
ISFG	incoming SFG for Centrex
INTERLATA	Calls that cross LATA boundaries
INTL	international
INTL-OPR	international operator
INTRALATA	Calls that occur within a single LATA
IP	Internet Protocol
IPsec	IP Security standard from IETF.
ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
ITP	IP transfer point
ITP	intraLATA toll presubscription
ITU-T	International Telecommunication Union - Telecommunication Sector
IVR	Interactive Voice Response
IXC	Interexchange Carrier
J	
JIP	jurisdiction information parameter
K	
KDC	Kerberos Domain Controller

L

LATA	local access transport area
LB-TEST	loopback test call (108 test line)
LCADS	Local Calling Area Data Source
LCD	limited call duration
LCR	least cost routing
LDAP	Lightweight Directory Access Protocol
LEC	local exchange carrier
LERG	Local Exchange Routing Guide
LIDB	line information database
LNP	local number portability
LNP	local number portability
LOCAL	local call
LOCK-OUT	lockout
LPTime	lower packetization time
LRN	local routing number
LSA	local service area

M

MAC	media access control
MAX-Digits	maximum number of digits
MCF	multiple call forwarding
MD5	message digest 5
MDCX	MGCP modify connection message type
MDL	Message Definition Language
MDN	multiple directory numbers
MDO	message definition object
MF-IMStart	multifrequency Immediate Start
MF-Winkstart	multifrequency Wink Start
MIB	Management Information Base

MG/MGW	media gateway
MGA	media gateway adapter
MGC	MGCP Media Gateway Controller
MGCP	Media Gateway Control Protocol, used by the Cisco BTS 10200 Softswitch for controlling the bearer path on the media gateway
MGW	Media Gateway. The main functionality of MGW is to packetize voice PCM stream from IMT in to RTP stream and vice-versa. The Call Agent controls MGWs using MGCP commands.
MIN-Digits	minimum number of digits
MLHG	Multiline hunt group
MSN	Microsoft Network
MTA	Media Terminal Adapter
Mu-law	PCM voice-coding and compounding standard
MWI-On	Message Waiting Indicator On
N	
NANP	North American Numbering Plan
NANPA	North American Numbering Plan Administration
NAS	network access server
NCA	no circuit available
NCS	network-based call signaling
NEW-DN	new subscriber directory number
NFAS	nonfacility associated signaling
NLB	network loopback
NMS	network management system
NOA	nature of address
NOD	nature of dial
NON-EMG	non emergency calls; 311 calls
Noun	The name of a table in the BTS 10200 database
NPA	Numbering Plan Area (area code)
NRUF	Numbering Resource Utilization and Forecast

NSA	no solicitation announcement
NSA_ACT	NSA management
NTE	named telephony event. An event such as DTMF digits that must be encoded and transported in an RTP packet. RFC 2833 specifies the format of the RTP NTE payload.
NTF	no trouble found
NTP	Network Time Protocol
NXX	Office Code or Prefix with a first digit of 2-9
O	
O-	Originating- such as CMS and MGC
OAMP	operations, administration, maintenance provisioning
OCB	outgoing call barring
OCB_ACT	outgoing call barring activation
OCB_ADI	outgoing call barring—activation, deactivation and interrogation. See OCB and ADI.
OCB_DEACT	outgoing call barring deactivation
OCB_INT	outgoing call barring interrogation
OCBA	Outgoing call barring activation
OCBD	Outgoing call barring deactivation
OCBI	Outgoing call barring interrogation
OCLLI	CLLI of the originating trunk group
OCN	Original Called Number Information Element
OLD-DN	Old Subscriber Directory Number
OLI	Originating Line Information
OOB	out of band
OOS	out of service
OPC	originating or origination point code
OPER-Status	Operational Status
OSFG	Outgoing SFG feature for Centrex
OSI	open switch interval or open system interconnection
OSS	Operations Support System

OSSS	operator services signaling system
P	
P1	Priority Level 1
P2	Priority Level 2
P3	Priority Level 3
P4	Priority Level 4
PHB	per-hop behavior
PBX	private branch exchange
PCM	pulse code modulation
PCS	personal communications service
PDP	Policy Decision Point
PEP	Policy Enforcement Point
PIC	preferred interLATA carrier or point in call
PIN	private identification number
PIN-LEN	pin length
PKT	packet
PKT-CBL	PacketCable
POP	point of presence
POTS	plain old telephone service
PRD	Product Requirement Document
PREMIUM	service access code 900, use carrier to route the call
PS	privacy screening
PS_MANAGE	privacy screening management
PS_O	privacy screening assigned to the incoming trunk from the PS application server
PSTN	public switched telephone network.
PTC	Plain Old Telephone Service (POTS), Tandem, Centrex
PVC	permanent virtual circuit
Q	
Q.931	Call-signaling protocol for setup and termination of calls

Q.Sig	Q signaling—a PBX signaling protocol
QAM	Queuing and Audit Manager
QoS	quality of service
QVT	query verification tool
R	
RAC	Resource Availability Confirmation message
RACF	remote activation of call forwarding
RACF_PIN	RACF PIN change
RADIUS	Remote Authentication Dial-In User Service
RAI	Resource Availability Indication RAS message
RAS	Registration, Admission, and Status Protocol. RAS is defined in the H.225 ITU-T Recommendation. RAS is used to communicate between gateways, endpoints and gatekeeper. RAS is also used to communicate between two gatekeepers.
RBOC	Regional Bell Operating Company
RCF	Remote call forwarding
RCF	Registration Confirmation message
RDN	Redirecting Number Information Element
REFER	refer capability
RFC	Request for comments document series
RGW	residential gateway
RIP	Request In Progress message
RKS	Record Keeping Server; Record Keeping System
ROH	receiver off hook
ROTL	remote office test line
RR	ring reminder
RRJ	Registration Reject message
RRQ	Registration Request message
RSIP	Restart In Progress
RSUP	Reliable SAP Update Protocol

RSVP	Resource Reservation Protocol. An IETF protocol for providing integrated services and reserving resources in an IP-based internet.
RTP	Real-time Transport Protocol—A protocol for transporting multimedia over IP; see RFC 1889, <i>RTP: A Transport Protocol for Real-Time Applications</i> .
RUDP	Reliable User Data Protocol (UDP) Protocol.
S	
S7A	SS7 ISUP signaling adapter
SAP	Session Announcement Protocol
SC1D	1-digit speed calling
SC1D_ACT	1-digit speed calling activation code
SC2D	2-digit speed calling
SC2D_ACT	2-digit speed calling activation code
SCA	Selective call acceptance
SCA_ACT	SCA activation code ACA_ACT provides access to an IVR server for activation, screening list setup and editing, and deactivation of SCA
SCCP	Signal Connection Control Part
SCF	Selective call forwarding
SCF_ACT	Selective call forwarding activation
SCP	Service Control Point
SCR	Selective call rejection
SCR_ACT	Selective call rejection activation SCR_ACT provides access to an IVR server for the activation, screening list setup and editing, and deactivation of SCR
SCTP	Stream Control Transmission Protocol
SDP	Session Description Protocol. A protocol for defining information needed to establish multimedia transport over IP. SDP transmits information such as session announcement, session invitation, transport addresses, and media types. For example, in a SIP call, SDP messages indicates if NTE is used, which events to send using NTE, and the NTE payload type value. See RFC 2327, <i>SDP: Session Description Protocol</i> .
SDT	second dial tone
Send-ATP	Send Access Transport Parameter
Send-CIP	Send Carrier Information Parameter
Send-CN	Send Charge Number

Send-CPN	Send Calling Party Number
Send-CSP	Send Carrier Selection Parameter
Send-GAP	Send Generic Address Parameter
Send-GN	Send Generic Name
Send-OCN	Send Original Called Number
SFD	Subscriber-Feature-Data. A record stored on a per-subscriber/per-feature basis in the Cisco BTS 10200 Softswitch.
SFG	simulated facility group
SG4.0	Signaling Gateway 4.0 Release
SGCP	Simple Gateway Control Protocol
SHA	secure hash algorithm
SI	service indicator
SIM	Service Interaction Module
SIP	Session Initiation Protocol. A protocol for transporting multimedia that is independent of the underlying packet control layer, such as the User Datagram Protocol (UDP), and is based on client/server architecture. See RFC 2543, <i>SIP: Session Initiation Protocol</i> .
SK	Service Key
SMG	Session Manager
SNMP	Simple Network Management Protocol
SPCS	stored program control switch
SPVC	soft permanent virtual circuit
SQL	Structured Query Language
SS7	Signaling System 7
SSF	service switching function
SSH	secure shell
SSN	subsystem number
SSP	service switching point
ST	Signaling Transport
SVC	switched virtual circuits
T	

T-	Terminating- such as CMS and MGC
Table	A database entity containing customer-provisioned data
TAC	Technical Assistance Center
TCAP	Transaction Capabilities Application Part
TCCLI	CLLI of the terminating trunk group
TCL	Tool command language
TCP	Transmission Control Protocol
TCP/IP	Transmission Control Protocol/Internet Protocol
TDP	Trigger Detection Point
Technology Prefix	A number used in the gateway and gatekeeper RAS communication to indicate to the gatekeeper the type of service this gateway is capable of handling. Examples of the type of service are voice mail, fax server, and so forth.
TFC	Transfer Controlled
TG	trunk group
TGCP	Trunking Gateway Control Protocol
TGW	trunking gateway (SS7/PSTN)
TID	trigger ID
TMN	Telecommunication Management Network
TNS	Transit Network Selection
TO	timeout
TOD	time of day
TOS	type of service
Translated DN	translated directory number
TRS	Telecommunications Relay Services
TS	tandem switch
TSA	TCAP Signaling Adapter
TSAP	Transport Service Access Point
T-Stamp	time stamp
TType	trigger type

TUP	Telephone User Part
TUT	trunk under test
TVT	translation verification tool
TW	time and weather
TWC	three-way call
TWCD	three-way calling deluxe
U	
UAC	user agent client
UAN	universal access number
UBR	unspecified bit rate
UCD	Uniform Call Distribution
UDP	User Datagram Protocol
UPA	user part available
UPU	user part unavailable
Update-ANI	Update Automatic Number Identification
UPL	user privilege level
URL	uniform resource locator
V	
VACANT	vacant code
VBR	variable bit rate
VISM	Voice Interworking Service Module
VM	voice mail
VM_ACCESS	voice mail access
VM_ACT	voice mail activation feature
VM_DEACT	voice mail deactivation feature
VMA	voice mail always
VMA_ACT (	voice mail always activation feature
VMA_DEACT	voice mail always deactivation feature

VoIP	Voice over IP. The ability to carry normal telephony-style voice over an IP-based internet with POTS-like functionality, reliability, and voice quality. VoIP is a blanket term which generally refers to Cisco's standards-based (for example, H.323) approach to IP voice traffic.
VoP	Voice over packet