APPENDIX A

通知 MIB

CISCO-EPM-NOTIFICATION-MIB は、アラートが発生したときに LMS が SNMP トラップを生成するために使用するトラップ メッセージの形式を指定します。トラップには、アラートの属性とそのアラートの原因となったイベントが含まれます。

この項では、MIB 定義および重要変数の ciscoEpmHealthNotificationAlarm 定義を示します。

CISCO-EPM-NOTIFICATION-MIB は、次の Cisco.com で入手可能です。

http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

MIB 定義

```
CISCO-EPM-NOTIFICATION-MIB DEFINITIONS ::= BEGIN

IMPORTS
MODULE-IDENTITY,
    NOTIFICATION-TYPE,
    Integer32,
    Unsigned32,
    OBJECT-TYPE,
    OBJECT-IDENTITY      FROM SNMPv2-SMI
    MODULE-COMPLIANCE,
    NOTIFICATION-GROUP,
    OBJECT-GROUP         FROM SNMPv2-CONF
    TimeStamp,
    RowPointer           FROM SNMPv2-TC
    SnmpAdminString      FROM SNMP-FRAMEWORK-MIB
    InetAddressType,
    InetAddress          FROM INET-ADDRESS-MIB
    Unsigned64           FROM CISCO-TC
    ciscoMgmt            FROM CISCO-SMI;

ciscoEpmNotificationMIB MODULE-IDENTITY
    LAST-UPDATED    "200901300000Z"
```

```
    ORGANIZATION    "Cisco Systems, Inc."

    DESCRIPTION
        "Notifications directly from hardware and software and processed
        notifications from various management applications can be further
        processed and forwarded by still other management applications to
        indicate the status of devices and software (managed objects).
        The status of these managed objects can be reported by traps.

        The CISCO-EPM-NOTIFICATION-MIB contains the trap structure which
        carries the identity and status info of the managed object as
        analyzed by such an event processor.It is not possible for
        receivers of these traps to query the mib objects.

        A unique but optional feature of the application generating the
        trap defined in this mib is the ability to contain multiple
        partitions in the same system running the application.A
        'Partition' is a logical grouping of a set of managed devices.
        These devices can belong to only one partition at any given
        time.The trap structure will contain information on the exact
        partition number and the partition name of the device where it
        resides.

        The need for trap generation is to enable multiple management
        applications in the network to have a consolidated view of the
        whole network of Cisco and non-Cisco devices."
    REVISION        "200901300000Z"
    DESCRIPTION
        "Added a new Notification ciscoEpmHealthNotificationAlarm to reflect
        the status of health and utilization related details of Managed Objects.

         Added more attributes which are useful for the new Notification.

         Added new oid subtree ciscoEpmNotificationComputedVar under
ciscoEpmNotificationMIBObjects
        to support the computed/derived variables described with cenAlarmMibVariable."
    REVISION        "200406070000Z"
    DESCRIPTION
        "Updated the cenAlarmEntry to include new attributes.The new
        attributes carries information that adds more value to the already
        existing trap structure.
```

```
        The Management application computes events for a device via
        polling snmp mib objects on the device and/or by listening to
        SNMP Traps.Multiple events on a single device roll up into what
        is called an Alert - there can be only one alert for a given
        device at any given time.The objects contained in the
        cenAlarmEntry are the same for both Alert and Event based
        notification.The attribute cenAlarmMode added in this revision
        of the mib can be used to distinguish between the Alert based and
        event based notification.

        In case of event based notification, the cenAlertID would contain
        the alert id, as computed by the management system, to which the
        generated event has been rolled up.

        Traps generated from systems that support multiple Partition, the
        cenPartitionNumber and cenPartitionName attributes will carry the
        exact partition details of the device for which the trap is
        generated.

        Through the management application user interface, the user can
        customize few attributes of the trap structure.Two attributes
        included in this mib revision that allows the user to customize
        each trap sent out are cenCustomerIdentification and
        cenCustomerRevision.

        ciscoEpmNotificationObjectsGroup, ciscoEpmNotificationAlarm, and
        ciscoEpmNotificationMIBCompliance have been deprecated in this
        revision.

        ciscoEpmNotificationAlarmRev1,
        ciscoEpmNotificationAlarmGroupRev1,
        ciscoEpmNotificationMIBComplianceRev1,
        and ciscoEpmNotificationObjectsGroupRev1 have been newly created
        in this revision."
    REVISION        "200308210000Z"
    DESCRIPTION
        "Included imports for Integer32, Unsigned32, and
        NOTIFICATION-GROUP."
    REVISION        "200207281420Z"
    DESCRIPTION
        "Initial version of this MIB."
    ::= { ciscoMgmt 311 }
```

```
-- MIB Object Definitions

ciscoEpmNotificationMIBNotifs  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIB 0 }

ciscoEpmNotificationMIBObjects  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIB 1 }

ciscoEpmNotificationMIBConform  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIB 2 }

cenAlarmData  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIBObjects 1 }

ciscoEpmNotificationComputedVar  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIBObjects 2 }



cenAlarmTableMaxLength OBJECT-TYPE
    SYNTAX          Unsigned32 (1..4294967295)
    MAX-ACCESS      read-write
    STATUS          current
    DESCRIPTION
        "Maximum number of entries permissible in the cenAlarmTable."
    DEFVAL          { 1 }
    ::= { cenAlarmData 1 }

cenAlarmTable OBJECT-TYPE
    SYNTAX          SEQUENCE OF CenAlarmEntry
    MAX-ACCESS      not-accessible
    STATUS          current
    DESCRIPTION
        "A table containing the device identification and
        alarm value.The maximum number of entries permissible
        in this table is defined by cenAlarmTableMaxLength.When
        the number of entries in the table reaches the maximum
        limit, the next entry would replace the oldest existing
        entry in the table."
    ::= { cenAlarmData 2 }
```

```
cenAlarmEntry OBJECT-TYPE
    SYNTAX          CenAlarmEntry
    MAX-ACCESS      not-accessible
    STATUS          current
    DESCRIPTION
        "The information regarding a single device status alarm.
        An entry is created when an alarm is processed."
    INDEX           { cenAlarmIndex }
    ::= { cenAlarmTable 1 }

CenAlarmEntry ::= SEQUENCE {
        cenAlarmIndex                    Unsigned32,
        cenAlarmVersion                  SnmpAdminString,
        cenAlarmTimestamp                TimeStamp,
        cenAlarmUpdatedTimestamp         TimeStamp,
        cenAlarmInstanceID               SnmpAdminString,
        cenAlarmStatus                   Integer32,
        cenAlarmStatusDefinition         SnmpAdminString,
        cenAlarmType                     INTEGER,
        cenAlarmCategory                 Integer32,
        cenAlarmCategoryDefinition       SnmpAdminString,
        cenAlarmServerAddressType        InetAddressType,
        cenAlarmServerAddress            InetAddress,
        cenAlarmManagedObjectClass       SnmpAdminString,
        cenAlarmManagedObjectAddressType InetAddressType,
        cenAlarmManagedObjectAddress     InetAddress,
        cenAlarmDescription              OCTET STRING,
        cenAlarmSeverity                 Integer32,
        cenAlarmSeverityDefinition       SnmpAdminString,
        cenAlarmTriageValue              Integer32,
        cenEventIDList                   OCTET STRING,
        cenUserMessage1                  SnmpAdminString,
        cenUserMessage2                  SnmpAdminString,
        cenUserMessage3                  SnmpAdminString,
        cenAlarmMode                     INTEGER,
        cenPartitionNumber               Unsigned32,
        cenPartitionName                 SnmpAdminString,
        cenCustomerIdentification        SnmpAdminString,
        cenCustomerRevision              SnmpAdminString,
        cenAlertID                       SnmpAdminString,
        cenAlarmObjectId                 OBJECT IDENTIFIER,
        cenAlarmObjectInstance           RowPointer,
        cenAlarmViolatedValue            Unsigned64,
```

```
        cenAlarmViolatedValueMantissa    Integer32
}

-- Alarm attributes

cenAlarmIndex OBJECT-TYPE
    SYNTAX          Unsigned32 (1..4294967295)
    MAX-ACCESS      not-accessible
    STATUS          current
    DESCRIPTION
        "A monotonically increasing integer for the sole
        purpose of indexing the attributes in
        ciscoEpmNotificationMIBObjects.When the maximum value is
        reached, this value wraps back to 1."
    ::= { cenAlarmEntry 1 }

cenAlarmVersion OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..16))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The release version of this MIB.The version string will
        be of the form <major version>.<minorversion>."
    ::= { cenAlarmEntry 2 }

cenAlarmTimestamp OBJECT-TYPE
    SYNTAX          TimeStamp
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The time when the alarm was raised."
    ::= { cenAlarmEntry 3 }

cenAlarmUpdatedTimestamp OBJECT-TYPE
    SYNTAX          TimeStamp
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "Alarms persist over time and can have their field(s)
        change values.The last time a field(s) changed, this
        alarm is updated.The updated time denotes this time.
        Each alarm is identified by the unique alarm instance
```

```
        id, cenAlarmInstanceID."
    ::= { cenAlarmEntry 4 }

cenAlarmInstanceID OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..20))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The Unique Alarm Instance ID."
    ::= { cenAlarmEntry 5 }

cenAlarmStatus OBJECT-TYPE
    SYNTAX          Integer32 (1..250)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The alarm status indicates the status of the alarm
        in integer value."
    ::= { cenAlarmEntry 6 }

cenAlarmStatusDefinition OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The short description of the status of the alarm.
        The string is formatted in
        '<integer>,<alarmStatus description>' tuples.The <integer>
        value is the same value that the 'cenAlarmStatus'
        attribute holds.<alarmStatus description> contains one line
        description of the alarm status generated."
    ::= { cenAlarmEntry 7 }

cenAlarmType OBJECT-TYPE
    SYNTAX          INTEGER  {
                        unknown(1),
                        direct(2),
                        indirect(3),
                        mixed(4)
                    }
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
```

```
        "unknown:  When the value for this attribute could not be
        determined.
        direct:   Denotes an alarm generated by a set of events where
        all events are reported by an observation(s) of a
        managed object.
        indirect: Denotes an alarm generated by a set of events where
        all events were deduced or inferred by the status of
        managed objects as determined by the network
        management system.
        mixed:    Denotes an alarm generated by a set of events which
        were either direct or indirect."
    ::= { cenAlarmEntry 8 }

cenAlarmCategory OBJECT-TYPE
    SYNTAX          Integer32 (1..250)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The category of the alarm generated represented in
        integer value."
    ::= { cenAlarmEntry 9 }

cenAlarmCategoryDefinition OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The short description of the category of the alarm
        generated.The String is formatted in
        '<integer>,<alarmCategory description>' tuples.The <integer>
        value is the same value that the 'cenAlarmCategory'
        attribute holds.<alarmCategory description> contains one
        line description of the alarm category generated."
    ::= { cenAlarmEntry 10 }

cenAlarmServerAddressType OBJECT-TYPE
    SYNTAX          InetAddressType
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The type of Internet address by which the server
        is reachable.The Server is the server
        that is generating this trap."
```

```
    ::= { cenAlarmEntry 11 }

cenAlarmServerAddress OBJECT-TYPE
    SYNTAX          InetAddress
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The IP Address or the DNS name of the Management
        Server that raised this alarm to be notified."
    ::= { cenAlarmEntry 12 }

cenAlarmManagedObjectClass OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The class of the managed object for which this
        alarm was  generated.For example, Router, Switch,
        GateKeeper and VoicePort."
    ::= { cenAlarmEntry 13 }

cenAlarmManagedObjectAddressType OBJECT-TYPE
    SYNTAX          InetAddressType
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The type of Internet address by which the managed
        object is reachable."
    ::= { cenAlarmEntry 14 }

cenAlarmManagedObjectAddress OBJECT-TYPE
    SYNTAX          InetAddress
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The IP Address or the DNS name of the Managed Object."
    ::= { cenAlarmEntry 15 }

cenAlarmDescription OBJECT-TYPE
    SYNTAX          OCTET STRING (SIZE  (1..1024))
    MAX-ACCESS      read-only
    STATUS          current
```

```
    DESCRIPTION
        "A detailed description of the alarm."
    ::= { cenAlarmEntry 16 }

cenAlarmSeverity OBJECT-TYPE
    SYNTAX          Integer32 (0..100)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The alarm severity indicates the severity of the alarm
        in integer value."
    ::= { cenAlarmEntry 17 }

cenAlarmSeverityDefinition OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The short description of the severity of the alarm
        generated.The String is formatted in
        '<integer>,<alarmSeverity  description>' tuples.The <integer>
        value is the same value that the 'cenAlarmSeverity '
        attribute holds.<alarmSeverity description> contains one line
        description of the alarm severity generated."
    ::= { cenAlarmEntry 18 }

cenAlarmTriageValue OBJECT-TYPE
    SYNTAX          Integer32 (0..100)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The triage value of an alarm is a hierarchical weighting value
        (applied by the application, and more importantly customizable
        by the end  user) to allow an artificial form of evaluating
        impact, interest, or other user-determined functions between
        alarms.The value is a positive number or zero where zero
        denotes an undetermined or uncomputable value."
    ::= { cenAlarmEntry 19 }

cenEventIDList OBJECT-TYPE
    SYNTAX          OCTET STRING (SIZE  (1..1024))
    MAX-ACCESS      read-only
    STATUS          current
```

```
    DESCRIPTION
        "Comma separated list of the Unique Event identifiers
        that led to the generation of this Alarm."
    ::= { cenAlarmEntry 20 }

cenUserMessage1 OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "User input message.This value can be configured."
    ::= { cenAlarmEntry 21 }

cenUserMessage2 OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "User input message.This value can be configured."
    ::= { cenAlarmEntry 22 }

cenUserMessage3 OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "User input message.This value can be configured."
    ::= { cenAlarmEntry 23 }

cenAlarmMode OBJECT-TYPE
    SYNTAX          INTEGER  {
                        unknown(1),
                        alert(2),
                        event(3)
                    }
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "unknown:  When the value for this attribute could not be
        determined.
        alert:    Denotes an alarm generated by a set of events where
        all events are reported by polling of managed
        objects and/or listening to SNMP notifications.
```

```
        event:    Denotes an event generated by polling of managed
        ojects and/or listening to SNMP notifications."
    ::= { cenAlarmEntry 24 }

cenPartitionNumber OBJECT-TYPE
    SYNTAX          Unsigned32 (0..100)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "In traps generated by the management application that support
        multiple partitions, the attribute will carry the integer
        value assigned to identify the logical group where the managed
        device resides."
    ::= { cenAlarmEntry 25 }

cenPartitionName OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "In traps generated by the management application that support
        multiple partitions, the attribute will carry the name
        assigned to identify the logical group where the managed
        device resides."
    ::= { cenAlarmEntry 26 }

cenCustomerIdentification OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "User input message.The attribute takes in a free format
        text.This attribute can be used by advanced management
        applications to sort responses from the fault management
        server."
    ::= { cenAlarmEntry 27 }

cenCustomerRevision OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..255))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "User input message.The attribute takes in a free format
```

```
        text.This attribute can be used by advanced management
        applications to sort responses from the fault management
        server."
    ::= { cenAlarmEntry 28 }

cenAlertID OBJECT-TYPE
    SYNTAX          SnmpAdminString (SIZE  (1..20))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "In event based notification, this attribute will contain the
        alert id to which the generated event has been rolled up
        to.In alert based notification, the cenAlarmInstanceId and
        cenAlertID would be identical."
    ::= { cenAlarmEntry 29 }

cenAlarmObjectId OBJECT-TYPE
    SYNTAX          OBJECT IDENTIFIER
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "This object represents the identifier of the Object that has
        exceeded the configured value.

        The OIDs populated through this object would represent one
        of the following kind of Objects.

        1) Existing MIB objects that represent a particular statistic

        like ifInOctets ( RFC1213-MIB ).The OID of the respective
        object will be populated.

        2) New Objects that are derived out of already-existing
        objects.

        Eg: 'TxUtilization' which is computation of 'ifOutOctets' and
        'ifSpeed'.For this kind of variables the OID values are
        mentioned in this MIB under the subtree
        ciscoEpmNotificationMIBObjects.ciscoEpmNotificationComputedVar."
    ::= { cenAlarmEntry 30 }

cenAlarmObjectInstance OBJECT-TYPE
```

```
    SYNTAX          RowPointer
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "This object identifies the instance of the OID populated
        through cenAlarmObjectId."
    ::= { cenAlarmEntry 31 }

cenAlarmViolatedValue OBJECT-TYPE
    SYNTAX          Unsigned64
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "This object represents the value of the objectId represented
        in cenAlarmObjectId when it exceeded the rule represented
        with cenAlarmDescription."
    ::= { cenAlarmEntry 32 }

cenAlarmViolatedValueMantissa OBJECT-TYPE
    SYNTAX          Integer32 (0..99)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "This represents the mantissa part of the violated value.As
        cenAlarmViolatedValue cannot accommodate floating point
        value, this part required to be mentioned separately.This will
        represent the values up to 1/100th of the decimal part."
    ::= { cenAlarmEntry 33 }




cencIfRxUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the incoming data utilization of a low
        speed interface(which is < 20mbps).

        This is calculated as below

        RxUtilization of an interface

        RxUtilization = (ifInOctets*8*100)/ifSpeed"
```

```
    ::= { ciscoEpmNotificationComputedVar 1 }


cencIfTxUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the outgoing data utilization of a low
        speed interface(which is < 20mbps).

        This is calculated as below

        TxUtilization of an interface

        TxUtilization = (ifOutOctets*8*100)/ifSpeed"
    ::= { ciscoEpmNotificationComputedVar 2 }


cencMemoryUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the memory utilization of different
        instances(modules) on a managed object as represented in
        CISCO-MEMORY-POOL-MIB.

        Memory utilization of the managed object

        Memory Utilization =
        (ciscoMemoryPoolUsed/(ciscoMemoryPoolUsed+ciscoMemoryPoolFree))*

        100"
    ::= { ciscoEpmNotificationComputedVar 3 }


cencHrStorageUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the memory utilization of different
        instances(modules) on a managed object as represented in
        HOST-RESOURCES-MIB.

        hrStorageUtilization = (hrStorageUsed/hrStorageSize)*100"
```

```
    ::= { ciscoEpmNotificationComputedVar 4 }


cenc64bitIfRxUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the incoming data utilization of a high
        capacity interface(which is > 20mbps).

        This is calculated as below

        64bitRxUtilization = (ifHcInOctets*8*100)/(ifHighSpeed*1000000)"
    ::= { ciscoEpmNotificationComputedVar 5 }


cenc64bitIfTxUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the outgoing data utilization of a high
        capacity interface(which is > 20mbps).

        This is calculated as below

        64bitTxUtilization =
        (ifHcOutOctets*8*100)/(ifHighSpeed*1000000)"
    ::= { ciscoEpmNotificationComputedVar 6 }


cencPowerUtilization OBJECT-IDENTITY
    STATUS          current
    DESCRIPTION
        "This object represents the power utilization of Power over
        Ethernet enabled interfaces.

        Power Utilization =
        (pethMainPseConsumptionPower/pethMainPsePower)*100"
    ::= { ciscoEpmNotificationComputedVar 7 }


ciscoEpmNotificationAlarm NOTIFICATION-TYPE
    OBJECTS         {
```

```
                                cenAlarmVersion,
                                cenAlarmTimestamp,
                                cenAlarmUpdatedTimestamp,
                                cenAlarmInstanceID,
                                cenAlarmStatus,
                                cenAlarmStatusDefinition,
                                cenAlarmType,
                                cenAlarmCategory,
                                cenAlarmCategoryDefinition,
                                cenAlarmServerAddressType,
                                cenAlarmServerAddress,
                                cenAlarmManagedObjectClass,
                                cenAlarmManagedObjectAddressType,
                                cenAlarmManagedObjectAddress,
                                cenAlarmDescription,
                                cenAlarmSeverity,
                                cenAlarmSeverityDefinition,
                                cenAlarmTriageValue,
                                cenEventIDList,
                                cenUserMessage1,
                                cenUserMessage2,
                                cenUserMessage3
                            }
    STATUS                  deprecated
    DESCRIPTION
        "Notification of the status of the managed object as
        generated by the  management server.

        New attributes are added to the ciscoEpmNotificationAlarmRev1.
        Hence this notification is deprecated."
   ::= { ciscoEpmNotificationMIBNotifs 1 }

ciscoEpmNotificationAlarmRev1 NOTIFICATION-TYPE
    OBJECTS                 {
                                cenAlarmVersion,
                                cenAlarmTimestamp,
                                cenAlarmUpdatedTimestamp,
                                cenAlarmInstanceID,
                                cenAlarmStatus,
                                cenAlarmStatusDefinition,
                                cenAlarmType,
                                cenAlarmCategory,
                                cenAlarmCategoryDefinition,
```

```
                        cenAlarmServerAddressType,
                        cenAlarmServerAddress,
                        cenAlarmManagedObjectClass,
                        cenAlarmManagedObjectAddressType,
                        cenAlarmManagedObjectAddress,
                        cenAlarmDescription,
                        cenAlarmSeverity,
                        cenAlarmSeverityDefinition,
                        cenAlarmTriageValue,
                        cenEventIDList,
                        cenUserMessage1,
                        cenUserMessage2,
                        cenUserMessage3,
                        cenAlarmMode,
                        cenPartitionNumber,
                        cenPartitionName,
                        cenCustomerIdentification,
                        cenCustomerRevision,
                        cenAlertID
                    }
    STATUS          current
    DESCRIPTION
        "Notification of the status of the managed object as
        generated by the  management server."
   ::= { ciscoEpmNotificationMIBNotifs 2 }

ciscoEpmHealthNotificationAlarm NOTIFICATION-TYPE
    OBJECTS         {
                        cenAlarmObjectId,
                        cenAlarmObjectInstance,
                        cenAlarmViolatedValue,
                        cenAlarmViolatedValueMantissa,
                        cenAlarmTimestamp,
                        cenAlarmCategory,
                        cenAlarmCategoryDefinition,
                        cenAlarmManagedObjectAddressType,
                        cenAlarmManagedObjectAddress,
                        cenAlarmDescription,
                        cenAlarmSeverity,
                        cenUserMessage1,
                        cenAlarmSeverityDefinition
                    }
    STATUS          current
```

```
    DESCRIPTION
        "Notification of details of the violation configured for mib
        variables that are monitored by management server."
   ::= { ciscoEpmNotificationMIBNotifs 3 }
-- Conformance information

ciscoEpmNotificationMIBCompliances  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIBConform 1 }

ciscoEpmNotificationMIBGroups  OBJECT IDENTIFIER
    ::= { ciscoEpmNotificationMIBConform 2 }


-- Compliance

ciscoEpmNotificationMIBCompliance MODULE-COMPLIANCE
    STATUS          deprecated
    DESCRIPTION
        "The compliance statement for entities which
        implement the CISCO-EPM-NOTIFICATION-MIB.


        New attributes are included in
        ciscoEpmNotificationMIBComplianceRev1.Hence this object is
        deprecated."
    MODULE          -- this module
    MANDATORY-GROUPS {
                        ciscoEpmNotificationObjectsGroup,
                        ciscoEpmNotificationAlarmGroup
                    }

    GROUP           ciscoEpmAlarmConfigGroup
    DESCRIPTION
        "This group is optional."

    OBJECT          cenAlarmTableMaxLength
    MIN-ACCESS      read-only
    DESCRIPTION
        "Write access is not required."

    OBJECT          cenAlarmVersion
    MIN-ACCESS      accessible-for-notify
```

```
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmTimestamp
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmUpdatedTimestamp
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmInstanceID
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmStatus
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmStatusDefinition
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmType
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmCategory
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmCategoryDefinition
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."
```

```
OBJECT          cenAlarmServerAddressType
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmServerAddress
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmManagedObjectClass
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmManagedObjectAddressType
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmManagedObjectAddress
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmDescription
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmSeverity
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmSeverityDefinition
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmTriageValue
```

```
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."

    OBJECT          cenEventIDList
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."

    OBJECT          cenUserMessage1
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."

    OBJECT          cenUserMessage2
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."

    OBJECT          cenUserMessage3
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."
    ::= { ciscoEpmNotificationMIBCompliances 1 }

ciscoEpmNotificationMIBComplianceRev1 MODULE-COMPLIANCE
    STATUS          current
    DESCRIPTION
        "The compliance statement for entities which
        implement the CISCO-EPM-NOTIFICATION-MIB."
    MODULE          -- this module
    MANDATORY-GROUPS {
                        ciscoEpmNotificationObjectsGroupRev1,
                        ciscoEpmNotificationAlarmGroupRev1
                    }

    GROUP           ciscoEpmAlarmConfigGroup
    DESCRIPTION
        "This group is optional."

    OBJECT          cenAlarmTableMaxLength
    MIN-ACCESS      read-only
```

```
DESCRIPTION
    "Write access is not required."

OBJECT          cenAlarmVersion
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmTimestamp
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmUpdatedTimestamp
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmInstanceID
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmStatus
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmStatusDefinition
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmType
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmCategory
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."
```

```
OBJECT          cenAlarmCategoryDefinition
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmServerAddressType
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmServerAddress
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmManagedObjectClass
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmManagedObjectAddressType
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmManagedObjectAddress
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmDescription
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmSeverity
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmSeverityDefinition
```

```
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmTriageValue
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenEventIDList
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenUserMessage1
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenUserMessage2
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenUserMessage3
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenAlarmMode
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenPartitionNumber
MIN-ACCESS      accessible-for-notify
DESCRIPTION
    "Read access is not required."

OBJECT          cenPartitionName
MIN-ACCESS      accessible-for-notify
DESCRIPTION
```

```
        "Read access is not required."

    OBJECT          cenCustomerIdentification
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."

    OBJECT          cenCustomerRevision
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."

    OBJECT          cenAlertID
    MIN-ACCESS      accessible-for-notify
    DESCRIPTION
        "Read access is not required."
    ::= { ciscoEpmNotificationMIBCompliance 2 }

-- Units of Conformance

ciscoEpmNotificationAlarmGroup NOTIFICATION-GROUP
   NOTIFICATIONS    { ciscoEpmNotificationAlarm }
    STATUS          deprecated
    DESCRIPTION
        "The collection of notifications used to indicate managed
        object status.

        ciscoEpmNotificationAlarmGroupRev1 is defined.Hence this
        object is deprecated."
    ::= { ciscoEpmNotificationMIBGroups 1 }

ciscoEpmNotificationObjectsGroup OBJECT-GROUP
    OBJECTS         {
                        cenAlarmVersion,
                        cenAlarmTimestamp,
                        cenAlarmUpdatedTimestamp,
                        cenAlarmInstanceID,
                        cenAlarmStatus,
                        cenAlarmStatusDefinition,
                        cenAlarmType,
                        cenAlarmCategory,
                        cenAlarmCategoryDefinition,
```

```
                        cenAlarmServerAddressType,
                        cenAlarmServerAddress,
                        cenAlarmManagedObjectClass,
                        cenAlarmManagedObjectAddressType,
                        cenAlarmManagedObjectAddress,
                        cenAlarmDescription,
                        cenAlarmSeverity,
                        cenAlarmSeverityDefinition,
                        cenAlarmTriageValue,
                        cenEventIDList,
                        cenUserMessage1,
                        cenUserMessage2,
                        cenUserMessage3
                    }
    STATUS          deprecated
    DESCRIPTION
        "Trap reflecting the alarm.

        New attributes are added to the new notification
        ciscoEpmNotificationObjectsGroupRev1.Hence
        this object is deprecated."
    ::= { ciscoEpmNotificationMIBGroups 2 }

ciscoEpmAlarmConfigGroup OBJECT-GROUP
    OBJECTS         { cenAlarmTableMaxLength }
    STATUS          current
    DESCRIPTION
        "A collection of objects providing information
        about the total number of cenAlarmTable entries
        maintained."
    ::= { ciscoEpmNotificationMIBGroups 3 }

ciscoEpmNotificationAlarmGroupRev1 NOTIFICATION-GROUP
   NOTIFICATIONS    {
                        ciscoEpmNotificationAlarmRev1,
                        ciscoEpmHealthNotificationAlarm
                    }
    STATUS          current
    DESCRIPTION
        "The collection of notifications used to indicate managed object
        status."
    ::= { ciscoEpmNotificationMIBGroups 4 }
```

```
ciscoEpmNotificationObjectsGroupRev1 OBJECT-GROUP
    OBJECTS         {
                        cenAlarmVersion,
                        cenAlarmTimestamp,
                        cenAlarmUpdatedTimestamp,
                        cenAlarmInstanceID,
                        cenAlarmStatus,
                        cenAlarmStatusDefinition,
                        cenAlarmType,
                        cenAlarmCategory,
                        cenAlarmCategoryDefinition,
                        cenAlarmServerAddressType,
                        cenAlarmServerAddress,
                        cenAlarmManagedObjectClass,
                        cenAlarmManagedObjectAddressType,
                        cenAlarmManagedObjectAddress,
                        cenAlarmDescription,
                        cenAlarmSeverity,
                        cenAlarmSeverityDefinition,
                        cenAlarmTriageValue,
                        cenEventIDList,
                        cenUserMessage1,
                        cenUserMessage2,
                        cenUserMessage3,
                        cenAlarmMode,
                        cenPartitionNumber,
                        cenPartitionName,
                        cenCustomerIdentification,
                        cenCustomerRevision,
                        cenAlertID,
                        cenAlarmObjectId,
                        cenAlarmObjectInstance,
                        cenAlarmViolatedValue,
                        cenAlarmViolatedValueMantissa
                    }
    STATUS          current
    DESCRIPTION
        "Notification reflecting the alarm."
    ::= { ciscoEpmNotificationMIBGroups 5 }

END
```

表 A-1 に MIB 変数 ciscoEpmHealthNotificationAlarm で使用される重要変数を説明します。

表 A-1　ciscoEpmHealthNotificationAlarm MIB で使用される重要変数

MIB 変数	説明	コメント
cenAlarmObjectId	しきい値を違反した MIB 変数の OID です。	計算された変数では、OID は同じ MIB で定義されます。
cenAlarmObjectInstance	しきい値を違反した MIB 変数のインスタンスです。	
cenAlarmSeverityDefinition	しきい値または Trendwatch の重大度です。	
cenAlarmCategoryDefinition	しきい値または Trendwatch の名前です。	
cenAlarmManagedObjectAddress	しきい値を違反したデバイスです。	