

Superseded

PacketCable™ MTA MIB Specification

PKT-SP-MIB-MTA-I01-991201

Interim

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Document Status Sheet

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Key to Document Status Codes:

Work in Progress	An incomplete document, designed to guide discussion and generate feedback, that may include several alternative requirements for consideration.
Draft	A document in specification format considered largely complete, but lacking review by Members and vendors. Drafts are susceptible to substantial change during the review process.
Interim	A document which has undergone rigorous Member and vendor review, suitable for use by vendors to design in conformance to and for field testing. For purposes of the "Contribution and License Agreement for Intellectual Property" which grants licenses to the intellectual property contained in the PacketCable Specification, an "Interim Specification" is a "Published" Specification.
Released	A stable document, reviewed, tested and validated, suitable to enable cross-vendor interoperability.

The PacketCable™ MTA MIB MUST be implemented as defined below.

```

PKTC-MTA-MIB DEFINITIONS ::= BEGIN
IMPORTS
    MODULE-IDENTITY
    OBJECT IDENTIFIER
        Integer32,
        Unsigned32,
        Counter32,
    NOTIFICATION-TYPE
        FROM SNMPv2-SMI
        TruthValue, DisplayString, DateAndTime, RowStatus
        FROM SNMPv2-TC
        OBJECT-GROUP,
    MODULE-COMPLIANCE
        FROM SNMPv2-CONF
        clabProjPacketCable
        FROM CLAB-DEF-MIB
        ifIndex
        FROM IF-MIB
        docsDevSwCurrentVers
        FROM DOCS-CABLE-DEVICE-MIB;      -- version 8

pktcMtaMib MODULE-IDENTITY
    LAST-UPDATED      "9912010000Z" -- December 1, 1999
    ORGANIZATION      "Packet Cable OSS Group"
    CONTACT-INFO
        "Roy Spitzer
        Postal: Telogy Networks, Inc.
        20250 Century Blvd.
        Germantown, MD 20855
        U.S.A.
        Phone:  +1 301-515-6531
        Fax:    +1 301-515-7954
        E-mail: rspitzer@telogy.com"
    DESCRIPTION
        "This MIB module supplies the basic management objects
        for the MTA Device"
    ::= { clabProjPacketCable 1 }

--
-- PacketCable 1.0 supports embedded MTA only
-- PacketCable 1.0 assumes SNMPv3
-- PacketCable 1.0 SW load management is per DOCSIS 1.1 only
--

pktcMtaMibObjects      OBJECT IDENTIFIER ::= { pktcMtaMib 1 }
pktcMtaDevBase          OBJECT IDENTIFIER ::= { pktcMtaMibObjects 1 }
pktcMtaDevServer        OBJECT IDENTIFIER ::= { pktcMtaMibObjects 2 }
pktcMtaDevSecurity      OBJECT IDENTIFIER ::= { pktcMtaMibObjects 3 }
pktcMtaDevEvent         OBJECT IDENTIFIER ::= { pktcMtaMibObjects 4 }

```

```
--
-- The following group describes the base objects in the MTA
--
pktcMtaDevResetNow OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS   read-write
    STATUS       current
    DESCRIPTION
        "Setting this object to true(1) causes the device to reset.
        Reading this object always returns false(2)."
```

```
 ::= { pktcMtaDevBase 1 }
```

```
pktcMtaDevSerialNumber OBJECT-TYPE
    SYNTAX      DisplayString (SIZE (0..128))
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "The manufacturer's serial number for this MTA."
```

```
 ::= { pktcMtaDevBase 2 }
```

```
pktcMtaDevHardwareVersion OBJECT-TYPE
    SYNTAX      DisplayString (SIZE (0..48))
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "The manufacturer's hardware version for this MTA."
```

```
 ::= { pktcMtaDevBase 3 }
```

```
pktcMtaDevMacAddress OBJECT-TYPE
    SYNTAX      OCTET STRING
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "The telephony MAC address for this device."
```

```
 ::= { pktcMtaDevBase 4 }
```

```
pktcMtaDevFQDN          OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS   read-write
    STATUS       current
    DESCRIPTION
        "The Fully Qualified Domain Name for this MTA."
```

```
 ::= { pktcMtaDevBase 5 }
```

```
pktcMtaDevEndPntCount   OBJECT-TYPE
    SYNTAX      INTEGER (1..255)
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "The physical end points for this MTA."
```

```
 ::= { pktcMtaDevBase 6 }
```

```
pktcMtaDevEnabled       OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS   read-write
    STATUS       current
    DESCRIPTION
        "The MTA Admin Status of this device, where True(1) means
        the voice feature is enabled and false(2) indicates that
        it is disabled."
```

```
 ::= { pktcMtaDevBase 7 }
```

```

pktcMtaDevTypeIdentifier    OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This is a copy of the device type identifier used in the
        DHCP option 60 exchanged between the MTA and the DHCP server."
    ::= { pktcMtaDevBase 8 }

pktcMtaDevProvisioningState  OBJECT-TYPE
    SYNTAX      INTEGER
    {
        pass(1),
        inProgress(2),
        fail(3)
    }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This object indicates the completion state of the
        provisioning process. Pass or Fail states occur after processing
        of the config file is completed. InProgress occurs from boot
        time until config file processing is complete. Fail state requires
        manual intervention."
    ::= { pktcMtaDevBase 9 }

pktcMtaDevHttpAccess        OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This indicates whether HTTP file access is supported for
        MTA configuration file transfer."
    ::= { pktcMtaDevBase 10 }

--
-- The following group describes the security objects in the MTA
--
pktcMtaDevManufacturerCertificate OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (0..1280))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The MTA Manufacturer's X.509 public-key certificate.
        This certificate is required to validate the MTA's
        Device Certificate"
    ::= { pktcMtaDevSecurity 1 }

pktcMtaDevCertificate OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (0..1280))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The MTA's X.509 public-key certificate installed in the
        embedded-MTA by the manufacturer (MUST contain the MTA's
        MAC address and serial number"
    ::= { pktcMtaDevSecurity 2 }

```

```

pktcMtaDevSignature OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (0..256))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A unique signature created by the MTA for each SNMP Inform
        or SNMP Trap or SNMP GetResponse message exchanged prior to
        enabling SNMPv3 security ASN.1 encoded Digital signature in
        the Cryptographic message syntax (includes nonce). "
    ::= { pktcMtaDevSecurity 3 }

pktcMtaDevCorrelationId OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        " Random value generated by the MTA for use in registration
        authorization. It is for use only in the MTA initialization
        messages and for MTA configuration file download "
    ::= { pktcMtaDevSecurity 4 }

pktcMtaDevSecurityTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcMtaDevSecurityEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Contains per endpoint security information."
    ::= { pktcMtaDevSecurity 5 }

pktcMtaDevSecurityEntry OBJECT-TYPE
    SYNTAX      PktcMtaDevSecurityEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "List of security attributes for a single packet cable
        endpoint interface associated with ifType(104)."
    INDEX { ifIndex }
    ::= { pktcMtaDevSecurityTable 1 }

PktcMtaDevSecurityEntry ::= SEQUENCE {
    pktcMtaDevServProviderCertificate OCTET STRING,
    pktcMtaDevTelephonyCertificate OCTET STRING,
    pktcMtaDevKerberosRealm OCTET STRING,
    pktcMtaDevKerbPrincipalName DisplayString,
    pktcMtaDevServGracePeriod Integer32
}

pktcMtaDevServProviderCertificate OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (0..1280))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "X.509 certificate of the Service provider for IPSEC"
    ::= { pktcMtaDevSecurityEntry 1 }

```

```

pktcMtaDevTelephonyCertificate OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (0..1280))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "X.509 certificate of the Service provider for IPSEC"
    ::= { pktcMtaDevSecurityEntry 2 }

pktcMtaDevKerberosRealm OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (0..1280))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        " Specifies a Kerberos realm (i.e. administrative domain), required
          for Packet Cable key management]."
    ::= { pktcMtaDevSecurityEntry 3 }

pktcMtaDevKerbPrincipalName OBJECT-TYPE
    SYNTAX      DisplayString (SIZE(0..40))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Kerberos principal name for the Call Agent. This information
          is required in order for the MTA to obtain Call Agent Kerberos
          tickets. This principal name does not include the realm, which
          is specified as a separate field in this configuration file. A
          Single Kerberos principal name MAY be shared among several
          Call Agents."
    ::= { pktcMtaDevSecurityEntry 4 }

pktcMtaDevServGracePeriod OBJECT-TYPE
    SYNTAX      Integer32 (15..600)
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        " The MTA MUST obtain a new Kerberos ticket (with a PKINIT
          exchange) this many minutes before the old ticket expires. The
          minimum allowable value is 15 mins. The default is 30 mins."
    DEFVAL { 30 }
    ::= { pktcMtaDevSecurityEntry 5 }

pktcMtaDevTgsTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcMtaDevTgsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Contains per endpoint Ticket Granting Server information."
    ::= { pktcMtaDevSecurity 8 }

pktcMtaDevTgsEntry OBJECT-TYPE
    SYNTAX      PktcMtaDevTgsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "List of Tgs attributes for a single packet cable
          endpoint interface associated with ifType(104)."
    INDEX { ifIndex, pktcMtaDevTgsIndex }
    ::= { pktcMtaDevTgsTable 1 }

```

```

PktcMtaDevTgsEntry ::= SEQUENCE {
    pktcMtaDevTgsIndex Integer32,
    pktcMtaDevTgsLocation DisplayString,
    pktcMtaDevTgsStatus RowStatus
}

pktcMtaDevTgsIndex OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Index into the TGS table for TGS locations.
        IfType specifies the endpoint, TgsIndex specifies a TGS."
    ::= { pktcMtaDevTgsEntry 1 }

pktcMtaDevTgsLocation OBJECT-TYPE
    SYNTAX      DisplayString (SIZE (0..255))
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        " Name of the TGS - Ticket Granting Server, which is the Kerberos
        Server. This parameter is a FQDN or Ipv4 address. There may be
        multiple entries of this type. The order in which these entries
        are listed is the priority order in which the MTA will attempt to
        contact them for this endpoint."
    ::= { pktcMtaDevTgsEntry 2 }

pktcMtaDevTgsStatus OBJECT-TYPE
    SYNTAX      RowStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "This object contains the Row Status associated with
        the pktcMtaDevTgsTable."
    ::= { pktcMtaDevTgsEntry 3 }

--
-- The following group describes server access and parameters used for
-- initial provisioning and bootstrapping.
--

pktcMtaDevServerBootState OBJECT-TYPE
    SYNTAX INTEGER {
        operational(1),
        disabled(2),
        waitingForDhcpOffer(3),
        waitingForDhcpResponse(4),
        waitingForConfig(5),
        refusedByCmts(6),
        other(7),
        unknown(8)
    }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "If operational(1), the device has completed loading and
        processing of configuration parameters and the CMTS has
        completed the Registration exchange.
        If disabled(2) then the device was administratively
        disabled, possibly by being refused network access in the
        configuration file."

```

If waitingForDhcpOffer(3) then a DHCP Discover has been transmitted and no offer has yet been received.
 If waitingForDhcpResponse(4) then a DHCP Request has been transmitted and no response has yet been received.
 If waitingForConfig(5) then a request to the config parameter server has been made and no response received.
 If refusedByCmts(6) then the Registration Request/Response exchange with the CMTS failed. "

REFERENCE

"DOCSIS Radio Frequency Interface Specification, Figure 7-1, CM Initialization Overview."

::= { pktcMtaDevServer 1 }

pktcMtaDevServerDhcp OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP address or FQDN of the DHCP server that assigned an IP address to this device. Returns 0.0.0.0 if DHCP was not used for IP address assignment."

::= { pktcMtaDevServer 2 }

pktcMtaDevServerDns1 OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP address or FQDN of the primary DNS server that resolved an IP address for this device. "

::= { pktcMtaDevServer 3 }

pktcMtaDevServerDns2 OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP address or FQDN of the primary DNS server that resolved an IP address for this device. "

::= { pktcMtaDevServer 4 }

pktcMtaDevConfigFile OBJECT-TYPE SYNTAX DisplayString

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The URL of the TFTP/HTTP file for downloading provisioning and configuration parameters to this device. Returns NULL if the server address is unknown. Supports both TFTP and HTTP"

::= { pktcMtaDevServer 5 }

pktcMtaDevSnmpEntity OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP address or FQDN of the SNMP entity for provisioning trap handling that assigned an IP address to this device. Returns 0.0.0.0 if DHCP was not used for IP address assignment."

::= { pktcMtaDevServer 6 }

```
--
-- Event Reporting
--

pktcMtaDevEvControl OBJECT-TYPE
    SYNTAX INTEGER {
        resetLog(1),
        useDefaultReporting(2)
    }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Setting this object to resetLog(1) empties the event log.
        All data is deleted. Setting it to useDefaultReporting(2)
        returns all event priorities to their factory-default
        reporting. Reading this object always returns
        useDefaultReporting(2)."
```

::= { pktcMtaDevEvent 1 }

```
pktcMtaDevEvSyslog OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The IP address or FQDN of the Syslog server. If 0.0.0.0,
        syslog transmission is inhibited."
```

::= { pktcMtaDevEvent 2 }

```
pktcMtaDevEvThrottleAdminStatus OBJECT-TYPE
    SYNTAX INTEGER {
        unconstrained(1),
        maintainBelowThreshold(2),
        stopAtThreshold(3),
        inhibited(4)
    }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Controls the transmission of traps and syslog messages
        with respect to the trap pacing threshold.
        unconstrained(1) causes traps and syslog messages to be
        transmitted without regard to the threshold settings.
        maintainBelowThreshold(2) causes trap transmission and
        syslog messages to be suppressed if the number of traps
        would otherwise exceed the threshold.
        stopAtThreshold(3) causes trap transmission to cease
        at the threshold, and not resume until directed to do so.
        inhibited(4) causes all trap transmission and syslog
        messages to be suppressed.

        A single event is always treated as a single event for
        threshold counting. That is, an event causing both a trap
        and a syslog message is still treated as a single event.

        Writing to this object resets the thresholding state.

        At initial startup, this object has a default value of
        unconstrained(1)."
```

::= { pktcMtaDevEvent 3 }

pktcMtaDevEvThrottleInhibited OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"If true(1), trap and syslog transmission is currently inhibited due to thresholds and/or the current setting of pktcMtaDevEvThrottleAdminStatus. In addition, this is set to true(1) if transmission is inhibited due to no syslog (pktcMtaDevEvSyslog) or trap (pktcMtaDevNmAccessEntry) destinations having been set."

::= { pktcMtaDevEvent 4 }

pktcMtaDevEvThrottleThreshold OBJECT-TYPE

SYNTAX Unsigned32

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"Number of trap/syslog events per pktcMtaDevEvThrottleInterval to be transmitted before throttling.

A single event is always treated as a single event for threshold counting. That is, an event causing both a trap and a syslog message is still treated as a single event.

At initial startup, this object returns 0."

::= { pktcMtaDevEvent 5 }

pktcMtaDevEvThrottleInterval OBJECT-TYPE

SYNTAX Integer32 (1..2147483647)

UNITS "seconds"

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The interval over which the trap threshold applies.

At initial startup, this object has a value of 1."

::= { pktcMtaDevEvent 6 }

--

-- The following table controls the reporting of the various classes of events.

--

pktcMtaDevEvControlTable OBJECT-TYPE

SYNTAX SEQUENCE OF PktcMtaDevEvControlEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table allows control of the reporting of event classes. For each event priority, a combination of logging and reporting mechanisms may be chosen. The mapping of event types to priorities is vendor-dependent. Vendors may also choose to allow the user to control that mapping through proprietary means."

::= { pktcMtaDevEvent 7 }

```

pktcMtaDevEvControlEntry OBJECT-TYPE
    SYNTAX      PktcMtaDevEvControlEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Allows configuration of the reporting mechanisms for a
         particular event priority."
    INDEX { pktcMtaDevEvPriority }
    ::= { pktcMtaDevEvControlTable 1 }

PktcMtaDevEvControlEntry ::= SEQUENCE {
    pktcMtaDevEvPriority      INTEGER,
    pktcMtaDevEvReporting    BITS
}

pktcMtaDevEvPriority OBJECT-TYPE
    SYNTAX INTEGER {
        emergency(1),
        alert(2),
        critical(3),
        error(4),
        warning(5),
        notice(6),
        information(7),
        debug(8)
    }
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The priority level that is controlled by this
         entry. These are ordered from most (emergency) to least (debug)
         critical. Each event with a CM or CMTS has a particular
         priority level associated with it (as defined by the
         vendor). During normal operation no event more critical than
         notice(6) should be generated. Events between warning and
         emergency should be generated at appropriate levels of
         problems (e.g. emergency when the box is about to
         crash)."
    ::= { pktcMtaDevEvControlEntry 1 }

pktcMtaDevEvReporting OBJECT-TYPE
    SYNTAX BITS {
        local(0),
        traps(1),
        syslog(2)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Defines the action to be taken on occurrence of this
         event class. Implementations may not necessarily support
         all options for all event classes, but at minimum must
         allow traps and syslogging to be disabled. If the
         local(0) bit is set, then log to the internal log, if the
         traps(1) bit is set, then generate a trap, if the
         syslog(2) bit is set, then send a syslog message
         (assuming the syslog address is set)."
    ::= { pktcMtaDevEvControlEntry 2 }

```

pktcMtaDevEventTable OBJECT-TYPE

SYNTAX SEQUENCE OF PktcMtaDevEventEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Contains a log of network and device events that may be of interest in fault isolation and troubleshooting."

::= { pktcMtaDevEvent 8 }

pktcMtaDevEventEntry OBJECT-TYPE

SYNTAX PktcMtaDevEventEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Describes a network or device event that may be of interest in fault isolation and troubleshooting. Multiple sequential identical events are represented by incrementing pktcMtaDevEvCounts and setting pktcMtaDevEvLastTime to the current time rather than creating multiple rows.

Entries are created with the first occurrence of an event.

pktcMtaDevEvControl can be used to clear the table.

Individual events can not be deleted."

INDEX { pktcMtaDevEvIndex }

::= { pktcMtaDevEventTable 1 }

PktcMtaDevEventEntry ::= SEQUENCE {

pktcMtaDevEvIndex	INTEGER,
pktcMtaDevEvFirstTime	DateAndTime,
pktcMtaDevEvLastTime	DateAndTime,
pktcMtaDevEvCounts	Counter32,
pktcMtaDevEvLevel	INTEGER,
pktcMtaDevEvId	Unsigned32,
pktcMtaDevEvText	DisplayString

}

pktcMtaDevEvIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Provides relative ordering of the objects in the event log. This object will always increase except when
 (a) the log is reset via pktcMtaDevEvControl,
 (b) the device reboots and does not implement non-volatile storage for this log, or (c) it reaches the value 2³¹.
 The next entry for all the above cases is 1."

::= { pktcMtaDevEventEntry 1 }

pktcMtaDevEvFirstTime OBJECT-TYPE

SYNTAX DateAndTime

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The time that this entry was created."

::= { pktcMtaDevEventEntry 2 }

```
pktcMtaDevEvLastTime OBJECT-TYPE
    SYNTAX      DateAndTime
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "If multiple events are reported via the same entry, the
         time that the last event for this entry occurred,
         otherwise this should have the same value as
         pktcMtaDevEvFirstTime. "
    ::= { pktcMtaDevEventEntry 3 }

pktcMtaDevEvCounts OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "The number of consecutive event instances reported by
         this entry. This starts at 1 with the creation of this
         row and increments by 1 for each subsequent duplicate event."
    ::= { pktcMtaDevEventEntry 4 }

pktcMtaDevEvLevel OBJECT-TYPE
    SYNTAX INTEGER {
        critical(1),
        major(2),
        minor(3),
        warning(4),
        information(5),
        notice(6),
        debug(7)
    }
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "The priority level of this event as defined by the
         vendor. These are ordered from most serious (critical)
         to least serious (debug). "
    ::= { pktcMtaDevEventEntry 5 }

--
-- Vendors will provide their own enumerations for the following.
-- The interpretation of the enumeration is unambiguous for a
-- particular value of the vendor's enterprise number in sysObjectID.
--

pktcMtaDevEvId OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "For this product, uniquely identifies the type of event
         that is reported by this entry."
    ::= { pktcMtaDevEventEntry 6 }

pktcMtaDevEvText OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS   read-only
    STATUS       current
    DESCRIPTION
        "Provides a human-readable description of the event,
         including all relevant context (interface numbers,
         etc.). "
    ::= { pktcMtaDevEventEntry 7 }
```

```

--
-- notification group is for future extension.
--

pktcMtaNotification OBJECT IDENTIFIER ::= { pktcMtaMib 2 0 }
pktcMtaConformance OBJECT IDENTIFIER ::= { pktcMtaMib 3 }
pktcMtaCompliances OBJECT IDENTIFIER ::= { pktcMtaConformance 1 }
pktcMtaGroups OBJECT IDENTIFIER ::= { pktcMtaConformance 2 }

--
-- Notification Group
--

pktcMtaProvisioningEnrollment NOTIFICATION-TYPE
    OBJECTS {
        pktcMtaDevHardwareVersion,
        docsDevSwCurrentVers,
        pktcMtaDevTypeIdentifier,
        pktcMtaDevMacAddress,
        pktcMtaDevCorrelationId,
        pktcMtaDevSignature
    }
    STATUS current
    DESCRIPTION
        "This inform is issued to initiate the PacketCable
        process provisioning ."
    REFERENCE
        "Inform as defined in RFC 1902"
    ::= { pktcMtaNotification 1 }

pktcMtaProvisioningStatus NOTIFICATION-TYPE
    OBJECTS {
        pktcMtaDevMacAddress,
        pktcMtaDevCorrelationId,
        pktcMtaDevSignature,
        pktcMtaDevProvisioningState
    }
    STATUS current
    DESCRIPTION
        "This inform is issued to confirm completion of the PacketCable
        provisioning process, and indicate the completion state."
    REFERENCE
        "Inform as defined in RFC 1902"
    ::= { pktcMtaNotification 2 }

-- compliance statements

pktcMtaBasicCompliance MODULE-COMPLIANCE
    STATUS current
    DESCRIPTION
        "The compliance statement for devices that implement
        MTA feature."
    MODULE --pktcMtaMib

```

```
-- unconditionally mandatory groups

    MANDATORY-GROUPS {
        pktcMtaGroup
    }

-- units of conformance

OBJECT pktcMtaDevCorrelationId
    MIN-ACCESS read-only
    DESCRIPTION
        "not-accessible when request is SNMP get
        read-only when used in informs during provisioning."

OBJECT pktcMtaDevCertificate
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file '
        download, otherwise it's a read-only object."

OBJECT pktcMtaDevTelephonyCertificate
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file
        download, otherwise it's a read-only object."

OBJECT pktcMtaDevServProviderCertificate
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file
        download, otherwise it's a read-only object."

OBJECT pktcMtaDevKerberosRealm
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file
        download, otherwise it's a read-only object."

OBJECT pktcMtaDevTgsLocation
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file
        download, otherwise it's a read-only object."

OBJECT pktcMtaDevManufacturerCertificate
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file
        download, otherwise it's a read-only object."

OBJECT pktcMtaDevKerbPrincipalName
    MIN-ACCESS read-only
    DESCRIPTION
        "Read-write when request is through configuration file
        download, otherwise it's a read-only object."
```

```
OBJECT pktcMtaDevServGracePeriod
  MIN-ACCESS read-only
  DESCRIPTION
    "Read-write when request is through configuration file
    download, otherwise it's a read-only object."
```

```
::= { pktcMtaCompliances 3 }
```

```
pktcMtaGroup OBJECT-GROUP
```

```
  OBJECTS {
    pktcMtaDevResetNow,
    pktcMtaDevSerialNumber,
    pktcMtaDevHardwareVersion,
    pktcMtaDevMacAddress,
    pktcMtaDevFQDN,
    pktcMtaDevEndPntCount,
    pktcMtaDevEnabled,
    pktcMtaDevTypeIdentifier,
    pktcMtaDevProvisioningState,
    pktcMtaDevCertificate,
    pktcMtaDevSignature,
    pktcMtaDevCorrelationId,
    pktcMtaDevManufacturerCertificate,
    pktcMtaDevTelephonyCertificate,
    pktcMtaDevServProviderCertificate,
    pktcMtaDevKerberosRealm,
    pktcMtaDevTgsLocation,
    pktcMtaDevKerbPrincipalName,
    pktcMtaDevServGracePeriod,
    pktcMtaDevServerBootState,
    pktcMtaDevServerDhcp,
    pktcMtaDevSnmpEntity,
    pktcMtaDevEvControl,
    pktcMtaDevEvSyslog,
    pktcMtaDevEvThrottleAdminStatus,
    pktcMtaDevEvThrottleInhibited,
    pktcMtaDevEvThrottleThreshold,
    pktcMtaDevEvThrottleInterval,
    pktcMtaDevEvReporting,
    pktcMtaDevEvFirstTime,
    pktcMtaDevEvLastTime,
    pktcMtaDevEvCounts,
    pktcMtaDevEvLevel,
    pktcMtaDevEvId,
    pktcMtaDevEvText
  }
  STATUS current
  DESCRIPTION
    "Group of objects for PacketCable MTA MIB."
  ::= { pktcMtaGroups 1 }
```

```
END
```