

# Superseded by

# PacketCable 1.5

PacketCable™ Management Event MIB  
**Specs** Specification

**PKT-SP-EVEMIB-I02-021018**

**ISSUED**

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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.
- Issued**    A stable document, which has undergone rigorous member and vendor review and is suitable for product design and development, cross-vendor interoperability, and for certification testing.
- Closed**    A static document, reviewed, tested, validated, and closed to further engineering change requests to the specification through CableLabs.

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# Superseded by

## 1 SCOPE

# PacketCable 1.5

### 1.1 Introduction and Overview

The Management Event MIB provides a common data and format definition for events (informative, alarm, etc.). It also specifies by what means events are transmitted over a network. The event mechanism facilitates management of the MTA in a multi-vendor environment and provides a standard means to implement PacketCable™ specified events.

### 1.2 Purpose of document

This document describes an SNMP MIB in SMIV2, to support the management event mechanism as described in [1]. It is intended to be implemented in the MTA and management devices.

### 1.3 Organization of document

This document contains the Management Event MIB for SNMPv3 [10], [11], [12], and [13]. This MIB is described in section 5.

### 1.4 Requirements

Throughout this document, the words that are used to define the significance of particular requirements are capitalized. These words are:

- |              |   |
|--------------|---|
| “MUST”       | This word or the adjective “REQUIRED” means that the item is an absolute requirement of this specification.   |
| “MUST NOT”   | This phrase means that the item is an absolute prohibition of this specification.   |
| “SHOULD”     | This word or the adjective “RECOMMENDED” means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighed before choosing a different course.                              |
| “SHOULD NOT” | This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label. |
| “MAY”        | This word or the adjective “OPTIONAL” means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.                      |

## 2 REFERENCES

### 2.1 Normative

In order to claim compliance with this specification, it is necessary to conform to the following standards and other works as indicated, in addition to the other requirements of this specification. Notwithstanding, intellectual property rights may be required to use or implement such normative references.

- [1] "PacketCable Management Event Mechanism," PKT-SP-MEM-I01-001128, Cable Television Laboratories, Inc., November 28, 2000.

### 2.2 Informative

- [2] "PacketCable MTA MIB," PKT-SP-MIB-MTA-I04-021018, Cable Television Laboratories, Inc., October 18, 2002.
- [3] "PacketCable SIGNALING MIB," PKT-SP-MIB-SIG-I04-021018, Cable Television Laboratories, Inc., October 18, 2002.
- [4] "PacketCable Management Event IDs," PKT-TR-MEMEVENT-ID-V01-001128, Cable Television Laboratories, Inc., November 28, 2000.
- [5] "PacketCable Network-Based Call Signaling Protocol Specification," PKT-SP-EC-MGCP-I04-011221, Cable Television Laboratories, Inc., December 21, 2001
- [6] "PacketCable Security Specification," PKT-SP-SEC-I05-020116, Cable Television Laboratories, Inc., January 16, 2002.
- [7] "PacketCable MTA Device Provisioning Specification," PKT-SP-PROV-I04-021018, Cable Television Laboratories, Inc., October 18, 2002.
- [8] "PacketCable Architecture Framework Technical Report", PKT-TR-ARCH-I01-991201, December 1, 1999, Cable Television Laboratories, Inc., December 1, 1999.
- [9] IETF RFC 1906, Transport Mappings for Version 2 of the Simple Network Management Protocol (SNMPv2), January 1996.
- [10] IETF RFC 2570, Introduction to Version 3 of the Internet-standard Network Management Framework, April 1999.
- [11] IETF RFC 2571, An Architecture for Describing SNMP Management Frameworks, April 1996.
- [12] IETF RFC 2572, Message Processing and Dispatching for the Simple Network Management Protocol (SNMP), April 1999.
- [13] IETF RFC 2573, SNMP Applications, April 1999.
- [14] IETF STD0058 (RFC 2579), Textual Conventions for SMIv2, April 1999.
- [15] IETF RFC 3291, "Textual Conventions for Internet Network Addresses, May 2002."

## 2.3 Reference Acquisition

CableLabs Specifications:

- Cable Television Laboratories, Inc., 400 Centennial Parkway, Louisville, CO 80027; Phone 303-661-9100; Fax 303-661-9199; Internet: <http://www.packetcable.com>

IETF Standards

- Internet Engineering Task Force (IETF) Secretariat c/o Corporation for National Research Initiatives, 1895 Preston White Drive, Suite 100, Reston, VA 20191-5434, Phone 703-620-8990, Fax 703-620-9071, Internet <http://www.ietf.org/>

## 3 TERMS AND DEFINITIONS

This PacketCable specification uses the following terms and definitions:

<b>Endpoint</b>	A Terminal, Gateway or MCU
-----------------	----------------------------

## 4 ABBREVIATIONS AND ACRONYMS

This PacketCable specification uses the following abbreviations:

<b>E-MTA</b>	Embedded MTA – a single node which contains both an MTA and a cable modem.
<b>FQDN</b>	Fully Qualified Domain Name. Refer to IETF RFC 1594 for details.
<b>IANA</b>	Internet Assigned Numbered Authority. See <a href="http://www.ietf.org">www.ietf.org</a> for details.
<b>IETF</b>	Internet Engineering Task Force. A body responsible, among other things, for developing standards used in the Internet.
<b>IP</b>	Internet Protocol. An Internet network-layer protocol.
<b>MAC</b>	Media Access Control. It is a sublayer of the Data Link Layer. It normally runs directly over the physical layer.
<b>MTA</b>	Multimedia Terminal Adapter.
<b>OSS</b>	Operations Systems Support. The back office software used for configuration, performance, fault, accounting and security management.
<b>SNMP</b>	Simple Network Management Protocol.

## 5 PACKETCABLE MANAGEMENT EVENT MIB

The PacketCable Management Event MIB MUST be implemented as defined below.

```

PKTC-EVENT-MIB DEFINITIONS ::= BEGIN

IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
    Integer32,
    Unsigned32,
    NOTIFICATION-TYPE,
    BITS
        FROM SNMPv2-SMI
    TruthValue, DisplayString, DateAndTime
        FROM SNMPv2-TC
    OBJECT-GROUP,
    MODULE-COMPLIANCE,
    InetAddressType, InetAddress, InetPortNumber
        FROM INET-ADDRESS-MIB
    NOTIFICATION-GROUP
        FROM SNMPv2-CONF
clabProjPacketCable
        FROM CLAB-DEF-MIB;

pktcEventMib MODULE-IDENTITY
    LAST-UPDATED      "0210180000Z" -- 10/18/02
    ORGANIZATION      "Packet Cable Provisioning/OSS Group"
    CONTACT-INFO
        "Matt Osman
         Postal: Cable Television Laboratories, Inc.
              400 Centennial Parkway
              Louisville, Colorado 80027-1266
         U.S.A.
         Phone:  +1 303-661-9100
         Fax:    +1 303-661-9199
         E-mail: m.osman@cablelabs.com"
    DESCRIPTION
        "This MIB module supplies the basic management objects
         for event reporting

         Acknowledgements:
         Rick Vetter      -      Motorola
         Eugene Nechamkin -      Broadcom"
    ::= { clabProjPacketCable 3 }

--
--
pktcDevEventControl      OBJECT IDENTIFIER ::= { pktcEventMib 1 }
pktcDevEventConfig      OBJECT IDENTIFIER ::= { pktcEventMib 2 }
pktcDevEventThrottle    OBJECT IDENTIFIER ::= { pktcEventMib 3 }
pktcDevEventLocal       OBJECT IDENTIFIER ::= { pktcEventMib 4 }
pktcDevEventNotify      OBJECT IDENTIFIER ::= { pktcEventMib 5 }
pktcDevEvNotification   OBJECT IDENTIFIER ::= { pktcEventMib 6 0 }

--
-- Event Reporting
--
--
-- Event reporting control
--

```

```

pktcDevEvControl OBJECT-TYPE
    SYNTAX INTEGER {
        resetLog(1),
        setDefaults(2)
    }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "This object defines actions related to the event log
        configuration. Setting this object to resetLog(1) empties the
        event log.
        All event log data is deleted. Setting it to setDefault(2)
        restores all event priorities to their factory-default
        reporting parameters."
    ::= { pktcDevEventControl 1 }

pktcDevEvControlState OBJECT-TYPE
    SYNTAX INTEGER {
        logReset(1),
        defaultsSet(2),
        userConfigured(3),
        processing(4)
    }
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object reflects the state of the device as modified in
        pktcDevEvControl. Processing indicates that a state change
        is underway. This object reflects the state of the device."
    ::= { pktcDevEventControl 2 }

pktcDevEvSyslogAddressType OBJECT-TYPE
    SYNTAX InetAddressType
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The type of Internet address of the Syslog server.
        Not all address types may be supported."
    ::= { pktcDevEventControl 3 }

pktcDevEvSyslogAddress OBJECT-TYPE
    SYNTAX InetAddress
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The IP address of the Syslog server. If 0.0.0.0,
        syslog transmission is inhibited. The use of FQDNs is
        syntactically allowed but it is discouraged for syslog
        servers since not resolving them in a timely manner
        may leave the device without access to the Syslog
        daemon during critical network events."
    ::= { pktcDevEventControl 4 }

pktcDevEvSyslogUdpPort OBJECT-TYPE
    SYNTAX InetPortNumber
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The UDP port number the syslog device is using to send
        requests to the syslog server."
    DEFVAL {514}
    ::= { pktcDevEventControl 5 }

--
--      Event throttling control

```

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

```
    DEFVAL { throttlingInhibited }
    ::= { pktcDevEventThrottle 1 }
```

```
pktcDevEvThrottleInhibited OBJECT-TYPE
    SYNTAX TruthValue
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "If true(1), trap/inform and syslog transmission is currently
        inhibited due to thresholds and/or the current setting of
        pktcDevEvThrottleAdminStatus. In addition, this is set to
        true(1) if transmission is inhibited due to no
        syslog (pktcDevEvSyslogAddress) or trap/inform
        (pktcMtaDevSnmpEntity)
        destinations having been set."
```

```
    ::= { pktcDevEventThrottle 2 }
```

```
pktcDevEvThrottleThreshold OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Number of trap/syslog events per pktcDevEvThrottleInterval
        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/inform and a syslog message is still treated as a
        single event.

        At initial startup, this object returns 2."
```

```
    DEFVAL { 2 }
    ::= { pktcDevEventThrottle 3 }
```

```

pktcDevEvThrottleInterval OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The interval over which the throttle threshold applies.
         At initial startup, this object has a value of 1."
    DEFVAL { 1 }
    ::= { pktcDevEventThrottle 4 }

--
-- Event configuration
--
--
-- The following table configures the reporting of the various programmable
-- events.
--
pktcDevEvProgrammableTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcDevEvProgrammableEntry
    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."
    ::= { pktcDevEventConfig 1 }

pktcDevEvProgrammableEntry OBJECT-TYPE
    SYNTAX      PktcDevEvProgrammableEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Allows configuration of the reporting mechanisms for a
         programmable event, including level, report type, and text."
    INDEX { pktcDevEvProgrammableId, pktcDevEvProgrammableEnterprise }
    ::= { pktcDevEvProgrammableTable 1 }

PktcDevEvProgrammableEntry ::= SEQUENCE {
    pktcDevEvProgrammableId          Integer32,
    pktcDevEvProgrammableEnterprise Integer32,
    pktcDevEvProgrammableLevel      INTEGER,
    pktcDevEvProgrammableReporting  BITS,
    pktcDevEvProgrammableText       DisplayString
}

pktcDevEvProgrammableId OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "ID for a specific programmable event to which the priority and
         display string are matched. These Event Ids are vendor specific or
         in the case of PacketCable events defined in pkt-tr-memevent-id-
         v01-001128."
    ::= { pktcDevEvProgrammableEntry 1 }

```

```

pktcDevEvProgrammableEnterprise OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
    "Provides the IANA enterprise number of the device manufacturer for proprietary
    events, and the CableLabs IANA enterprise number for PacketCable specified
    events."
    ::= { pktcDevEvProgrammableEntry 2 }

pktcDevEvProgrammableLevel OBJECT-TYPE
    SYNTAX INTEGER {
        critical(1),
        major(2),
        minor(3),
        warning(4),
        information(5)
    }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
    "The priority level that is controlled by this entry. These are
    ordered from most (critical) to least (information) critical.
    Each event has a particular priority level associated with it (as
    defined by the vendor). The levels are described as:
    critical(1) - A service-affecting condition that requires immediate
    corrective action.
    major(2) - A service-affecting condition that requires urgent
    corrective action.
    minor(3) - A non-service-affecting fault condition which warrants
    corrective action in order to avoid a more serious fault.
    warning(4) - A potential or impending condition which can lead to a
    fault; diagnostic action is suggested.
    information(5) - Normal event meant to convey information."
    ::= { pktcDevEvProgrammableEntry 3 }

pktcDevEvProgrammableReporting OBJECT-TYPE
    SYNTAX BITS {
        local(0),
        traps(1),
        syslog(2),
        inform(3),
        none(4)
    }
    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)
    inform(3) bit is set, then generate an inform, if the
    none(4) bit is set, then this event is not generated."
    --
    DEFVAL { local }
    ::= { pktcDevEvProgrammableEntry 4 }

```

```

pktcDevEvProgrammableText OBJECT-TYPE
    SYNTAX DisplayString(SIZE (127))
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "Programmable event display string providing a human-readable
        description of the event."
    ::= { pktcDevEvProgrammableEntry 5 }

-- The following table configures the reporting of the various fixed
-- events.
--
pktcDevEvFixedTable OBJECT-TYPE
    SYNTAX SEQUENCE OF PktcDevEvFixedEntry
    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."
    ::= { pktcDevEventConfig 2 }

pktcDevEvFixedEntry OBJECT-TYPE
    SYNTAX PktcDevEvFixedEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Allows configuration of the reporting mechanisms for a
        fixed event, including level, and report type."
    INDEX { pktcDevEvFixedId, pktcDevEvFixedEnterprise }
    ::= { pktcDevEvFixedTable 1 }

PktcDevEvFixedEntry ::= SEQUENCE {
    pktcDevEvFixedId Integer32,
    pktcDevEvFixedEnterprise Integer32,
    pktcDevEvFixedLevel INTEGER,
    pktcDevEvFixedReporting BITS,
    pktcDevEvFixedText DisplayString
}

pktcDevEvFixedId OBJECT-TYPE
    SYNTAX Integer32 (1..2147483647)
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "ID for a specific fixed event to which the priority and display
        string are matched. These Event Ids are vendor specific or in the
        case of PacketCable events defined in pkt-tr-memevent-id-v01-
        001128."
    ::= { pktcDevEvFixedEntry 1 }

pktcDevEvFixedEnterprise OBJECT-TYPE
    SYNTAX Integer32 (1..2147483647)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Provides the IANA enterprise number of the device manufacturer for
        proprietary events, and the CableLabs IANA enterprise number for
        PacketCable specified events."
    ::= { pktcDevEvFixedEntry 2 }

```

```

pktcDevEvFixedLevel OBJECT-TYPE
    SYNTAX INTEGER {
        critical(1),
        major(2),
        minor(3),
        warning(4),
        information(5)
    }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The priority level that is controlled by this entry. These are
        ordered from most (critical) to least (information) critical. Each
        event has a particular priority level associated with it (as defined
        by the vendor). The levels are described as:
            critical(1) - A service-affecting condition that requires
            immediate corrective action.
            major(2) - A service-affecting condition that requires urgent
            corrective action.
            minor(3) - A non-service-affecting fault condition which
            warrants corrective action in order to avoid a more serious
            fault.
            warning(4) - A potential or impending condition which can lead
            to a fault; diagnostic action is suggested.
            information(5) - Normal event meant to convey information."
    ::= { pktcDevEvFixedEntry 3 }

pktcDevEvFixedReporting OBJECT-TYPE
    SYNTAX BITS {
        local(0),
        traps(1),
        syslog(2),
        inform(3),
        none(4)
    }
    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) inform(3) bit is set, then generate an
        inform, if the none(4) bit is set, then this event is not
        generated."
    -- DEFVAL { local }
    ::= { pktcDevEvFixedEntry 4 }

pktcDevEvFixedText OBJECT-TYPE
    SYNTAX DisplayString(SIZE (127))
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "Fixed event display string providing a human-readable
        description of the event."
    ::= { pktcDevEvFixedEntry 5 }

--
-- Local event table - for retrieval of events via SNMP
--

```

```

pktcDevEventTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcDevEventEntry
    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."
    ::= { pktcDevEventLocal 1 }

pktcDevEventEntry OBJECT-TYPE
    SYNTAX      PktcDevEventEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Describes a network or device event that may be of
         interest in fault isolation and troubleshooting.
         Entries are created with the first occurrence of an event.
         pktcDevEvControl can be used to clear the table.
         Individual events can not be deleted."
    INDEX { pktcDevEvIndex }
    ::= { pktcDevEventTable 1 }

PktcDevEventEntry ::= SEQUENCE {
    pktcDevEvIndex          INTEGER,
    pktcDevEvTime          DateAndTime,
    pktcDevEvLevel         INTEGER,
    pktcDevEvEnterprise    Integer32,
    pktcDevEvId            Unsigned32,
    pktcDevEvText          DisplayString,
    pktcDevEvMacAddress    OCTET STRING,
    pktcDevEvEndpointName  DisplayString
}

pktcDevEvIndex OBJECT-TYPE
    SYNTAX      INTEGER (1..2147483647)
    MAX-ACCESS  read-only
    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 pktcDevEvControl,
         (b) the device reboots and does not implement non-volatile
         storage for this log, or (c) it reaches the value 2^31.
         The next entry for all the above cases is 1. This also serves as
         a indicator of event sequence."
    ::= { pktcDevEventEntry 1 }

pktcDevEvTime          OBJECT-TYPE
    SYNTAX      DateAndTime
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides a human-readable description of the
         time at which the event occurred."
    ::= { pktcDevEventEntry 2 }

pktcDevEvLevel OBJECT-TYPE
    SYNTAX INTEGER {
        critical(1),
        major(2),
        minor(3),
        warning(4),
        information(5)
    }
    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)."
```

::= { pktcDevEventEntry 3 }

```

pktcDevEvEnterprise OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides the IANA enterprise number of the device manufacturer for
        proprietary events, and the CableLabs IANA enterprise number for
        PacketCable specified events."
```

::= { pktcDevEventEntry 4 }

```

pktcDevEvId OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "ID for a specific event to which the priority and display string
        are matched. These Event Ids are vendor specific or in the case of
        PacketCable events defined in pkt-tr-memevent-id-v01-001128."
```

::= { pktcDevEventEntry 5 }

```

pktcDevEvText 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.)."
```

::= { pktcDevEventEntry 6 }

```

pktcDevEvMacAddress OBJECT-TYPE
    SYNTAX      OCTET STRING
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides the MAC address of the device generating the event."
```

::= { pktcDevEventEntry 7 }

```

pktcDevEvEndpointName      OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This is the endpoint identifier followed by the FQDN/IP Address
        of the device. This is in the form - AALN/X:FQDN/IP Address.
        If the event is not specific to an endpoint, then the contents
        is just the FQDN/IP address."
```

::= { pktcDevEventEntry 8 }

```

--
--      Event Data for Traps - Informs
--
pktcDevEvReportIndex      OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Integer value starting at one that increases by one
        for each event generated. Used for sequencing of events."
```

::= { pktcDevEventNotify 1 }

```

pktcDevEvReportTime          OBJECT-TYPE
    SYNTAX      DateAndTime
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides a human-readable description of the time at
         which the event occurred."
    ::= { pktcDevEventNotify 2 }

pktcDevEvReportLevel         OBJECT-TYPE
    SYNTAX      INTEGER {
        critical(1),
        major(2),
        minor(3),
        warning(4),
        information(5)
    }
    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)."
    ::= { pktcDevEventNotify 3 }

pktcDevEvReportEnterprise   OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides the IANA enterprise number of the device
         manufacturer for proprietary events, and the CableLabs
         IANA enterprise number for
         PacketCable specified events."
    ::= { pktcDevEventNotify 4 }

pktcDevEvReportId           OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "ID for a specific event to which the priority and display string
         are matched. These Event Ids are vendor specific or in the case of
         PacketCable events defined in pkt-tr-memevent-id-v01-001128."
    ::= { pktcDevEventNotify 5 }

pktcDevEvReportText         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.)."
    ::= { pktcDevEventNotify 6 }

pktcDevEvReportMacAddress   OBJECT-TYPE
    SYNTAX      OCTET STRING
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Provides the MAC address of the device generating the event."
    ::= { pktcDevEventNotify 7 }

```

```

pktcDevEvReportEndpointName      OBJECT-TYPE
    SYNTAX      DisplayString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This is the endpoint identifier followed by the FQDN/IP Address of
        the device. in the case of the , this is in the form -
        AALN/X:FQDN/IP Address. If the event is not specific to an
        endpoint, then the contents is just the FQDN/IP address"
    ::= { pktcDevEventNotify 8 }

pktcDevEvInform NOTIFICATION-TYPE
    OBJECTS { pktcDevEvReportIndex, pktcDevEvReportTime, pktcDevEvReportLevel,
              pktcDevEvReportEnterprise, pktcDevEvReportId, pktcDevEvReportText,
              pktcDevEvReportMacAddress, pktcDevEvReportEndpointName }
    STATUS      current
    DESCRIPTION
        "Inform for event reporting "
    ::= { pktcDevEvNotification 1 }

pktcDevEvTrap NOTIFICATION-TYPE
    OBJECTS { pktcDevEvReportIndex, pktcDevEvReportTime, pktcDevEvReportLevel,
              pktcDevEvReportEnterprise, pktcDevEvReportId, pktcDevEvReportText,
              pktcDevEvReportMacAddress, pktcDevEvReportEndpointName }
    STATUS      current
    DESCRIPTION
        " Trap for event reporting "
    ::= { pktcDevEvNotification 2 }

pktcEventConformance OBJECT IDENTIFIER ::= { pktcEventMib 7 }
pktcEventCompliances  OBJECT IDENTIFIER ::= { pktcEventConformance 1 }
pktcEventGroups       OBJECT IDENTIFIER ::= { pktcEventConformance 2 }

-- compliance statements

pktcEventBasicCompliance MODULE-COMPLIANCE
    STATUS      current
    DESCRIPTION
        "The compliance statement for devices that implement
        Event reporting feature."
    MODULE     --pktcEventMib

-- unconditionally mandatory groups

    MANDATORY-GROUPS {
        pktcEventGroup
    }

-- units of conformance

::= { pktcEventCompliances 3 }

pktcEventGroup OBJECT-GROUP
    OBJECTS {
        pktcDevEvControl,
        pktcDevEvControlState,
        pktcDevEvSyslogAddressType,
        pktcDevEvSyslogAddress,
        pktcDevEvSyslogUdpPort,
        pktcDevEvThrottleAdminStatus,
        pktcDevEvThrottleInhibited,
        pktcDevEvThrottleThreshold,
        pktcDevEvThrottleInterval,
        pktcDevEvProgrammableEnterprise,
        pktcDevEvProgrammableLevel,
        pktcDevEvProgrammableReporting,
        pktcDevEvProgrammableText,
    }

```

```
        pktcDevEvFixedEnterprise,
        pktcDevEvFixedLevel,
        pktcDevEvFixedReporting,
        pktcDevEvFixedText,
        pktcDevEvIndex,
        pktcDevEvTime,
        pktcDevEvLevel,
        pktcDevEvEnterprise,
        pktcDevEvId,
        pktcDevEvText,
        pktcDevEvMacAddress,
        pktcDevEvEndpointName,
        pktcDevEvReportIndex,
        pktcDevEvReportTime,
        pktcDevEvReportLevel,
        pktcDevEvReportEnterprise,
        pktcDevEvReportId,
        pktcDevEvReportText,
        pktcDevEvReportMacAddress,
        pktcDevEvReportEndpointName
    }
    STATUS    current
    DESCRIPTION
        "Group of objects for PacketCable Event MIB."
        ::= { pktcEventGroups 1 }

-- Notification Group Added

pktcEventNotificationGroup      NOTIFICATION-GROUP
    NOTIFICATIONS { pktcDevEvInform, pktcDevEvTrap }
    STATUS    current
    DESCRIPTION
        "These notifications deal with change in status of
        MTA Device."
        ::= { pktcEventGroups 2 }

END
```

## Appendix I Acknowledgements

On behalf of CableLabs and its participating member companies, I would like to extend a heartfelt thanks to all those who contributed to the development of this specification. Certainly all the participants of the provisioning focus team have added value to this effort by participating in the review and weekly conference calls. Particular thanks are given to Sumanth Channabasappa (Alopa); Angela Lyda and Rodney Osborne (Arris Interactive); Eugene Nechamkin (Broadcom); Jean-Francois Mule (CableLabs); Sandeep Asija and Paul Duffy (Cisco Systems); Rick Vetter (General Instrument/Motorola); Burcak Beser (Pacific Broadband); Peter Bates (Telcordia); Roy Spitzer (Telogy/TI). A special thanks is due to Rick Vetter (Motorola) and Roy Spitzer (Telogy/TI) who worked tirelessly in a challenging multi-vendor environment to build this specification.

*Matt Osman, CableLabs*

## Appendix II Revision History

Engineering Change Notices incorporated in PKT-SP-EVEMIB-I01-020308.

<b>ECN</b>	<b>Date Ratified</b>	<b>Summary</b>
mib-n-01193	02/15/02	The ECN was folded in as a comment against the draft before releasing as “Issued”.

Engineering Change Notices incorporated in PKT-SP-EVEMIB-I04-021018.

<b>ECN</b>	<b>Date Ratified</b>	<b>Summary</b>
memmib-n-02112	7/29/02	Removal of MIB object value (3) for pktcDevEvControl
memmib-n-02113	8/5/02	Correction of SYNTAX for MIB object pktcDevEvSyslogUdpPort
memmib-n-02133	7/29/02	pktcDevEvSyslogAddressType and "pktcDevEvSyslogAddress" MIB Objects have both the same OID Index.