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STANDARDS

Data Standards Subcommittee

AMERICAN NATIONAL STANDARD

ANSI/SCTE 165-20 2019

IPCablecom 1.5 Part 20: MTA Extension MIB

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1 INTRODUCTION

1.1 Purpose of the Document

New objects that are being introduced beyond IPCablecom 1.0 for MTA MIBS are being grouped in this document so that the additional changes made can be tracked easily.

1.2 Requirements and Conventions

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 event 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

The following documents contain provisions which, through reference in this text, constitute provisions of this standard. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision, and while parties to agreement based on this standard are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1 Normative References

In order to claim compliance with this standard, it is necessary to conform to the following standards and other works as indicated, in addition to the other requirements of this standard. Intellectual property rights may be required to implement these references.

[1] ANSI/SCTE 165-05 2019, IPCablecom 1.5 Part 5: MTA Device Provisioning.

[2] IETF STD 62, Simple Network Management Protocol Version 3 (SNMPv3), December 2002.

[3] IETF RFC 2669, Cable Device Management Information Base for DOCSIS Compliant Cable Modems and Cable Modem Termination Systems.

[4] ANSI/SCTE 23-03 2017, DOCSIS 1.1 Part 3: Operations Support System Interface.

[5] IETF STD 5, Internet Protocol, September 1981.

[6] IETF RFC 2011, SNMPv2 Management Information Base for the Internet Protocol using SMIv2, November 1996.

[7] IETF RFC 2863, The Interfaces Group MIB, June 2000.

[8] ANSI/SCTE 107 2017, DOCSIS Embedded Cable Modem Devices.

[9] CableLabs Definition MIB Specification, CL-SP-MIB-CLABDEF-I12-160325, March 25, 2016, Cable Television Laboratories, Inc., Cable Television Laboratories, Inc.

[10] ANSI/SCTE 79-2 2016, DOCSIS 2.0 Operations Support System Interface

[11] ANSI/SCTE 165-07 2019, IPCablecom 1.5 Part 7: Media Terminal Adapter (MTA) Management Information Base (MIB).

[12] ANSI/SCTE 165-08 2019, IPCablecom 1.5 Part 8: Signaling Management Information Base (MIB).

[13] ANSI/SCTE 165-06 2019, IPCablecom 1.5 Part 6: Management Information Base (MIB) Framework.

[14] IETF RFC 2833, RTP Payload for DTMF Digits, May 2000.

[15] ANSI/SCTE 165-02 2016, IPCablecom 1.5 Part 2: Audio/Video Codecs.

[16] ANSI/SCTE 165-03 2016, IPCablecom 1.5 Part 3: Network-Based Call Signaling Protocol.

2.2 Informative References

The following documents may provide valuable information to the reader but are not required when complying with this standard.

[17] Data-Over-Cable Service Interface Specifications, Cable Modem to Customer Premise Equipment Interface Specification, CMCI, CM-SP-CMCI-C01-081104, November 4, 2008, Cable Television Laboratories, Inc.

[18] IETF RFC 3417, Transport Mappings for the Simple Network Management Protocol (SNMP), December 2002.

[19] IETF RFC 2579, Textual Conventions for SMIv2, April 1999.

[20] IETF RFC 3410, Introduction and Applicability Statements for Internet-Standard Management Framework, December 2002.

[21] IETF RFC 3411, An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks, December 2002.

[22] IETF RFC 3412, Message Processing and Dispatching for the Simple Network Management Protocol (SNMP), December 2002.

[23] IETF RFC 2821, Simple Mail Transfer Protocol, April 2001.

[24] ANSI/SCTE 165-04 2019, IPCablecom 1.5 Part 4: Dynamic Quality-of-Service.

[25] IETF RFC 3594, PacketCable Security Ticket Control Sub-Option for the DHCP CableLabs Client Configuration (CCC) Option, September 2003.

[26] IETF RFC 2782, A DNS RR for specifying the location of services (DNS SRV), February 2000.

[27] IETF RFC 3584, Coexistence between Version 1, Version 2, and Version 3 of the Internet-standard Network Management Framework, August 2003.

[28] ANSI/SCTE 165-15 2019, IPCablecom 1.5 Part 15: Management Event MIB Specification.

3 ABBREVIATIONS

There are no abbreviations used in this document.

4 REQUIREMENTS

The IPCablecom Extension MTA MIB MUST be implemented as defined below.

```
PKTC-EN-MTA-MIB DEFINITIONS ::= BEGIN

IMPORTS
      MODULE-IDENTITY, OBJECT-TYPE         FROM SNMPv2-SMI
      OBJECT-GROUP, MODULE-COMPLIANCE      FROM SNMPv2-CONF
      pktcEnhancements                     FROM CLAB-DEF-MIB;


pktcEnMtaMib MODULE-IDENTITY
    LAST-UPDATED    "200501280000Z - January 28, 2005"
    ORGANIZATION    "Cable Television Laboratories, Inc"

    CONTACT-INFO
            "Sumanth Channabasappa
             Postal: Cable Television Laboratories, Inc.
             858 Coal Creek Circle
             Louisville, Colorado 80027-9750
             U.S.A.
             Phone: +1 303-661-9100
             Fax: +1 303-661-9199
             E-mail: mibs@cablelabs.com"

    DESCRIPTION
            "This MIB module enhances the basic management objects
             defined for the PacketCable MTA Device device by
             the MIB group pktcMtaMib.

            Acknowledgements:
            Rodney Osborne        -      Arris Interactive
            Eugene Nechamkin      -      BroadCom Corporation
            Satish Kumar          -      Texas Instruments
            Jean-Francois Mule    -      CableLabs
            Venkatesh Sunkad      -      CableLabs


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      REVISION "200501280000Z"
      DESCRIPTION
            "This revision is being published as part of the PacketCable
             MTA MIBs enhancements for PacketCable 1.5."
      ::=  { pktcEnhancements 1 }

--
--  PacketCable Enhanced MTA MIB Objects
--
pktcEnMtaMibObjects       OBJECT IDENTIFIER ::= { pktcEnMtaMib 1 }
pktcEnMtaDevBase          OBJECT IDENTIFIER ::= { pktcEnMtaMibObjects 1 }
pktcEnMtaDevServer        OBJECT IDENTIFIER ::= { pktcEnMtaMibObjects 2 }
pktcEnMtaDevSecurity      OBJECT IDENTIFIER ::= { pktcEnMtaMibObjects 3 }


--
--  Enhanced notification group.
--

pktcEnMtaNotificationPrefix OBJECT IDENTIFIER ::= { pktcEnMtaMib 2 }
pktcEnMtaNotification OBJECT IDENTIFIER       ::= { pktcEnMtaNotificationPrefix 0 }
```

```
pktcEnMtaConformance  OBJECT IDENTIFIER       ::= { pktcEnMtaMib 3 }
pktcEnMtaCompliances  OBJECT IDENTIFIER       ::= { pktcEnMtaConformance 1 }
pktcEnMtaGroups       OBJECT IDENTIFIER       ::= { pktcEnMtaConformance 2 }

--
--  Enhancement MIB Objects
--
pktcEnMtaDevMltplGrantsPerInterval     OBJECT-TYPE
      SYNTAX INTEGER {
             enablemgpifunctionality(1),
             disablemgpifunctionality(2)
      }
      MAX-ACCESS  read-only
      STATUS      current
      DESCRIPTION
            " This object is used to control the Multiple grants functionality
              on a PacketCable MTA.
              To indicate enabling of this functionality, a value of
              enablemgpifunctionality(1) is used.
              To indicate disabling of this functionality, a value of
              disablemgpifunctionality(2) is used."
      DEFVAL  {disablemgpifunctionality}
      ::= { pktcEnMtaDevBase 1}
--
--  Compliance statements
--
pktcEnMtaBasicCompliance MODULE-COMPLIANCE
      STATUS     current
      DESCRIPTION
            "The compliance statement for devices that implement
            MTA feature."
      MODULE   --PKTC-EN-MTA-MIB
--
--  Mandatory groups
--
      MANDATORY-GROUPS {
              pktcEnMtaGroup
          }
      ::= { pktcEnMtaCompliances 3 }

pktcEnMtaGroup OBJECT-GROUP
      OBJECTS {
        pktcEnMtaDevMltplGrantsPerInterval
      }
      STATUS    current
      DESCRIPTION
            "Group of Enhanced objects for the PacketCable MTA MIB."
      ::= { pktcEnMtaGroups 1 }
END
```