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Telecommunications
Engineers***

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**IPCablecom 1.0 Part 8: Signaling Management
Information Base (MIB) Requirements**

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1 SCOPE

This specification describes the IPCablecom Signaling (SIG) MIB requirements.

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

All references are subject to revision, and users of this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.

- [1] ANSI/SCTE 24-06 2016, IPCablecom 1.0 Part 6: Management Information Base (MIB) Network.
- [2] ANSI/SCTE 24-03 2016, IPCablecom 1.0 Part 3: Network Call Signaling Protocol for the Delivery of Time-Critical Services over Cable Television Using Data Modems.
- [3] ANSI/SCTE 24-05 2016, IPCablecom 1.0 Part 5: Media Terminal Adapter (MTA) Device Provisioning Requirements for the Delivery of Real-Time Services over Cable Television Using Cable Modems.

2.2 Informative References

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

- [1] ANSI/SCTE 24-01 2016, IPCablecom 1.0 Part 1: Architecture Framework for the Delivery of Time-Critical Services over Cable Television Networks Using Cable Modems.
- [2] IETF RFC 3261, SIP: Session Initiation Protocol, February 2002.

3 TERMS

This standard uses the following term:

Management Information Base (MIB)	The specification of information in a manner that allows standard access through a network management protocol.
--	---

4 ABBREVIATIONS AND ACRONYMS

The following abbreviations are used in this standard:

MIB	Management Information Base
MTA	Media Terminal Adapter

5 REQUIREMENTS

The IPCablecom NCS MIB MUST be implemented as defined below.

PKTC-SIG-MIB DEFINITIONS ::= BEGIN

IMPORTS

```
MODULE-IDENTITY,  
OBJECT-TYPE,  
Integer32,  
IpAddress,  
BITS  
    FROM SNMPv2-SMI  
TEXTUAL-CONVENTION,  
RowStatus,  
TruthValue  
    FROM SNMPv2-TC  
OBJECT-GROUP,  
MODULE-COMPLIANCE  
    FROM SNMPv2-CONF  
SnmAdminString  
    FROM SNMP-FRAMEWORK-MIB  
clabProjPacketCable  
    FROM CLAB-DEF-MIB  
ifIndex  
    FROM IF-MIB;
```

pktcSigMib MODULE-IDENTITY

```
LAST-UPDATED      "200711290000Z" -- November 29, 2007  
ORGANIZATION      "CableLabs -- PacketCable OSS Group"  
CONTACT-INFO  
    "Sumanth Channabasappa  
     Postal: CableLabs, Inc.  
            858 Coal Creek Circle  
            Louisville, CO 80027-1266  
            U.S.A.  
     Phone: +1 303-661-9100  
     Fax:   +1 303-661-9199  
     E-mail: mibs@cablelabs.com"
```

DESCRIPTION

"This MIB module supplies the basic management object for the PacketCable Signaling protocols. This version of the MIB includes common signaling and Network Call Signaling (NCS) related signaling objects.

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REVISION "200711290000Z"

DESCRIPTION

"This revision, published as part of the PacketCable Signaling MIB Standard."

::= { clabProjPacketCable 2 }

PktcCodecType ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

"Textual Convention defines various types of CODECs that MAY be supported. The list of CODECs MUST be consistent with the Codec RTP MAP Parameters Table in the PacketCable CODEC specification. In-line embedded comments below contain the Literal Codec Name for each CODEC. The Literal Codec Name corresponds to the second column of the Codec RTP MAP Parameters Table. The Literal Codec Name Column contains the CODEC name that is used in the LCD of the NCS messages CRCX/MDCX, and is also used to identify the CODEC in the CMS Provisioning Specification. The RTP Map Parameter Column of the Codec RTP MAP Parameters Table contains the string used in the media attribute line ('a=') of the SDP parameters in NCS messages."

REFERENCE

"PacketCable CODEC Specification"

SYNTAX INTEGER {

other (1),
unknown (2),
g729 (3), -- G729
reserved (4), -- reserved for future use
g729E (5), -- G729E
pcmu (6), -- PCMU
g726at32 (7), -- G726-32
g728 (8), -- G728
pcma (9), -- PCMA
g726at16 (10), -- G726-16
g726at24 (11), -- G726-24
g726at40 (12) -- G726-40
}

PktcRingCadence ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

"This object represents a ring cadence in bit string format. The ring cadence representation starts with the first 1 in the pattern (the leading 0s in the MSB are padding and are to be ignored). Each bit represents 100ms of tone; 1 is tone, 0 is no tone. 64 bits MUST be used for cadence representation, LSB 4 bits are used for representing repeatable characteristics. 0000 means repeatable, and 1000 means non repeatable. During SNMP SET operations 64 bits MUST be used, otherwise MTA MUST reject the value. As an example, the hex representation of a ring cadence of 0.5 secs on; 4 secs off; repeatable would be:0x0001F00000000000."

SYNTAX BITS {

interval1 (0),
interval2 (1),
interval3 (2),
interval4 (3),
interval5 (4),
interval6 (5),
interval7 (6),
interval8 (7),
interval9 (8),
interval10 (9),
interval11 (10),
interval12 (11),
interval13 (12),

```
interval14 (13),
interval15 (14),
interval16 (15),
interval17 (16),
interval18 (17),
interval19 (18),
interval20 (19),
interval21 (20),
interval22 (21),
interval23 (22),
interval24 (23),
interval25 (24),
interval26 (25),
interval27 (26),
interval28 (27),
interval29 (28),
interval30 (29),
interval31 (30),
interval32 (31),
interval33 (32),
interval34 (33),
interval35 (34),
interval36 (35),
interval37 (36),
interval38 (37),
interval39 (38),
interval40 (39),
interval41 (40),
interval42 (41),
interval43 (42),
interval44 (43),
interval45 (44),
interval46 (45),
interval47 (46),
interval48 (47),
interval49 (48),
interval50 (49),
interval51 (50),
interval52 (51),
interval53 (52),
interval54 (53),
interval55 (54),
interval56 (55),
interval57 (56),
interval58 (57),
interval59 (58),
interval60 (59),
interval61 (60),
interval62 (61),
interval63 (62),
interval64 (63)
}
```

```
PktcSigType      ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
        "These are the various types of signaling that
        may be supported.
        ncs - network call signaling a derivation of MGCP
        (Media Gateway Control Protocol) version 1.0
        dcs - distributed call signaling a derivation
        of SIP (Session Initiation Protocol) RFC 3261"
```

```

SYNTAX INTEGER {
    other(1),
    unknown(2),
    ncs(3),
    dcs(4)
}

pktcSigMibObjects          OBJECT IDENTIFIER
                           ::= { pktcSigMib 1 }
pktcSigDevConfigObjects    OBJECT IDENTIFIER
                           ::= { pktcSigMibObjects 1 }
pktcNcsEndPntConfigObjects OBJECT IDENTIFIER
                           ::= { pktcSigMibObjects 2 }
pktcSigEndPntConfigObjects OBJECT IDENTIFIER
                           ::= { pktcSigMibObjects 3 }
pktcDcsEndPntConfigObjects OBJECT IDENTIFIER
                           ::= { pktcSigMibObjects 4 }

--
--     The pktcSigDevCodecTable defines the codecs supported by this
--     Media Terminal Adapter (MTA). There is one entry for each
--     codecs supported.
--

pktcSigDevCodecTable      OBJECT-TYPE
    SYNTAX      SEQUENCE OF PktcSigDevCodecEntry
    MAX-ACCESS   not-accessible
    STATUS       current
    DESCRIPTION
        "This table describes the MTA supported codec types."
    ::= { pktcSigDevConfigObjects 1 }

pktcSigDevCodecEntry      OBJECT-TYPE
    SYNTAX       PktcSigDevCodecEntry
    MAX-ACCESS    not-accessible
    STATUS       current
    DESCRIPTION
        "List of supported codecs types for the MTA."
    INDEX { pktcSigDevCodecIndex }
    ::= { pktcSigDevCodecTable 1 }

PktcSigDevCodecEntry ::= SEQUENCE {
    pktcSigDevCodecIndex  Integer32,
    pktcSigDevCodecType   PktcCodecType,
    pktcSigDevCodecMax    Integer32
}

pktcSigDevCodecIndex      OBJECT-TYPE
    SYNTAX       Integer32 (1..16383)
    MAX-ACCESS    not-accessible
    STATUS       current
    DESCRIPTION
        "The index value which uniquely identifies an entry
         in the pktcSigDevCodecTable."
    ::= { pktcSigDevCodecEntry 1 }

pktcSigDevCodecType       OBJECT-TYPE
    SYNTAX       PktcCodecType
    MAX-ACCESS    read-only
    STATUS       current
    DESCRIPTION
        "A codec type supported by this MTA."

```