



***Society of Cable
Telecommunications
Engineers***

**ENGINEERING COMMITTEE
Data Standards Subcommittee**

AMERICAN NATIONAL STANDARD

ANSI/SCTE 165-15 2009

IPCablecom 1.5 Part 15: Management Event MIB Specification

NOTICE

The Society of Cable Telecommunications Engineers (SCTE) Standards are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interchangeability and ultimately the long term reliability of broadband communications facilities. These documents shall not in any way preclude any member or non-member of SCTE from manufacturing or selling products not conforming to such documents, nor shall the existence of such standards preclude their voluntary use by those other than SCTE members, whether used domestically or internationally.

SCTE assumes no obligations or liability whatsoever to any party who may adopt the Standards. Such adopting party assumes all risks associated with adoption of these Standards, and accepts full responsibility for any damage and/or claims arising from the adoption of such Standards.

Attention is called to the possibility that implementation of this standard may require the use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. SCTE shall not be responsible for identifying patents for which a license may be required or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Patent holders who believe that they hold patents which are essential to the implementation of this standard have been requested to provide information about those patents and any related licensing terms and conditions. Any such declarations made before or after publication of this document are available on the SCTE web site at <http://www.scte.org>.

All Rights Reserved

© Society of Cable Telecommunications Engineers, Inc. 2009
140 Philips Road
Exton, PA 19341

Note: PacketCable™ is a registered trademark of Cable Television Laboratories, Inc., and is used in this document with permission.

Contents

1	INTRODUCTION	1
1.1	OVERVIEW.....	1
1.2	PURPOSE OF DOCUMENT	1
1.3	ORGANIZATION OF DOCUMENT.....	1
1.4	REQUIREMENTS	1
2	REFERENCES	2
2.1	NORMATIVE	2
2.2	INFORMATIVE.....	2
2.3	REFERENCE ACQUISITION.....	2
3	TERMS AND DEFINITIONS	2
4	ABBREVIATIONS AND ACRONYMS.....	3
5	IPCABLECOM MANAGEMENT EVENT MIB	4

This page intentionally left blank.

1 INTRODUCTION

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. Use of a common event mechanism facilitates management of the MTA in a multi-vendor environment and provides a standard means to implement IPCablecom 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

The Management Event MIB defined in this document provides a set of objects required for the management of IPCablecom compliant MultiMedia Terminal Adapter (MTA) devices. The mechanisms to control the event reporting are defined in this specification.

This MIB itself is structured as six groups:

- Management information that controls the event reporting (pktcDevEventControl).
- Management information that configures the reporting of the various programmable events (pktcDevEventConfig).
- Management information that configures the event throttling control (pktcDevEventThrottle).
- Management information that configures that allows the retrieval of events via SNMP (pktcDevEventLocal).
- Management information that specifies the information sent in traps and informs (pktcDevEventNotify).
- Management information that defines the trap and inform messages (pktcDevEventNotification).

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

The following documents contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreement based on this standard are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.

2.1 Normative

- [1] SCTE 165-16 2009, IPCablecom 1.5 Part 16: Management Event Mechanism Specification
- [2] IETF RFC 1034/STD0013, Domain names - concepts and facilities, November, 1987.
- [3] IETF RFC 2578/STD0058, Structure of Management Information Version 2 (SMIv2), April 1999.
- [4] IETF RFC 2579, Textual Conventions for SMIv2, April 1999.
- [5] IETF RFC 2580/STD0058, Conformance Statements for SMIv2, April 1999.
- [6] IETF RFC 3550, RTP: A Transport Protocol for Real-Time Applications, July 2003.
- [7] SCTE 165-5 2009, IPCablecom 1.5 Part 5: MTA Device Provisioning

2.2 Informative

- [8] SCTE 167-7 2009, IPCablecom 1.5 Part 7: MTA MIB..
- [9] SCTE 165-8 2009, IPCablecom 1.5 Part 8: Signaling MIB.
- [10] SCTE 165-3 2009, IPCablecom 1.5 Part 3: Network-Based Call Signaling Protocol.
- [11] SCTE 165-10 2009, IPCablecom 1.5 Part 10: Security

2.3 Reference Acquisition

- 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 IPCablecom document uses the following terms and definitions:

Endpoint A Terminal, Gateway or MCU

4 ABBREVIATIONS AND ACRONYMS

This IPCablecom document uses the following abbreviations:

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