Video MIBs

The SCTE-HMS-MPEG-MIB and SCTE-HMS-QAM-MIB are supported under the video management framework of Cisco cBR-8 routers.

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SCTE-HMS-MPEG-MIB

SCTE-HMS-MPEG-MIB MIB module represents the MPEG equipment in the headend. It defines both the MPEG input and output MIB objects for managing MPEG input and output transport streams, programs and elementary streams. It provides both input and output related statistics, as well as program mapping and video session information. It includes the following tables:

mpegInputTSEntry

Provides the details of input transport stream to a video session.

mpegInputProgEntry

Describes the PSI of each incoming program.

mpegProgESEntry

Contains information about the elementary streams in a program.

mpegInputStatsEntry

Each entry in this table describes statistics for each input transport stream.

mpegInputUdpOriginationEntry

Specifies the UDP unicast or multicast flows of an input transport stream. For unicast streams, it represents the UDP port and optionally destination IP address of the input transport stream origination UDP IP flow. For multicast streams, it represents the set of SSM multicast groups of the input transport stream origination UDP IP flow.

mpegInsertPacketEntry

Describes packet insertion information. Typical packets that are inserted at the RF output of a device are PSI, PSIP, and CVCT MPEG packets. These packets have their own PID. This table may be empty if the video device does not support packet insertion or does not have any packet insertion configured.

mpegOutputStatsEntry

Specifies the diagnostic statistics objects for the output transport stream of an MPEG device.

mpegOutputTSEntry

Specifies the attributes of an outgoing transport stream SPTS or MPTS.

mpegOutputProgEntry

Describes the PSI of each outgoing program.

mpegOutputProgElemStatsEntry

Contains the statistical information associated with the elementary streams of an MPEG program.

mpegOutputUdpDestinationEntry

Specifies the UDP unicast or multicast of the output transport stream this entry references.

mpegProgramMappingEntry

Describes program mappings, i.e., ties the input destination to the output destination for every active program in the device.

mpegVideoSessionEntry

Stores video session information. The session type is VOD, SDV or DB. It captures logical information about a video stream, such as source and destination addresses, UDP port etc., and also ties this information with direct mapping of input and output programs.

mpegVideoSessionPtrEntry

Provides a quick reference of the program mapping and input/output transport stream connection information associated with a video session.

mpegInputTSOutputSessionEntry

Specifies the list of output session indexes that the input transport stream entry is feeding. For unicast sessions, it typically points to just one output session. For multicast sessions, it points to all the output sessions using this internally replicated input transport stream.

SCTE-HMS-QAM-MIB

SCTE-HMS-QAM-MIB represents edge QAM equipment present in the headend. It defines QAM channel related configuration MIB objects associated with physical and logical characteristics of the QAM channel. It includes the following tables:

qamChannelTable

Describes the configuration and attribution of each QAM channel designated by ifIndex.

qamChannelCommonTable

Describes QAM channel output bandwidth and utilization information designation by ifIndex.

qamConfigTable

Contains the following parameters for a range of QAM Channels:

- IP addresses configuration for the QAM channels (VEI IP Addresses)
- Program number range associated with QAM channels (constant in Cisco cBR-8 routers)
- UDP port range (constant in Cisco cBR-8 routers)

CISCO-ENTITY-ALARM-MIB

This MIB module defines the managed objects that support the monitoring of alarms generated by physical entities contained by the system, including chassis, slots, modules, ports, power supplies, and fans. It includes the following tables:

ceAlarmDescrMapTable

For each type of entity (represented entPhysicalVendorType OID), this table contains a mapping between a unique ceAlarmDescrIndex and entPhysicalvendorType OID.

ceAlarmDescrTable

This table contains a description for each alarm type defined by each vendor type employed by the system. Observe that this table is sparse in nature, as it is rarely the case that a physical entity type needs to define every alarm in its alarm space.

ceAlarmTable

This table specifies alarm control and status information related to each physical entity contained by the system, including the alarms currently being asserted by each physical entity capable of generating alarms.

ceAlarmHistTable

This table contains a history of ceAlarmIndicate and ceAlarmClear traps generated by the agent.

ceAlarmFilterProfileTable

This table contains a list of alarm filter profiles.