# CableLabs® Definition MIB Specification

## CL-SP-MIB-CLABDEF-I06-070119

**ISSUED**

### Notice

# Document Status Sheet

| | |
|---|---|
| **Document Control Number:** | CL-SP-MIB-CLABDEF-I06-070119 |
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| **Distribution Restrictions:** | ~~Author Only~~ ~~CL/Member~~ ~~CL/Vendor~~ Public |

**Key to Document Status Codes:**

| | |
|---|---|
| **Work in Progress** | An incomplete document, designed to guide discussion and generate feedback, which 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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# 1 SCOPE

This specification describes the namespace organization for the CableLabs enterprise MIB. It defines the CableLabs Definition MIB module (CLAB-DEF-MIB), whose purpose is to be the central registry of Object Identifiers (OIDs) for CableLabs, and as such, to provide the private layout of the CableLabs Object Identifier structure.

# 2 REFERENCES

This specification is referenced by several CableLabs projects including DOCSIS®, CableHome®, and PacketCable™. It defines the CableLabs OID registry from which each project assigns its own MIB information modules. As such, the CableLabs Definition MIB constitutes a normative reference to several CableLabs specifications, including those listed below.

**DOCSIS Specifications** (http://www.cablemodem.com/specifications/)

- DOCSIS Set-Top Gateway Interface Specification: CM-SP-DSG
- DOCSIS Testing MIB Specification: CM-SP-TestMIB
- eDOCSIS™ Specification: CM-SP-eDOCSIS
- DOCSIS M-CMTS Operations Support System Interface Specification: CM-SP-M-OSSI
- DOCSIS Layer 2 Virtual Private Networks Specification: CM-SP-L2VPN
- DOCSIS TDM Emulation Interfaces Specification: CM-SP-TEI
- DOCSIS 3.0 Operations Support System Interface Specification: CM-SP-OSSIv3.0

**CableHome Specifications** (http://www.cablelabs.com/projects/cablehome/specifications/)

- CableHome 1.0 Specification: CH-SP-CH1.0
- CableHome 1.1 Specification: CH-SP-CH1.1
- CableHome PS Device MIB: CH-SP-MIB-PSDEV
- CableHome Security MIB: CH-SP-MIB-SEC
- CableHome Addressing Portal MIB: CH-SP-MIB-CAP
- CableHome DHCP Portal MIB: CH-SP-MIB-CDP
- CableHome Test Portal MIB: CH-SP-MIB-CTP
- CableHome Quality of Service MIB: CH-SP-MIB-QOS

**PacketCable Specifications** (http://www.packetcable.com/specifications/)

- PacketCable Multimedia Terminal Adapter (MTA) MIB: PKTC-MTA-MIB
- PacketCable Signaling MIB: PKTC-SIG-MIB
- PacketCable Event Management: MIB: PKTC-SP-EVEMIB
- PacketCable Security Specification: PKT-SP-SEC
- PacketCable Electronic Surveillance Specification: PKT-SP-ESP
- PacketCable Provisioning, Activation, Configuration and Management: PKT-SP-PACM

The CableLabs Definition MIB Specification follows the Internet Standard Management Framework described in IETF RFC 3410 [3]. The CableLabs Definition MIB module also imports its X.509 textual convention from IETF RFC 2578 [1] and RFC 4131 [2].

## 2.1 Normative References

[1] IETF RFC 2578, Structure of Management Information Version 2 (SMIv2), April 1999.

[2] IETF RFC 4131, Management Information Base for Data Over Cable Service Interface Specification (DOCSIS) Cable Modems and Cable Modem Termination Systems for Baseline Privacy Plus, September 2005.

## 2.2 Informative References

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

## 2.3 Reference Acquisition

CableLabs Specifications:

- Cable Television Laboratories, Inc., 858 Coal Creek Circle, Louisville, CO 80027; Phone +1-303-661-9100; Fax +1-303-661-9199; http://www.cablelabs.com.

IETF Specifications:

- IETF Secretariat, 46000 Center Oak Plaza, Sterling, VA 20166, Phone: +1-571-434-3500, Fax: +1-571-434-3535; http://www.ietf.org.

# 3 ACRONYMS

This specification uses the following acronyms:

| | |
|---|---|
| **BSoD** | Business Services over DOCSIS |
| **CA** | Certificate Authority |
| **CM** | Cable Modem |
| **CMS** | Call Management Server |
| **CMTS** | Cable Modem Termination System |
| **CPE** | Customer Premises Equipment |
| **CVC** | Code Verification Certificate |
| **DER** | Distinguished Encoding Rules |
| **DEPI** | Downstream External PHY Interface |
| **DOCSIS** | Data-Over-Cable Service Interface Specification |
| **DSID** | Downstream Service Identifier |
| **DTI** | DOCSIS Timing Interface |
| **eDOCSIS** | Embedded DOCSIS |
| **eSAFE** | Embedded Service/Application Functional Entity |
| **IETF** | Internet Engineering Task Force |
| **KDC** | Key Distribution Center |
| **L2VPN** | Layer 2 Virtual Private Network |
| **M-CMTS** | Modular Cable Modem Termination System |
| **MIB** | Management Information Base |

| | |
|---|---|
| **OID** | Object Identifier |
| **OSSI** | Operations Support System Interface |
| **PS** | Portal Services |
| **PW** | Pseudo Wire |
| **QoS** | Quality of Service |
| **RFI** | Radio Frequency Interface |
| **SLED** | Software Loopback for eDOCSIS |
| **TDM** | Time Division Multiplexing |
| **TEA** | TDM Emulation Adapter |
| **X509** | ITU-T Recommendation X.509: Information Technology – Open Systems Interconnection – The Directory: Authentication Framework |

# 4 REQUIREMENTS

The CableLabs Definition MIB MUST be implemented as defined below.

```
CLAB-DEF-MIB DEFINITIONS ::= BEGIN
IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
    enterprises
                    FROM SNMPv2-SMI
    DocsX509ASN1DEREncodedCertificate
                    FROM DOCS-IETF-BPI2-MIB;

cableLabs MODULE-IDENTITY
    LAST-UPDATED "200701191700Z" -- January 19, 2007
    ORGANIZATION "Cable Television Laboratories, Inc."
    CONTACT-INFO
           "Postal: Cable Television Laboratories
                    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 defines the namespace organization for the
            CableLabs enterprise OID registry.

            Copyright 1999-2007 Cable Television Laboratories, Inc.
            All rights reserved."

    REVISION "200701191700Z" -- January 19, 2007
    DESCRIPTION
            "This revision published as CL-SP-MIB-CLABDEF-I06."

    REVISION "200504081700Z" -- April 8, 2005
    DESCRIPTION
            "This revision published as CL-SP-MIB-CLABDEF-I05."
    ::= { enterprises 4491 }

-- Sub-tree for Registrations
clabFunction            OBJECT IDENTIFIER ::= { cableLabs 1 }
clabFuncMib2            OBJECT IDENTIFIER ::= { clabFunction 1 }
clabFuncProprietary     OBJECT IDENTIFIER ::= { clabFunction 2 }

-- Sub-tree for Project Definitions
clabProject             OBJECT IDENTIFIER ::= { cableLabs 2 }
clabProjDocsis          OBJECT IDENTIFIER ::= { clabProject 1 }
clabProjPacketCable     OBJECT IDENTIFIER ::= { clabProject 2 }
clabProjOpenCable       OBJECT IDENTIFIER ::= { clabProject 3 }
clabProjCableHome       OBJECT IDENTIFIER ::= { clabProject 4 }

-- Sub-tree for Global Security Definitions
clabSecurity            OBJECT IDENTIFIER ::= { cableLabs 3 }
clabSecCertObject       OBJECT IDENTIFIER ::= { clabSecurity 1 }

-- Sub tree for CableLabs cross project common MIB definitions
clabCommonMibs          OBJECT IDENTIFIER ::= { cableLabs 4 }

--
```

```
-- CableLabs DOCSIS Project Sub-tree Definitions
--
dsgMIB OBJECT IDENTIFIER
    -- DOCSIS Set-top Gateway (DSG) MIB module
    -- This object identifier points to the MIB module
    -- DOCSIS-SETTOP-GATEWAY-MIB, which was deprecated by
    -- DSG-IF-MIB MIB module (dsgIfMib).
    -- Reference:
    -- CableLabs DOCSIS Set-top Gateway (DSG) Interface Specification
    ::= { clabProjDocsis 1 }

docsLoadBalanceMib OBJECT IDENTIFIER
    -- DOCSIS MIB module defining the CMTS configuration parameters to
    -- support Load Balancing requirements."
    ::= { clabProjDocsis 2 }

dsgIfMIB OBJECT IDENTIFIER
    -- DOCSIS Set-top Gateway (DSG) MIB module
    -- Obsoletes DOCSIS-SETTOP-GATEWAY-MIB Module (dsgMib)
    -- defined initially in DOCSIS Set-top Gateway (DSG) Interface
    -- Specification SP-DSG-I01-020228.
    -- Reference:
    -- CableLabs DOCSIS Set-top Gateway (DSG) Interface Specification
    ::= { clabProjDocsis 3 }

dsgIfStdMib OBJECT IDENTIFIER
    -- DOCSIS Set-top Device (DSG) MIB module.
    -- Reference:
    -- CableLabs DOCSIS Set-top Gateway (DSG) Interface Specification
    ::= { clabProjDocsis 4 }

docsIfExt2Mib OBJECT IDENTIFIER
    -- This MIB module contains the management objects that enhance
    -- DOCSIS RFI Interface Extensions. Contains Enhancements to
    -- DOCSIS RFI interface MIB module.
    -- Reference:
    -- CableLabs DOCSIS RFI Interface Specification.
    ::= { clabProjDocsis 5 }

docsIfMCmtsMib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- configuration and management of the Downstream External
    -- PHY Interface (DEPI) of the M-CMTS architecture (Modular CMTS).
    -- Reference:
    -- CableLabs DOCSIS M-OSSI Interface Specification.
    ::= { clabProjDocsis 6 }

dtiMib OBJECT IDENTIFIER
    -- This MIB module provides management objects necessary
    -- to configure and manage the DOCSIS Timing Interface
    -- devices.
    -- Reference:
    -- CableLabs DOCSIS M-OSSI Interface Specification.
    ::= { clabProjDocsis 7 }

docsL2vpnMIB OBJECT IDENTIFIER
    -- This MIB module provides management objects for devices
    -- complying with the DOCSIS L2VPN requirements.
    -- Reference:
    -- CableLabs DOCSIS BSoD Layer 2 Virtual Private Networks
    -- Specification.
    ::= { clabProjDocsis 8 }
```

```
docsDiagMib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- Diagnostic Log for DOCSIS-compliant Cable Modem
    -- Termination Systems (CMTS).
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 9 }

docsSubmgt3Mib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- CMTS control of the IPv4 and IPv6 traffic with origin and
    -- destination to CMs and/or CPEs behind the CM.
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 10 }

docsSecMib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- management of the security requirements in the DOCSIS
    -- Security Specification.
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 11 }

docsTestMIB OBJECT IDENTIFIER
    -- DOCSIS Test MIB module supporting programmable test features
    -- for DOCSIS-compliant Cable Modems (CM) and Cable Modems
    -- Termination Systems (CMTS).
    -- Reference:
    -- CableLabs DOCSIS Testing MIB Specification
    ::= { clabProjDocsis 12 }

sledMib OBJECT IDENTIFIER
    -- eDOCSIS MIB module supporting the Software Loopback Application
    -- for eDOCSIS (SLED).
    -- Reference:
    -- CableLabs eDOCSIS Specification
    ::= { clabProjDocsis 13 }

esafeMib OBJECT IDENTIFIER
    -- This MIB module provides management objects necessary
    -- to configure functionality of eSAFE components of a device
    -- implementing an eDOCSIS compliant Cable Modem and one or
    -- more eSAFE elements.
    -- Reference:
    -- CableLabs eDOCSIS Specification
    ::= { clabProjDocsis 14 }

teaPwMIB OBJECT IDENTIFIER
    -- This MIB module provides management objects for
    -- modeling of Pseudo Wire Edge-to-Edge services carried
    -- over a general Packet Switched Network and is based
    -- on the IETF Internet Draft draft-ietf-pwe3-pw-mib-07.txt.
    -- Reference:
    -- CableLabs TDM Emulation Interface Specification
    ::= { clabProjDocsis 15 }

teaPwTDMMIB OBJECT IDENTIFIER
    -- This MIB module provides management objects for
    -- encapsulating TDM (T1,E1, T3, E3, NxDS0) as
    -- pseudo-wires over packet-switching networks (PSN)
    -- and is based on the IETF Internet Draft
    -- draft-ietf-pwe3-tdm-mib-04.txt.
```

```
    -- Reference:
    -- CableLabs TDM Emulation Interface Specification
    ::= { clabProjDocsis 16 }

teaPwTcMIB OBJECT IDENTIFIER
    -- This MIB module defines Textual Conventions (TCs)
    -- to represent commonly-used Pseudo Wire (PW)
    -- management information and is based on the IETF
    -- Internet Draft draft-ietf-pwe3-pw-tc-mib-07.txt.
    -- Reference:
    -- CableLabs TDM Emulation Interface Specification
    ::= { clabProjDocsis 17 }

docsMcastMib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- management of Multicast over DOCSIS to support Multicast
    -- DSID forwarding and or bonded multicast.
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 18 }

docsMcastAuthMib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- management of the CMTS Multicast Authorization Module.
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 19 }

docsIf3Mib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- management of DOCSIS 3.0 features, primarily channel bonding,
    -- interface topology and enhanced signal quality monitoring.
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 20 }

docsQos3Mib OBJECT IDENTIFIER
    -- This MIB module provides management objects for the
    -- management of QOS for channel bonding.
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabProjDocsis 21 }

--
-- CableLabs CableHome Project Sub-tree Definitions
-- Reference
-- CableLabs CableHome Specification
--
cabhPsDevMib OBJECT IDENTIFIER
    -- CableHome MIB module defining the basic management objects for
    -- the Portal Services logical element of a CableHome compliant
    -- Residential Gateway device. The PS device parameters describe
    -- general PS Device attributes and behavior characteristics
    ::= { clabProjCableHome 1 }

cabhSecMib OBJECT IDENTIFIER
    -- CableHome MIB module defining the basic management objects for
    -- the firewall and other security features of the Portal Services
    -- element.
    ::= { clabProjCableHome 2 }

cabhCapMib OBJECT IDENTIFIER
    -- CableHome MIB module defining the basic management objects for
```

```
    -- the CableHome Addressing Portal (CAP) function of the Portal
    -- Services element.
    ::= { clabProjCableHome 3 }

cabhCdpMib OBJECT IDENTIFIER
    -- This MIB module supplies the basic management objects for the
    -- CableHome DHCP Portal (CDP) function of the Portal Services
    -- element.
    ::= { clabProjCableHome 4 }

cabhCtpMib OBJECT IDENTIFIER
    -- CableHome MIB module supporting the remote LAN diagnostic
    -- features provided by the CableHome Test Portal (CTP) function
    -- of the Portal Services element.
    ::= { clabProjCableHome 5 }

cabhQosMib OBJECT IDENTIFIER
    -- CABLEHOME QOS MIB Module (cabhQosMib).
    -- This object identifier points to the MIB module
    -- CABH-QOS-MIB, which is being deprecated by
    -- CABH-QOS2-MIB module (cabhQos2Mib).
    -- Reference:
    -- CableLabs CableHome 1.1 Specification
    ::= { clabProjCableHome 6 }

cabhCsaMib OBJECT IDENTIFIER
    -- CableHome MIB module defining management objects for the
    -- configuration and monitoring of CableHome Commercial Services
    -- Annex.
    -- Reference:
    -- CableLabs CableOffice Commercial Services Annex MIB
    -- Specification
    ::= { clabProjCableHome 7 }

cabhQos2Mib OBJECT IDENTIFIER
    -- Obsoletes CABH-QOS-MIB module (cabhQosMib)
    -- defined initially in CABLEHOME 1.1 Interface Specification.
    -- This MIB module defines the Quality of Service Management
    -- Information Base (MIUB) for CableHome UPnP QOS-compliant
    -- devices.
    -- Reference:
    -- CableLabs CableHome 1.1 Specification
    ::= { clabProjCableHome 8 }

--
-- CableLabs PacketCable Project Sub-tree Definitions
--
pktcMtaMib OBJECT IDENTIFIER
    -- PacketCable MIB module defining the basic management object for
    -- the Multimedia Terminal Adapter (MTA) devices compliant with
    -- PacketCable requirements.
    -- Reference
    -- CableLabs PacketCable MTA Device Provisioning Specification
    ::= { clabProjPacketCable 1 }

pktcSigMib OBJECT IDENTIFIER
    -- PacketCable MIB module defining the basic management object for
    -- the PacketCable MTA Signaling protocols. This version of the MIB
    -- includes common signaling and Network Call Signaling (NCS)
    -- related signaling objects.
    -- Reference
    -- CableLabs PacketCable MTA Device Provisioning Specification
    ::= { clabProjPacketCable 2 }
```

```
pktcEventMib OBJECT IDENTIFIER
    -- PacketCable MIB module defining the basic management objects for
    -- event reporting.
    -- Reference
    -- CableLabs PacketCable Management Event Specification
    ::= { clabProjPacketCable 3 }

pktcSecurity OBJECT IDENTIFIER
    -- CableLabs OID reserved for security and used to specify errors
    -- that can be returned for the Kerberos KDC - Provisioning
    -- Server interface, or the MTA-CMS Kerberized IPsec interface, or
    -- the MTA-Provisioning Server Kerberized SNMPv3 interface.
    -- CableLabs PacketCable Security Specification
    ::= { clabProjPacketCable 4 }

pktcLawfulIntercept OBJECT IDENTIFIER
    -- CableLabs OID reserved for the PacketCable Electronic
    -- Surveillance Protocol (PCESP) between the Delivery Function
    -- and Collection Function. This OID is used to define the ASN.1
    -- PCESP messages.
    -- CableLabs PacketCable Electronic Surveillance Protocol
    -- Specification
    ::= { clabProjPacketCable 5 }

--
-- Sub-tree for PacketCable MIB Enhancements
--

pktcEnhancements OBJECT IDENTIFIER ::= { clabProjPacketCable 6 }


-- The following MIB objects are being introduced for
-- incorporation of new MIB objects (MIB enhancements)
-- proposed to the PacketCable MIB modules.
-- This includes new MIB objects being introduced
-- as part of the PacketCable MIB enhancement efforts
-- and as a place holder for future revisions.
-- This sub-division would facilitate easier incorporation
-- of proposed IETF Internet-Drafts and RFCs by keeping enhancements
-- independent of RFC or Internet-Draft changes.
-- For new MIB tables that use previously used indices, it is
-- recommended that the AUGMENT CLAUSE be used to aid SNMP Operations,
-- as deemed necessary.


pktcEnMtaMib OBJECT IDENTIFIER
    -- PacketCable MIB module enhancements to the basic management
    -- objects defined by the MIB group pktcMtaMib for the Multimedia
    -- Terminal Adapter (MTA) devices compliant with PacketCable
    -- requirements.
    -- Reference:
    -- CableLabs PacketCable MTA Device Provisioning Specification.
    ::= { pktcEnhancements 1 }

pktcEnSigMib OBJECT IDENTIFIER
    -- PacketCable MIB module enhancements to the basic management
    -- objects defined by the MIB group pktcSigMib for the
    -- PacketCable MTA Signaling protocols.
    -- Reference:
    -- CableLabs PacketCable MTA Device Provisioning Specification.
    ::= { pktcEnhancements 2 }
```

```
pktcEnEventMib OBJECT IDENTIFIER
    -- PacketCable MIB module enhancements to the basic management
    -- objects defined by the MIB group pktcEventMib for event reporting.
    -- Reference:
    -- CableLabs PacketCable Management Event Specification.
    ::= { pktcEnhancements 3 }

pktcEnSecurityMib OBJECT IDENTIFIER
    -- PacketCable MIB module enhancements to the basic management
    -- objects defined by the reserved MIB group pktcSecurity.
    -- Reference:
    -- CableLabs PacketCable Security Specification.
    ::= { pktcEnhancements 4 }

--
-- End of sub-tree for PacketCable MIB Enhancements
--

pktcPACMMibs OBJECT IDENTIFIER
    -- PacketCable MIB module defining the basic MIB
    -- Objects related to Provisioning, Activation,
    -- Configuration and Management (PACM)
    -- Reference:
    -- CableLabs PacketCable PACM Specification.
    ::= { clabProjPacketCable 7 }

pktcServiceMibs OBJECT IDENTIFIER
    -- PacketCable MIB module defining the basic MIB
    -- Objects related to Service specific definitions
    -- Reference:
    -- CableLabs PacketCable Service specifications
    ::= { clabProjPacketCable 8 }

pktcSupportMibs OBJECT IDENTIFIER
    -- PacketCable MIB module defining the basic MIB
    -- Objects related to service support definitions,
    -- (independent of PACM or service specific definitions)
    -- Reference:
    -- CableLabs PacketCable specifications
    ::= { clabProjPacketCable 9 }

--
-- PacketCable PACM sub-tree
--
pktcPACMTC OBJECT IDENTIFIER
    -- PacketCable MIB module defining PacketCable
    -- textual conventions for describing PacketCable
    -- PACM MIB objects.
    -- Reference
    -- CableLabs PacketCable Provisioning, Activation,
    -- Configuration and Management specification
    ::= { pktcPACMMibs 1 }

pktcPACMUEMib OBJECT IDENTIFIER
    -- PacketCable MIB module defining PacketCable
    -- PACM MIB Objects related to User Equipment.
    -- Reference
    -- CableLabs PacketCable Provisioning, Activation,
    -- Configuration and Management specification
    ::= { pktcPACMMibs 2 }

pktcPACMUserMib OBJECT IDENTIFIER
    -- PacketCable MIB module defining PacketCable
```

```
    -- PACM MIB Objects related to Users.
    -- Reference
    -- CableLabs PacketCable Provisioning, Activation,
    -- Configuration and Management specification
    ::= { pktcPACMMibs 3 }

--
-- PacketCable Service support sub-tree
--
pktcESSupportMibs OBJECT IDENTIFIER
    -- PacketCable MIB module defining PacketCable
    -- Electronic Surveillance (ES) support MIB Objects.
    -- Reference
    -- CableLabs PacketCable Electronic Surveillance
    -- specification
    ::= { pktcSupportMibs 1 }
--
--
-- Definition of CableLabs Security Certificate Objects
--
clabSrvcPrvdrRootCACert OBJECT-TYPE
    SYNTAX      DocsX509ASN1DEREncodedCertificate
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The X509 DER-encoded CableLabs Service Provider Root CA
            Certificate."
    REFERENCE
            "CableLabs CableHome Specification;
            CableLabs PacketCable Security Specification."
    ::= { clabSecCertObject 1 }

clabCVCRootCACert OBJECT-TYPE
    SYNTAX      DocsX509ASN1DEREncodedCertificate
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The X509 DER-encoded CableLabs CVC Root CA Certificate."
    REFERENCE
            "CableLabs CableHome Specification;
            CableLabs PacketCable Security Specification."
    ::= { clabSecCertObject 2 }

clabCVCCACert OBJECT-TYPE
    SYNTAX      DocsX509ASN1DEREncodedCertificate
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The X509 DER-encoded CableLabs CVC CA Certificate."
    REFERENCE
            "CableLabs CableHome Specification;
            CableLabs PacketCable Security Specification."
    ::= { clabSecCertObject 3 }

clabMfgCVCCert OBJECT-TYPE
    SYNTAX      DocsX509ASN1DEREncodedCertificate
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The X509 DER-encoded Manufacturer CVC Certificate."
    REFERENCE
            "CableLabs CableHome Specification;
            CableLabs PacketCable Security Specification."
```

```
    ::= { clabSecCertObject 4 }

clabMfgCACert OBJECT-TYPE
    SYNTAX      DocsX509ASN1DEREncodedCertificate
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The X509 DER-encoded Manufacturer CA Certificate."
    REFERENCE
            "CableLabs CableHome Specification;
            CableLabs PacketCable Security Specification."
    ::= { clabSecCertObject 5 }

--
-- CableLabs cross project common MIB sub-tree definitions
--

clabUpsMib OBJECT IDENTIFIER
    -- CableLabs cross project MIB module defining the basic management
    -- objects for the configuration and monitoring of the battery
    -- backup and UPS functionality for CableLabs compliant devices.
    ::= { clabCommonMibs 1 }

clabTopoMib OBJECT IDENTIFIER
    -- This CableLabs cross project MIB module provides
    -- management objects for the management of fiber
    -- nodes in the Cable plant
    -- Reference:
    -- CableLabs DOCSIS 3.0 OSSI Specification.
    ::= { clabCommonMibs 2 }

END
```

# Appendix I Revision History

The following Engineering Change Notices were incorporated into CL-SP-MIB-CLABDEF-I02-020920:

| ECN | ECN Date | Summary |
|---|---|---|
| CH1-N-02016 | 7/25/02 | Add a new branch into the CLABDEF MIB for CableLabs Security for CableLabs certificates. |

The following Engineering Change Notices were incorporated into CL-SP-MIB-CLABDEF-I03-040113:

| ECN | ECN Date | Summary |
|---|---|---|
| MIB-CLABDEF-N-03.0017-3 | 1/8/04 | Clear SMICng compilation errors and properly register some OID branches. Addition of new TC for X509 certificates. |

The following Engineering Change Notices were incorporated into CL-SP-MIB-CLABDEF-I04-040804:

| ECN | ECN Date | Summary |
|---|---|---|
| MIB-CLABDEF-N-04.0018-3 | 7/14/04 | Add OBJECT IDENTITY place holder for DOCS-LOADBALANCING-MIB. Add Object Entity for CableHome CSA. Updated docsLoadBalMib definition. Add dsgifMib, eSafe branch, typo corrections, add clabMfgCACert MIB object |

The following Engineering Change Notices were incorporated into CL-SP-MIB-CLABDEF-I05-050408:

| ECN | ECN Date | Summary |
|---|---|---|
| MIB-CLABDEF-N-04.0019-4 | 2/22/05 | Addition of PacketCable MIB Extensions |
| MIB-CLABDEF-N-05.0020-1 | 3/23/05 | New Object Identifiers for CLAB-DEF-MIB MIB Module |

The following Engineering Change Notices were incorporated into CL-SP-MIB-CLABDEF-I06-070119:

| ECN | ECN Date | Summary |
|---|---|---|
| MIB-CLABDEF-N-06.0021-1 | 3/27/2006 | Incorporation of the PacketCable 2.0 sub-tree (the contents of this ECN were not incorporated, as it was superseded by the following ECN). |
| MIB-CLABDEF-N-06.0023-2 | 11/1/2006 | Correction to MIB-CLABDEF-N-04.0021-1 |
| MIB-CLABDEF-N-06.0024-4 | 1/17/2007 | Updates to CLAB-DEF-MIB for M-CMTS and DOCSIS OSSIv3.0 MIB Module OID. |
| MIB-CLABDEF-N-07.0025-1 | 1/18/07 | Editorial corrections and clarification of references. |