

CableLabs[®] Definition MIB Specification

CL-SP-MIB-CLABDEF-I06-070119

ISSUED

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Document Status Sheet

Document Control Number:	CL-SP-MIB-CLABDEF-I06-070119		
Document Title:	CableLabs® Definition MIB Specification		
Revision History:	I01 – April 5, 2002 I02 – September 20, 2002 I03 – January 13, 2004 I04 – August 4, 2004 I05 – April 8, 2005 I06 – January 19, 2007		
Date:	January 19, 2007		
Status:	Work in Progress	Draft	Issued
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 }

teaPwTDM MIB 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
::= { clabProjDccsis 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
::= { clabProjDccsis 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.
::= { clabProjDccsis 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.
::= { clabProjDccsis 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.
::= { clabProjDccsis 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.
::= { clabProjDccsis 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 OSSv3.0 MIB Module OID.
MIB-CLABDEF-N-07.0025-1	1/18/07	Editorial corrections and clarification of references.