

Superseded

CableHome™ PSDEV MIB Specification

CH-SP-MIB-PSDEV-I05-040129

Issued

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- 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.
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1 SCOPE

This specification defines CableHome Portal Services Device (SL) MIB information.

Superseded

2 REFERENCES

2.1 Normative References

In order to claim compliance with this specification, it is necessary to conform to the following standards and other works as indicated, in addition to the other requirements of this specification. Notwithstanding, intellectual property rights may be required to use or implement such normative references.

- [1] CableHome 1.0 Specification, CH-SP-CH1.0-I05-030801, August 1, 2003.
- [2] CableHome 1.1 Specification, CH-SP-CH1.1-I03-040129, January 29, 2004.
- [3] CableLabs® Definition MIB Specification, CL-SP-MIB-CLABDEF-I03-040113, January 13, 2004.

2.2 Reference Acquisition

CableLabs Specifications:

- Cable Television Laboratories, Inc. <http://www.cablelabs.com/>

3 ACRONYMS

This specification uses the following acronyms:

CAP	CableHome Addressing Portal
CDC	CableHome DHCP Client (component of CDP)
CDP	CableHome DHCP Portal
CDS	CableHome DHCP Server (component of CDP)
CMP	CableHome Management Portal
CTP	CableHome Test Portal
DHCP	Dynamic Host Configuration Protocol
NAPT	Network Address and Port Translation
NAT	Network Address Translation
PS	Portal Services

4 REQUIREMENTS

The CableHome™ PSDev MIB MUST be implemented as defined below.

```

CABH-PS-DEV-MIB DEFINITIONS ::= BEGIN
IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
    Integer32,
    NOTIFICATION-TYPE          FROM SNMPv2-SMI

    TruthValue,
    PhysAddress,
    DateAndTime,
    TimeStamp                  FROM SNMPv2-TC

    SnmpAdminString           FROM SNMP-FRAMEWORK-MIB

    OBJECT-GROUP,
    MODULE-COMPLIANCE,
    NOTIFICATION-GROUP       FROM SNMPv2-CONF

    InetAddressType,
    InetAddress               FROM INET-ADDRESS-MIB

    IANAifType                FROM IANAifType-MIB

    docsDevSwCurrentVers,
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    docsDevSwFilename,
    docsDevSwServer          FROM DOCS-CABLE-DEVICE-MIB -- RFC2669

    cabhCdpServerDhcpAddress,
    cabhCdpWanDataAddrClientId,
    cabhCdpLanTransThreshold,
    cabhCdpLanTransCurCount FROM CABH-CDP-MIB

    ZeroBasedCounter32       FROM RMON2-MIB

    clabProjCableHome        FROM CLAB-DEF-MIB;

cabhPsDevMib MODULE-IDENTITY

    LAST-UPDATED      "200401290000Z" -- January 29, 2004
    ORGANIZATION      "CableLabs Broadband Access Department"
    CONTACT-INFO
        "Kevin Luehrs
        Postal: Cable Television Laboratories, Inc.
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        Louisville, Colorado 80027
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        Phone:  +1 303-661-9100
        Fax:    +1 303-661-9199
        E-mail: k.luehrs@cablelabs.com; mibs@cablelabs.com"
    DESCRIPTION
        "This MIB module supplies 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.
        Most the PS Device MIB is needed for configuration
        download."
 ::= { clabProjCableHome 1 }

-- Textual Conventions

cabhPsDevMibObjects OBJECT IDENTIFIER ::= { cabhPsDevMib 1 }
cabhPsDevBase       OBJECT IDENTIFIER ::= { cabhPsDevMibObjects 1 }
cabhPsDevProv       OBJECT IDENTIFIER ::= { cabhPsDevMibObjects 2 }
cabhPsDevAttrib     OBJECT IDENTIFIER ::= { cabhPsDevMibObjects 3 }
cabhPsDevPsAttrib   OBJECT IDENTIFIER ::= { cabhPsDevAttrib 1 }
cabhPsDevBpAttrib   OBJECT IDENTIFIER ::= { cabhPsDevAttrib 2 }
cabhPsDevPsStats    OBJECT IDENTIFIER ::= { cabhPsDevMibObjects 4 }

--
-- The following group describes the base objects in the PS.
-- These are device based parameters.
--

cabhPsDevDateTime OBJECT-TYPE
    SYNTAX      DateAndTime
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The date and time, with optional timezone information."
    ::= { cabhPsDevBase 1 }

cabhPsDevResetNow OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Setting this object to true(1) causes the stand-alone or
        embedded PS device to reboot. Device code initializes as if
        starting from a power-on reset. The CMP ensures that MIB
        object values persist as specified in Appendix I of the
        CableHome specification. Reading this object always
        returns false(2)."

```

```

 ::= { cabhPsDevBase 4 }

cabhPsDevWanManMacAddress OBJECT-TYPE
    SYNTAX      PhysAddress (SIZE (0..16))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The PS WAN-Man MAC address. This is the PS hardware
        address to be used by the CDC to uniquely identify
        the PS to the cable data network DHCP server for
        the acquisition of an IP address to be used for
        management messaging between the cable network
        NMS and the CMP."
 ::= { cabhPsDevBase 5 }

cabhPsDevWanDataMacAddress OBJECT-TYPE
    SYNTAX      PhysAddress (SIZE (0..16))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The PS WAN-Data MAC address. The PS could have multiple
        WAN-Data Interfaces, which share the same hardware address.
        The client identifiers will be unique so that each may be
        assigned a different, unique IP address."
 ::= { cabhPsDevBase 6 }

cabhPsDevTypeIdIdentifier OBJECT-TYPE
    SYNTAX      SnmpAdminString
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This is a copy of the device type identifier used in the
        DHCP option 60 exchanged between the PS and the DHCP
        server."
    REFERENCE
        "CableHome Specification, CDC Function System
        Description section."
 ::= { cabhPsDevBase 7 }

cabhPsDevSetToFactory OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Setting this object to true(1) sets all PsDev MIB objects
        to the factory default values. Reading this object always
        returns false(2)."
```

```

 ::= { cabhPsDevBase 8 }

cabhPsDevWanManClientId OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (1..80))
    MAX-ACCESS  read-write
    STATUS      deprecated
    DESCRIPTION
        "This is the client ID used for WAN-MAN DHCP requests.
        The default value is the 6 byte MAC address."
 ::= { cabhPsDevBase 9 }

cabhPsDevTodSyncStatus OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION

```

```

        "This object indicates whether the PS was able to
        successfully synchronize with the Time of Day (ToD) Server
        in the cable network. The PS sets this object to true(1) if
        the PS successfully synchronizes its time with the ToD
        server. The PS sets this object to false(2) if the PS does
        not successfully synchronize with the ToD server."
DEFVAL { false }
 ::= { cabhPsDevBase 10 }

cabhPsDevProvMode OBJECT-TYPE
SYNTAX      INTEGER
{
    dhcpmode(1),
    snmpmode(2),
    dormantCHmode(3)
}
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This object indicates the provisioning mode in which the
    PS is operating. If the PS is operating in DHCP
    Provisioning Mode as described in the CableHome
    specification, the PS sets this object to dhcpmode(1).
    If the PS is operating in SNMP Provisioning Mode, the PS
    sets this object to snmpmode(2). If the PS is not
    configured to operate in either dhcpmode or snmpmode
    it will fall back to Dormant CableHome Mode and set
    the value of cabhPsDevProvMode to dormantCHmode(3)."
```

```
 ::= { cabhPsDevBase 11 }

cabhPsDevLastSetToFactory OBJECT-TYPE
SYNTAX      TimeStamp
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The value of sysUpTime when cabhPsDevSetToFactory was
    last set to true. Zero if never reset."
```

```
 ::= { cabhPsDevBase 12 }

--
-- The following group defines Provisioning Specific parameters
--

cabhPsDevProvisioningTimer OBJECT-TYPE
SYNTAX      INTEGER (0..16383)
UNITS       "minutes"
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "This object enables the user to set the duration of the
    provisioning timeout timer. The value is in minutes.
    Setting the timer to 0 disables it. The default value
    for the timer is 5."
DEFVAL { 5 }
 ::= { cabhPsDevProv 1 }

cabhPsDevProvConfigFile OBJECT-TYPE
SYNTAX      SnmpAdminString (SIZE(1..128))
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "The URL of the TFTP host for downloading provisioning and
    configuration parameters to this device. Returns NULL if the
```

```

        server address is unknown."
 ::= { cabhPsDevProv 2 }

cabhPsDevProvConfigHash OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE(0|20))
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "Hash of the contents of the PS config file, which is
        calculated by the NMS and sent to the PS. For the SHA-1
        authentication algorithm the hash length is 160 bits. This
        hash value is encoded in binary format."
 ::= { cabhPsDevProv 3 }

cabhPsDevProvConfigFileSize OBJECT-TYPE
    SYNTAX      Integer32
    UNITS       "bytes"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Size of the configuration file."
 ::= { cabhPsDevProv 4 }

cabhPsDevProvConfigFileStatus OBJECT-TYPE
    SYNTAX      INTEGER
    {
        idle(1),
        busy(2)
    }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This object indicates the current status of the
        configuration file download process. It is provided to
        indicate to the management entity that the PS will reject
        PS Configuration File triggers (set request to
        cabhPsDevProvConfigFile) when busy."
 ::= { cabhPsDevProv 5 }

cabhPsDevProvConfigTLVProcessed OBJECT-TYPE
    SYNTAX      INTEGER (0..16383)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number of TLVs processed in config file."
 ::= { cabhPsDevProv 6 }

cabhPsDevProvConfigTLVRejected OBJECT-TYPE
    SYNTAX      INTEGER (0..16383)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Number of TLVs rejected in config file."
 ::= { cabhPsDevProv 7 }

cabhPsDevProvSolicitedKeyTimeout OBJECT-TYPE
    SYNTAX      Integer32 (15..600)
    UNITS       "seconds"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This timeout applies only when the Provisioning Server
        initiated key management (with a Wake Up message) for

```

```
SNMPv3. It is the period during which the PS will save
a number (inside the sequence number field) from the sent
out AP Request and wait for the matching AP Reply from the
Provisioning Server."
DEFVAL { 120 }
 ::= { cabhPsDevProv 8 }

cabhPsDevProvState OBJECT-TYPE
SYNTAX      INTEGER
{
    pass(1),
    inProgress(2),
    fail(3)
}
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This object indicates the completion state of the
    initialization process. Pass or Fail states occur after
    completion of the initialization flow. InProgress occurs
    from PS initialization start to PS initialization end."
 ::= { cabhPsDevProv 9 }

cabhPsDevProvAuthState OBJECT-TYPE
SYNTAX      INTEGER
{
    accepted(1),
    rejected(2)
}
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This object indicates the authentication state of the
    configuration file."
 ::= { cabhPsDevProv 10 }

cabhPsDevProvCorrelationId OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      deprecated
DESCRIPTION
    "Random value generated by the PS for use in registration
    authorization. It is for use only in the PS initialization
    messages and for PS configuration file download. This value
    appears in both cabhPsDevProvisioningStatus and
    cabhPsDevProvisioningEnrollmentReport informs to verify the
    instance of loading the configuration file."
 ::= { cabhPsDevProv 11 }

cabhPsDevTimeServerAddrType OBJECT-TYPE
SYNTAX      InetAddressType
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The IP address type of the Time server (RFC-868).
    IP version 4 is typically used."
 ::= { cabhPsDevProv 12 }

cabhPsDevTimeServerAddr OBJECT-TYPE
SYNTAX      InetAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
```

```

        "The IP address of the Time server (RFC-868). Returns
        0.0.0.0 if the time server IP address is unknown."
 ::= { cabhPsDevProv 13 }

-----
--
--   PS Device Profile Group
--
--   The cabhPsDevPsProfile contains the Residential Gateway's
--   device attributes. This set of attributes is analogous to
--   some attributes of the BP Device profile.
--
-----

cabhPsDevPsDeviceType OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(1..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The type of device, as defined in the CableHome
        specifications (Residential Gateway Device or CableHome
        Host Device), that implements this OID."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL { "CableHome Residential Gateway" }
    ::= { cabhPsDevPsAttrib 1 }

cabhPsDevPsManufacturerUrl OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Universal Resource Locator to the Residential Gateway
        device manufacturer's web site."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description"
    ::= { cabhPsDevPsAttrib 3 }

cabhPsDevPsModelUrl OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Universal Resource Locator to the web site describing this
        CableHome compliant residential gateway device."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    ::= { cabhPsDevPsAttrib 7 }

cabhPsDevPsModelUpc OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Universal Product Code of the CableHome compliant
        residential gateway device."
    REFERENCE

```

```

        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description.
        See also: Uniform Code Council www.uc-council.org"
 ::= { cabhPsDevPsAttrib 8 }

=====
--
-- CableHome Host/BP Device Profile Table
--
-- The cabhPsDevBpProfile contains the list of the CableHome Host
-- device attributes provided to the PS by BPs passing their Device
-- Profile XML schema via SOAP/HTTP.
--
=====

cabhPsDevBpProfileTable OBJECT-TYPE
    SYNTAX SEQUENCE OF CabhPsDevBpProfileEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "This table contains the information for the CableHome Host
        Device Profiles. Attributes of a device make up a Device
        Profile."
    ::= { cabhPsDevBpAttrib 1 }

cabhPsDevBpProfileEntry OBJECT-TYPE
    SYNTAX CabhPsDevBpProfileEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "The table that describes the CableHome Host Device
        Profile."
    INDEX { cabhPsDevBpIndex }
    ::= { cabhPsDevBpProfileTable 1 }

CabhPsDevBpProfileEntry ::= SEQUENCE {
    cabhPsDevBpIndex INTEGER,
    cabhPsDevBpDeviceType SnmpAdminString,
    cabhPsDevBpManufacturer SnmpAdminString,
    cabhPsDevBpManufacturerUrl SnmpAdminString,
    cabhPsDevBpSerialNumber SnmpAdminString,
    cabhPsDevBpHardwareVersion SnmpAdminString,
    cabhPsDevBpHardwareOptions SnmpAdminString,
    cabhPsDevBpModelName SnmpAdminString,
    cabhPsDevBpModelNumber SnmpAdminString,
    cabhPsDevBpModelUrl SnmpAdminString,
    cabhPsDevBpModelUpc SnmpAdminString,
    cabhPsDevBpModelSoftwareOs SnmpAdminString,
    cabhPsDevBpModelSoftwareVersion SnmpAdminString,
    cabhPsDevBpLanInterfaceType IANAIfType,
    cabhPsDevBpNumberInterfacePriorities INTEGER,
    cabhPsDevBpPhysicalLocation SnmpAdminString,
    cabhPsDevBpPhysicalAddress PhysAddress
}

cabhPsDevBpIndex OBJECT-TYPE
    SYNTAX INTEGER (1..65535)
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION
        "Integer index into the CableHome Host Device Profile
        Table."

```

```

 ::= { cabhPsDevBpProfileEntry 1 }

cabhPsDevBpDeviceType OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The type of device, as defined by the CableHome
        specifications (CableHome Residential Gateway or CableHome
        Host Device), that passed the Device Profile whose
        information is made available through this table row."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL     { "CableHome Host" }
 ::= { cabhPsDevBpProfileEntry 2 }

cabhPsDevBpManufacturer OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The name of the CableHome Host Device's manufacturer."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL     { "" }
 ::= { cabhPsDevBpProfileEntry 3 }

cabhPsDevBpManufacturerUrl OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Universal Resource Locator to the CableHome Host device
        manufacturer's web site."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL     { "" }
 ::= { cabhPsDevBpProfileEntry 4 }

cabhPsDevBpSerialNumber OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The serial number assigned by the manufacturer for this
        CableHome Host Device."
    DEFVAL     { "" }
 ::= { cabhPsDevBpProfileEntry 5 }

cabhPsDevBpHardwareVersion OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The hardware version number assigned by the manufacturer
        for this CableHome Host Device."
    REFERENCE
        "CableHome 1.1 Specification,

```

```
        6.5.3.1.3 Device Profile Description."
    DEFVAL { "" }
 ::= { cabhPsDevBpProfileEntry 6 }

cabhPsDevBpHardwareOptions OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The hardware options implemented on this CableHome Host
        Device."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL { "" }
 ::= { cabhPsDevBpProfileEntry 7 }

cabhPsDevBpModelName OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The model name assigned by the manufacturer for this
        CableHome Host Device."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL { "" }
 ::= { cabhPsDevBpProfileEntry 8 }

cabhPsDevBpModelNumber OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The model number assigned by the manufacturer for this
        CableHome Host Device."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL { "" }
 ::= { cabhPsDevBpProfileEntry 9 }

cabhPsDevBpModelUrl OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The Universal Resource Locator to the web site describing
        this CableHome Host Device model."
    REFERENCE
        "CableHome 1.1 Specification,
        6.5.3.1.3 Device Profile Description."
    DEFVAL { "" }
 ::= { cabhPsDevBpProfileEntry 10 }

cabhPsDevBpModelUpc OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(0..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Universal Product Code of the CableHome Host Device."
```

```

REFERENCE
    "CableHome 1.1 Specification,
    6.5.3.1.3 Device Profile Description."
DEFVAL { "" }
::= { cabhPsDevBpProfileEntry 11 }

cabhPsDevBpModelSoftwareOs OBJECT-TYPE
SYNTAX      SnmpAdminString (SIZE(0..32))
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "Software operating system implemented on the CableHome
    Host Device."
REFERENCE
    "CableHome 1.1 Specification,
    6.5.3.1.3 Device Profile Description."
DEFVAL { "" }
::= { cabhPsDevBpProfileEntry 12 }

cabhPsDevBpModelSoftwareVersion OBJECT-TYPE
SYNTAX      SnmpAdminString (SIZE(0..32))
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "Version of the operating system implemented on the
    CableHome Host Device."
REFERENCE
    "CableHome 1.1 Specification,
    6.5.3.1.3 Device Profile Description."
DEFVAL { "" }
::= { cabhPsDevBpProfileEntry 13 }

cabhPsDevBpLanInterfaceType OBJECT-TYPE
SYNTAX      IANAifType
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The ifType for the LAN Interface implemented on the
    CableHome Host Device."
REFERENCE
    "http://www.iana.org/assignments/ianaiftype-mib.
    See also: CableHome 1.1 Specification,
    6.5.3.1.3 Device Profile Description."
DEFVAL { other }
::= { cabhPsDevBpProfileEntry 14 }

cabhPsDevBpNumberInterfacePriorities OBJECT-TYPE
SYNTAX      INTEGER (1..8)
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "Number of QoS priorities supported by the LAN technology
    (Data Link Layer) implemented in the CableHome Host
    Device."
DEFVAL { 1 }
::= { cabhPsDevBpProfileEntry 15 }

cabhPsDevBpPhysicalLocation OBJECT-TYPE
SYNTAX      SnmpAdminString (SIZE(0..32))
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "Physical location of the CableHome Host Device."

```

```

REFERENCE
    "CableHome 1.1 Specification,
    6.5.3.1.3 Device Profile Description."
DEFVAL { "" }
 ::= { cabhPsDevBpProfileEntry 16 }

cabhPsDevBpPhysicalAddress OBJECT-TYPE
SYNTAX      PhysAddress (SIZE (0..16))
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The CableHome Host Device's hardware address."
REFERENCE
    "CableHome 1.1 Specification,
    6.5.3.1.3 Device Profile Description."
DEFVAL { 'h' }
 ::= { cabhPsDevBpProfileEntry 17 }

=====
--
-- LAN IP Traffic Statistics Table
--
-- The cabhPsDevLanIpTrafficTable contains the Traffic Statistics
-- for all LAN IP Devices connected to the PS. When the PS learns a
-- new LAN IP address an entry is added to this table
--
=====

cabhPsDevLanIpTrafficCountersReset OBJECT-TYPE
SYNTAX      INTEGER
{
    clearCounters(1),
    clearTable(2)
}
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "Setting this object to clearCounters(1) resets all the
    traffic statistic counter entries to zero in the
    cabhPsDevLanIpTrafficTable. Setting this object to
    clearTable(2) removes all entries in the
    cabhPsDevLanIpTrafficTable. Reading this object always
    returns clearCounters(1)."
```

```

DEFVAL { clearCounters }
-- Default read value
 ::= { cabhPsDevPsStats 1 }

cabhPsDevLanIpTrafficCountersLastReset OBJECT-TYPE
SYNTAX      TimeStamp
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The value of sysUpTime when
    cabhPsDevLanIpTrafficCountersReset was last written to.
    Zero if never written to."
 ::= { cabhPsDevPsStats 2 }

cabhPsDevLanIpTrafficEnabled OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-write
STATUS      current
```

```

DESCRIPTION
    "Setting this object to true(1) turns on the IP traffic
    counters. Setting this object false(2) turns off the IP
    traffic counters."
DEFVAL { false } -- IP traffic counters are off by default
 ::= { cabhPsDevPsStats 3 }

cabhPsDevLanIpTrafficTable OBJECT-TYPE
SYNTAX      SEQUENCE OF CabhPsDevLanIpTrafficEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "This table contains IP-layer Traffic Statistics for all
    LAN IP Devices connected to the PS."
 ::= { cabhPsDevPsStats 4 }

cabhPsDevLanIpTrafficEntry OBJECT-TYPE
SYNTAX      CabhPsDevLanIpTrafficEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "List of Traffic Statistics for LAN IP Devices."
INDEX { cabhPsDevLanIpTrafficIndex }
 ::= { cabhPsDevLanIpTrafficTable 1 }

CabhPsDevLanIpTrafficEntry ::= SEQUENCE {
    cabhPsDevLanIpTrafficIndex      INTEGER,
    cabhPsDevLanIpTrafficInetAddressType  InetAddressType,
    cabhPsDevLanIpTrafficInetAddress      InetAddress,
    cabhPsDevLanIpTrafficInOctets         ZeroBasedCounter32,
    cabhPsDevLanIpTrafficOutOctets        ZeroBasedCounter32
}

cabhPsDevLanIpTrafficIndex OBJECT-TYPE
SYNTAX      INTEGER (1..65535)
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "The Index into the LAN IP Traffic Statistics Table."
 ::= { cabhPsDevLanIpTrafficEntry 1 }

cabhPsDevLanIpTrafficInetAddressType OBJECT-TYPE
SYNTAX      InetAddressType
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The type of IP address assigned to the LAN IP device to
    which the statistics in this table row apply. IP version
    4 is typically used."
DEFVAL { ipv4 }
 ::= { cabhPsDevLanIpTrafficEntry 2 }

cabhPsDevLanIpTrafficInetAddress OBJECT-TYPE
SYNTAX      InetAddress
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The IP address of the LAN IP device to which the
    statistics in this table row apply. An IPv4 IP
    address is typically used."
 ::= { cabhPsDevLanIpTrafficEntry 3 }

cabhPsDevLanIpTrafficInOctets OBJECT-TYPE

```

```

SYNTAX      ZeroBasedCounter32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The total number of octets the PS forwarded from the WAN
    interfaces to the LAN IP device associated with the value
    of cabhPsDevLanIpTrafficInetAddress. This counter object
    does not include LAN-to-LAN traffic."
 ::= { cabhPsDevLanIpTrafficEntry 4 }

cabhPsDevLanIpTrafficOutOctets OBJECT-TYPE
SYNTAX      ZeroBasedCounter32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The total number of octets the PS forwarded from the LAN
    IP device associated with the value of
    cabhPsDevLanIpTrafficInetAddress, to the WAN interfaces.
    This counter object does not include LAN-to-LAN traffic."
 ::= { cabhPsDevLanIpTrafficEntry 5 }

--

cabhPsNotification      OBJECT IDENTIFIER ::= { cabhPsDevMib 2 }
cabhPsDevNotifications  OBJECT IDENTIFIER ::= { cabhPsNotification 0 }
cabhPsConformance      OBJECT IDENTIFIER ::= { cabhPsDevMib 3 }
cabhPsCompliances       OBJECT IDENTIFIER ::= { cabhPsConformance 1 }
cabhPsGroups            OBJECT IDENTIFIER ::= { cabhPsConformance 2 }

--
--   Notification Group
--

cabhPsDevInitTLVUnknownTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "Event due to detection of unknown TLV during the TLV
    parsing process. The values of docsDevEvLevel, docsDevId,
    and docsDevEvText are from the entry which logs this event
    in the docsDevEventTable. The value of
    cabhPsDevWanManMacAddress indicates the WAN-Man MAC address
    of the PS. This part of the information is uniform across
    all PS Traps."
 ::= { cabhPsDevNotifications 1 }

cabhPsDevInitTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    cabhPsDevProvConfigFile,
    cabhPsDevProvConfigTLVProcessed,
    cabhPsDevProvConfigTLVRejected
}
STATUS      current
DESCRIPTION

```

```

        "This inform is issued to confirm the successful completion
        of the CableHome provisioning process."
 ::= { cabhPsDevNotifications 2 }

cabhPsDevInitRetryTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress
}
STATUS current
DESCRIPTION
    "An event to report a failure happened during the
    initialization process and was detected in the PS."
 ::= { cabhPsDevNotifications 3 }

cabhPsDevDHCPFailTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    cabhCdpServerDhcpAddress
}
STATUS current
DESCRIPTION
    "An event to report the failure of a DHCP server. The
    value of cabhCdpServerDhcpAddress is the IP address of
    the DHCP server."
 ::= { cabhPsDevNotifications 4 }

cabhPsDevSwUpgradeInitTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    docsDevSwFilename,
    docsDevSwServer
}
STATUS current
DESCRIPTION
    "An event to report a software upgrade initiated event.
    The values of docsDevSwFilename, and docsDevSwServer
    indicate the software image name and the IP address of the
    server from which the image was downloaded."
 ::= { cabhPsDevNotifications 5 }

cabhPsDevSwUpgradeFailTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    docsDevSwFilename,
    docsDevSwServer
}
STATUS current
DESCRIPTION
    "An event to report the failure of a software upgrade
    attempt. The values of docsDevSwFilename, and

```

```

docsDevSwServer indicate the software image name and the IP
address of the server from which the image was downloaded."
 ::= { cabhPsDevNotifications 6 }

```

cabhPsDevSwUpgradeSuccessTrap NOTIFICATION-TYPE

```

OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    docsDevSwFilename,
    docsDevSwServer
}
STATUS      current
DESCRIPTION
    "An event to report the Software upgrade success event.
    The values of docsDevSwFilename, and docsDevSwServer
    indicate the software image name and the IP address of the
    server from which the image was downloaded."
 ::= { cabhPsDevNotifications 7 }

```

cabhPsDevSwUpgradeCVCFailTrap NOTIFICATION-TYPE

```

OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "An event to report the failure of the verification of code
    file happened during a secure software upgrade attempt."
 ::= { cabhPsDevNotifications 8 }

```

cabhPsDevTODFailTrap NOTIFICATION-TYPE

```

OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevTimeServerAddr,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "An event to report the failure of a time of day server.
    The value of cabhPsDevTimeServerAddr indicates the server
    IP address."
 ::= { cabhPsDevNotifications 9 }

```

cabhPsDevCdpWanDataIpTrap NOTIFICATION-TYPE

```

OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhCdpWanDataAddrClientId,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "An event to report the failure of PS to obtain all

```

```

        needed WAN-Data Ip Addresses.
        cabhCdpWanDataAddrClientId indicates the ClientId for
        which the failure occurred."
 ::= { cabhPsDevNotifications 10 }

cabhPsDevCdpThresholdTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    cabhCdpLanTransThreshold
}
STATUS      current
DESCRIPTION
    "An event to report that the LAN-Trans address assignment
    threshold has been exceeded."
 ::= { cabhPsDevNotifications 11 }

cabhPsDevCspTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "To report an event with the CableHome Security Portal."
 ::= { cabhPsDevNotifications 12 }

cabhPsDevCapTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "To report an event with the CableHome Address Portal."
 ::= { cabhPsDevNotifications 13 }

cabhPsDevCtpTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress
}
STATUS      current
DESCRIPTION
    "To report an event with the CableHome Test Portal."
 ::= { cabhPsDevNotifications 14 }

cabhPsDevProvEnrollTrap NOTIFICATION-TYPE
OBJECTS {
    cabhPsDevHardwareVersion,
    docsDevSwCurrentVers,
    cabhPsDevTypeIdentifier,
    cabhPsDevWanManMacAddress
}

```

```
STATUS      current
DESCRIPTION
    "This inform is issued to initiate the CableHome
    provisioning process for SNMP Provisioning Mode."
REFERENCE
    "CableHome 1.1 Specification,
    13.4 Provisioning the PS for Management:
    SNMP Provisioning Mode."
 ::= { cabhPsDevNotifications 15 }

cabhPsDevCdpLanIpPoolTrap NOTIFICATION-TYPE
OBJECTS {
    docsDevEvLevel,
    docsDevEvId,
    docsDevEvText,
    cabhPsDevWanManMacAddress,
    cabhCdpLanTransCurCount
}
STATUS      current
DESCRIPTION
    "An event to report that the pool of IP addresses for LAN
    clients, as defined by cabhCdpLanPoolStart and
    cabhCdpLanPoolEnd, is exhausted."
 ::= { cabhPsDevNotifications 16}

-- compliance statements

cabhPsBasicCompliance MODULE-COMPLIANCE
STATUS      current
DESCRIPTION
    "The compliance statement for devices that implement the
    CableHome Portal Services logical element."
MODULE     -- cabhPsMib

-- unconditionally mandatory groups

MANDATORY-GROUPS {
    cabhPsDevBaseGroup,
    cabhPsDevProvGroup,
    cabhPsNotificationGroup,
    cabhPsDevAttribGroup,
    cabhPsDevPsStatsGroup
}
 ::= { cabhPsCompliances 1}

cabhPsDevBaseGroup OBJECT-GROUP
OBJECTS {
    cabhPsDevDateTime,
    cabhPsDevResetNow,
    cabhPsDevSerialNumber,
    cabhPsDevHardwareVersion,
    cabhPsDevWanManMacAddress,
    cabhPsDevWanDataMacAddress,
    cabhPsDevTypeIdentifier,
    cabhPsDevSetToFactory,
    cabhPsDevTodSyncStatus,
    cabhPsDevProvMode,
    cabhPsDevLastSetToFactory
}
STATUS      current
DESCRIPTION
    "A collection of objects for providing device status and
    control."
```

```

 ::= { cabhPsGroups 1 }

cabhPsDevProvGroup OBJECT-GROUP
  OBJECTS {
    cabhPsDevProvisioningTimer,
    cabhPsDevProvConfigFile,
    cabhPsDevProvConfigHash,
    cabhPsDevProvConfigFileSize,
    cabhPsDevProvConfigFileStatus,
    cabhPsDevProvConfigTLVProcessed,
    cabhPsDevProvConfigTLVRejected,
    cabhPsDevProvSolicitedKeyTimeout,
    cabhPsDevProvState,
    cabhPsDevProvAuthState,
    cabhPsDevTimeServerAddrType,
    cabhPsDevTimeServerAddr
  }
  STATUS      current
  DESCRIPTION
    "A collection of objects for controlling and providing
    status on provisioning."
  ::= { cabhPsGroups 2 }

cabhPsDevAttribGroup OBJECT-GROUP
  OBJECTS {
    cabhPsDevPsDeviceType,
    cabhPsDevPsManufacturerUrl,
    cabhPsDevPsModelUrl,
    cabhPsDevPsModelUpc,
    cabhPsDevBpDeviceType,
    cabhPsDevBpManufacturer,
    cabhPsDevBpManufacturerUrl,
    cabhPsDevBpSerialNumber,
    cabhPsDevBpHardwareVersion,
    cabhPsDevBpHardwareOptions,
    cabhPsDevBpModelName,
    cabhPsDevBpModelNumber,
    cabhPsDevBpModelUrl,
    cabhPsDevBpModelUpc,
    cabhPsDevBpModelSoftwareOs,
    cabhPsDevBpModelSoftwareVersion,
    cabhPsDevBpLanInterfaceType,
    cabhPsDevBpNumberInterfacePriorities,
    cabhPsDevBpPhysicalLocation,
    cabhPsDevBpPhysicalAddress
  }
  STATUS      current
  DESCRIPTION
    "A collection of objects for providing information on
    LAN IP devices known to the PS."
  ::= { cabhPsGroups 3 }

cabhPsDevPsStatsGroup OBJECT-GROUP
  OBJECTS {
    cabhPsDevLanIpTrafficCountersReset,
    cabhPsDevLanIpTrafficCountersLastReset,
    cabhPsDevLanIpTrafficEnabled,
    cabhPsDevLanIpTrafficInetAddressType,
    cabhPsDevLanIpTrafficInetAddress,
    cabhPsDevLanIpTrafficInOctets,
    cabhPsDevLanIpTrafficOutOctets
  }

```

```
STATUS      current
DESCRIPTION
    "A collection of objects for providing information
    on LAN IP traffic."
 ::= { cabhPsGroups 4 }

cabhPsDevDeprecatedGroup OBJECT-GROUP
OBJECTS {
    cabhPsDevWanManClientId,
    cabhPsDevProvCorrelationId
}
STATUS      deprecated
DESCRIPTION
    "Group of deprecated PSDev MIB objects."
 ::= { cabhPsGroups 5 }

cabhPsNotificationGroup NOTIFICATION-GROUP
NOTIFICATIONS {
    cabhPsDevInitTLVUnknownTrap,
    cabhPsDevInitTrap,
    cabhPsDevInitRetryTrap,
    cabhPsDevDHCPFailTrap,
    cabhPsDevSwUpgradeInitTrap,
    cabhPsDevSwUpgradeFailTrap,
    cabhPsDevSwUpgradeSuccessTrap,
    cabhPsDevSwUpgradeCVCFailTrap,
    cabhPsDevTODFailTrap,
    cabhPsDevCdpWanDataIpTrap,
    cabhPsDevCdpThresholdTrap,
    cabhPsDevCspTrap,
    cabhPsDevCapTrap,
    cabhPsDevCtpTrap,
    cabhPsDevProvEnrollTrap,
    cabhPsDevCdpLanIpPoolTrap
}
STATUS      current
DESCRIPTION
    "These notifications indicate change in status of the
    Portal Services set of functions in a device complying
    with CableLabs CableHome(tm) specifications."
 ::= { cabhPsGroups 6 }

END
```

5 ACKNOWLEDGEMENTS

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Rick Vetter, Consultant to CableLabs

Appendix I Revision History

The following Engineering Change Notices were incorporated into CH-SP-MIB-PSDEV-I02-020920:

ECN Number	ECN Date	Summary
CH1-N-02003	8/15/02	There is currently no event defined for reporting the exhaustion of addresses from the CDS pool.
CH1-N-02008	6/20/02	Correct single dash in the LAST-UPDATED line of the MODULE-IDENTITY. Clarify the description for cabhPsDevResetNow object. Rename cabhPsDevResetDefaults to cabhPsDevSetToFactory to be consistent with other CableHome MIBs. Clarify the description for cabhPsDevProvMode object.
CH1-N-02018	8/15/02	Define CableHome acronyms. Correct cabhPsGroup OID numbering: should be the first, not the third, leaf on the cabhPsCompliances branch. Change SYNTAX from DisplayString to SnmpAdminString. Change 'headend DHCP server' reference in DESCRIPTION for cabhPsDevWanManMacAddress to 'cable data network DHCP server'. Correct grammatical error in the description for cabhPsDevWanDataMacAddress. Correct the grammatical/typographical error in the description for cabhPsDevProvConfigHash.

The following Engineering Change Notices were incorporated into CH-SP-MIB-PSDEV-I03-030411:

ECN Number	ECN Date	Summary
CH1-N-02041	1/23/03	Add cabhCdpLanTransCurCount to list of OIDs to IMPORT from CDP MIB.
CH1-N-02046	1/23/03	Change the STATUS of the cabhPsDevWanManClientId object from "current" to "deprecated".
CH1-N-02050	1/23/03	cabhSecFwPolicyFileHash and cabhPsDevProvConfigHash are defined as 20 octet should return binary values.
CH1-N-02065	1/23/03	Align the PSDev MIB with draft-jones-cable-gateway-device-MIB-00.txt and add new option for Dormant CableHome mode.

The following Engineering Change Notices were incorporated into CH-SP-MIB-PSDEV-I04-030801:

ECN Number	ECN Date	Summary
CH1-N-03007	04/17/03	Update PSDev MIB to incorporate CableHome 1.1 objects and conformance statements.
CH-MIB-N-03054	07/03/03	Update PSDev MIB to incorporate changes needed to align the CableLabs version with the version submitted to the IETF.

The following Engineering Change Notices were incorporated into CH-SP-MIB-PSDEV-I05-040129:

ECN Number	ECN Date	Summary
CH-MIB-N-03083	11/06/03	Correct the name of the deprecated group of objects.
MIB-PSDEV-N-03.0102-1	12/04/03	Remove references to the CableHome 1.0 specification.