

Superseded

CableHome™ CTP MIB Specification

CH-SP-MIB-CTP-I01-020405

Issued

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Key to Document Status Codes:

- Work in Progress** An incomplete document, designed to guide discussion and generate feedback, that 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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- 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 CableHome Test Portal (CTP) MIB requirement.

2 REFERENCES

The following reference contains provisions that, through reference in this text, constitute provisions of this recommendation. At the time of publication, the applicable national and international reference are expected to be revised. It is understood that this recommendation and therefore contained to investigate the possibility of applying the most recent editions of the reference listed below.

2.1 NORMATIVE REFERENCE

- [1] “CableHome 1.0 Specification,” CH-SP-I01-020405, Cable Television Laboratories, Inc., April 5, 2002. <http://www.CableLabs.com/CableHome>

2.2 INFORMATIVE REFERENCE

There are no informative references required for this document.

3 ABBREVIATIONS

There are no abbreviations used in this document.

4 REQUIREMENTS

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

CABH-CTP-MIB DEFINITIONS ::= BEGIN

IMPORTS

MODULE-IDENTITY,
OBJECT-TYPE

FROM SNMPv2-SMI

TruthValue,
TEXTUAL-CONVENTION

FROM SNMPv2-TC

OBJECT-GROUP,
MODULE-COMPLIANCE
FROM SNMPv2-CONF

InetAddressType,
InetAddress,
InetAddressIPv4,
InetAddressIPv6

FROM INET-ADDRESS-MIB

clabProjCableHome

FROM CLAB-DEF-MIB;

```

=====
--
-- History:
--
-- Date          Modified by      Reason
-- 10/05/01      Roy Spitzer       Initial Version
-- 10/26/01      Roy Spitzer       Use IPv6 compatible textual conventions, expand
--                                     Ping-All definition
-- 12/07/01      Roy Spitzer       Bring into alignment with CMP documentation
-- 12/12/01      Roy Spitzer       Addressed comments since December 10 2001
-- 12/19/01      Roy Spitzer       Addressed comments since December 12 2001
-- 01/09/02      Chris Zacker      Removed ARP table
-- 03/21/02      Kevin Luehrs      Incorporate changes from CableHome 1.0 D01
--                                     specification vendor review
-- 04/03/02      Kevin Luehrs      Incorporate changes from CableHome 1.0 D01
--                                     specification review
-- 04/05/02      Issued
--
=====

```

cabhCtpMib MODULE-IDENTITY

LAST-UPDATED "0204030000Z" – April 3, 2002

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DESCRIPTION

"This MIB module defines the diagnostic controls offered by the CableHome Test Portal (CTP).

Acknowledgements:

Roy Spitzer - Consultant to CableLabs
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::= { clabProjCableHome 5 }

-- Textual conventions

cabhCtpObjects OBJECT IDENTIFIER ::= { cabhCtpMib 1 }
 cabhCtpBase OBJECT IDENTIFIER ::= { cabhCtpObjects 1 }
 cabhCtpConnSpeed OBJECT IDENTIFIER ::= { cabhCtpObjects 2 }
 cabhCtpPing OBJECT IDENTIFIER ::= { cabhCtpObjects 3 }

--

-- The following group describes the base objects in the Cable Home
 -- Management Portal.

--

cabhCtpReset OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"Setting this object to true(1) causes all testing to be terminated. Reading this object always returns false(2). When cabhCtpReset is set to true, the following actions occur:

1. Terminate any diagnostic tests in progress.
2. Clear all diagnostic statistics."

::= { cabhCtpBase 1 }

--

-- Parameter and results from Connection Speed Command

--

cabhCtpConnSrcIpType OBJECT-TYPE

SYNTAX InetAddressType

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP Address type used as the source address for the Connection Speed Test."

DEFVAL { ipv4 }

::= { cabhCtpConnSpeed 1 }

cabhCtpConnSrcIp OBJECT-TYPE

SYNTAX InetAddress

MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The IP Address used as the source address for the Connection Speed Test. The default value is the value of cabhCdpServerRouter (192.168.0.1)."

REFERENCE

"CableHome Specification Section 6.4.4"

DEFVAL { 'c0a80001'h }-- 192.168.0.1

::= { cabhCtpConnSpeed 2 }

cabhCtpConnDestIpType OBJECT-TYPE
 SYNTAX InetAddressType
 MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP Address type used as the destination address for the Connection Speed Test."

::= { cabhCtpConnSpeed 3 }

cabhCtpConnDestIp OBJECT-TYPE
 SYNTAX InetAddress
 MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The IP Address used as the destination address for the Connection Speed Test."

::= { cabhCtpConnSpeed 4 }

cabhCtpConnProto OBJECT-TYPE
 SYNTAX INTEGER {
 udp (1),
 tcp (2)
 }
 MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The protocol used in the Connection Speed Test. TCP testing is optional."

DEFVAL { udp }

::= { cabhCtpConnSpeed 5 }

cabhCtpConnNumPkts OBJECT-TYPE
 SYNTAX INTEGER (1..65535)
 MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The number of packets the CTP is to send when triggered to execute the Connection Speed Tool."

DEFVAL { 100 }

::= { cabhCtpConnSpeed 6 }

cabhCtpConnPktSize OBJECT-TYPE
 SYNTAX INTEGER (64..1518)
 MAX-ACCESS read-write

STATUS current
 DESCRIPTION
 "The size of the test frames."
 REFERENCE
 ""
 DEFVAL { 1518 }
 ::= { cabhCtpConnSpeed 7 }

cabhCtpConnTimeOut OBJECT-TYPE
 SYNTAX INTEGER (0..600000) -- Max 10 minutes
 UNITS "milliseconds"
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The timeout value for the response. A value of zero indicates
 no time out and can be used for TCP only."
 DEFVAL {30000} -- 30 seconds
 ::= { cabhCtpConnSpeed 8 }

cabhCtpConnControl OBJECT-TYPE
 SYNTAX INTEGER {
 notRun (1),
 start (2),
 abort (3)
 }
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The control for Connection Speed Test. The value notRun
 is used to indicate never executed. This parameter should
 only be set via SNMP."
 DEFVAL { notRun }
 ::= { cabhCtpConnSpeed 9 }

cabhCtpConnStatus OBJECT-TYPE
 SYNTAX INTEGER {
 running (1),
 complete (2),
 aborted (3)
 }
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The Status of the currently/last executed test."
 DEFVAL { complete }
 ::= { cabhCtpConnSpeed 10 }

cabhCtpConnPktsSent OBJECT-TYPE
 SYNTAX INTEGER (0..65535)
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The number of packets the CTP sent after it was triggered to execute
 the Connection Speed Tool."
 ::= { cabhCtpConnSpeed 11 }

```

cabhCtpConnPktsRecv OBJECT-TYPE
    SYNTAX          INTEGER (0..65535)
    MAX-ACCESS      read-only
    STATUS           current
    DESCRIPTION
        "The number of packets the CTP received after it executed the
        Connection Speed Tool."
        ::= { cabhCtpConnSpeed 12 }

cabhCtpConnRTT      OBJECT-TYPE
    SYNTAX          INTEGER (0..600000)
    UNITS           "millisec"
    MAX-ACCESS      read-only
    STATUS           current
    DESCRIPTION
        "The resulting round trip time for the set of
        packets sent to and received from the target LAN IP Device."
        ::= { cabhCtpConnSpeed 13 }

cabhCtpConnThroughput OBJECT-TYPE
    SYNTAX          INTEGER (0..65535)
    MAX-ACCESS      read-write
    STATUS           current
    DESCRIPTION
        "The average round-trip throughput measured in
        kilobits per second."
        ::= { cabhCtpConnSpeed 14 }

--
-- Parameters and Results for Ping Command
--

cabhCtpPingSrcIpType OBJECT-TYPE
    SYNTAX          InetAddressType
    MAX-ACCESS      read-write
    STATUS           current
    DESCRIPTION
        "The IP Address Type used as the source address for the Ping
        Test."
        ::= { cabhCtpPing 1 }

cabhCtpPingSrcIp    OBJECT-TYPE
    SYNTAX          InetAddress
    MAX-ACCESS      read-write
    STATUS           current
    DESCRIPTION
        "The IP Address used as the source address for the Ping
        Test. The default value is the value of
        CabhCdpServerRouter (192.168.0.1)."

    REFERENCE
        "CableHome 1.0 Specification Section 6.4.4"
    DEFVAL { 'c0a80001'h }
    ::= { cabhCtpPing 2 }

cabhCtpPingDestIpType OBJECT-TYPE
    SYNTAX          InetAddressType

```

MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The Destination IP Address Type used as the destination address for
 the Ping Test."
 ::= { cabhCtpPing 3 }

cabhCtpPingDestIp OBJECT-TYPE
 SYNTAX InetAddress
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The Destination IP Address used as the destination address for
 the Ping Test."
 ::= { cabhCtpPing 4 }

cabhCtpPingNumPkts OBJECT-TYPE
 SYNTAX INTEGER (1..4)
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The number of packets to send to each host."
 DEFVAL {1}
 ::= { cabhCtpPing 5 }

cabhCtpPingPktSize OBJECT-TYPE
 SYNTAX INTEGER (64..1518)
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The size of the test frames."
 DEFVAL {64}
 ::= { cabhCtpPing 6 }

cabhCtpPingTimeBetween OBJECT-TYPE
 SYNTAX INTEGER (0..600000)
 UNITS "milliseconds"
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The time between sending one ping and the next."
 DEFVAL { 1000 }
 ::= { cabhCtpPing 7 }

cabhCtpPingTimeOut OBJECT-TYPE
 SYNTAX INTEGER (0..600000)
 UNITS "milliseconds"
 MAX-ACCESS read-write
 STATUS current
 DESCRIPTION
 "The time out for ping response of sending a single ping."
 DEFVAL { 5000 } -- 5 seconds
 ::= { cabhCtpPing 8 }

cabhCtpPingControl OBJECT-TYPE
 SYNTAX INTEGER {

```

                                notRun      (1),
                                start        (2),
                                abort       (3)
                                }

    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
        "The control for Ping Test. The value notRun
        is used to indicate never executed."
    DEFVAL { notRun }
    ::= { cabhCtpPing 9 }

cabhCtpPingStatus OBJECT-TYPE
    SYNTAX          INTEGER {
                                running      (1),
                                complete    (2),
                                aborted     (3)
                                }

    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The Status of the currently/last executed test."
    DEFVAL { complete }
    ::= { cabhCtpPing 10 }

cabhCtpPingNumSent OBJECT-TYPE
    SYNTAX          INTEGER (0..255)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The number of pings sent."
    ::= { cabhCtpPing 11 }

cabhCtpPingNumRecv OBJECT-TYPE
    SYNTAX          INTEGER (0..255)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The number of pings received."
    ::= { cabhCtpPing 12 }

cabhCtpPingAvgRTT OBJECT-TYPE
    SYNTAX          INTEGER (0..600000)
    UNITS           "millisec"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The resulting average of round trip times for acknowledged packets."
    ::= { cabhCtpPing 13 }

cabhCtpPingMaxRTT OBJECT-TYPE
    SYNTAX          INTEGER (0..600000)
    UNITS           "millisec"
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION

```

"The resulting maximum of round trip times for acknowledged packets."
 ::= { cabhCtpPing 14 }

cabhCtpPingMinRTT OBJECT-TYPE
 SYNTAX INTEGER (0..600000)
 UNITS "millisec"
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The resulting minimum of round trip times for acknowledged packets."
 ::= { cabhCtpPing 15 }

cabhCtpPingNumIcmpError OBJECT-TYPE
 SYNTAX INTEGER (0..255)
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "Number of ICMP errors."
 ::= { cabhCtpPing 16 }

cabhCtpPingIcmpError OBJECT-TYPE
 SYNTAX INTEGER (0..255)
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The last ICMP error."
 ::= { cabhCtpPing 17 }

=====

--
 -- notification group is for future extension.
 --

cabhCtpNotification OBJECT IDENTIFIER ::= { cabhCtpMib 2 0 }
 cabhCtpConformance OBJECT IDENTIFIER ::= { cabhCtpMib 3 }
 cabhCtpCompliances OBJECT IDENTIFIER ::= { cabhCtpConformance 1 }
 cabhCtpGroups OBJECT IDENTIFIER ::= { cabhCtpConformance 2 }

--
 -- Notification Group
 --

-- compliance statements

cabhCtpBasicCompliance MODULE-COMPLIANCE
 STATUS current
 DESCRIPTION
 "The compliance statement for devices that implement
 Portal Service feature."
 MODULE --cabhCtpMib

-- unconditionally mandatory groups

```

MANDATORY-GROUPS {
    cabhCtpGroup
}

```

```

::= { cabhCtpCompliances 3 }

```

```

cabhCtpGroup OBJECT-GROUP
OBJECTS {

```

```

    cabhCtpReset,
    cabhCtpConnSrcIpType,
    cabhCtpConnSrcIp,
    cabhCtpConnDestIpType,
    cabhCtpConnDestIp,
    cabhCtpConnProto,
    cabhCtpConnNumPkts,
    cabhCtpConnPktSize,
    cabhCtpConnTimeOut,
    cabhCtpConnControl,
    cabhCtpConnStatus,
    cabhCtpConnPktsSent,
    cabhCtpConnPktsRecv,
    cabhCtpConnRTT,
    cabhCtpConnThroughput,

    cabhCtpPingSrcIpType,
    cabhCtpPingSrcIp,
    cabhCtpPingDestIpType,
    cabhCtpPingDestIp,
    cabhCtpPingNumPkts,
    cabhCtpPingPktSize,
    cabhCtpPingTimeBetween,
    cabhCtpPingTimeOut,
    cabhCtpPingControl,
    cabhCtpPingStatus,
    cabhCtpPingNumSent,
    cabhCtpPingNumRecv,
    cabhCtpPingAvgRTT,
    cabhCtpPingMinRTT,
    cabhCtpPingMaxRTT,
    cabhCtpPingNumIcmpError,
    cabhCtpPingIcmpError
}

```

```

STATUS current

```

```

DESCRIPTION

```

```

    "Group of objects for CableHome CTP MIB."

```

```

::= { cabhCtpGroups 1 }

```

```

END

```

The following Engineering Change Notices were incorporated into
CH-SP-MIB-CTP-I01-020405:

ECN Number	ECN Date	Summary