This document provides technical details about a Simple Network Management Protocol (SNMP) Management Information Base (MIB) supported by many HP StorageWorks Tape Libraries. The MIB described in this document is known as the NetCitizen MIB, the SEMI 1.0 MIB, or the HP HTTP Manageable MIB. Tape libraries that support the NetCitizen MIB also support the standard MIB-II MIB and some support the HP Trap Destination MIB. Tape libraries that support one or more of these MIBs include:

- ESL 9000 series libraries, with an Interface Manager card installed
- ESL E-Series libraries
- EML E-Series libraries
- MSL 5000 and 6000 series libraries, with firmware 4.23 or greater
- VLS 6000 series virtual libraries

The NetCitizen MIB is pre-installed in many HP management applications, including System Insight Manager, and is primarily intended for LAN-based device discovery and alerts. Other applications may allow the MIB to be installed to decode traps received from supported storage devices. You should use applications like Command View and System Insight Manager to monitor, configure, and maintain your LAN-connected storage devices.

The NetCitizen MIB described in this document defines SNMP-readable fields and SNMP events or traps. The hpHttpMgDeviceTable contains the fields of greatest interest and the hpHttpMgTraps tree defines generic traps. Other fields are not guaranteed to be supported. Most fields are read-only. Fields listed as read-write may be changeable only by HP applications such as Command View for Tape Libraries or System Insight Manager. These fields may not be accessible directly through general SNMP query tools.
-- ************************************************************************
-- HP-httpManageable-MIB
-- "Management information for HP devices. This MIB provides SNMP
-- systems asset and HTTP management information, as well as
-- entity relationship information for host based implementations."
-- (C) Copyright Hewlett-Packard Company 2000
-- All Rights Reserved.
-- Date: April 5, 2001 10:16 a.m. (Version 01.00) Release
-- ************************************************************************
-- Context within the MIB object naming tree
--
--(1)   iso
--(1.3)  org
--(1.3.6) dod
--(1.3.6.1) internet
--(1.3.6.1.4) private
--(1.3.6.1.4.1) enterprises
--(1.3.6.1.4.1.11) hp
--(1.3.6.1.4.1.11.2) nm
--(1.3.6.1.4.1.11.2.36) hpWebMgmt
--(1.3.6.1.4.1.11.2.36.1) hpHttpMgMod
--(1.3.6.1.4.1.11.2.36.1.1) hpHttpMgObjects
--(1.3.6.1.4.1.11.2.36.1.1.1) hpHttpMgDefaults
--(1.3.6.1.4.1.11.2.36.1.1.1.1) hpHttpMgDefaultURL
--(1.3.6.1.4.1.11.2.36.1.1.1.2) hpHttpMgNetCitizen (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.1) hpHttpMgmtSrVRURL (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.2) hpHttpMgID (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.3) hpHttpMgHealth (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.4) hpHttpMgManufacturer (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.5) hpHttpMgProduct (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.6) hpHttpMgVersion (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.7) hpHttpMgHWVersion (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.8) hpHttpMgROMVersion (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.9) hpHttpMgSerialNumber (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.10) hpHttpMgAssetNumber (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.2.11) hpHttpMgPhone (deprecated)
--(1.3.6.1.4.1.11.2.36.1.1.3) hpHttpMgEntityNetInfo
--(1.3.6.1.4.1.11.2.36.1.1.3.1) hpHttpMgEntityNetInfoTable
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1) hpHttpMgEntityNetInfoEntry
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.1) hpHttpMgEntityNetInfoIndex
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.1.12) hpHttpMgEntityNetInfoSysObjID
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.3) hpHttpMgEntityNetInfoRelationshipType
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.4) hpHttpMgEntityNetInfoUniqueID
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.5) hpHttpMgEntityNetInfoURL
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.6) hpHttpMgEntityNetInfoURLLabel
--(1.3.6.1.4.1.11.2.36.1.1.3.1.1.7) hpHttpMgEntityNetInfoIPAddress
--(1.3.6.1.4.1.11.2.36.1.1.4) hpHttpMgCluster
--(1.3.6.1.4.1.11.2.36.1.1.4.1) hpHttpMgClusterName
--(1.3.6.1.4.1.11.2.36.1.1.4.5) hpHttpMgDeviceInfo
--(1.3.6.1.4.1.11.2.36.1.1.5.1) hpHttpMgDeviceTable
--(1.3.6.1.4.1.11.2.36.1.1.5.1.1) hpHttpMgDeviceEntry
--(1.3.6.1.4.1.11.2.36.1.1.5.1.1.11) hpHttpMgDeviceIndex
--(1.3.6.1.4.1.11.2.36.1.1.5.1.1.12) hpHttpMgDeviceGlobalUniqueID
--(1.3.6.1.4.1.11.2.36.1.1.5.1.1.13) hpHttpMgDeviceHealth
--hpHttpMgDeviceSysObjID
--hpHttpMgDeviceManagementURL
--hpHttpMgDeviceManagementURLLabel
--hpHttpMgDeviceManufacturer
--hpHttpMgDeviceProductName
--hpHttpMgDeviceProductCaption
--hpHttpMgDeviceSerialNumber
--hpHttpMgDeviceVersion
--hpHttpMgDeviceHWVersion
--hpHttpMgDeviceROMVersion
--hpHttpMgDeviceAssetNumber
--hpHttpMgDeviceContactPerson
--hpHttpMgDeviceContactPhone
--hpHttpMgDeviceContactEmail
--hpHttpMgDeviceContactPagerNumber
--hpHttpMgDeviceLocation
--hpHttpMgDeviceRackId
--hpHttpMgDeviceRackPosition
--hpHttpMgDeviceRelationshipType

--hpHttpMgDefaultGroup
--hpHttpMgBasicNetCitizenGroup (deprecated)
--hpHttpMgBasicNetCitizenTrapGroup (deprecated)
--hpHttpMgExtendedNetCitizenGroup (deprecated)
--hpHttpMgExtendedNetCitizenTrapGroup
--hpHttpMgEntityRelationshipGroup
--hpHttpMgClusterGroup
--hpHttpMgEnhancedNetCitizenGroup
--hpHttpMgEnhancedNetCitizenTrapGroup

--hpHttpMgCompliances
--hpHttpMgMinCompliance
--hpHttpMgBasicNetCitizenCompliance (deprecated)
--hpHttpMgEnhancedNetCitizenCompliance

--hpHttpMgTraps
--hpHttpMgHealthTrap (deprecated)
--hpHttpMgShutdown (deprecated)
--hpHttpMgUnknownHealthTrap
--hpHttpMgOKHealthTrap
--hpHttpMgWarningHealthTrap
--hpHttpMgCriticalHealthTrap
--hpHttpMgNonRecoverableHealthTrap
--hpHttpMgDeviceAddedTrap
--hpHttpMgDeviceRemovedTrap

-- NOTE - For those who want to implement a trap destination table, we recommend using the trap destination section of the ICF mib.

SEMI-MIB DEFINITIONS ::= BEGIN

-- IMPORTS
OBJECT-TYPE, MODULE-IDENTITY, NOTIFICATION-TYPE,
enterprises, IpAddress
FROM SNMPv2-SMI
TEXTUAL-CONVENTION
FROM SNMPv2-TC
OBJECT-GROUP, NOTIFICATION-GROUP, MODULE-COMPLIANCE
FROM SNMPv2-CONF;

-- ========================================================================
--
hp OBJECT IDENTIFIER ::= { enterprises 11 }
nm OBJECT IDENTIFIER ::= { hp 2 }
hpWebMgmt OBJECT IDENTIFIER ::= { nm 36 }

-- Module Identity

hpHttpMgMod MODULE-IDENTITY
LAST-UPDATED "0104030000Z"
ORGANIZATION "Hewlett-Packard"
CONTACT-INFO "brian_harrison@hp.com"

DESCRIPTION
"Management information for HP devices. This MIB provides SNMP systems asset and HTTP management information, as well as entity relationship information for host based implementations. This version contains additions for SEMI"

REVISION    "0010160000Z"
DESCRIPTION  "Minor syntactic changes in notifications."

REVISION    "0010120000Z"
DESCRIPTION  "Fixed semantic error, modified traps and included changes from the review team."

REVISION    "0010040000Z"
DESCRIPTION  "Moved Device asset information into a container model. Modified traps and compliance definitions. Depreciated previous device asset objects."

REVISION    "0001120000Z"
DESCRIPTION  "Added cluster support"

REVISION    "9903170000Z"
DESCRIPTION  "Corrected definition of hpHttpMgMod"

REVISION    "9812010000Z"
DESCRIPTION  "Incorporated entity-relationship table"

REVISION    "9706260000Z"
DESCRIPTION  "Incorporated NetCitizen definitions"

REVISION    "9606120000Z"
DESCRIPTION  "Initial Version"
 ::= { hpWebMgmt 1 }

-- Textual Conventions for this MIB

Utf8String ::= TEXTUAL-CONVENTION
DISPLAY-HINT "255a"
STATUS    current
DESCRIPTION  "To facilitate internationalization, this TC

"
represents information taken from the ISO/IEC IS
10646-1 character set, encoded as an octet string
using the UTF-8 character encoding scheme described
in RFC 2044 [10]. For strings in 7-bit US-ASCII,
there is no impact since the UTF-8 representation is
identical to the US-ASCII encoding.

SYNTAX OCTET STRING (SIZE (0..255))

-- ========================================================

hpHttpMgTraps OBJECT IDENTIFIER ::= { hpHttpMgMod 0 }
hpHttpMgObjects OBJECT IDENTIFIER ::= { hpHttpMgMod 1 }
hpHttpMgGroups OBJECT IDENTIFIER ::= { hpHttpMgMod 2 }
hpHttpMgCompliances OBJECT IDENTIFIER ::= { hpHttpMgMod 3 }

-- ========================================================

-- Default attributes for managing via HTTP

hpHttpMgDefaults OBJECT IDENTIFIER ::= { hpHttpMgObjects 1 }

hpHttpMgDefaultURL OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"A Uniform Resource Locator (URL), as defined in RFC1738,
for the default management information for this device.
This URL is typically used by a HTTP browser to display
management information for this device. This default
page should contain links to any other management
pages for this device."
::= { hpHttpMgDefaults 1}

-- ========================================================

-- HP NetCitizen attributes

hpHttpMgNetCitizen OBJECT IDENTIFIER ::= { hpHttpMgObjects 2 }

hpHttpMgMgmtSrvcURL OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS deprecated
DESCRIPTION "URL of management server for this device."
::= { hpHttpMgNetCitizen 1}

hpHttpMgID OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Unique identifier for this entity. This ID
must not change even if network address or
removable cards are changed. For devices with
fixed MAC addresses this may be the same as
ifPhysAddress; for devices with fixed serial
numbers this may be the same as
hpHttpMgSerialNumber."
::= { hpHttpMgNetCitizen 2}

hpHttpMgHealth OBJECT-TYPE

-- ========================================================


SYNTAX INTEGER {
  unknown(1),
  information(2),
  ok(3),
  warning(4),
  critical(5),
  nonrecoverable(6)
}
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Operating status of this entity."
::= { hpHttpMgNetCitizen 3}

hpHttpMgManufacturer OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Manufacturer of the hardware for this entity e.g. 'Hewlett-Packard'."
::= { hpHttpMgNetCitizen 4}

hpHttpMgProduct OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Manufacturer's product number for this entity, e.g. 'D1234A'."
::= { hpHttpMgNetCitizen 5}

hpHttpMgVersion OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Version number of this entity, e.g. 'A.00.01'. Where several version numbers are available, this represents the software version."
::= { hpHttpMgNetCitizen 6}

hpHttpMgHWVersion OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Version number of the hardware for this entity, e.g. 'A.00.01'."
::= { hpHttpMgNetCitizen 7}

hpHttpMgROMVersion OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS deprecated
DESCRIPTION "Version number of ROM for this entity, e.g. 'A.00.01'."
::= { hpHttpMgNetCitizen 8}

hpHttpMgSerialNumber OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-write
STATUS deprecated
DESCRIPTION "Serial number of entity. It is recommended
that this be factory set and read only; if not factory set, should initially be blank."
 ::= { hpHttpMgNetCitizen 9}

hpHttpMgAssetNumber OBJECT-TYPE
 SYNTAX          Utf8String (SIZE(0..32))
 MAX-ACCESS      read-write
 STATUS          deprecated
 DESCRIPTION     "Asset number of entity. This is not normally modified once set."
 ::= { hpHttpMgNetCitizen 10}

hpHttpMgPhone OBJECT-TYPE
 SYNTAX          Utf8String (SIZE(0..32))
 MAX-ACCESS      read-write
 STATUS          deprecated
 DESCRIPTION     "Phone number of contact person for this entity."
 ::= { hpHttpMgNetCitizen 11}

-- Entity Relationships

hpHttpMgEntityNetInfo OBJECT IDENTIFIER ::= { hpHttpMgObjects 3 }

hpHttpMgEntityNetInfoTable OBJECT-TYPE
 SYNTAX SEQUENCE OF HpHttpMgEntityNetInfoEntrySequence
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION
 "A table of EntityRelationships, connection type, URLs, IPAddress etc. This table
typically contains relationships between devices that each have their own
management agent."
 ::= { hpHttpMgEntityNetInfoTable 1 }
"The EntityRelationship Entity Index."
::= { hpHttpMgEntityNetInfoEntry 1 }

hpHttpMgEntityNetInfoSysObjID OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Sys Object ID of this entity."
::= { hpHttpMgEntityNetInfoEntry 2 }

hpHttpMgEntityNetInfoRelationshipType OBJECT-TYPE
SYNTAX INTEGER {
  self                     (0),
  containedEntity          (1),
  containingEntity         (2),
  externallyAttachedEntity (3),
  indirectlyAttachedEntity (4),
  clusterNode              (5)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Specifies the type of relationship this entry has to this entity."
::= { hpHttpMgEntityNetInfoEntry 3 }

hpHttpMgEntityNetInfoUniqueID OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"This represents a globally unique ID for the device.
  This MUST be the ordered combination of the Manufacturer,
  product name, AND any other text that is necessary to guarantee
  global uniqueness. This ID must not change even if the referenced
  entity is moved.
  e.g. HPD1234A9482882"
::= { hpHttpMgEntityNetInfoEntry 4 }

hpHttpMgEntityNetInfoURL OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Home Page URL of entity corresponding to this entry.
  This field may only contain the DNS name of a managed
  system, in which case the actual URL must be determined
  from this managed system."
::= { hpHttpMgEntityNetInfoEntry 5 }

hpHttpMgEntityNetInfoURLLabel OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Label that a management application should use for the hyperlink
  to the entity’s URL."
::= { hpHttpMgEntityNetInfoEntry 6 }
hpHttpMgEntityNetInfoIPAddress OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION "Addressing information for one of the IP Addresses of the entity corresponding to this entry."
::= { hpHttpMgEntityNetInfoEntry 7 }

-- ========================================================================
-- Clustering information

hpHttpMgCluster OBJECT IDENTIFIER ::= { hpHttpMgObjects 4 }

hpHttpMgClusterName OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The name of the cluster that this system is a member of, or blank if this system is not a member of a cluster."
::= { hpHttpMgCluster 1}

-- ========================================================================
-- Device Table
--
-- NOTE: For agents that only support one device the table must only have one row and the index value should always be 1.

hpHttpMgDeviceInfo OBJECT IDENTIFIER ::= { hpHttpMgObjects 5 }

hpHttpMgDeviceTable OBJECT-TYPE
SYNTAX SEQUENCE OF HpHttpMgDeviceEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A list of HP devices under a single SNMP agent."
::= { hpHttpMgDeviceInfo 1 }

hpHttpMgDeviceEntry OBJECT-TYPE
SYNTAX HpHttpMgDeviceEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A device entry containing objects for a particular device."
INDEX { hpHttpMgDeviceIndex }
::= { hpHttpMgDeviceTable 1 }

HpHttpMgDeviceEntry ::= SEQUENCE {
    hpHttpMgDeviceIndex              INTEGER,
    hpHttpMgDeviceGlobalUniqueID     Utf8String,
    hpHttpMgDeviceHealth             INTEGER,
    hpHttpMgDeviceSysObjID           Utf8String,
    hpHttpMgDeviceManagementURL      Utf8String,
    hpHttpMgDeviceManagementURLLabel Utf8String,
    hpHttpMgDeviceManufacturer       Utf8String,
    hpHttpMgDeviceProductName        Utf8String,
    hpHttpMgDeviceProductCaption     Utf8String,
hpHttpMgDeviceIndex OBJECT-TYPE
SYNTAX INTEGER (0..1000)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The unique device identification within the instance of this Mib."
::= { hpHttpMgDeviceEntry 1 }

hpHttpMgDeviceGlobalUniqueID OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"This represents a globally unique ID for the device.
This MUST be the ordered combination of the Manufacturer,
product name, AND any other text that is necessary to guarantee
global uniqueness. This value may not be null.
e.g. HPD1234A9482882"
::= { hpHttpMgDeviceEntry 2 }

hpHttpMgDeviceHealth OBJECT-TYPE
SYNTAX INTEGER {
  unknown        (1),
  unused         (2),
  ok             (3), -- available for meaningful work
  warning        (4), -- something needs attention
  critical       (5), -- something has failed
  nonrecoverable (6)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Overall health of the device. The goal of this object
is to be the single poll point to check the status of the
device."
::= { hpHttpMgDeviceEntry 3 }

hpHttpMgDeviceSysObjID OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"System Object ID for this Device entity. This should be an
ASCII integer format. (i.e. 1.3.6.1.4.1.11.2.36.1.1)
The value may not be null.
--
-- NOTE: For single device agents this field contains a value
--       similar to the MIB II/System/sysObjID
--
 ::= { hpHttpMgDeviceEntry 4 }

hpHttpMgDeviceManagementURL OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
  "This object contains the URL for the device's management
  software. If it does not exist the value is empty string.
  If write is not supported, then return invalid. This value is
  retained across boots."
 ::= { hpHttpMgDeviceEntry 5 }

hpHttpMgDeviceManagementURLLabel OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
  "The label that a management application should use for the
  hyperlink to the entity's URL."
 ::= { hpHttpMgDeviceEntry 6 }

hpHttpMgDeviceManufacturer OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  "The device's manufacturer name. For Hewlett Packard branded
  equipment this value MUST be 'HP'"
 ::= { hpHttpMgDeviceEntry 7 }

hpHttpMgDeviceProductName OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  "The device's product name. Null is NOT a valid value.
  (i.e. D1234A)"
 ::= { hpHttpMgDeviceEntry 8 }

hpHttpMgDeviceProductCaption OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  "The device's product caption name.
  (i.e. HP Multi-stack Disk Array)"
 ::= { hpHttpMgDeviceEntry 9 }

hpHttpMgDeviceSerialNumber OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The serial number for the device. This can return a NULL string."
::= { hpHttpMgDeviceEntry 10 }

hpHttpMgDeviceVersion OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "Version number for this device."
::= { hpHttpMgDeviceEntry 11 }

hpHttpMgDeviceHWVersion OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "Version number for this device's hardware."
::= { hpHttpMgDeviceEntry 12 }

hpHttpMgDeviceROMVersion OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "Version number for this device's ROM."
::= { hpHttpMgDeviceEntry 13 }

hpHttpMgDeviceAssetNumber OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-write
STATUS current
DESCRIPTION
   "Asset number for the device."
::= { hpHttpMgDeviceEntry 14 }

hpHttpMgDeviceContactPerson OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-write
STATUS current
DESCRIPTION
   "Identifies the name of the person responsible for the operation of this device. If write is not supported then return invalid."
   --
   -- NOTE: For single device agents this field contains a value similar to the MIB II/System/sysContact
   --
::= { hpHttpMgDeviceEntry 15 }

hpHttpMgDeviceContactPhone OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-write
STATUS current
DESCRIPTION
   "Phone number of the contact person for this device."
::= { hpHttpMgDeviceEntry 16 }
hpHttpMgDeviceContactEmail OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
e-mail address of the contact person for this device.
::= { hpHttpMgDeviceEntry 17 } 

hpHttpMgDeviceContactPagerNumber OBJECT-TYPE
SYNTAX Utf8String (SIZE(0..32))
MAX-ACCESS read-write
STATUS current
DESCRIPTION
Pager number of the contact person for this device.
::= { hpHttpMgDeviceEntry 18 } 

hpHttpMgDeviceLocation OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"Identifies the location for the this device. If write is not supported then return invalid."
--
-- NOTE: For single device agents this field contains a value similar to the MIB II/System/sysLocation
--
::= { hpHttpMgDeviceEntry 19 } 

hpHttpMgDeviceRackId OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"Identifies the name given by the administrator to identify a particular rack such a rack 4a or SAP 2 for example."
::= { hpHttpMgDeviceEntry 20 } 

hpHttpMgDeviceRackPosition OBJECT-TYPE
SYNTAX Utf8String
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"Identifies the location such as top, middle or bottom or a number such a 1st from top etc. to identify the placement of a device in a rack."
::= { hpHttpMgDeviceEntry 21 } 

hpHttpMgDeviceRelationshipType OBJECT-TYPE
SYNTAX INTEGER {
  host        (1),
  other       (2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Indicates the relationship of this device to the SNMP agent. Host indicates that this device owns the SNMP agent."
::= { hpHttpMgDeviceEntry 22 }
--=======================================================================
--Trap Definitions

hpHttpMgHealthTrap NOTIFICATION-TYPE

OBJECTS { hpHttpMgHealth }
STATUS deprecated
DESCRIPTION "Sent whenever hpHttpMgHealth changes state."
::= { hpHttpMgTraps 1 }

hpHttpMgShutdown NOTIFICATION-TYPE

STATUS deprecated
DESCRIPTION "Sent when the agent is about to shut down."
::= { hpHttpMgTraps 2 }

hpHttpMgUnknownHealthTrap NOTIFICATION-TYPE

OBJECTS { hpHttpMgDeviceIndex,
    hpHttpMgDeviceSysObjID,
    hpHttpMgDeviceGlobalUniqueID,
    hpHttpMgDeviceManagementURL,
    hpHttpMgDeviceManagementURLLabel,
    hpHttpMgDeviceSpecificEventCode,
    hpHttpMgDeviceSpecificFRU
 }
STATUS current
DESCRIPTION "The device's health has changed to unknown."
::= { hpHttpMgTraps 3 }

hpHttpMgOKHealthTrap NOTIFICATION-TYPE

OBJECTS { hpHttpMgDeviceIndex,
    hpHttpMgDeviceSysObjID,
    hpHttpMgDeviceGlobalUniqueID,
    hpHttpMgDeviceManagementURL,
    hpHttpMgDeviceManagementURLLabel,
    hpHttpMgDeviceSpecificEventCode,
    hpHttpMgDeviceSpecificFRU
 }
STATUS current
DESCRIPTION "The device's health has changed to OK."
::= { hpHttpMgTraps 4 }

hpHttpMgWarningHealthTrap NOTIFICATION-TYPE

OBJECTS { hpHttpMgDeviceIndex,
    hpHttpMgDeviceSysObjID,
    hpHttpMgDeviceGlobalUniqueID,
    hpHttpMgDeviceManagementURL,
    hpHttpMgDeviceManagementURLLabel,
    hpHttpMgDeviceSpecificEventCode,
    hpHttpMgDeviceSpecificFRU
 }
STATUS current
DESCRIPTION "The device's health has changed to warning."
::= { hpHttpMgTraps 5 }

hpHttpMgCriticalHealthTrap NOTIFICATION-TYPE

OBJECTS { hpHttpMgDeviceIndex,
    hpHttpMgDeviceSysObjID,
hpHttpMgDeviceGlobalUniqueID, hpHttpMgDeviceManagementURL, hpHttpMgDeviceManagementURLLabel, hpHttpMgDeviceSpecificEventCode, hpHttpMgDeviceSpecificFRU

STATUS          current
DESCRIPTION    "The device's health has changed to critical."
::= { hpHttpMgTraps 6 }

hpHttpMgNonRecoverableHealthTrap NOTIFICATION-TYPE
OBJECTS { hpHttpMgDeviceIndex, hpHttpMgDeviceSysObjID, hpHttpMgDeviceGlobalUniqueID, hpHttpMgDeviceManagementURL, hpHttpMgDeviceManagementURLLabel, hpHttpMgDeviceSpecificEventCode, hpHttpMgDeviceSpecificFRU

STATUS          current
DESCRIPTION    "The device's health has changed to Non-Recoverable."
::= { hpHttpMgTraps 7 }

hpHttpMgDeviceAddedTrap NOTIFICATION-TYPE
OBJECTS { hpHttpMgDeviceIndex, hpHttpMgDeviceSysObjID, hpHttpMgDeviceGlobalUniqueID, hpHttpMgDeviceManagementURL, hpHttpMgDeviceManagementURLLabel

STATUS          current
DESCRIPTION    "Sent whenever a device is added to the mib."
::= { hpHttpMgTraps 8 }

hpHttpMgDeviceRemovedTrap NOTIFICATION-TYPE
OBJECTS { hpHttpMgDeviceIndex, hpHttpMgDeviceSysObjID, hpHttpMgDeviceGlobalUniqueID

STATUS          current
DESCRIPTION    "Sent whenever a device is removed from the mib."
::= { hpHttpMgTraps 9 }

hpHttpMgDeviceSpecificEventCode OBJECT-TYPE
SYNTAX    Utf8String
MAX-ACCESS read-write
STATUS    current
DESCRIPTION    "Device specific event error code."
::= { hpHttpMgTraps 10 }

hpHttpMgDeviceSpecificFRU OBJECT-TYPE
SYNTAX    Utf8String
MAX-ACCESS read-write
STATUS    current
DESCRIPTION    "Device specific FRU identifier"
::= { hpHttpMgTraps 11 }
-- Compliance Statements

hpHttpMgMinCompliance MODULE-COMPLIANCE
  STATUS current
  DESCRIPTION "The compliance statement for SNMP entities which
                 are http manageable."
  MODULE -- this module
  MANDATORY-GROUPS { hpHttpMgDefaultGroup }
  ::= { hpHttpMgCompliances 1 }

hpHttpMgBasicNetCitizenCompliance MODULE-COMPLIANCE
  STATUS deprecated
  DESCRIPTION "The compliance statement for SNMP entities which
               meet basic NetCitizen criteria"
  MODULE -- this module
  MANDATORY-GROUPS { hpHttpMgDefaultGroup,
                     hpHttpMgBasicNetCitizenGroup,
                     hpHttpMgBasicNetCitizenTrapGroup }
  ::= { hpHttpMgCompliances 2 }

hpHttpMgEnhancedNetCitizenCompliance MODULE-COMPLIANCE
  STATUS current
  DESCRIPTION "The compliance statement for SNMP entities which
               meet basic NetCitizen criteria"
  MODULE -- this module
  MANDATORY-GROUPS { hpHttpMgDefaultGroup,
                     hpHttpMgEnhancedNetCitizenGroup,
                     hpHttpMgEnhancedNetCitizenTrapGroup }
  ::= { hpHttpMgCompliances 3 }

-- Units of conformance

hpHttpMgDefaultGroup OBJECT-GROUP
  OBJECTS { hpHttpMgDefaultURL }
  STATUS current
  DESCRIPTION "The objects providing information applicable to all
                http manageable systems"
  ::= { hpHttpMgGroups 1 }

hpHttpMgBasicNetCitizenGroup OBJECT-GROUP
  OBJECTS { hpHttpMgMgmtSrvrURL,
            hpHttpMgID,
            hpHttpMgHealth,
            hpHttpMgManufacturer,
            hpHttpMgProduct,
            hpHttpMgVersion }
  STATUS deprecated
  DESCRIPTION "Additional HP NetCitizen objects"
  ::= { hpHttpMgGroups 2 }

hpHttpMgBasicNetCitizenTrapGroup NOTIFICATION-GROUP
NOTIFICATIONS { hpHttpMgHealthTrap }
STATUS deprecated
DESCRIPTION
"HP NetCitizen notifications"
::= { hpHttpMgGroups 3 }

hpHttpMgExtendedNetCitizenGroup OBJECT-GROUP
OBJECTS { hpHttpMgHWVersion,
    hpHttpMgROMVersion,
    hpHttpMgSerialNumber,
    hpHttpMgAssetNumber,
    hpHttpMgPhone }
STATUS deprecated
DESCRIPTION
"Additional HP NetCitizen objects"
::= { hpHttpMgGroups 4 }

hpHttpMgExtendedNetCitizenTrapGroup NOTIFICATION-GROUP
NOTIFICATIONS { hpHttpMgShutdown }
STATUS current
DESCRIPTION
"HP NetCitizen notifications"
::= { hpHttpMgGroups 5 }

hpHttpMgEntityRelationshipGroup OBJECT-GROUP
OBJECTS { hpHttpMgEntityNetInfoIndex,
    hpHttpMgEntityNetInfoSysObjID,
    hpHttpMgEntityNetInfoRelationshipType,
    hpHttpMgEntityNetInfoUniqueID,
    hpHttpMgEntityNetInfoURL,
    hpHttpMgEntityNetInfoURLLabel,
    hpHttpMgEntityNetInfoIPAddress }
STATUS current
DESCRIPTION
"NetCitizen entity-relationship table"
::= { hpHttpMgGroups 6 }

hpHttpMgClusterGroup OBJECT-GROUP
OBJECTS { hpHttpMgClusterName }
STATUS current
DESCRIPTION
"Cluster objects"
::= { hpHttpMgGroups 7 }

hpHttpMgEnhancedNetCitizenGroup OBJECT-GROUP
OBJECTS { hpHttpMgDeviceIndex,
    hpHttpMgDeviceGlobalUniqueID,
    hpHttpMgDeviceHealth,
    hpHttpMgDeviceSysObjID,
    hpHttpMgDeviceManagementURL,
    hpHttpMgDeviceManagementURLLabel,
    hpHttpMgDeviceManufacturer,
    hpHttpMgDeviceProductName,
    hpHttpMgDeviceProductCaption,
    hpHttpMgDeviceSerialNumber,
    hpHttpMgDeviceVersion,
    hpHttpMgDeviceHWVersion,
    hpHttpMgDeviceROMVersion,
    hpHttpMgDeviceAssetNumber,
hpHttpMgDeviceContactPerson,
hpHttpMgDeviceContactPhone,
hpHttpMgDeviceContactEmail,
hpHttpMgDeviceContactPagerNumber,
hpHttpMgDeviceLocation,
hpHttpMgDeviceRackId,
hpHttpMgDeviceRackPosition,
hpHttpMgDeviceRelationshipType

}  
STATUS current
DESCRIPTION
"Additional HP NetCitizen objects"
::= { hpHttpMgGroups 8 }

hpHttpMgEnhancedNetCitizenTrapGroup NOTIFICATION-GROUP
NOTIFICATIONS { hpHttpMgUnknownHealthTrap,
hpHttpMgOKHealthTrap,
hpHttpMgWarningHealthTrap,
hpHttpMgCriticalHealthTrap,
hpHttpMgNonRecoverableHealthTrap,
hpHttpMgDeviceAddedTrap,
hpHttpMgDeviceRemovedTrap
}
STATUS current
DESCRIPTION
"HP NetCitizen notifications"
::= { hpHttpMgGroups 9 }
END