

1 HP Insight Manager WBEM Ethernet

Description

The HP Insight Management Web-Based Enterprise Management (WBEM) Ethernet Port provider implements and extends Common Information Model (CIM) classes described in this document to model the ethernet port. These classes reside in the local host OS CIM Object Manager (CIM OM) on each individual monitored system and describe the ethernet ports, associated controllers, and logical ethernet interfaces that are available in the system. These classes do not describe Management Processor or iLO related information that information is provided by the MPLite provider.

Profile Name	Organization	Version
Ethernet Port Profile (DSP1014)	Distributed Management Task Force	1.0.0
Host LAN Network Port Profile (DSP1035)	Distributed Management Task Force	1.0.0
IP Protocol Profile (with IPv6 implementation) (DSP103)	Distributed Management Task Force	1.0.0
HP Ethernet Teaming Profile (P00117)	HP WBEM TC	1.0.1
HP Location Profile	HP WBEM TC	1.0

For the hardware architecture s listed, this provider requires the following distributions

SLES 10 and later

HP Integrity managed servers

RHEL 5.0 and later

Requirements

SLES 11 and later

HP ProLiant managed servers

RHEL 5.3 and later

Release History Initial release with HP Insight Management WBEM Providers for Linux v2.0.

1-1 Setting Up the Provider

Installing the Provider

There are no special installation instructions for this provider. It is installed by default as part of the HP Insight Management WBEM providers.

Configuring the Provider

This provider does not accept specific configuration adjustments beyond standard HP Insight Management WBEM support.

1-2 Using the Provider

Namespaces Supported by the Provider This provider returns instances in the `root/hpq` namespace.

Schema Supported by the Provider

This provider supports the following classes:

- `SMX_EthernetPort`
- `SMX_EthernetDevice`
- `SMX_EthernetLANEndpoint`
- `SMX_EthernetLANHostedAccessPoint`
- `SMX_EthernetPortToLANEndpoint`
- `SMX_EthernetPortController`
- `SMX_EthernetPortControllerEthernetPort`
- `SMX_EthernetPortControllerPhysicalPackage`
- `SMX_EthernetControllerPhysicalPackageEthernetController`
- `SMX_EthernetControllerLocation`
- `SMX_EthernetControllerPhysicalPackageEthernetControllerLocation`
- `SMX_IPProtocolEndpoint`
- `SMX_IPProtocolBindsToEthernetLANEndpoint`
- `SMX_EthIPHostedAccessPoint`
- `SMX_EthernetRemoteServiceAccessPoint`
- `SMX_EthernetRemoteAccessAvailableToIPEndpoint`
- `SMX_EthernetRemoteServiceHostedAccessPoint`
- `SMX_EthernetStatistics`
- `SMX_EthernetPortStatisticalData`
- `SMX_EthernetPortControllerSoftwareIdentity`
- `SMX_EthernetPortControllerFirmwareIdentity`
- `SMX_EthernetElementSoftwareIdentity`
- `SMX_EthernetElementFirmwareIdentity`

- `SMX_EthernetCollection`
- `SMX_EthernetMemberOfCollection`
- `SMX_EthernetGroupHostedCollection`
- `SMX_EthernetTeam,`
- `SMX_EthermetTeamMember`
- `SMX_HostedEthernetTeam`
- `SMX_EthernetTeamToLANEndpoint`
- `SMX_EthEventSettings`

The tables in the following sections describe the properties of the supported classes. The classes are categorized by the class or superclass that defines the property, the first column is the Property Name (including type and units) and the second column describes how the provider determines the properties implementation. When the Property Implementation value is a number, the number given is the default behavior and the Managed Object Format interpretation is within parenthesis. If other values are returned, a problem is indicated.

Unless otherwise noted, all of the property implementation values given are for HP ProLiant and HP Integrity (cellular and non-cellular) systems. The location related properties and implementation values are determined based on the server type so they may differ.

1-2-1 `SMX_EthernetPort` Class

The `SMX_EthernetPort` class implements the `HP_EthernetPort` class to describe the capabilities and characteristics of each EthernetPort in a monitored system.

The following table lists the properties implemented.

Property Name	Property Implementation
<code>CIM_ManagedElement</code>	
Caption	Text describing this port as advertised from PCI configuration/header information. For example: Broadcom Corporation NetXtreme BCM5753M Gigabit Ethernet PCI Express (rev 21).
Description	A description of the instance with unique port number for each port on a particular controller. For example: Ethernet port <code><PortNumber></code> on ethernet controller <code><controller_id></code> .

Property Name	Property Implementation
ElementName	Same as Caption.
CIM_ManagedSystemElement	
HealthState	5 (OK), 10 (Degraded), 20 (MajorFailure)
Name	<p>The logical MAC address of the Ethernet Port, typically for the format <i>FFFFFFFFFFFF</i></p> <p>Where: each <F> is a text representation of a hexadecimal digit 0x0 - 0xF.</p>
OperationalStatus	<p>0 (Unknown)</p> <p>2 (OK)</p> <p>3 (Degraded - indicating that there is no link for this port)</p> <p>6 (Error - indicating a link that was active is now lost)</p>
StatusDescriptions	<p>StatusDescriptions[0] per OperationalStatus[0]:</p> <p>Unknown</p> <p>OK</p> <p>Degraded</p> <p>Error</p>
CIM_LogicalElement	
CIM_EnabledLogicalElement	
EnabledState	5 (Not Applicable)
RequestedState	12 (Not Applicable)
EnabledDefault	2 (Enabled)
CIM_LogicalDevice	
CreationClassName	SMX_EthernetPort
DeviceID	HPQ:SMX_EthernetPort:<InstanceNum>
SystemName	SMX_ComputerSystem.Name

Property Name	Property Implementation
SystemCreationClassName	SMX_ComputerSystem
MaxSpeed	Current bandwidth in bits per second if port has link (value is 0, otherwise). Typically one of the following: 10000000, 100000000, 1000000000, or 2500000000
CIM_NetworkPort	
AutoSense	Boolean that is true if Ethernet Port can automatically determine speed of comm. characteristics of the network
FullDuplex	Boolean that is true if operating in FullDuplex mode
LinkTechnology	2 (Ethernet)
Permanent Address	The logical MAC address of the Ethernet Port, typically for the format FFFFFFFFFF Where: each <F> is a text representation of a hexadecimal digit 0x0 - 0xF.
PortNumber	Unique number assigned to each Ethernet Port on a given ethernet controller in the form of <port_id>. These numbers are not unique across multiple controllers that exist on the same system.
Speed	Current bandwidth in bits per second. Typically one of the following: 10000000, 100000000, or 1000000000
SupportedMaximumTransmissionUnit	64-bit unsigned integer of MTU in bytes
ActiveMaximumTransmissionUnit	64-bit unsigned integer reporting current active MTU in bytes
CIM_EthernetPort	
PortType	0 (Unknown) 1 (Other) 50 (10BaseT) 51 (10-100BaseT) 52 (100BaseT) 53 (1000BaseT), 55 (10GBaseT)

Property Name	Property Implementation
	54 (2500BaseT) 55 (10GBaseT) 100 (100Base-FX) 101 (1000Base-SX) 102 (1000Base-SX) 103 (1000Base-LX) 104 (1000Base-CX) 105 (10GBase-SR) 106 (10GBase-SW) 107 (10GBbase-LX4) 108 (10GBase-LR) 109 (10GBase-LW) 110 (10GBase-ER) 111 (10GBase-EW)
Capabilities[]	Array of 16 bit unsigned integers advertising the capabilities of the EthernetPort: 0 (Unknown) 1 (Other) 2 (AlertOnLan) 3 (WakeOnLan)
CapabilityDescriptions[]	Capability Descriptions[0] per Capabilities[0]. Text descriptions for the Capabilities array above. For example: Unknown Other Alert On LAN Wake On LAN
EnabledCapabilities[]	Specifies which of the Ethernet Ports capabilities are enabled.
NetworkAddresses[]	Array of MAC addresses affiliated with port. Formatted like 001122334455 with no delimiting.
HP_EthernetPort	

Property Name	Property Implementation
VirtualPortNumber	Virtual Port Number for FlexNICs

1-2-2 SMX_EthernetDevice Class

The `SMX_EthernetDevice` class implements the `HP_EthernetDevice` class and associates the enclosure's computer system instance to the blade's computer system instance.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_EthernetDevice	
GroupComponent	Reference to <code>SMX_ComputerSystem</code> (the computer system in which this Ethernet Port resides.)
PartComponent	Reference to <code>SMX_EthernetPort</code> (the instance of Ethernet Port in this Computer System.)

1-2-3 SMX_EthernetLANEndpoint Class

The `SMX_EthernetLANEndpoint` class implements the `HP_EthernetLANEndpoint` class and describes a communication endpoint that, when its associate interface is connected to a LAN, may send and receive data frame.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	LAN Endpoint information for OS Exposed Ethernet Port information. For example: LAN Endpoint (<i>instanceNum</i>) for: 82546GB Gigabit Ethernet Controller port < <i>portNumber</i> >
CIM_ManagedSystemElement	
HealthState	5 (OK), normal operation 20 (MajorFailure)
Name	Opaque key, of the format <code>HPQ:SMX_EthernetLANEndpoint:instanceNumber</code>
OperationalStatus	0 (Unknown)

Property Name	Property Implementation
	<p>2 (OK)</p> <p>3 (Degraded - indicating that there is no link for this port)</p> <p>6 (Error - indicating a link that was active is now lost)</p>
StatusDescriptions	<p>StatusDescriptions[0] per OperationalStatus[0]:</p> <p>Unknown</p> <p>OK</p> <p>Degraded</p> <p>Error</p>
CIM_LogicalDevice	
CIM_EnabledLogicalElement	
CIM_ServiceAccessPoint	
CreationClassName	SMX_EthernetLANEndpoint
SystemName	SMX_ComputerSystem.Name
SystemCreationClassName	SMX_ComputerSystem
CIM_ProtocolEndpoint	
Description	<p>Text representing of what the operating system labels this endpoint.</p> <p>For example:</p> <p>eth3</p>
ElementName	<p>LAN Endpoint information for OS Exposed Ethernet Port information.</p> <p>For example:</p> <p>LAN Endpoint(<i>instanceNum</i>) for: 82546GB Gigabit Ethernet Controller port <i>portNumber</i></p>
ProtocolIFType	6 (Ethernet CSMA/CD)
CIM_LANEndpoint	
MACAddress	Text representing the principal unicast address used in communication with the LAN Endpoint. Twelve hexadecimal digits.

Property Name	Property Implementation
	For example: 0102a3b40506
HP_EthernetLANEndpoint	

1-2-4 SMX_EthernetLANHostedAccessPoint Class

The `SMX_EthernetLANHostedAccessPoint` class implements the `HP_EthernetLANHostedAccessPoint` class and associates the Ethernet LAN Endpoint to the Computer System in a managed system.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_Dependency	
CIM_HostedDependency	
CIM_HostedAccessPoint	
HP_EthernetLANHostedAccessPoint	
Antecedent	Reference to <code>SMX_ComputerSystem</code> .
Dependent	Reference to <code>SMX_EthernetLANEndpoint</code> .

1-2-5 SMX_EthernetPortToLANEndpoint Class

The `SMX_EthernetPortToLANEndpoint` class implements the `HP_EthernetPortToLANEndpoint` class and associates the Ethernet Port instance to its Ethernet LAN Endpoint instance.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_Dependency	
CIM_DeviceSAPIImplementation	
HP_EthernetPortToLANEndpoint	
Antecedent	Reference to <code>SMX_EthernetPort</code> .

Property Name	Property Implementation
Dependent	Reference to SMX_EthernetPortLANEndpoint.

1-2-6 SMX_EthernetPortController Class

The SMX_EthernetPortController class implements the HP_EthernetPortController class and is a logical device corresponding to a hardware Ethernet network controller.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	A description of the class. For example: Ethernet Controller <i>controller_id</i>
Description	A description of the class. For example: Ethernet Controller < <i>controller_id</i> >
ElementName	A description of the class. For example: Ethernet Controller < <i>controller_id</i> >
CIM_ManagedSystemElement	
HealthState	5 (OK - normal operation)
Name	A description of the class. For example: Ethernet Controller <i>controller_id</i>
OperationalStatus	2 (OK - normal operation)
StatusDescriptions	Ethernet Controller status: OK
CIM_LogicalDevice	
CIM_EnabledLogicalElement	
CIM_LogicalDevice	

Property Name	Property Implementation
CreationClassName	SMX_EthernetPortController
SystemCreationClassName	SMX_ComputerSystem
SystemName	SMX_ComputerSystem.Name
IdentifyingDescriptions	None
CIM_Controller	
CIM_PortController	
ControllerType	2 (Ethernet)
ControllerVersion	Hardware revision number of the controller or None if unknown

1-2-7 SMX_EthernetPortControllerEthernetPort Class

The SMX_EthernetPortControllerEthernetPort class implements the HP_EthernetPortControllerEthernetPort class and associates an Ethernet Port Controller to its controlled Ethernet Ports.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_Dependency	
CIM_DeviceConnection	
CIM_ControlledBy	
HP_EthernetPortControllerEthernetPort	
Antecedent	Reference to SMX_EthernetPortController.
Dependent	Reference to SMX_EthernetPort.

1-2-8 SMX_EthernetPortControllerPhysicalPackage Class

The SMX_EthernetPortControllerPhysicalPackage class implements the HP_EthernetPortControllerPhysicalPackage class and describes an Ethernet Port Controller Physical Package.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Product name. For example: Controller (<i>num_ports</i> -port): Broadcom Corporation NetXtreme BCM5753M Gigabit Ethernet PCI Express (rev 21)
Name	Name and location For example: Ethernet Controller Package
HealthState	5 (OK - normal operation)
OperationalStatus	2 (OK - normal operation)
StatusDescriptions	Ethernet Controller Package status: OK
CIM_PhysicalElement	
CanBeFRUed	Boolean describing if this individual physical package can be replaced in the field. True - if PCI card False - if embedded device on Motherboard
CreationClassName	SMX_EthernetPortControllerPhysicalPackage
Description	Product name. For example: Controller (<i>num_ports</i> -port): Broadcom Corporation NetXtreme BCM5753M Gigabit Ethernet PCI Express (rev 21)
ElementName	Same as Name property
Manufacturer	Text representing vendor information from PCI configuration space. For example: HP, Intel, Broadcom
Tag	Opaque key HPQ:SMX_EthernetPortControllerPhysicalPackage: <i>controller_id</i>

Property Name	Property Implementation
RemovalConditions	2 (Not Applicable)
Version	Hardware version of the Package or N/A
CIM_PhysicalPackage	
OtherPackageType	If PackageType is 1 (Other), then this text will further describe the package. For example: Embedded Controller
PackageType	0 (Unknown) 1 (Other - more information in OtherPackageType) 9 (Module/Card)
HP_EthernetPortPhysicalPackage	

1-2-9 SMX_EthernetControllerPhysicalPackageEthernetController Class

The `SMX_EthernetControllerPhysicalPackageEthernetController` class implements the `HP_EthernetControllerPhysicalPackageEthernetController` class and associates an Ethernet Port Controller Physical Package to its logical Ethernet Port Controller.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_Dependency	
CIM_Realizes	
HP_EthernetControllerPhysicalPackageEthernetController	
Antecedent	Reference to <code>SMX_EthernetPortControllerPhysicalPackage</code> .
Dependent	Reference to <code>SMX_EthernetPortController</code> .

1-2-10 SMX_EthernetControllerLocation Class

The `SMX_EthernetControllerLocation` class implements the `HP_EthernetControllerLocation` class. It describes the location information of the Ethernet Controller Physical Package or card.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
ElementName	Product Name. For Example: 2 port controller: Broadcom Corporation NetXtreme BCM5753M Gigabit Ethernet PCI Express (rev 21)
Description	Value of ElementLocationTag prefaced with either Embedded Ethernet Controller OR Ethernet Controller in
Caption	Same as Description.
CIM_Location	
Name	PCISLOT or EMBEDDED ETHERNET
PhysicalPosition for other servers	Opaque key. For example, for a controller in slot 3 the key would be: FF-FF-FF-FF-FF-03-FF-85 For an embedded controller 2 the key would be: FF-FF-FF-FF-FF-00-02-88
HP_Location	
ElementLocationTagDesc	23 (Adapter) 18 (Port)
ElementLocationTag	<physical location> Refer to "Physical Location" for more information.
LocationInfoDesc	Array of numerical enumerators describing values at comparable index in the LocationInformation array index 1, 2, 3, or 4. LocationInfoDesc[0] per LocationInformation[0] 3 (PCI Slot). Embedded devices 17 (Embedded Device) 10 (Cell if it is an embedded device in a cellular system) Additional enumerators for Cellular servers 2 (Interconnect Bay)

Property Name	Property Implementation
	7 (Cabinet) 6 (Chassis) Additional enumerators for HP BladeSystem servers 14 (Blade) 1 (Mezzanine)
LocationInformation	Array of text values representing the location components that describe this Ethernet Controller Physical location. LocationInfoDesc[0] per LocationInformation[0]. Refer to the LocationInfoDescription array to determine what type of location information is represented.

1-2-11 SMX_EthernetControllerPhysicalPackageEthernetControllerLocation Class

The SMX_EthernetControllerPhysicalPackageEthernetControllerLocation class implements the HP_EthernetControllerPhysicalPackageEthernetControllerLocation class and associates SMX_EthernetControllerPhysicalPackage to its logical SMX_EthernetControllerLocation.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_PhysicalElementLocation HP_EthernetPortControllerPhysicalPackageEthernetControllerLocation	
Element	Reference to SMX_EthernetControllerPhysicalPackage.
PhysicalLocation	Reference to SMX_EthernetControllerLocation.

1-2-12 SMX_IPProtocolEndpoint Class

The SMX_IPProtocolEndpoint class implements the HP_IPProtocolEndpoint class and describes capabilities and characteristics of each IP interface in a managed system.

The following table lists the properties implemented.

Property Name	Value
CIM_ManagedElement	
ElementName	IP Protocol Endpoint information for OS Exposed Ethernet Port

Property Name	Value
	information. For example: IP Protocol Endpoint (<i>instanceNum</i>) for: port <portnumber> 82546GB Gigabit Ethernet Controller
Caption	Same as associated ElementName
Description	Operating System ethernet device name. For example: eth1.
CIM_ManagedSystemElement	
HealthState	Same as associated LAN Endpoint.
StatusDescriptions	StatusDescriptions[0] per OperationalStatus[0]: Unknown OK Degraded Error
CIM_LogicalElement	
CIM_EnabledLogicalElement	
RequestedState	12 (Not Applicable)
EnabledState	2 (Enabled)
CIM_ServiceAccessPoint	
CreationClassName	SMX_IPProtocolEndpoint
SystemCreationClassName	SMX_ComputerSystem
SystemName	SMX_ComputerSystem.Name
CIM_ProtocolEndpoint	
OperationalStatus	0 (Unknown) 2 (OK)

Property Name	Value
	3 (Degraded) 6 (Error)
CIM_IPProtocolEndpoint	
AddressOrigin	How the Address was assigned to this IP Protocol Endpoint. 0 (Unknown) 3 (Static) 4 (DHCP)
IPv4Address	Only initialized if IP interface advertises a valid IPv4 Address.
IPv6Address	Only initialized if IP interface advertises a valid IPv6 Address.
IPv6AddressType	If ProtocolIFType is 4097 or 4098, then this property will be implemented. 3 (Loopback) 5 (Link Local Unicast) 7 (Embedded IPv4 Address)
IPv6SubnetPrefixLength	Unsigned integer. Only initialized if IP interface advertises a valid IPv6 Address. It is used to describe the prefix length of the IPv6Address subnet (experimental schema.)
PrefixLength	Same as IPv6SubnetPrefixLength (non-experimental schema.)
Name	Opaque Key. SMX scoped instance name. For example: HPQ:SMX_IPProtocolEndpoint: <i>instance_num</i>
NameFormat	Text describing the method to create a unique name for every IPProtocolEndpoint. For example: Opaque Key. Unique scoped instance information HPQ:SMX_IPProtocolEndpoint: concatenated with the class instance id number.
ProtocolIFType	1 (Other)

Property Name	Value
	4096 (IPv4) 4097 (IPv6) 4098 (IPv4/IPv6)
SubnetMask	Text representing the mask of the IPv4 address, if defined; otherwise, 0.0.0.0/
HP_IPProtocolEndpoint	

1-2-13 SMX_IPProtocolBindsToEthernetLANEndpoint Class

The `SMX_IPProtocolBindsToEthernetLANEndpoint` class implements the `HP_IPBindsToEthernetLANEndpoint` class and associates an instance of an `IPProtocolEndpoint` with its representative Ethernet LAN Endpoint instance.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_SAPSAPDependency	
CIM_BindsTo	
CIM_BindsToLANEndpoint	
FrameType	1 (Ethernet)
HP_IPBindsToEthernetLANEndpoint	
Antecedent	Reference to <code>SMX_EthernetLANEndpoint</code> .
PartComponent	Reference to <code>SMX_IPProtocolEndpoint</code> .

1-2-14 SMX_EthIPHostedAccessPoint

`SMX_EthIPHostedAccessPoint` implements the class `HP_EthIPHostedAccessPoint` and associates IP Protocol Endpoints to the Computer System.

Property Name	Property Implementation
CIM_HostedDependency	
CIM_HostedAccessPoint	

Property Name	Property Implementation
HP_EthIPHostedAccessPont	
Antecedent	Reference to SMX_ComputerSystem
Dependent	Reference to SMX_IPProtocolEndpoint

1-2-15 SMX_EthernetRemoteServiceAccessPoint Class

The SMX_EthernetRemoteServiceAccessPoint class implements the HP_RemoteServiceAccessPoint class and describes the managed systems view of the default gateway.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
ElementName	A unique description of the gateway. For example: RemoteServiceAccessPoint: Gateway for <i>interface_name</i>
CIM_ManagedSystemElement	
CIM_LogicalElement	
CIM_EnabledLogicalElement	
CIM_ServiceAccessPoint	
CreationClassName	SMX_RemoteServiceAccessPoint
Name	A unique description of the gateway. For example: RemoteServiceAccessPoint: Gateway for <i>interface_name</i>
SystemCreationClassName	SMX_ComputerSystem
SystemName	SMX_ComputerSystem.Name
CIM_RemoteServiceAccessPoint	
AccessContext	0 (Unknown)

Property Name	Property Implementation
	2 (Default Gateway)
AccessInfo	<p>If ProtocolIFType = 4095 (IPv4), then text value will be dot-delimited IP address of default gateway followed by the IPv4 netmask; otherwise, 0.0.0.0 if the default gateway is unassigned.</p> <p>If ProtocolIFType = 4097 or 4098 (IPv6), the text value will be either a valid IPv6 Address or ::/128 if default gateway is unassigned.</p>
InfoFormat	<p>3 (IPv4 Address)</p> <p>4 (Ipv6 Address)</p>

1-2-16 SMX_EthernetRemoteAccessAvailableToIPEndpoint Class

The class implements the HP_RemoteAccessAvailableToIPEndpoint class and associates the Default Gateway represented by the SMX_EthernetRemoteServiceAccessPoint instance to the IP Protocol Endpoint that has access to it.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_Dependency	
CIM_RemoteAccessAvailableToElement	
IsDefault	<p>Boolean true if only 1 default and only 1 gateway is present. In some systems, there may be order of access constraints if multiple gateways are present.</p> <p>Refer to the OrderOfAccess property for gateway priorities</p>
OrderOfAccess	0 (default - indicates ordering doesn't apply; otherwise the numbers indicate priority order of access.)
HP_RemoteAccessAvailableToIPEndpoint	
Antecedent	Reference to SMX_EthernetRemoteServiceAccessPoint
Dependent	Reference to SMX_IPProtocolEndpoint

1-2-17 SMX_EthernetRemoteServiceHostedAccessPoint Class

The `SMX_EthernetRemoteServiceHostedAccessPoint` class implements the `HP_RemoteServiceHostedAccessPoint` class and associates the Remote Service Access Point to the Computer System in a managed system.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_Dependency	
CIM_HostedDependency	
CIM_HostedAccessPoint	
HP_EthernetLANHostedAccessPoint	
Antecedent	Reference to <code>SMX_ComputerSystem</code>
Dependent	Reference to <code>SMX_EthernetRemoteServiceAccessPoint</code>

1-2-18 SMX_EthernetStatistics

`SMX_EthernetStatistics` implements the class `HP_EthernetStatistics`. The following table lists the property implementation for `SMX_EthernetStatistics`.

Note: Currently implemented only in VMware ESXi platform.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	For Ethernet Ports, same as associated <code>EthernetPort.Caption</code> .
Description	A description of the instance with unique port number for each port on a particular controller For example: Ethernet port <code><PortNumber></code> on ethernet controller <code><controller_id></code>
ElementName	Same as Caption
CIM_StatisticalData	
InstanceId	HPQ:SMX_EthernetStatistics: <code><instance_id></code>
SampleInterval	0000000000000000.000000:000
StatisticTime	Time of current statistics

Property Name	Property Implementation
CIM_NetworkPortStatistics	
BytesReceived	Total number of bytes received
BytesTransmitted	Total number of bytes transmitted
PacketsReceived	Total number of packets received
CIM_EthernetPortStatistics	
AlignmentErrors	See CIM_EthernetPortStatistics mof.
DeferredTransmissions	See CIM_EthernetPortStatistics mof.
ExcessiveCollisions	See CIM_EthernetPortStatistics mof.
FCSErrors	See CIM_EthernetPortStatistics mof.
InternalMACReceiveErrors	See CIM_EthernetPortStatistics mof.
InternalMACTransmitErrors	See CIM_EthernetPortStatistics mof.
LateCollisions	See CIM_EthernetPortStatistics mof.
MultipleCollisionFrames	See CIM_EthernetPortStatistics mof.
SingleCollisionFrames	See CIM_EthernetPortStatistics mof.
HP_EthernetStatistics	

1-2-19 SMX_EthernetPortStatisticalData

SMX_EthernetPortToStatisticalData associates Ethernet Ports to Ethernet Port Statistics.

Property Name	Property Implementation
CIM_ElementStatisticalData	
Key:ManagedElement	Reference SMX_EthernetPort
Key:Stats	Reference SMX_EthernetStatistics
HP_EthernetPortStatisticalData	

1-2-20 SMX_EthernetPortControllerSoftwareIdentity

SMX_EthernetPortControllerSoftwareIdentity implements the class CIM_SoftwareIdentity. It represents the adapter driver software of the associated Ethernet Port.

Note: Currently implemented only in VMware ESXi platform.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Ethernet Port Controller Driver
Description	<product name> Device Driver Where: <product name> is the product name of the Ethernet Adapter.
ElementName	Ethernet Port Controller Driver
CIM_ManagedSystemElement	
Name	DriverFilename
CIM_LogicalElement	
CIM_SoftwareIdentity	
ClassificationDescriptions	Ethernet Port Controller Driver
Classifications	2 (Driver)
InstanceID	HPQ:SMX_EthernetPortControllerSoftwareIdentity:<instanceNum>
Manufacturer	Manufacturer
VersionString	Driver Version

1-2-21 SMX_EthernetPortControllerFirmwareIdentity

SMX_EthernetPortControllerFirmwareIdentity implements the class CIM_SoftwareIdentity. It represents the adapter firmware of the associated Ethernet Port.

Note: Currently implemented only in VMware ESXi platform.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Ethernet Port Controller Firmware
Description	Ethernet Port Controller Firmware details for <Model name> Where: <Model name> is the Model name of the Ethernet Adapter.

Property Name	Property Implementation
ElementName	PCI Vendor Id: Device Id
CIM_ManagedSystemElement	
Name	Ethernet Port Controller Firmware details for <Model name> Where: <Model name> is the Model name of the Ethernet Adapter.
CIM_LogicalElement	
CIM_SoftwareIdentity	
ClassificationDescriptions	Ethernet Port Controller Firmware
Classifications	10 (firmware)
InstanceID	HPQ:SMX_EthernetPortControllerFirmwareIdentity: <instanceNum>
IdentityInfoType	CIM:SoftwareFamily
IdentityInfoValue[0]	HPQ:PCI Vendor Id:DeviceId
TargetType	PCI Vendor Id:Device Id
Manufacturer	Manufacturer
VersionString	Firmware Version

1-2-22 SMX_EthernetElementSoftwareIdentity

SMX_EthernetElementSoftwareIdentity implements the class CIM_ElementSoftwareIdentity. It represents the association between SMX_EthernetPortController and SMX_EthernetPortControllerSoftwareIdentity.

Property Name	Property Implementation
CIM_Dependency	
Antecedent	ref:SMX_EthernetPortControllerSoftwareIdentity
Dependent	ref:SMX_EthernetPortController
CIM_ElementSoftwareIdentity	
ElementSoftwareStatus	ElementSoftwareStatus[0]: 2 (Current) ElementSoftwareStatus[1]: 6 (Installed)

1-2-23 SMX_EthernetElementFirmwareIdentity

SMX_EthernetElementFirmwareIdentity implements the class CIM_ElementSoftwareIdentity. It represents the association between SMX_EthernetPortController and SMX_EthernetPortControllerFirmwareIdentity.

Property Name	Property Implementation
CIM_ Dependency	
Antecedent	ref:SMX_EthernetPortControllerFirmwareIdentity
Dependent	ref:SMX_EthernetPortController
CIM_ElementSoftwareIdentity	
ElementSoftwareStatus	ElementSoftwareStatus[0]: 2 (Current) ElementSoftwareStatus[1]: 6 (Installed)

1-2-24 SMX_EthernetCollection

SMX_EthernetCollection implements the class HP_EthernetCollection. It represents the collection of all Ethernet Ports.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Ethernet Adapter Collection
Description	This is a collection of all Ethernet Ports.
ElementName	Ethernet Adapter Collection
CIM_Collection	
CIM_SystemSpecificCollection	
InstanceID	HPQ:SMX_EthernetCollection-1
HP_GroupSystemSpecificCollection	
GroupOperationalStatus	0 (Unknown) 2 (OK) 3 (Degraded) 6 (Error)
GroupStatusDescriptions	GroupStatusDescriptions[0] per GroupOperationalStatus[0]:

Property Name	Property Implementation
	Unknown OK Degraded Error
HP_EthernetCollection	

1-2-25 SMX_EthernetMemberOfCollection

SMX_EthernetMemberOfCollection associates Ethernet Ports to the Ethernet Collection.

Property Name	Property Implementation
CIM_MemberOfCollection	
Collection	ref:SMX_EthernetCollection
Member	ref:SMX_EthernetPort
CIM_MemberOfPolicyCollection	
Included	<p>Writeable boolean property indicating if the ethernet port instance referenced by Member will contribute status to the SMX_EthernetCollection.</p> <p>TRUE—Include member status in collection status FALSE—Do not include member status in collection status</p>
HP_EthernetMemberOfCollection	

1-2-26 SMX_EthernetGroupHostedCollection

SMX_EthernetGroupHostedCollection associates the Ethernet Collection to the Computer System.

Property Name	Property Implementation
CIM_Dependency	
Antecedent	ref:SMX_ComputerSystem
Dependent	ref:SMX_EthernetCollection
CIM_HostedDependency	
CIM_HostedCollection	
HP_EthernetGroupHostedCollection	

1-2-27 SMX_EthernetTeam

SMX_EthernetTeam models Ethernet Redundancy Sets (Ethernet Teams).

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Device Name For example: HP Network Team #1
Description	Local Area Connection For example: Local Area Connection #10
ElementName	Same as caption.
CIM_Collection	
CIM_SystemSpecificCollection	
Key:InstanceId	System GUID for the team.
CIM_RedundancySet	
LoadBalanceAlgorithm	0 (None) 1 (Other) 3 (Round Robin)
MaxNumberSupported	Number of ports configured in team.
MinNumberNeeded	1
OtherLoadBalanceAlgorithm	When LoadBalanceAlgorithm is 1 (Other), OtherLoadBalanceAlgorithm is set to configured Load Balance Algorithm. For example: Automatic
RedundancyStatus	2 (Fully Redundant) 3 (Degraded Redundancy) 4 (Redundancy Lost) 5 (Overall Failure).
TypeOfSet	2 (N+1) 3 (Load Balanced).
HP_GroupRedundancySet	
GroupOperationalStatus	2 (OK)

Property Name	Property Implementation
	3 (Degraded) 6 (Error)
HP_EthernetTeam	
ActiveMaximumTransmissionUnit	Current maximum transmission unit in bytes.
Speed	The current bandwidth of the team in bits per second.
TeamCapabilities[]	Capabilities of an Ethernet Team. Refer to Windows Ethernet Teaming mof, HP_WinEthRedundancySet.mof For example: Fast Path Failover
TeamCurrentOperatingMode	Current operating mode of the Ethernet Team. For example: 802.3ad Dynamic With Fault Tolerance
TeamEnabledCapabilities[]	Currently enabled capabilities of the Ethernet Team For example: Fast Path Failover
TeamOperatingMode	Operating modes of an Ethernet Team. Refer to Windows Ethernet Teaming mof, HP_WinEthRedundancySet.mof. For example: 802.3ad Dynamic With Fault Tolerance

1-2-28 SMX_EthernetTeamMember

SMX_EthernetTeamMember associates the Ethernet Ports to Ethernet Teams.

Property Name	Property Implementation
CIM_MemberOfCollection	
Key:Collection	ref:HP_EthernetTeam
Key:Member	ref:HP_EthernetPort
HP_EthernetTeamMember	
MemberOperationalStatus	2 (OK) 3 (Degraded) 6 (Error)
MemberStatusDescriptions	Refer to HP Ethernet Teaming Profile. For example: Degraded (Fast Path)

Property Name	Property Implementation
Role	0 (Unknown) 1 (None) 1000 (Tx/Rx – Transmit/Receive) 1001 (Tx – Transmit only) 1002 (Standby – Spare)

1-2-29 SMX_HostedEthernetTeam

SMX_HostedEthernetTeam associates the Ethernet Teams to the containing Computer System.

Property Name	Property Implementation
CIM_OwningCollectionElement	
Key:OwnedElement	ref:HP_EthernetTeam
Key:OwningElement	ref:HP_ComputerSystem
HP_HostedEthernetTeam	

1-2-30 SMX_EthernetTeamToLANEndpoint

SMX_EthernetTeamToLANEndpoint associates the Ethernet Teams to the Ethernet LAN Endpoints.

Property Name	Property Implementation
CIM_ Dependency	
Key:OwnedElement	ref:HP_EthernetTeam
Key:OwningElement	ref:HP_ComputerSystem
HP_ EthernetTeamToLANEndpoint	

1-2-31 SMX_EthEventSetting

SMX_EthEventSettings models configurable Ethernet Indication settings.

Property Name	Property Implementation
CIM_SettingData	
Caption	HP Ethernet Event Provider configurable settings
Description	HP Ethernet Event Provider configurable settings

Property Name	Property Implementation
ElementName	HP Ethernet Event Provider configurable settings
InstanceId	0
HP_EthEventSettings	
SMX_EthEventSettings	
ActiveAdapterCountChanged	If enabled, an event is generated when a change is detected in number of active adapter count of a team. Default, disabled.
FloodThreshold	Time, in seconds, used for indication flood control, default 10 seconds
InterfaceAvailable	If enabled, an event is generated when a network interface becomes available. Default, disabled.
InterfaceUnAvailable	If enabled, an event is generated when a network interface becomes unavailable. Default, disabled.
MaxFloodLevel	Max number of events within Flood Threshold, default 100 events.
MemberJoinedTeam	If enabled, an event is generated when an adapter joins a team. Default, disabled.
MemberLeftTeam	If enabled, an event is generated when an adapter leaves a team. Default, disabled.
MemberRoleChanged	If enabled, an event is generated when any change in team member role is detected. Default, disabled.
MemberStatusChanged	If enabled, an event is generated when any change in team member status is detected. Default, disabled.
MonitorLANEndpoints	If enabled, events related to SMX_EthernetLANEndpoint are generated. Default, disabled.
MonitorPorts	If enabled, events related to SMX_EthernetPort are generated. Default, enabled.
MonitorRedundancySets	If enabled, events related to SMX_EthernetTeam are generated. Default, true.
PolInterval	The longest interval between network status polls, in seconds. Value 0 disables polling and is not recommended. Using very low values can increase CPU utilization. Default 200.

1-3 Supported Indications

The following table describes the properties that are common to all of the SMX Ethernet Port Provider indications that are implemented for server platforms, where available.

Property Name	Property Implementation
CIM_Indication	
IndicationIdentifier	GUID string generated at the time of indication
IndicationTime	Time of indication
CIM_AlertIndication	
EventTime	Time of the event or time of the indication if event time unknown
SystemName	SMX_ComputerSystem.Name
SystemCreationClassName	SMX_ComputerSystem.CreationClassName
HP_AlertIndication	
ProviderVersion	Provider Version in the format <i>VV.UU.FF</i> For example: 01.05.00
NetworkAddresses	Contains a list of all the IP addresses of the computer system generating the indication
OSType	On ESX, 39 (VM) On Linux, 36 (Linux)
OSVersion	The operating system version of the computer system generating the indication in the following format: <major>.<minor>.<build>
SystemFirmwareVersion	Array of firmware versions of the computer system generating the indication
SystemSerialNumber	Serial number of the computer system generating the indication
SystemProductID	Product ID of the computer system generating the indication
SystemModel	Model name of the computer system generating the indication
SystemGUID	Platform GUID of the computer system generating the indication

1-3-1 HP_AlertIndication: Network Interface Connectivity Lost

The following indications are implemented for HP ProLiant and Integrity server platforms, where available..

Property Name	Property Implementation
CIM_Indication	

Property Name	Property Implementation
PerceivedSeverity	6 (Critical)
CIM_AlertIndication	
Description	If the Network Interface is an Ethernet Port, the Ethernet Port has transitioned from OK to Error.
AlertingManagedElement	WBEM Path of the SMX_EthernetPort instance
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	2
ProviderName	HP Ethernet
RecommendedActions	View the Ethernet Port status in HP Systems Insight Manager (SIM). View the System Event Log for additional information.
HP_AlertIndication	
Summary	The Network interface has lost connectivity.
EventCategory	9 (Network Device)
EventSubCategory	11 (Ethernet port) 12 (Ethernet team) 13 (Ethernet LAN Endpoint)
ProbableCause	7 (Communications Subsystem Failure)
ProbableCauseDescription	Network Interface Lost Connectivity

1-3-2 HP_AlertIndication: Network Interface Connectivity Restored

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	2 (Information)
CIM_Alertindication	
Description	If the Network Interface is an Ethernet Port, the Ethernet Port has transitioned from Error to OK.
AlertingManagedElement	WBEM Path of the SMX_EthernetPort instance
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)

Property Name	Property Implementation
EventID	3
ProviderName	HP Ethernet
RecommendedActions	No action is recommended
HP_AlertIndication	
Summary	The interface network connectivity has been restored.
EventCategory	9 (Network Device)
EventSubCategory	11 (Ethernet port) 12 (Ethernet team) 13 (Ethernet LAN Endpoint)
ProbableCause	1 (Other)
ProbableCauseDescription	Network Interface Connectivity Restored

1-3-3 HP_AlertIndication:Ethernet Team Redundancy Lost

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	6 (Critical)
CIM_Alertindication	
Description	An Ethernet team's redundancy status changed to Redundancy Lost. All members of an Ethernet team, except one, are failed.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting lost redundancy
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	5
ProviderName	HP Ethernet
RecommendedActions	Check the Ethernet Team and Ethernet Team Member status. View the System Event Log for additional information.
HP_AlertIndication	
Summary	Ethernet team lost redundancy
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)

Property Name	Property Implementation
ProbableCause	88 (Loss of Redundancy)
ProbableCauseDescription	Ethernet Team Redundancy Lost

1-3-4 HP_AlertIndication: Ethernet Team Redundancy Increased

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	2 (Information)
CIM_Alertindication	
Description	An Ethernet team's redundancy has increased. A team member recovered from a failed or degraded state.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting increased redundancy.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	6
ProviderName	HP Ethernet
RecommendedActions	No action is recommended
HP_AlertIndication	
Summary	Ethernet team redundancy increased
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team))
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet Team Redundancy Increased

1-3-5 HP_AlertIndication: Ethernet Team Redundancy Decreased

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	3 (Warning)
CIM_Alertindication	

Property Name	Property Implementation
Description	An Ethernet team's redundancy has decreased. A team member has changed to failed or degraded state.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting decreased redundancy
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	4
ProviderName	HP Ethernet
RecommendedActions	Check the Ethernet Team and Ethernet Team Member status. View the System Event Log for additional information.
HP_AlertIndication	
Summary	Ethernet team's redundancy decreased
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	88 (Loss of Redundancy)
ProbableCauseDescription	Ethernet Team Redundancy Decreased

1-3-6 HP_AlertIndication: Ethernet Team Redundancy Restored

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	An Ethernet team's redundancy status changed to Fully Redundant. An Ethernet team member status changed from Error or Degraded to OK.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting full redundancy restored.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	15
ProviderName	HP Ethernet

Property Name	Property Implementation
RecommendedActions	No action is recommended
HP_AlertIndication	
Summary	Ethernet team redundancy Fully Redundant.
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet Team Redundancy Status Changed to Fully Redundant

1-3-7 HP_AlertIndication: Ethernet Team Member Status Change

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_Alertindication	
Description	An Ethernet team member's status has changed. This is an optional indication that can be disabled via the Ethernet Event Provider settings.
AlertingManagedElement	Wbem Path of SMX_EthernetTeam instance reporting a member status change.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	10
ProviderName	HP Ethernet
RecommendedActions	Check the Ethernet Team and Ethernet Team Member status. View the System Event Log for additional information.
HP_AlertIndication	
Summary	Ethernet team member reported status change
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet Team Member Status Change

1-3-8 HP_AlertIndication: Ethernet Team Member Role Change

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	2 (Information)
CIM_Alertindication	
Description	An Ethernet Team member's role has changed. This is an optional indication that can be disabled via the Ethernet Event Provider settings.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting a member role change.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	9
ProviderName	HP Ethernet
RecommendedActions	Check the Ethernet Team and Ethernet Team Member status. View the System Event Log for additional information.
HP_AlertIndication	
Summary	Ethernet Team Member Reported Role Change.
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet Team Member Reported Role Change

1-3-9 HP_AlertIndication: Ethernet Team Member Dropped

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	2 (Information)
CIM_Alertindication	
Description	A team member was dropped from the team via the HP Network Configuration Utility (NCU). This is an optional indication that can be disabled via the Ethernet Event Provider settings.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting a dropped

Property Name	Property Implementation
	team member.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	8
ProviderName	HP Ethernet
RecommendedActions	Check the Ethernet Team and Ethernet Team Member status. View the System Event Log for additional information.
HP_AlertIndication	
Summary	Ethernet Team Member Dropped from Team.
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet Team Member Dropped from Team

1-3-10 HP_AlertIndication: Ethernet Team Member Added

Property Name	Property Implementation
CIM_Indication	
PerceivedSevertiy	2 (Information)
CIM_Alertindication	
Description	A new team member has been added to an Ethernet team via the HP Network Configuration Utility (NCU). This is an optional indication that can be disabled via the Ethernet Event Provider settings.
AlertingManagedElement	WBEM Path of SMX_EthernetTeam instance reporting lost redundancy.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	7
ProviderName	HP Ethernet
RecommendedActions	No action is recommended.
HP_AlertIndication	
Summary	Ethernet Team Member Added to Team

Property Name	Property Implementation
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet Team Member Added to Team

1-3-11 HP_AlertIndication: Network Interface No Longer Available

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	3 (DegradedWarning)
CIM_AlertIndication	
Description	A network interface is no longer available. An Ethernet adapter was removed or an Ethernet team or VLAN was removed via the HP Network Configuration Utility (NCU).
AlertingManagedElement	Wbem Path of SMX_EthernetTeam instance reporting network interface no longer available.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	12
ProviderName	HP Ethernet
RecommendedActions	Ensure the network interface was made unavailable intentionally.
HP_AlertIndication	
Summary	Network interface no longer available
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Network Interface Unavailable

1-3-12 HP_AlertIndication: Network Interface Available

Property Name	Property Implementation
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Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	A new network interface is available. An Ethernet adapter has been added or an Ethernet team or VLAN has been created. This is an optional indication that can be disabled via the Ethernet Event Provider settings.
AlertingManagedElement	Wbem Path of SMX_EthernetTeam instance reporting network interface available.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	11
ProviderName	HP Ethernet
RecommendedActions	No action is recommended.
HP_AlertIndication	
Summary	New Network Interface Available
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	New Network Interface Available

1-3-13 HP_AlertIndication: Ethernet Team Active Member Count Change

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	The number of active adapters in an Ethernet team has changed. This is an optional indication that can be disabled via the Ethernet Event Provider settings.
AlertingManagedElement	Wbem Path of SMX_EthernetTeam instance reporting a member

Property Name	Property Implementation
	role change.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	2 (Communications Alert)
EventID	13
ProviderName	HP Ethernet
RecommendedActions	Check the Ethernet Team and Ethernet Team Member status. View the System Event Log for additional information.
HP_AlertIndication	
Summary	Ethernet team reported change in number of active members.
EventCategory	9 (Network Device)
EventSubCategory	12 (Ethernet team)
ProbableCause	1 (Other)
ProbableCauseDescription	Ethernet team reported change in number of active members

1-4 Physical Location

The Ethernet Port Physical Location is a string representing the physical location of the Ethernet Port. This string should represent the physical location of the device with which an end-user can uniquely locate the device. Most of these strings will be represented in customer documentation, silkscreen labels, or hood tags.

The following table lists the properties implemented. Any combination of the following applicable descriptors could be used to better define the device location.

All Systems	HP Integrity Cellular Servers	HP BladeServers in C3000/C7000 Enclosures
Slot=<num>	Cabinet=<num>	Blade=<num>
Embedded Controller=<logical_controller_id>	Bay=<num>	RootPort=<num> (if embedded on System Board)
System Mainboard (referring to System Board/motherboard)	Chassis=<num>	Mezzanine=<num> (I/O Mezzanine slot num)