



hp WBEM solutions



hp technical  
data sheet

## EMS Wrapper Provider

### Provider Overview

#### Description

Web Based Enterprise Management (WBEM) indication provider for wrapping OpenVMS Event Monitoring Services (OpenVMS EMS) events.

EMS Wrapper Provider is a CIM indication provider. EMS Wrapper Provider enables you to subscribe to indications using a management application that is compliant with the CIM 2.7.2 schema; for example, HP Systems Insight Manager (SIM). OpenVMS EMS is a component that is included in the WBEM Providers software. This component monitors and captures the hardware events and saves them in the OpenVMS index file. The EMS Wrapper Provider queries the index file and wraps these hardware indications (events). OpenVMS EMS supports the following types of monitors:

- IPMI Forward Progress Log Event Monitor (fp\_em)
- The i64 Core Hardware Events Monitor (ia64\_corehw)

This provider generates indications of type HP\_DeviceIndication.

#### Requirements

The Provider requires HP WBEM Services for OpenVMS.

#### Release history

This provider will be available via OpenVMS Version 8.3-1H1 release.

- HP I64VMS WBEMPROVIDERS V1.7-16 (May 2009)
- HP I64VMS WBEMPROVIDERS V2.0-4 (June 2010)
- HP I64VMS WBEMPROVIDERS V2.1-4 (August 2010)
- HP I64VMS WBEMPROVIDERS V2.2-3 (February 2011)

#### Supported managed resources

Managed systems

#### Setting up this provider

#### Installing this provider

The installation of HP WBEM Providers will set up this provider. Ensure HP WBEM Services is already installed.

On installation, executable binaries, configuration files and MOF definition and registration files will be available in their respective directory, as follows:

- The CIM MOF file, containing the definitions of the HP-specific MOF classes, (namely HP\_AlertIndication, HP\_HardwareIndication and HP\_DeviceIndication) will be available in SYS\$COMMON:[WBEMPROVIDERS.MOF] HP\_DeviceIndication.mof. This directory will also include the provider registration file, namely EMSWRAPPERPROVIDERR.MOF. Note: All the HP-specific MOF classes will be registered under the "root/cimv2" namespace.
- The SYS\$SPECIFIC:[WBEMPROVIDERS] directory will contain the configuration files of the WBEM Providers Product.
- The WBEM Services SYS\$SPECIFIC:[WBEM\_SERVICES]CIMSERVER\_STARTUP.LOG log file will contain logs generated during the execution of this provider. By editing the "Severity" property in the SYS\$SPECIFIC:[WBEMPROVIDERS]FMLOGGERCONFIG.TXT file different levels of messages in the SYS\$SPECIFIC:[WBEM\_SERVICES]CIMSERVER.LOG can be generated. The valid values are TRACE, DEBUG, INFORMATIONAL, WARNING, ERROR, CRITICAL, STOPLOGGING.

NOTE: EMS Wrapper Provider is one of the providers under HP WBEM Providers software.

## Configuring this provider

This provider does not accept specific configuration adjustments (beyond standard WBEM support).

## Using this provider

Any HP WBEM Services compliant client will be able to use the MOF classes supported by the provider.

## Schema supported by this provider

This Provider services HP\_DeviceIndication and is compliant with CIM V2.7.2 Schema Table 1 shows the properties of HP\_DeviceIndication that are supported by the provider.

Clients are expected to subscribe to this provider using a wbemexec or HP SIM.

Methods given by this provider

This provider currently does not provide any method.

Indications generated by this provider.

HP\_DeviceIndication.

Note: All non-key properties that are not supported are also listed below with comment "Not Supported".

**Table 1: HP\_DeviceIndication and base classes supported properties.**

<i>Property name</i>	<i>Property inheritance</i>	<i>Property value (and data source)</i>
String IndicationIdentifier	Inherited from CIM_Indication	A unique identifier for the Indication similar to a key value in that it can be used for identification.
String[] CorrelatedIndications	Inherited from CIM_Indication	Not Supported.
Datetime IndicationTime	Inherited from CIM_Indication	The time and date of creation of the Indication.
String Description	Inherited from CIM_AlertIndication	A short description of the Indication.
String AlertingManagedElement	Inherited from CIM_AlertIndication	Not Supported.
UInt16 AlertType	Inherited from CIM_AlertIndication	Primary classification of the Indication. 1 - Other 2 - Communications Alert 3 - Quality of Service Alert 4 - Processing Error 5 - Device Alert 6 - Environmental Alert 7 - Model Change 8 - Security Alert For OpenVMS this is always "1"
String OtherAlertType	Inherited from CIM_AlertIndication	Not Supported.
UInt16 PerceivedSeverity	Inherited from CIM_AlertIndication	An enumerated value that describes the severity of the AlertIndication from the notifier's point of view. 0 - Unknown 1 - Other 2 - Information 3 - Degraded/Warning 4 - Minor

		5 – Major 6 – Critical 7 - Fatal/NonRecoverable
String OtherSeverity	Inherited from CIM_AlertIndication	Not Supported.
UInt16 ProbableCause	Inherited from CIM_AlertIndication	An enumerated value that describes the probable cause of the situation which resulted in the AlertIndication. For OpenVMS this is always "1"
String ProbableCauseDescription	Inherited from CIM_AlertIndication	Provides additional information related to the probable cause.
UInt16 Trending	Inherited from CIM_AlertIndication	Not Supported.
String[] RecommendedActions <sup>1</sup>	Inherited from CIM_AlertIndication	Free form descriptions of the recommended actions to take to resolve the cause of the notification.
String EventID	Inherited from CIM_AlertIndication	An instrumentation or provider specific value that describes the underlying "real-world" event represented by the Indication.
Datetime EventTime	Inherited from CIM_AlertIndication	The time and date the underlying event was first detected. This field would be populated if the underlying event supports time-stamp.
String SystemCreationClassName	Inherited from CIM_AlertIndication	The scoping System's CreationClassName for the Provider generating this Indication.
String SystemName	Inherited from CIM_AlertIndication	The scoping System's Name for the Provider generating this Indication.
String ProviderName	Inherited from CIM_AlertIndication	The name of the Provider generating this Indication.
String Summary	Inherited from HP_AlertIndication	Short description of the reason for the indication.
String[] RelatedIndications	Inherited from HP_AlertIndication	Not Supported.
String[] RootCauseIndications	Inherited from HP_AlertIndication	Not Supported.
UInt32 EventCategory	Inherited from HP_AlertIndication	Category for the event. This is a value map which is intended to be used by the consumer to group events. For OpenVMS this is always "1".
String OtherEventCategory	Inherited from HP_AlertIndication	Not Supported
UInt32 EventSubCategory	Inherited from HP_AlertIndication	Sub-category for the event. This sub-category is intended to be used by the consumer in conjunction with "EventCategory" to provide additional granularity to group events. For OpenVMS this is always "1"
String OtherEventSubCategory	Inherited from HP_AlertIndication	Not Supported.

<sup>1</sup> For the i64 Core Hardware events, the property value for 'RecommendedActions' will be blank, that is ''. These property values will be provided along with the 'ProbableCauseDescription' property values.

UInt32 EventThreshold	Inherited from HP_AlertIndication	Not Supported.
UInt32 EventTimeWindow	Inherited from HP_AlertIndication	Not Supported.
UInt32 ActualEventThreshold	Inherited from HP_AlertIndication	Identifies the number of indications that have occurred to event. This property corresponds to the "Number of Events" field, if present, in the EMS Event notification.
String InformationURL	Inherited from HP_AlertIndication	URL where the user should go for the latest information related to this indication. This property corresponds to the "Latest information on this event" field in the EMS event notification.
UInt32 ActualEventTimeWindow	Inherited from HP_AlertIndication	Not Supported.
String Query	Inherited from HP_AlertIndication	Not Supported.
Boolean ClusterWideEvent	Inherited from HP_AlertIndication	Indicates whether this event is of interest to all cluster members
String ProviderVersion	Inherited from HP_AlertIndication	The version of the provider generating this indication.
String[] ActionURLs	Inherited from HP_AlertIndication	Not Supported.
String[] ActionURLDescriptions	Inherited from HP_AlertIndication	Not Supported.
UInt16 OSType	Inherited from HP_AlertIndication	The type of OS on the system generating the indication as a value-map. This is 7 in OpenVMS
String OSVersion	Inherited from HP_AlertIndication	Version of the OS on the system generating the indication.
String[] NetworkAddresses	Inherited from HP_AlertIndication	The IP address of the system generating the Indication.
String SystemFirmwareVersion	Inherited from HP_AlertIndication	Not Supported.
String SystemSerialNumber	Inherited from HP_AlertIndication	Serial number of the system generating the indication.
String SystemModel	Inherited from HP_AlertIndication	Model of the system generating the indication.
String UserComment	Inherited from HP_AlertIndication	Not Supported.
String[] VariableNames	Inherited from HP_AlertIndication	Array of variable names for information that is associated with this indication, but cannot be described by the other properties of the indication. The names are correlated with the variable's types and values in the "VariableTypes" and "VariableValues" arrays. Each entry is related to the entries in the other arrays that are located at the same index.

UInt16[] VariableTypes	Inherited from HP_AlertIndication	Array of variable types defined as an enumerated value. 1 - string 2 - datetime 3 - uint8 4 - uint16 5 - uint32 6 - uint64 7 - sint8 8 - sint16 9 - sint32 10 - sint64 11 - real32 12 - real64 13 - char16 14 - Boolean
String[] VariableValues	Inherited from HP_AlertIndication	Array of variable values to be used in conjunction with "VariableTypes" and "VariableNames" to reconstruct the information
UInt16 AlertingElementFormat	Inherited from HP_AlertIndication	The format of the AlertingManagedElement property is interpretable based upon the value of this property. 0 – Unknown 1 – Other 2 – CIMObjectPath
String OtherAlertingElementFormat	Inherited from HP_AlertIndication	Not Supported.
String HWPartNumber	Inherited from HP_HardwareIndication	Not Supported.
String[] HWFirmwareVersion	Inherited from HP_HardwareIndication	Not Supported.
String HWManufacturer	Inherited from HP_HardwareIndication	Not Supported.
String[] HWLogicalLocation	Inherited from HP_HardwareIndication	Not Supported.
String HWPhysicalLocation	Inherited from HP_HardwareIndication	Not Supported.
String[] HWSerialNumber	Inherited from HP_HardwareIndication	Not Supported.
String DeviceModel	Inherited from HP_DeviceIndication	Not Supported.
String[] DeviceControllerLogicalLocation	Inherited from HP_DeviceIndication	Not Supported.
String DevicePermanentName	Inherited from HP_DeviceIndication	The permanent, system unique, name of the device, encoded as a string parameter. The name string is formatted per the DevicePermanentNameFormat property.
UInt16 DevicePermanentNameFormat	Inherited from HP_DeviceIndication	The format of the DevicePermanentName property is interpretable based upon the value of this property. 0 – Unknown 1 – Other 2 – WorldWideName 3 - MACAddress
String OtherPermanentNameFormat	Inherited from HP_DeviceIndication	Not Supported.

## Related Documents

- **WBEM information**
  - For a CIM tutorial, go to <http://www.dmtf.org/education/tutorials>
  - For information about HP WBEM Services go to [http://h71000.www7.hp.com/openvms/products/wbem/wbem\\_index.html](http://h71000.www7.hp.com/openvms/products/wbem/wbem_index.html).
  - HP WBEM Providers Release Notes bundled with the WBEM Providers kit.
  - HP WBEM Providers Installation and Administrator's Guide bundled with the WBEM Providers kit.
  
- **Managed resource documentation**
  - See the following event listings for supported monitors bundled with the WBEM Providers kit:
    - **IPMI Forward Progress Log Monitor**
    - **IA64 Core Hardware Monitor**
  
- **Client information**

None.
  
- **Support contacts**

The EMS Wrapper Provider is supported as part of HP WBEM Providers.

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