



Enclosure Manager Instance Provider

Provider overview

The Enclosure Manager Instance Provider retrieves information related to Enclosure of the Blade system.

Description

The Enclosure Manager Provider is a Web-Based Enterprise Management (WBEM) Instance Provider that retrieves enclosure information from HP Blade servers based on HP Integrity Servers, running HP OpenVMS. This provider is compliant with the Common Information Model (CIM) 2.8 Schema, proposed by the Distributed Management Task Force (DMTF).

The Enclosure Manager Provider allows any client, compliant with the CIM 2.8 Schema, to query for information about the managed blade system's Enclosure details. The Enclosure Manager Instance Provider implements Enclosure related CIM classes, proposed in the DMTF CIM 2.8 revision. In addition to the properties that belong to the standard CIM classes, the Enclosure Manager Provider serves information that is specific to HP Blade Servers, by implementing HP-specific CIM classes, derived from the standard DMTF classes.

The following MOF class is handled by the Enclosure Manager Instance Provider:

- HP_BladeEnclosureCS

HP_BladeEnclosureCS (subclass of CIM_ComputerSystem) contains Enclosure related information. The MOF class mentioned above (i.e. all MOF classes prefixed with "HP_") are HP-specific extensions to the CIM Schema, and are registered in the "root/cimv2" namespace.

For the MOF class mentioned above, the Enclosure Manager Instance Provider supports the following standard CIM Operations:

- enumerateInstanceNames()
- enumerateInstances()
- getInstance()

The following CIM operations are not supported by the Enclosure Manager Instance Provider:

- createInstance()
- deleteInstance()
- modifyInstance()

Enclosure Manager Instance Provider is not a CIM Method Provider, and does not support extrinsic method invocation on instances on any of the MOF classes mentioned above. The invocation of any of these methods will result in a CIM_ERR_NOT_SUPPORTED exception.

requirements

The Provider requires HP WBEM Services for HP OpenVMS

release history

supported managed resources

This provider retrieves information related to the Blade Enclosure on the system.

Note that the Enclosure Manager Instance Provider retrieves only the information about the above resources. It does not retrieve any management, diagnostic or configuration capabilities for the above resources.

setting up this provider

installing this provider

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

On installation, the configuration files and MOF definition and registration files will be available in the SYS\$COMMON:[WBEMPROVIDERS] directory, as follows:

- The CIM MOF file, HP_ComputerSystem.mof will be available in SYS\$COMMON:[WBEMPROVIDERS.MOF] must be executed before the registration.
- The CIM MOF files, containing the definitions of the HP-specific MOF classes, (namely HP_BladeEnclosureCS.mof) will be available in SYS\$COMMON:[WBEMPROVIDERS.MOF]. This directory will also include the provider registration file, namely HP_BladeEnclosureCSR.mof. Note: All the HP-specific MOF classes will be registered under the "root/cimv2" namespace.
- The SYS\$SPECIFIC:[WBEMPROVIDERS] directory will contain the (XML) 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 the Enclosure Manager Instance Provider.

Configuring this provider using this provider

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

schema supported by this provider

The "Description" section explains in brief the different MOF classes supported by Enclosure manager Instance Provider. The following tables list all the supported properties corresponding to these MOF classes, along with the properties inherited from the standard CIM MOF classes, as per CIM 2.8 schema specifications.

Note: All key properties corresponding to the CIM classes are supported by the Enclosure manager Instance Provider. The few non-key properties not supported (currently) by the Enclosure manager Instance Provider are not listed below.

Note:

1. All key properties corresponding to the CIM classes are supported by the Enclosure manager Instance Provider.
2. The non-key properties that are not supported by the Enclosure manager Instance Provider are not listed below.

Table 1: MP Instance Provider properties

<i>Property name</i>	<i>Property inheritance</i>	<i>Property value (and data source)</i>
OperationalStatus	Inherited from CIM_ManagedSystemElement	uint16 [0] = Overall MP status: 0=Unknown 2=OK 3=Degraded 6=Critical
StatusDescriptions	Inherited from CIM_ManagedSystemElement	String - OnboardAdministrator is in OK state. - OnboardAdministrator is in Degraded state. - OnboardAdministrator has critical errors. - OnboardAdministrator is in unknown state.
ManagementIPAddress	Inherited from HP_BladeEnclosureCS	String IP address of Enclosure Manager.
ManagementMACAddress	Inherited from HP_BladeEnclosureCS	String MAC address of Enclosure Manager.
ManagementURL	Inherited from HP_BladeEnclosureCS	string The Uniform Resource Locator of the Enclosure manager.
RackName	Inherited from HP_BladeEnclosureCS	string User defined rack name set through Onboard Administrator.
RackUID	Inherited from HP_BladeEnclosureCS	string The UID assigned for the Rack.

BladeBayNumber	Inherited from HP_ComputerSystem	String Bay number to which the Blade is associated/connected to.
EnclosureName	Inherited from HP_BladeEnclosureCS	String Enclosure name. Example : OA-0016355E3003
EnclosureSerialNumber	Inherited from HP_BladeEnclosureCS	String Enclosure Serial Number. Example : 1Z34AB7580
EnclosureModel	Inherited from HP_ComputerSystem	Return the EnclosureModel
Name	Inherited from CIM_System	Returns the MP ipaddress
CreationClassName	Inherited from CIM_EnabledLogicalElement	Returns "HP_BladeEnclosureCS"

Intrinsic methods for all the CIM classes supported by Enclosure Manager Instance Provider

This Table describes the intrinsic methods supported by this provider. It has three columns. The first is the method name, the second is a description of the provider's actions based on invoking that method, and the third is a list of any exceptions that could result from invoking the method. Each row describes a method.

<i>Method name</i>	<i>description</i>	<i>exceptions thrown</i>
enumerateInstances	Returns all instances of class with values of supported properties. (See tables above.)	
enumerateInstanceNames	Returns object path of all instances of class.	
getInstance	Returns an instance that matches the keys with values of supported properties. (See table above.)	
modifyInstance	This operation is not supported by the Enclosure Manager Instance Provider. This is indicated to the client, via exceptions.	CIMNotSupportedException
deleteInstance	This operation is not supported by the Enclosure Manager Instance Provider. This is indicated to the client, via exceptions.	CIMNotSupportedException
createInstance	This operation is not supported by the Enclosure Manager Instance Provider. This is indicated to the client, via exceptions.	CIMNotSupportedException

indications generated by this provider This Provider does not generate any indications.

Related Documentation

- **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.
 - 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.

For additional information on HP products and services, visit us at <http://www.hp.com>.

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9/2007

