HP WBEM solutions

HP technical data sheet

HP OpenVMS Computer System CIM provider

provider overview

description

The Computer System provider makes available basic computer system information such as computer name, status, and administrator contact information. This Computer System provider instruments the CIM_ComputerSystem, CIM_UnitaryComputerSystem, and PG_ComputerSystem classes. The PG_ComputerSystem subclass of CIM_UnitaryComputerSystem adds the SerialNumber and IdentificationNumber properties (typically set on an HP OpenVMS system via DMI).

- SerialNumber is the system's serial number.

This provider is for use by clients as part of a basic understanding of the identity of the Managed System on which it is running (typically a server or appliance).

Note that the PG_ComputerSystem follows the industry convention of naming CIM_UnitaryComputerSystem subclasses without including "Unitary" in the class name. This practice is an exception to the normal practice used for creating non-DMTF defined subclasses (simply changing the superclass's prefix from "CIM_" to some organization-specific string).

requirements

The provider requires HP WBEM Services for OpenVMS.

release history

- 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 running HP WBEM Services for OpenVMS.

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 MOF classes, (namely PG_ComputerSystem20.mof) will be available in SYS$COMMON:[WBEM_Services.opt.wbem.mof.Pegasus]. This directory will also include the provider registration file, namely PG_ComputerSystem20R.mof. Note: All the HP-specific MOF classes will be registered under the "root/cimv2" namespace.
- The SYS$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.

There are no special installation instructions; the provider will be installed by default with HP WBEM Services for OpenVMS.

configuring this provider

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

using this provider

schema supported by this provider

This provider supports the CIM_ComputerSystem, CIM_UnitaryComputerSystem, and PG_ComputerSystem classes. Tables 1 through 4 describe the properties and methods supported by the provider.

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

table 1: CIM_ComputerSystem properties

Table 1 describes the properties of the CIM_ComputerSystem class. It has three columns. The first is the property name (including type and units), the second is the property inheritance (indicating which class or superclass defines the property), and the third is the property's value and data source. Each row describes a property.

Note: while some properties in the table are marked with the "Write" qualifier (based on their designation in the DMTF CIM schema), all properties are in fact read-only for this version of the HP OpenVMS Computer System Provider.

Property name	***Property inheritance***	***Property value (and data source)***
string Caption	Inherited from CIM_ManagedElement	Returns the string "Computer System".
string Description	Inherited from CIM_ManagedElement	Returns the string "This is the CIM_ComputerSystem object."
string CreationClassName [Key]	Inherited from CIM_System	Always returns string "CIM_UnitaryComputerSystem".
string Name [Key]	Inherited from CIM_ManagedSystemElement, overridden in CIM_System	Returns the name (fully qualified host name if possible) of the system.
string Status	Inherited from CIM_ManagedSystemElement	Returns the current system status.
string StatusDescriptions	Inherited from CIM_ManagedSystemElement	Returns the description of system status.
string OperationalStatus	Inherited from CIM_ManagedSystemElement	Returns the current system status.
string NameFormat	Inherited from CIM_System, overridden in CIM_ComputerSystem	Returns 1 ("IP").
string PrimaryOwnerName	Local to CIM_ComputerSystem	Returns "".
string PrimaryOwnerContact [Write]	Local to CIM_ComputerSystem	OpenVMS: Returns "".
string Roles[]	Inherited from CIM_System	Not Supported.
string OtherIdentifyingInfo[]	Local to CIM_ComputerSystem	Returns the Hardware model (For Example: "HP rx2600 (1.30GHz/3.0MB)")
string IdentifyingDescriptions[]	Local to CIM_ComputerSystem	Returns the string "Model".
datetime InstallDate	Inherited from	Returns the OpenVMS operating system installation date

	CIM_ManagedSystemElement	and time.
string ElementName	Inherited from CIM_ManagedElement	Returns the string “Computer System”
uint16 Dedicated[]	Local to CIM_ComputerSystem	Not Supported.

table 2: CIM_UnitaryComputerSystem properties

Table 2 describes the properties of the CIM_UnitaryComputerSystem class. It has three columns. The first is the property name (including type and units), the second is the property inheritance (indicating which class or superclass defines the property), and the third is the property's value or data source. Each row describes a property.
The CIM_UnitaryComputerSystem class inherits properties of superclass CIM_ComputerSystem (as described in Table 1 and not repeated here).

Property name	***Property inheritance***	***Property value (and data source)***
string InitialLoadInfo[]	Local to CIM_UnitaryComputerSystem	Returns the system disk (for example "1DKA0").
string LastLoadInfo	Local to CIM_UnitaryComputerSystem	Not Supported.
boolean PowerManagementSupported	Local to CIM_UnitaryComputerSystem	Always returns FALSE.
uint16 WakeUpType	Local to CIM_UnitaryComputerSystem	Not Supported.
uint16 ResetCapability	Local to CIM_UnitaryComputerSystem	Not Supported.
uint16 PowerManagementCapabilities[]	Local to CIM_UnitaryComputerSystem	Returns 1 (defined by DMTF as the value to set for "Not Supported").
uint32 SetPowerState	Local to CIM_UnitaryComputerSystem	Not Supported.
uint16 PowerState	Local to CIM_UnitaryComputerSystem	Always returns 1 (“Full Power”).

table 3: PG_ComputerSystem properties

Table 3 describes the properties of the PG_ComputerSystem class. It has three columns. The first is the property name (including type and units), the second is the property inheritance (indicating which class or superclass defines the property), and the third is the property's value or data source. Each row describes a property.
The PG_ComputerSystem class inherits properties of superclasses CIM_ComputerSystem and CIM_UnitaryComputerSystem (as described in Tables 1 and 2 and not repeated here).

Property name	***Property inheritance***	***Property value (and data source)***
string PrimaryOwnerPager	Local to PG_ComputerSystem	Returns "".
string SecondaryOwnerName	Local to PG_ComputerSystem	Returns "".
string SecondaryOwnerContact	Local to PG_ComputerSystem	Returns "".
string SecondaryOwnerPager	Local to PG_ComputerSystem	Returns "".
string SerialNumber	Local to PG_ComputerSystem	Returns the system serial number.
string IdentificationNumber	Local to PG_ComputerSystem	Retuns the System UUID .

table 4: Intrinsic methods for CIM_ComputerSystem, CIM_UnitaryComputerSystem, and PG_ComputerSystem

Table 4 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. Note that this provider supports no extrinsic methods.

Method name	*Description*	*Exceptions thrown*
enumerateInstances	Returns all instances of class with all properties and their respective values. There will always be only one instance.	None
enumerateInstanceNames	Returns object path of all instances of class. There will always be only one instance.	None
getInstance	Supported.	CIM_ERR_INVALID_PARAMETERif wrong class or wrong number of keys. CIM_ERR_FAILED if provider can't get access to various system resources.
modifyInstance	Not Supported.	CIM_ERR_NOT_SUPPORTED
deleteInstance	Not Supported.	CIM_ERR_NOT_SUPPORTED
initialize	Initializes the provider, establishing system values for various system constants, including InstallDate, SystemName, SerialNumber.	CIM_ERR_FAILED if there is a failure in various system commands.
terminate	Not Supported.	None
createInstance	Not Supported.	CIM_ERR_NOT_SUPPORTED

- **Indications generated by this provider**
  This provider does not currently generate any indications.
- Associations provided by this provider
  This provider does not currently support any associations.

Links to more information

- **Additional HP WBEM solution data**
  http://www.hp.com/large/infrastructure/management/wbem/
- **Additional WBEM information**
  http://www.hp.com/large/infrastructure/management/wbem/
- **Additional provider documentation**
  There is currently no additional documentation for this provider beyond this information.
- **WBEM information**
  For a CIM tutorial, go to http://www.dmtf.org/education/tutorials
  For information about HP WBEM Services for OpenVMS, see http://h71000.www7.hp.com/openvms/system_management.html.
- **Client information**
  None.
- **Support contacts**
  The HP OpenVMS Computer System Provider is supported as part of HP WBEM Services for OpenVMS.

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