



hp WBEM solutions



hp technical
data sheet
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hp-ux 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 PrimaryOwnerPager, SecondaryOwnerName, SecondaryOwnerContact, SecondaryOwnerPager, SerialNumber, and IdentificationNumber properties (typically set on an HP-UX system via DMI).

- PrimaryOwnerPager is the pager number for the primary system owner.
- SecondaryOwnerName, SecondaryOwnerContact, and SecondaryOwnerPager are the name, phone number, and pager number of the system's secondary owner respectively.
- SerialNumber is the system's serial number.
- IdentificationNumber is the corporate asset number of the system.

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). The current implementation is for HP-UX only.

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 HP-UX. Some properties are set by DMI and therefore will be available only if DMI is present. See the specific property information in the tables below to determine which information is set by DMI.

release history

Initial release with HP WBEM Services for HP-UX, version 1.0. Re-released with HP WBEM Services for HP-UX, version 1.1.

supported managed resources

Managed systems running HP WBEM Services for HP-UX.

setting up this provider

installing this provider

This Computer System provider is contained within a Computer System Provider Module (it is the only provider within that module). The Provider Module is bundled with HP WBEM Services for HP-UX including:

- Schema MOF file: PG_ComputerSystem20.mof (in /etc/opt/wbem/mof)
- Provider registration MOF file: PG_ComputerSystem20R.mof (in /etc/opt/wbem/mof)
- Provider Module executable: libComputerSystemProvider.sl (in /opt/wbem/providers/lib, and is the target of the /opt/wbem/lib/libComputerSystemProvider.0 symbolic link)

The HP-UX Computer System provider is registered to support the "root/cimv2" namespace as an instance provider. There are no special installation instructions; the provider will be installed by default with HP WBEM Services for HP-UX.

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.

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-UX Computer System Provider.

| property name | property inheritance | property value (and data source) |
|------------------------------------|---|---|
| string Caption | Inherited from CIM_ManagedElement | <u>HP-UX</u> : Returns the string "Computer System". |
| string Description | Inherited from CIM_ManagedElement | <u>HP-UX</u> : Returns the string "This is the CIM_ComputerSystem object." |
| datetime InstallDate | Inherited from CIM_ManagedSystemElement | <u>HP-UX</u> : Returns the date/time the kernel was created. Obtained using the stat() system call on the /stand/vmunix file. |
| string CreationClassName [Key] | Inherited from CIM_System | <u>HP-UX</u> : Always returns string "PG_ComputerSystem". |
| string Name [Key] | Inherited from CIM_ManagedSystemElement, overridden in CIM_System | <u>HP-UX</u> : Returns the fully qualified host name returned by the name service through the gethostbyname() system call. If a name service is not available, the provider supplies the hostname returned by the gethostname() system call. |
| string Status | Inherited from CIM_ManagedSystemElement | <u>HP-UX</u> : Returns 0 ("OK"). |
| string NameFormat | Inherited from CIM_System, overridden in CIM_ComputerSystem | <u>HP-UX</u> : Returns 1 ("IP"). |
| string PrimaryOwnerName [Write] | Local to CIM_ComputerSystem | <u>HP-UX</u> : Returns GenInfoSysPUser_E from the DMI General Information Group. The provider does not support modification of this property's value. This property is set by DMI. If DMI is not present, this value will be set to an empty string. |
| string PrimaryOwnerContact [Write] | Local to CIM_ComputerSystem | <u>HP-UX</u> : Returns GenInfoSysPPhone_E from the DMI General Information Group. The provider does not support modification of this property's value. This property is set by DMI. If DMI is not present, this value will be set to an empty string. |
| string OtherIdentifyingInfo[] | Local to CIM_ComputerSystem | <u>HP-UX</u> : Returns the string returned by /usr/bin/model command (for example "9000/800/A180c"). |
| string IdentifyingDescriptions[] | Local to CIM_ComputerSystem | <u>HP-UX</u> : Returns the string "Model". |

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).

| <i>property name</i> | <i>property inheritance</i> | <i>property value (and data source)</i> |
|----------------------------------|------------------------------------|---|
| string InitialLoadInfo[] | Local to CIM_UnitaryComputerSystem | <u>HP-UX</u> : Returns the name of boot device obtained from the /stand/bootconf file (for example "/dev/dsk/cxydz"). |
| boolean PowerManagementSupported | Local to CIM_UnitaryComputerSystem | <u>HP-UX</u> : Always returns FALSE. |
| uint16 PowerState | Local to CIM_UnitaryComputerSystem | <u>HP-UX</u> : 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).

| <i>property name</i> | <i>property inheritance</i> | <i>property value (and data source)</i> |
|--------------------------------------|-----------------------------|--|
| string PrimaryOwnerPager [Write] | Local to PG_ComputerSystem | <u>HP-UX</u> : Returns GenInfoSysPager_E from the DMI General Information Group. The provider does not support modification of this property's value. This property is set by DMI. If DMI is not present, this value will be set to an empty string. |
| string SecondaryOwnerName [Write] | Local to PG_ComputerSystem | <u>HP-UX</u> : Returns GenInfoSysUser_E from the DMI General Information Group. The provider does not support modification of this property's value. This property is set by DMI. If DMI is not present, this value will be set to an empty string. |
| string SecondaryOwnerContact [Write] | Local to PG_ComputerSystem | <u>HP-UX</u> : Returns GenInfoSysPhone_E from the DMI General Information Group. The provider does not support modification of this property's value. This property is set by DMI. If DMI is not present, this value will be set to an empty string. |
| string SecondaryOwnerPager [Write] | Local to PG_ComputerSystem | <u>HP-UX</u> : Returns GenInfoSysPager_E from the DMI General Information Group. The provider does not support modification of this property's value. This property is set by DMI. If DMI is not present, this value will be set to an empty string. |
| string SerialNumber | Local to PG_ComputerSystem | <u>HP-UX</u> : Returns the identification number (idnumber) from the uname() system call (for example "2015986034"). |
| string IdentificationNumber | Local to PG_ComputerSystem | <u>HP-UX</u> : Not implemented. |

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.

| <i>method name</i> | <i>description</i> | <i>exceptions thrown</i> |
|------------------------|---|---|
| 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_PARAMETER if 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. See also man pages for information on the various commands and system calls noted in the descriptions above.
- **WBEM information**
For a CIM tutorial, go to <http://www.dmf.org/education/cimtutorial.php>.
For information about HP WBEM Services for HP-UX, see software.hp.com and hp.com (the Network and Systems Management areas).
- **Managed resource documentation**
See also the HP-UX man page for commands and system calls as referenced in the descriptions above.
- **Client information**
None.
- **Support contacts**
The HP-UX Process and Process Statistics Providers are supported as part of HP WBEM Services for HP-UX.

For additional information on HP products and services, visit us at www.hp.com

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United States: +1 800 637 7740

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Latin America: +1 305 267 4220

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