



hp-ux network time protocol CIM provider

provider overview

description

The Network Time Protocol Provider makes available server information used by the network time protocol service. This provider instruments the PG_NTPService subclass of the CIM_Service class by adding the ServerAddress property.

- ServerAddress specifies the name(s) or IP address(es) in dot notation format of the server(s) that provide(s) time to clients when requested.

Currently, the provider does not support all the properties of the CIM_Service class or its superclasses. This provider extends the CIM_Service class to describe a network time protocol (NTP) service.

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.

requirements

The provider requires HP WBEM Services for HP-UX.

comments

A local system that assumes the broadcast client role may not list a "server" field in the "/etc/ntp.conf" configuration file. In this case, the "ServerAddress" property will return an empty array.

This provider makes a security check to ensure the CIMOM user has rights to access NTP information. If CIMOM authentication is enabled (which is the typical condition) the provider will verify if the user has access rights to the /etc/ntp.conf file. If CIMOM authentication is disabled, the /etc/ntp.conf file access rights must be set to allow read access for everyone, otherwise the provider will throw the CIM_ERR_ACCESS_DENIED exception.

release history

Initial release with HP WBEM Services for HP-UX, version 1.5.

supported managed resources

Managed systems running HP WBEM Services for HP-UX and NTP.

setting up this provider

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 PG_NTPTService class. Tables 1 and 2 describe the properties and methods supported by the provider.

table 1: PG_NTPTService properties

table 1 describes the properties of the PG_NTPTService 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.

property name	property inheritance	property value (and data source)
string Caption	Inherited from CIM_ManagedElement	<u>HP-UX</u> : Returns the string " NTP daemon".
string Description	Inherited from CIM_ManagedElement	<u>HP-UX</u> : Returns the string " Describes the Network Time Protocol (NTP) daemon."
string SystemCreationClassName [Key]	Inherited from CIM_Service	<u>HP-UX</u> : Returns string "CIM_UnitaryComputerSystem".
string SystemName [Key]	Inherited from CIM_Service	<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 CreationClassName [Key]	Inherited from CIM_Service	<u>HP-UX</u> : Returns the string "PG_NTPTService".
string Name [Key]	Inherited from CIM_ManagedSystemElement (and made one of 4 keys of CIM_Service)	<u>HP-UX</u> : Returns the string "xntpd".
string ServerAddress[]	Local to PG_NTPTService	<u>HP-UX</u> : Returns the value(s) from the "server" field(s) from the /etc/ntp.conf file.

table 2: intrinsic methods for PG_NTPTService

Table 2 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.	CIM_ERR_NOT_SUPPORTED if wrong class (different than PG_NTPTService). CIM_ERR_ACCESS_DENIED if the user does not have rights to access the NTP configuration. CIM_ERR_FAILED if the NTP configuration file does not exist.
enumerateInstanceNames	Returns object path of all instances of class. There will always be only one .	CIM_ERR_NOT_SUPPORTED if wrong class (different than PG_NTPTService).

modifyInstance	Returns Not Supported.	CIM_ERR_NOT_SUPPORTED
deleteInstance	Returns Not Supported.	CIM_ERR_NOT_SUPPORTED
initialize	Not Supported.	None
terminate	Not Supported.	None
createInstance	Returns 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 provider documentation**
There is currently no additional documentation for this provider beyond this information.
For NTP specific information on HP-UX systems, see the man pages for ntp.conf, xntpd, or ntpq.
- **WBEM information**
For a CIM tutorial, go to <http://www.dmtf.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**
Information regarding HP-UX network time protocol service can be found in network manuals and man pages.
- **Client Information**
None.
- **Support Contacts**
The HP-UX NTP Provider is 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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10/2002