

HP-UX WBEM LAN Provider Release Notes

HP-UX 11i v1, HP-UX 11i v2, HP-UX 11i v3

HP Part Number: 5900-2321
Published: September 2012



Legal Notices

© Copyright 2003, 2012 Hewlett-Packard Development Company, L.P.

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing here should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

UNIX is a registered trademark of The Open Group.

PostScript is a trademark of Adobe Systems Incorporated.

Intel and Itanium are trademarks of Intel Corporation in the U.S. and other countries.

Contents

1	HP-UX WBEM LAN provider release notes.....	4
	Announcement.....	4
	HP-UX WBEM LAN provider.....	4
	What is new in this release.....	4
	Installing HP-UX WBEM LAN provider.....	5
	Hardware requirements and OS support.....	5
	Software requirements.....	6
	Disk space requirement.....	6
	Defects fixed in this version.....	6
	Known problems, workarounds, and limitations.....	10
	Related documentation.....	10
	Localized version of the software.....	11
2	Documentation feedback.....	12

1 HP-UX WBEM LAN provider release notes

This document discusses the most recent product information on HP-UX WBEM LAN provider, which is supported on HP-UX 11i v1, HP-UX 11i v2, and HP-UX 11i v3 operating systems.

Table 1 Documentation support for LAN provider

Operating system	Version
HP-UX 11i v3	B.11.31.1209.06.01

Announcement

Web-Based Enterprise Management (WBEM) is an industry wide initiative to unify the management of system, networks, and applications across multiple and diverse vendor environments. The WBEM clients use the mass storage providers to gather information about various subsystems. The WBEM standard enables the WBEM clients to subscribe to indications, and indication consumers to receive indications on the occurrence of events of interest on the managed system. This release supports HP-UX WBEM LAN provider which is part of a suite of Mass Storage IO WBEM providers. The other providers in this suite supported in the current release are:

- HP-UX WBEM Fibre Channel provider
- HP-UX WBEM RAIDSA provider
- HP-UX WBEM SAS provider
- HP-UX WBEM DAS provider
- HP-UX WBEM IOTree indication provider
- HP-UX WBEM SCSI provider

HP-UX WBEM LAN provider

HP-UX WBEM LAN provider is used by client applications to retrieve information about LAN cards present on the system. Using this provider, the WBEM clients can retrieve details about various attributes of a LAN card.

The features of LAN provider are described below:

- Reports data for the subsystem.
- Supports HP-UX WBEM services to provide web access to HP-UX data for management clients.
- Used by HP Software Management clients, HP System Insight Manager (SIM), HP System Management HomePage (SMH), and others.
- Supports WBEM 2.5 services security features to control access to HP-UX data.
- Supports Consolidated Status Provider (CSP) feature on HP-UX 11i v1, HP-UX 11i v2 and HP-UX 11i v3 OS. This feature reports the consolidated status of LAN cards available on the system.
- Supports Indication Provider (IP) feature on HP-UX 11i v1, HP-UX 11i v2 and HP-UX 11i v3 OS. This feature generates indications in WBEM format and delivers the events to the cimserver.

What is new in this release

The LANIndicationProvider is enhanced to generate new test event 103. For more information see *man LAN_Provider_Test*.

For information about the defect fix, see [“Defects fixed in this version”](#) (page 6).

Installing HP-UX WBEM LAN provider

The latest WBEM LAN provider depot is available for download on the OE media. It is also available on the Web for download at: http://h18013.www1.hp.com/products/servers/management/hpsim/dl_hpux.html#managed

For more information on installing the providers, see the Website at: <http://h20392.www2.hp.com/portal/swdepot/displayInstallInfo.do?productNumber=WBEMP-LAN-00>

Hardware requirements and OS support

Table 2 lists the platform support information for the LAN provider.

Table 2 LAN provider supported platform and OS requirement

Provider	Product name	Supported OS	Mode of delivery
LAN Provider	WBEMP-LAN	HP-UX 11i v1	Part of the core OS bundle
LAN Provider	WBEMP-LAN	HP-UX 11i v2, and HP-UX 11i v3	ISU
LAN indication Provider	WBEMP-LAN	HP-UX 11i v2, and HP-UX 11i v3	ISU
LAN Consolidated Status Provider (CSP)	WBEMP-LAN	HP-UX 11i v1, HP-UX 11i v2, and HP-UX 11i v3	ISU

Table 3 LAN provider supported platforms

Provider	Product name	Supported platforms
LAN Provider	WBEMP-LAN	HP 9000 servers <ul style="list-style-type: none"> • rp3410 • rp3440 • rp4410 • rp4440 • rp7405 • rp7410 • rp7420 • rp8400 • rp8420 • SD16, SD32, SD64 • SD16A, SD32A, SD64A • SD16B, SD32B, SD64B HP Legacy Integrity servers <ul style="list-style-type: none"> • cx2600 • cx2620 • rx1600 • rx1620 • rx2600 • rx2620 • rx2660 • rx3600 • rx4640

Table 3 LAN provider supported platforms *(continued)*

Provider	Product name	Supported platforms
		<ul style="list-style-type: none"> • rx5670 • rx6600 • rx7620 • rx7640 • rx8620 • rx8640 • SD16A, SD32A, SD64A • SD16B, SD32B, SD64B • BL60p HP Server Blade • BL860c HP Server Blade • BL870c HP Server Blade • HP Integrity BL860c i2, BL870c i2 & BL890c i2 Server Blades • rx2800 i2 • HP Integrity Superdome 2 <p>NOTE: Wrapper indication provider is supported on HP 9000 servers. Native indication provider is supported on Integrity servers.</p>

Software requirements

The software requirements for the LAN provider are listed below:

- WBEM Services, version A.02.07 or later, to be installed on HP-UX 11i v1, HP-UX 11i v2, and HP-UX 11i v3 systems to gather information about the subsystems.
- SysMgmtPlus, version A.01.00 to be installed on HP-UX 11i v3 system.
- LAN Consolidated Status provider requires `nettl-run` product to be installed on HP-UX 11i v1 and HP-UX 11i v2 OS.
- LAN indication provider requires patch `PHNE_35545` (11i v2) and `PHNE_37799` (11i v3) respectively to generate events with more detail severity, cause and recommended actions.
- LANProvider depends on ProviderSvcsBase version C.06.00.05.02 and HPVM 6.1 to support DIO.

Disk space requirement

Table 4 lists the disk space requirement for the LAN provider

Table 4 LAN provider Disk space requirement

Provider	Disk space required
LAN provider (includes indication provider)	4576 KB

Defects fixed in this version

This section describes the WBEM LAN provider defects fixed in the HP-UX 11i v2 and 11i v3 operating systems.

Table 5 Defect fix in the HP-UX 11i v2 operating systems.

Defect ID	Description
Defect fix in B.11.23.1003 release	
QXCR1000993165	<p>In the previous release, the LAN provider generates a core file due to an option missing in the compilation file of LAN Consolidated Status provider and LAN indication provider.</p> <p>This defect is fixed in the current release by including the missing option in the compilation file of LAN Consolidated Status provider and LAN indication provider.</p>

Table 6 Defects fixed in the HP-UX 11i v3 operating systems.

Defect ID	Description												
Defect fix in B.11.31.0909 release													
QXCR1000889988	In the previous release, in certain scenarios, the LAN indication provider may dump core when it shuts down after generating indications. This defect is fixed in the current release, and the LAN indication provider does not dump core when it shuts down after generating indications.												
Defect Fixes in B.11.31.1004 release													
QXCR1000965312	In the previous release, failure messages generated by the <code>HPUXLANCSProviderModule</code> are logged in <code>/var/adm/syslog/syslog.log</code> file. In the current release, these failure messages are not generated by the <code>HPUXLANCSProviderModule</code> .												
QXCR1000990126	In the previous release, <code>enumerate instances</code> method initiated for <code>HPUX_EthernetGroupHostedCollection</code> class returned <code>CIM_ERR_FAILED</code> , when non-root guest user executed the method using <code>wbemexec</code> command. This defect is fixed in the current release. The <code>enumerate instances</code> method initiated for <code>HPUX_EthernetGroupHostedCollection</code> class returns instance of the class when non-root guest user executes the method using <code>wbemexec</code> command . For more information about the command, see <code>wbemexec(1)</code> man page.												
QXCR1000985457	In the previous release, the <code>HPUXLANProviderModule</code> dumps core in certain scenarios on PA-RISC systems. This defect is fixed in the current release.												
QXCR1000991396	In the previous release, on PA-RISC systems when <code>modify instance</code> method is initiated for an instance of <code>HPUX_LANMemberOfPolicyCollection</code> class, the LAN Consolidated Status provider dumps core. This defect is fixed in the current release on PA-RISC systems.												
Defect Fixes in B.11.31.1009 release													
QXCR1001023213	In the previous release, LAN indication provider does not display multiple IP addresses of a system. In the current release, LAN indication provider displays multiple IP addresses of a system.												
Defect Fixes in B.11.31.1009.01 release													
QXCR1001054625	In the previous release, events are not generated on the primary LAN interface by the <code>HPUXEthernetIndicationProvider</code> module when APA is configured on HP-UX system. In the current release, this defect is fixed. Events are generated on APA ports.												
QXCR1001043514	In the previous release, several property data types of the LAN Provider module are different from the data types documented in the provider datasheet available at <code>/opt/lanprovider/doc/HPUX_LANProvider.pdf</code> . Property data types used in the LAN provider module must be reset in accordance to the property data types set in the datasheet. Users developing WBM client applications must be aware of the mismatch of property data types that exist between the provider module and the provider datasheet. Following properties are to be reset in the LAN provider module <code>HPUX_EthernetPort</code> class: Table 7 Class <code>HPUX_EthernetPort</code> Properties												
<table border="1"> <thead> <tr> <th>Property Name</th> <th>From Type</th> <th>To Type</th> </tr> </thead> <tbody> <tr> <td>OperationalStatus</td> <td>Sint32</td> <td>uint16[]</td> </tr> <tr> <td>Speed</td> <td>uint32</td> <td>uint64</td> </tr> <tr> <td>ActiveMaximumTransmissionUnit</td> <td>Sint32</td> <td>uint64</td> </tr> </tbody> </table>		Property Name	From Type	To Type	OperationalStatus	Sint32	uint16[]	Speed	uint32	uint64	ActiveMaximumTransmissionUnit	Sint32	uint64
Property Name	From Type	To Type											
OperationalStatus	Sint32	uint16[]											
Speed	uint32	uint64											
ActiveMaximumTransmissionUnit	Sint32	uint64											

Table 6 Defects fixed in the HP-UX 11i v3 operating systems. (continued)

Defect ID	Description																		
	<p>Table 7 Class HPUX_EthernetPort Properties (continued)</p> <table border="1" data-bbox="525 243 1485 401"> <thead> <tr> <th>Property Name</th> <th>From Type</th> <th>To Type</th> </tr> </thead> <tbody> <tr> <td>NetworkAddresses</td> <td>String</td> <td>string[]</td> </tr> <tr> <td>MaxDataSize</td> <td>Sint32</td> <td>uint32</td> </tr> </tbody> </table> <p>Following properties are to be reset in the LAN provider module HPUX_EthernetLANEndpoint class:</p> <p>Table 8 Class HPUX_EthernetLANEndpoint Properties</p> <table border="1" data-bbox="525 537 1485 695"> <thead> <tr> <th>Property Name</th> <th>From Type</th> <th>To Type</th> </tr> </thead> <tbody> <tr> <td>OperationalStatus</td> <td>Sint32</td> <td>uint16[]</td> </tr> <tr> <td>ProtocolType</td> <td>Sint32</td> <td>uint16</td> </tr> </tbody> </table> <p>In the current release, this defect is fixed. Property data types are reset in the LAN provider module HPUX_EthernetPort and HPUX_EthernetLANEndpoint classes.</p>	Property Name	From Type	To Type	NetworkAddresses	String	string[]	MaxDataSize	Sint32	uint32	Property Name	From Type	To Type	OperationalStatus	Sint32	uint16[]	ProtocolType	Sint32	uint16
Property Name	From Type	To Type																	
NetworkAddresses	String	string[]																	
MaxDataSize	Sint32	uint32																	
Property Name	From Type	To Type																	
OperationalStatus	Sint32	uint16[]																	
ProtocolType	Sint32	uint16																	
Defect Fixes in B.11.31.1109 release																			
QXCR1001071051	LANProvider will try and write debug log messages into files. Since, the user does not have permissions, LANProvider will try and write and dump core.																		
QXCR1001118139	<p>In the previous release, HPUXEthernetIndicationProvider used to generate two indications HP_AlertOpStatusModify and HP_DeviceIndication for every LAN error. Subscribers who subscribe for HP_AlertIndication, receive indications for every LAN error.</p> <p>In the current release, this defect is fixed. HPUXEthernetIndicationProvider will no longer generate HP_AlertOpStatusModify indication.</p>																		
Defect Fixes in B.11.31.1109.01 release																			
QXCR1000959168	<p>LAN cards governed by iether driver might have extra characters in EEPROM. During such scenarios, if an error occurs on these cards, HPUXEthernetIndicationProvider detects these errors, but dumps the core while generating an indication.</p> <p>This defect is fixed in the current release.</p>																		
Defect Fixes in B.11.31.1203.03.01 release																			
QXCR1001040958	<p>If the LANIndicationProvider is disabled or enabled, a core is observed while LAN event processing is on.</p> <p>This defect is fixed in the current release.</p>																		
QXCR1001141338	While enumerating getinstance of class HPUX_EthernetPortCollection, the GroupStatusDescriptions is not set as per the standard of the data type array of strings.																		
QXCR1001165745	<p>When the swconfig -u WBEMP-LAN command is executed to unconfigure WBEMP-LAN, it removes /var/opt/lanprovider directory.</p> <p>This issue is fixed in this release.</p>																		
Defect Fixes in B.11.31.1209.06.01 release																			
QXCR1001198841	<p>During multiple system reboot, past provider events get reported for LAN provider.</p> <p>This issue is fixed in this release. When the past provider events get reported, the following warning message is seen in the provider log:</p>																		

Table 6 Defects fixed in the HP-UX 11i v3 operating systems. (continued)

Defect ID	Description
	WARNING! Started processing old osel log files. Old events may get reported. You can safely ignore this message.
QXCR1001210965	The duplicate events are reported by the LANIndication provider when the LAN interface is reset. This issue is fixed in this release.

Known problems, workarounds, and limitations

The following known problems are for the current release:

- **Problem:** There are no email alerts for the subscription.
Description: User do not receive email alerts for existing and new email subscriptions due to database authorization issue in September 2011 release.
Workaround: There is no workaround for this problem.
- **Problem:** When the first node of the hostname is changed to a name that has more than 8 characters, the LAN provider fails to report the events.
Workaround: To ensure LAN provider works as expected, change the first node of the hostname to a name that has less than 8 characters.

Following are the limitations of the LAN provider:

- LAN is a read-only provider and hence does not allow users to modify, create, or delete instances.
- In LANInstanceProvider a new error has been introduced. If during instance (`enumerateInstance/getInstance/enumerateInstanceNames`) request the provider is busy retrieving the properties of CIMInstance classes then it will report an error called `CIM_ERR_FAILED: enumerateInstances:: Internal error occurred while building the LAN inventory`.
- When LANInstanceProvider gets disabled and enabled manually (`cimprovider -dm/-em`) then after getting enabled, for the first instance request the following error can be seen. `CIM_ERR_FAILED: enumerateInstances:: Internal error occurred while building the LAN inventory`
When LANIndicationProvider is running, any instance request issued in 10 minutes (maximum) after the LANInstanceProvider gets enabled will not report the above mentioned error.
When LANIndicationProvider is not running, only the first instance request will fail with the above mentioned error. The subsequent instance requests will pass without any fail.
- If the LANInstanceProvider on the HPVM 6.1 guest is disabled, the HPVM 6.1 host (VSP) shows the guest related information for a maximum 70 minutes. After that instance request on host will not show the guest owned DIO functions until maximum of 60 minutes after the provider gets enabled again.
- If the HPVM 6.1 guest system is shutdown then the guest DIO function might be seen in the instance request output for a maximum time of 10 minutes. After that no DIO functions for the turned off guest will be seen for that guest until the guest is not turned on again.

Related documentation

Table 9 lists the available documentation for the WBEM providers:

Table 9 WBEM provider related documents

Description	Location
CIM Tutorial	http://www.dmtf.org/standards/cim
Information about HP WBEM Services	http://software.hp.com and http://www.hp.com
Overview of the indication schema	http://www.openpegasus.org/uploads/40/3452/WBEMIndications.pdf
Provider Datasheets	The Datasheets are available at the following location: www.hp.com/go/hpux-networking-docs and select HP-UX 11i WBEM Software collection.

Localized version of the software

The product is supported only in English locale (LANG=C). Behavior of the product is unpredictable when LANG value is set to any other language code other than C. Documentation support for this product is also available only in English locale.

2 Documentation feedback

HP is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hp.com). Include the document title and part number, version number, or the URL when submitting your feedback.