HP BladeSystem Matrix Release Notes

BladeSystem Matrix firmware set 1.01

Intended audience

This document is for the person who installs, administers, and troubleshoots servers and storage systems. HP assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels.

Contents

BladeSystem Matrix release notes

Hardware, software, and firmware versions

For supported hardware, software, and firmware versions, see the *HP BladeSystem Matrix Compatibility Chart* at the BladeSystem Matrix website (http://www.hp.com/go/matrixcompatibility).

Issues and workarounds

The following are known issues and workarounds for BladeSystem Matrix environments.

General issues

1. Changing enclosure names through Onboard Administrator can cause issues with Virtual Connect Enterprise Manager (VCEM) and logical servers. Do not change the enclosure names after creating a Virtual Connect Domain Group.

2. Updating VC firmware with the Online Firmware Bundle using HPSUM
   - o Do not lock maintenance mode in VCEM
   - o Primary VC needs to be the target
   - o Make sure the OA and VC Administrator credentials match before running HPSUM

3. If using BladeSystem Matrix Firmware Deployment Tool v1.61 to update any c-Class server blade configured with an HP NC373i Integrated Multifunction Gigabit Server Adapter, you might encounter the following message, `PXE-E61:Media test failure, check cable.` If this occurs, go to the HP website (http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?lang=en&cc=us&objectID=c01683477) and follow the procedures to correct this issue.

4. BladeSystem Matrix Firmware Deployment Tool v1.61 might not properly update firmware on the HP BLc Emulex LPe1105-hp 4Gb FC HBA. Use one of the following alternative methods to update the firmware.
   a. Option 1
      i. Boot the Firmware Maintenance CD v8.50 (available on hp.com).
      ii. Agree to the licenses, and then choose the language.
      iii. Select the **Firmware** tab, and then select the **Install Firmware** option.
      iv. When the Select Items to Install screen appears, find the Emulex firmware component and then click **Installation Options** link.
      v. Select the **force** option.
      vi. Click **Install** to force the update of the Emulex firmware.
   b. Option 2
      Use the force option on the BladeSystem Matrix Firmware Deployment Tool v1.61 CD.
      i. Boot the Firmware Deployment Tool CD.

ii. As the CD is booting, a blinking cursor appears for approximately five seconds immediately after the CD starts to load. During this time, type `force`, and press **Enter.**

5. The Power PIC Firmware component of the Windows® Online Firmware Bundle v1.61 contains Power PIC Firmware version 3.4. The "Device Details" page for the Power PIC Controller in HP Smart Update Manager shows the "Installed Version" and "Available Version" to be the same. No action is needed as this will not affect the update process.

6. When installing VMware ESX 3.5.0 Update 4 on ProLiant BL280c G6 server blades, the installer incorrectly identifies the NIC in the blade and requires a driver CD to install properly. Manually provision the operating system in HPIO and initialize the installation through the driver CD as per the driver CD's instructions. The VMware ESX SErver 3.5 driver CD is available at http://www.vmware.com/support/vi3/doc/drivercd/esx35-igb-350.1.3.8.6.3.html.

7. Support for VMware vSphere 4 as a managed system in this release is limited to a technology preview for use in pilot and test environments only.

8. Multi-Path IO deployments using Emulex LPe1205 8Gb FC may stall during a Windows® 2008 scripted install. If MPIO functionality is required, you can work around this installation issue by configuring the host in command view with a single FC adapter port WWN. After the OS has landed and all MPIO requirements along with the DSM are installed, the second FC adapter port WWN can be added to the host using command view.

HP Insight Dynamics - VSE 4.1 Update 2

Known issues and limitations of this release are listed below, organized by ID-VSE product or functional area. The following categories are used:

- Limitations—Limitations of the implemented functions and features of this release.

- Major issues—Known issues that may significantly affect functionality and usability in this release.

- Minor issues—Known issues that may be noticeable but do not have a significant impact on functionality or usability.

Verifying VSE Version of VSE 4.1 Update 2: To verify that Update 2 is installed, select Help>About HP Systems Insight Manager. Verify that the version number for HP Virtualization Manager is 4.1.2.xxx.

General VSE Software

Major issues

The following are general major issues for VSE software.

Network Utilization Measurements May Be Unreliable Due To WMI Counter Rollover When Using Agentless Data Collection on Windows Server® 2003

The performance counters that are queried during agentless data collection are 32-bit values on Windows® 2003 servers. Windows® 2003 servers that have high network utilization can cause these performance counters to overflow. When this occurs, Virtualization Manager may report a negative utilization value or a value sometimes significantly lower than the actual utilization.

In addition, "Collect Capacity Advisor Data" may display the following warning:

```
Warning: The Network I/O utilization values for system [hostname] may be
inaccurate due to WMI performance counter rollovers.
```

When this warning is displayed, one or more network I/O utilization samples were invalidated and not used for calculating the 5-minute averages for network utilization stored in the Capacity Advisor database.

Suggested Action—Lower the polling interval for the agentless data collection service by using the SIM menu Configure>Configure VSE Agentless Collection>Advanced Agentless Options. Depending on the level of network utilization of the server, this action may not completely eliminate the issue. Furthermore, lowering the polling interval may impact the CMS's overall performance.

ESX Hosts May Fail to Return Performance Data, Resulting in Incorrect (Zero-Valued) Resource Metrics Reported in Capacity Advisor and Visualization Tab Meters

In some cases, the VMware management agents running on an ESX host may fail to return performance data to both HP Virtual Machine Management (which is used by Virtualization Manager and Capacity Advisor for collecting performance data for ESX hosts) and VMware Virtual Center (the VMware Infrastructure Client).

Indications of this issue:

- **VMware Virtual Center/VMware Infrastructure Client:** The Performance tab for the ESX host, and any guests configured on the host, will display the error "Performance data is currently not available for this entity".

- **Virtualization Manager:** Visualization Tab meters will display 0 for all metrics (CPU, Memory, Network and Disk utilization) for these ESX hosts and guests.

- **Capacity Advisor:** Profile Viewer will display 0 for all metrics (CPU, Memory, Network and Disk utilization) for these ESX hosts and guests, for some period of time.

Suggested Actions

1. Ensure that the system clock is set correctly on the ESX host by running the date command on the host.

   If the system date/time is modified via the date command, also run the following command to sync the hardware clock:

   ```
   # hwclock --systohc
   ```

2. Restart the VMware management agents on the host:

   ```
   # service mgmt-vmware restart
   ```

3. Restart the Virtual Machine Management agent on the host:

   ```
   # service hpvmmcntsvc restart
   ```

   > **NOTE:** Alternatively, you may reboot the host in place of steps 2 and 3.

4. (Capacity Advisor only) The data collected during these intervals are not valid, and should be omitted for capacity planning purposes. See the *HP Capacity Advisor User's Guide* and Online Help for information on how to invalidate data for these intervals where data collection was failing (as indicated by 0-valued metrics over these intervals).

   > **NOTE:** In other cases where Virtual Machine Manager may fail to collect performance data from an x86 virtual machine host (either VMware ESX, Microsoft Virtual Server or Microsoft Hyper-V), Virtualization Manager will correctly display an error and Capacity Advisor will correctly omit the data (indicated by gaps in data in the Profile Viewer) for these hosts and their guests during these intervals. In any case where data collection appears to be failing for extended periods of time, rebooting the VM host (or following the procedure, above, in the

case of ESX) may remedy the situation.

Minor issues

- **Systems on the Workload Tab can Erroneously be Displayed as Unlicensed After Initial HP SIM Discovery:** This occurs when systems initially get discovered by HP SIM horizontally (for example, through the enclosure for a blade, or through the management processor for a partitionable system). When the system (blade, nPartition, VM guest, etc.) is later explicitly added and fully discovered (hostname is now known), the Workload tab can lose the workload's association with the proper host. As a result, utilization data will not be displayed and the system will be incorrectly identified as not being licensed.

  Suggested Action—Even though utilization data is not displayed on the Workload tab, it is correctly displayed on the Visualization tab. After an HP SIM restart, data is properly displayed on the Workload tab as well.

- **"Watch workload method failed" Message When Creating Sub-OS Workload Definitions for SELinux Managed Systems**

  When trying to create sub-OS workloads definition in Virtualization Manager for x86/x64 Linux managed systems with SELinux or equivalent technology enabled you might get the following message:

  ```
  An error occurred collecting data -- query failed.
  ```

  ```
  An error occurred communicating with WBEM : CIM_ERR_FAILED:A general
  error occurred that is not covered by a more specific error code: "Watch
  workload method failed for workload name: <workload name>."
  ```

  Suggested Action—To make sure the cause of the issue is related to write permission in `/var/adm/util`, check `/var/log/messages` for the following message (or similar):

  ```
  SELinux is preventing /usr/sbin/cimserver (pegasus_t) "write" access to
  util (var_t). For complete SELinux messages (...)
  ```

  Make sure that OpenPegasus has write access to /var/adm/util directory. If you are using SELinux execute the following command:

  ```
  # chcon -t pegasus_data_t /var/adm/util
  ```

  If you are using another security package, such as AppArmor, follow the specific rules for that tool to give OpenPegasus write access to this directory.

- **Attempting to Migrate or Scan for HP-UX LTU's for Already Licensed Systems Can Fail:** If a purchased permanent license is assigned to an HP-UX node and you subsequently run the **vselicense -m** command on this node (or press the Scan for HP-UX Licenses button in the VSE Management for Integrity software license screen or other variants), the command can fail because of the mix of purchased and migrated licenses.

  Suggested Action—If you wish to migrate or scan licenses from the node, do not assign licenses from a purchased key.

- **Some Messages from vselicense Command Point to Old Licensing Menu Items:** When using the **vselicense** command, certain error messages that should refer the user to the Deploy>License Manager menu item in HP SIM, instead refer to the old menu items (Deploy>VSE Management for Integrity software...).

  Suggested Action—Use the Deploy>License Manager menu.

- **A VM Guest that Migrates from an Unlicensed to a Licensed Host while HP SIM is Running Will Not be Considered Licensed:** VM Guests are not explicitly licensed. Instead, their license state is

cascaded from their host. If, while HP SIM is running and the user is using Virtualization Manager, a guest migrates from an unlicensed to a licensed host, the license state of the guest will not change until HP SIM is restarted.

Suggested Action—Restart HP SIM.

Capacity Advisor

Limitations

The following are limitations for Capacity Advisor.

Moving a Virtual Machine Guest Shows Fewer Headroom Rating Stars Than Expected

When converting a server to a virtual machine (VM) or moving a VM from one host to another, a list of target hosts will each display a five-star headroom rating. For a VM host, this rating is impacted by how well the workloads fit into the VM as well as how well the VMs fit on the host. If any VM guest on the host (including the guest currently being moved onto that host) has a low headroom rating then it will impact the headroom rating shown for that target host by showing fewer headroom stars than might be expected from viewing the available resources indicated by the utilization meters.

For example, if a VM host contains a guest which has a memory utilization of 100% (common with Hyper-V guests) and a memory utilization limit of 100% for 0% of the time (a default global utilization limit) then moving or adding a VM guest of any size and/or utilization to this host will always return a headroom rating of one star.

See the Capacity Advisor online help "Units, Terminology, and Associated Concepts" topic for more information on interpreting the headroom star ranking.

Suggested Action—Remove the utilization limit from the workload (not the global or scenario utilization limits) of the metric(s) which may be significantly impacting the headroom rating. Metrics will impact the headroom rating if they are 50% or more of the specified limit, but the impact may not be significant until approaching the limit.

Taking the example above, where Hyper-V guests show memory utilization of 100%, from the scenario workload tab, individually select each Hyper-V guest and select the Edit->Scenario Workload Utilization Limits… menu item to remove the memory utilization limit.

Memory Allocation for ESX Guests May Appear to Vary over Time Even Though the VM Configuration Has Not Changed

When viewing memory data for an ESX guest in the Profile Viewer, the Allocation (light blue, dashed line) may appear to vary over time, even though the amount of memory configured for that guest has not changed. The reason for this is that the Allocation represents "granted" memory for ESX guests (the amount of physical memory that the ESX host has actually allocated to the guest at any point in time). The "granted" memory may be less than the amount of memory configured/requested for the guest (based on the current memory utilization for the guest). So the "granted" memory may be very low when the guest is idle.

Incorrect Hyper-V Guest Memory Utilization May Limit Headroom Ratings to One Star

Capacity Advisor shows the memory utilization of Hyper-V Virtual Machines as being 100% utilized all of the time. This can lead to confusion in interpreting the profile viewer and will limit any headroom ratings to at most one star with default utilization limits.

When stacking VMs onto VM hosts, Capacity Advisor always uses the VM's allocated memory in deciding if a VM host is full. This error will not affect using Smart Solver to rebalance the VMs across several VM hosts, or manually moving VMs from host to host.

Suggested Action—Remove the memory utilization limit from the Hyper-V workloads. Removing the memory utilization limit from the global or scenario limits will also work but will impact workloads that are not Hyper-V. To remove the default memory utilization limit use either of the following procedures.

Outside of a Scenario (affects five-star headroom ratings displayed for logical server activations and migrations):

1. Select each Hyper-V guest in the Visualization tab.
2. Select the Configure>Workload Utilization Limits... menu item from the VSE menu bar.
3. Select the Memory Utilization% utilization limit.
4. Click the Remove button.
5. Click the OK button.

Inside of a Scenario (affects five-star headroom ratings displayed for What-If actions within a planning scenario only):

1. Select each Hyper-V guest in the Edit Scenario Workload tab.
2. Select the Edit>Workload Utilization Limits... menu item.
3. Select the Memory Utilization% utilization limit.
4. Click the Remove button.
5. Click the OK button.

Minor issues

The following are minor issues for Capacity Advisor.

- **Errors Occur When Starting a Manual Data Collection Prior to Completion of First 5-Minute Sample:** Immediately after installing the Utilization Provider on a server or after adding a server to the agentless data collection configuration file, wait at least 5 minutes for an initial data sample to be collected before manually requesting performing data collection in Capacity Advisor. Capacity Advisor requires at least one data point for a server to be useful in a planning scenario.

- **Add Agentless Systems UI Does Not Prevent Configuration of Hyper-V Hosts:** Step 1 of the Add Agentless Systems wizard incorrectly allows the selection of Hyper-V hosts. When the underlying **capagentlesscfg** command is run on a selected Hyper-V host, command output will indicate that the Hyper-V host was not configured for VSE agentless data collection. In fact, utilization data for Hyper-V hosts is collected agentlessly through VMM, so there is no loss in functionality, despite the error message.

- **"Collect ALL Capacity Advisor Data Nightly" Fails with Large Number of Nodes:** On a CMS with over 1000 managed nodes, the nightly schedule "capcollect all" task will fail with the following error message:

```
Can't spawn "cmd.exe": No such file or directory at C:\Program
Files\HP\vse\bin\\capcollect.pl line 277.
```

This error occurs at approximately 1500 managed nodes.

Suggested Action—Delete the default scheduled task that is shipped with the software, and create a new one. See "Gathering Data for Capacity Advisor" in the *HP Capacity Advisor User's Guide* for more information. This new task will scale correctly, because of the way that HP SIM creates new tasks.

- **Missing VM Host Subtype Causes Duplicate Workload Error Condition:** If the HP SIM system subtype for a VM host is missing, but associations to its VM guests exist and the VM guest subtype is defined, Capacity Advisor assumes that the system is physical and not a VM host. Then, when a user opens a

Capacity Advisor Edit Scenario screen, the screen displays the workloads associated with this server as running on a physical server and on the VM guests. This duplication causes the information popups for the server and the VM guests to fail with the following message.

Error generating screen. Attempting to create second instance of (hostname).

Suggested Actions—Re-identify the VM host with its VM host subtypes.

a. Verify a VM host subtype is listed for that VM host in its HP SIM System page in the Product Description table, System Subtype list.

b. If there is no VM host subtype in the System page:

— If this is an Integrity VM host, ensure the WBEM VM Provider is installed on the VM host.

— For Proliant VM hosts, ensure Virtual Machine Management Pack (VMM) is identifying the VM host correctly.

— Then re-identify the VM host in HP SIM to correct the Subtype settings using Options->Identify Systems....

c. Verify the VM host attribute exists in the System page and in the Virtualization tab

d. If the VM host subtype is listed in the System page and not in the Virtualization tab and/or not in the Edit Scenario page, then log out of the current HP SIM session and log back in to clear any caching issues.

- **Capacity Advisor Data Collection Succeeds but is Not Displayed in Profile Viewer:** Collecting Capacity Advisor data "succeeds" with no error message displayed for a system or group of systems when collecting data (either from the **capcollect** CLI, the Optimize>Collect Capacity Advisor Data... menu, or from the Collect Capacity Advisor Data link on the Profile Viewer). However no data is displayed in the Profile Viewer.

  Suggested Action—If data is correctly displayed on the Visualization tab, restart HP SIM in order to properly display data on the Workload tab or Profile Viewer.

- **Current Day's Capacity Advisor Data can be Lost:** After performing a virtual to physical move (using HP Server Migration Pack-Universal, for example), or after switching from agentless data collection to the Utilization Provider, collecting Capacity Advisor data may result in loss of data previously collected for the current day.

  Suggested Action—Wait 24 hours before collecting Capacity Advisor data for systems that were either migrated from virtual to physical systems or that have switched from agentless data collection to UP-based data collection.

- **Error Message from Agentless Data Collection May Indicate A DNS Issue When the WMI Connection to the Host Has Failed:** When collecting agentless data, the following error may be displayed (either in Virtualization Manager meter popups or in the **capcollect**/Collect Capacity Advisor Data output): "The IP address of the host X could not be resolved". When this error is encountered the problem may not be with DNS hostname/IP address resolution. It may instead be that the target server is currently shutdown or otherwise inaccessible via WMI.

  Suggested Action—When you encounter this error message, run the vseassist managed node communication checks (select the host(s) in the Visualization tab and then select the Diagnose>Troubleshoot VSE Management>Check VSE CMS to Managed Node Communication... menu item), and verify that the following (first three) tests pass:

```
    Managed system hostname
resolution...................................[PASS]
    WBEM port
open.........................................................[PASS]
```

```
      WBEM
authentication................................................[PASS]
```

Only the first three tests relate to agentless collection. The SSH and SNMP checks run by this **vseassist** command do not apply to agentless collection.

- **CPU Data Collected after VM Migrations (for the Time Period Between the Previous Collection and the Last Migration) Between Hosts with Dissimilar CPUs May be Inaccurate:** Capacity Advisor "normalizes" CPU utilization based on the CPU speed of the system. For Virtual Machines, this is based on the VM host's CPU speed. For x86 VM platforms (VMware ESX, MSVS and Hyper-V), if VM's have been migrated between hosts since the last data collection, Capacity Advisor will use the "current" host's CPU speed for normalizing all data since the last collection, even if some of that data was on hosts of a different CPU speed than the current. Note that this is only a problem if the hosts that the VM is migrated between have different CPU speeds.

  Suggested Action—Whenever possible, collect Capacity Advisor data for VMs just prior to migrating those VM's between hosts with different CPU speeds.

- **Operating System Name for VMM Systems Displayed Incorrectly In Capacity Advisor Profile Viewer and Scenario Editor After OS Change:** If a system is dual-booted (or a different OS is installed) and the new operating system is managed by VMM, the operating system type will not be updated when a capcollect is performed. It will be updated if the new operating system is collected via agentless or WBEM. The original OS on which the system was booted will continue to be displayed. For example, if an x86 system previously running Windows and licensed for Capacity Advisor had data collected and is subsequently reprovisioned as an ESX VM host, registering it with VMM and collecting Capacity Advisor data will continue to show the system OS type as "Windows".

  Suggested Actions—Perform the following:

  a. In a command window type **capprofile -x workload-name < file.txt**.

  b. Edit the resulting file to remove everything except the header and the first line of utilization data. Change the operating system type in the header to the correct value:

    — `WINNT` for Windows

    — `LINUX` for Linux

    — `HPUX` for HP-UX

    — `hypervisor` for ESX

  c. Type **capprofile -i -o -S workload-name >file.txt.**

- **Potential Race Conditions In Profile Viewer:** Using pan buttons in two instances of the profile viewer within the same session will cause odd panning behavior. The last pan button pressed will impact both profile viewers (after the second one is reposted).

  There is also a small probability that using pan buttons from multiple browser sessions simultaneously will cause a null pointer exception (NPE).

  Suggested Actions—Open a second browser instance or use a browser from a different machine if you need to use pan buttons from both browser instances. Alternatively, if you want to use the same session, pan to your desired position in one profile view, then use the pan buttons in the second profile viewer.

- **Workload Disappears After Move Workload Action:** The `.OTHER` workload is meant to represent virtualization overhead in Capacity Advisor. If you explicitly move a `.OTHER` workload in Capacity Advisor to a server for which it is inappropriate, or to a server which already has a `.OTHER` workload, the moved `.OTHER` workload disappears.

Suggested Action—HP recommends not moving `.OTHER` workloads to servers for which they are not intended. You can recover this workload by choosing "undo action" to restore the workload to its original place, then recover it.

HP Insight Orchestration

Issues

- Hyper-V virtual machine multi-homed support notes:
  - Insight Orchestration does not support multi-homed Hyper-V virtual machines when the virtual machine network interfaces are configured to use a static IP address.
  - Insight Orchestration supports multi-homed Hyper-V virtual machine when the virtual machine network is configured to use a DHCP IP address.
- VMM templates created on one version of ESX may only be deployed onto an ESX host of the same major version. For example, a VMM template created on ESX 3.5 may only be deployed onto an ESX host that is running ESX 3.5.
- Support for VMware vSphere 4 as a managed system in this release of Insight Software is limited to a technology preview for use in pilot and test environments only.
  - The maximum ESX 4x concurrent provisioning limit is restricted to 2 in the technology preview (see setting `virtual.max.concurrent.request` value in the *HP Insight Orchestration version 1.0.2 User Guide*.)
  - Deployment speed and concurrent limitations will be removed with full vSphere support in the next release.

HP Insight Recovery

Limitations

- ESX 4.0 support limitations

  The Matrix 1.01 update introduces ID-VSE support for VMware ESX 4.0, but HP Insight Recovery 1.0 does not support failover of VMs created on ESX 4.0 (or any other ESX host), to an ESX 4.0 host in this release.

  To avoid unsuccessful failover of HP Insight Recovery recovery groups:

  a. Do not assign an ESX 4.0 host to an HP Insight Recovery license.
  b. Do not configure a VM-based Logical Server in an HP Insight Recovery recovery group, if the VM was created in an ESX 4.0 environment.

Logical Server Management

Limitations

The following is a limitation for Logical Server Management.

Performing Operations on a Logical Server Running as a Hypervisor

Insight Dynamics supports a logical server that is a physical server (Virtual Connect, iLO, or foreign) running a hypervisor, and supports logical servers that are guest VMs on that physical server, with the following restrictions:

- Deactivate, move, power off, and delete operations on the hypervisor logical server are **not supported** while there are guest VM logical servers residing on the hypervisor logical server. You

must first move the guest VM logical server off of the hypervisor logical server before performing any of these operations on the hypervisor logical server.

- Deactivate, move, power off, and delete operations on the hypervisor logical server are not supported while there are running jobs on a VM guest logical server or on the hypervisor logical server that could result in creating or leaving a VM guest logical server on the hypervisor logical server.

Minor issues

The following are minor issues for Logical Server Management.

Virtual Connect Blade Logical Servers Minor Issues

- **Logical Server Associations Not Displayed on HP SIM System Page Associations List:** The associations list for a logical server on the HP SIM Tools>System Information>System Page... does not show associations between the mxnode for an active logical server and the object on which the logical server is running (virtual machine or blade). These associations do appear in the HP SIM System table and in the perspectives of the Virtualization Manager Visualization tab.

- **Activating Logical Servers when there are Identically Named Enclosures in a Virtual Connect Domain:** When you activate a Virtual Connect blade logical server, the target selection screen does not display the VC domain of potential target hosts. Virtual Connect Enterprise Manager 1.30 allows more than one enclosure to have the same name in the same VC domain group.

  Suggested Action—As a best practice, you should NOT give enclosures the same name. If you already have this issue, follow these steps to activate the logical server. Verify that the enclosure containing the blade on which you want to activate the logical server is the appropriate enclosure by verifying its serial number. To verify a BladeSystem server blade enclosure serial number, use the HP System Management Homepage (SMH) at https://[server blade ip address]:2381. Select System>Enclosure Information, then select Server Enclosure [enclosure name].

- **Target Hosts Rejected with Incorrect Error:** When you move a Virtual Connect blade logical server, some blades may be rejected as possible target hosts with an incorrect hard error. This happens when all the following conditions are met:
  o VCEM 1.30 or later is installed.
  o The logical server is active on a VC Domain with more than one enclosure.
  o The logical server is active on a blade with the same bay number, but different enclosure, as the rejected blade.
  o The rejected blade has another logical server active on it.

  In this case, the target blade is rejected, which is correct behavior, but the error reported for the rejection incorrectly states that the logical server to be moved is active on the rejected blade.

- **Configuring Storage Entry For A Virtual Connect Blade Logical Server:** When you are configuring the storage entry for a Virtual Connect blade logical server, note the following issues.
  o When you specify a LUN identifier that corresponds to the server world wide name for each storage volume, LUN IDs can be in one of the following formats:
    — Decimal number in the range of 0 to 255
    — Hexadecimal number with 13 to 16 digits

    An example of defining a boot volume and data volume is to set one path to each volume as primary boot and (assuming redundancy) the other path to each volume (boot or data) as ** ** secondary boot. Do not select disabled from the drop-down menu.

You can create, modify, import, and activate a logical server with LUN IDs in these formats. However, you can perform storage validation only on storage volumes with LUN IDs that are decimal numbers in the range of 0 to 255. Storage validation returns "not found" for storage volumes with LUN IDs not in decimal format.

o In the Volume Path Settings table, the Boot Path column title is misleading. The column should be named Path, because some of the volumes in the table may be data volumes. The path is a boot path only if the volume is the boot volume. The path is a data path for data volumes.

ESX and Hyper-V Virtual Machine Logical Servers Minor Issues

• **Reactivating and Moving Logical Servers Created on ESX 4x VM Hosts to ESX 3x VM Hosts:** The new ESX 4 virtual hardware version prevents virtual machine logical servers that were first activated on an ESX 4x VM Host from being moved or reactivated on an ESX 3x VM Host.

  ESX 4x supports virtual hardware version 4 and version 7 VM guests, but ESX 3x supports only version 4 VM guests.

  You can successfully move a virtual machine logical server first activated on ESX 3x to an ESX 4x VM Host.

  If your logical server was first activated on an ESX 4x VM Host and specifies **SAN storage**:

  o For a SAN move or live move, only valid ESX 4x target hosts are displayed in the Available Target Hosts table. ESX 3x targets are filtered out.

  o Reactivating the logical server results in both ESX 3x and ESX 4x hosts displayed as valid targets. Choose only an ESX 4x target. ESX 3x targets show the following soft error to remind you to take care when moving the VM:

  ```
  VM Host {target-host} may not support the virtual hardware version of
  VM Guest {vm-guest}.
  ```

  If you select an ESX 3x host, the reactivation fails (the registration of the new hypervisor succeeds but the virtual machine is not powered on). Reactivating the logical server on an ESX 4x host succeeds after a failed reactivation on an ESX 3x host.

  If your logical server was first activated on an ESX 4x VM Host and specifies **local storage**:

  o A copy move and a reactivation result in both ESX 3x and ESX 4x hosts displayed as valid targets. Choose only an ESX 4x target. The ESX 3x targets show soft errors.

  o An attempted copy move to an ESX 3x host fails with the error:

  ```
  Unable to move Virtual Machine (vm-guest}. (The host {vm-host} does
  not support the virtual hardware version of virtual machine.)
  ```

  A copy move to an ESX 4x host succeeds after a failed copy move to an ESX 3x host.

  o An attempted reactivation on an ESX 3x target fails (the registration on the current ESX 4x hypervisor succeeds but the copy move to the ESX 3x hypervisor fails, and the virtual machine is unregistered from that hypervisor). A subsequent activation on an ESX 4x hypervisor succeeds.

  If your logical server was first activated on an ESX 3x VM Host and you have moved it to an ESX 4x VM Host, and now you want to move it back, the ESX 3x targets show a soft error. The error can be ignored in this case because the VM version is compatible with ESX 3x VM Hosts.

• **Ensure VM Hosts Use Fully Qualified Host Names:** Activating and moving virtual machine logical servers requires that the VM Host is identified by its fully qualified DNS name or the host name in HP SIM.

  If the VM host is not identified by its fully qualified name, the VM Host may not appear as a valid target when dragging and dropping a logical server onto another host, or it may not be properly identified in HP SIM.

Workaround—Use the Options>Discovery... menu selection in HP SIM to perform a manual HP SIM discovery on the host name before you begin operations on ESX virtual machine logical servers.

- **SAN Storage Names with Parentheses Can Cause VM Hosts to be Rejected Targets at Activation:** Do not use a SAN storage name that includes a parenthesis when you specify the storage configuration for a virtual machine logical server. For example, MYSAN(1) is an invalid SAN storage name. Logical server management interprets the value inside the parentheses as a storage identifier. When the logical server is activated, the VM Hosts are shown as rejected target hosts with an incorrect storage error.

  Suggested Action—When you create SAN Storage, specify storage names that do not include parentheses.

- **Cannot Activate Logical Server if Operating System Variation is "Other Linux" or "Invalid Entry" (ESX 3i Only):** If you create an ESX virtual machine logical server and specify Linux as the operating system and Other Linux as the OS Variation on the Create Logical Server Identity screen, you cannot activate the logical server on an ESX 3i VM host.

  Similarly, if you import an ESX virtual machine logical server and the View Logical Server Details screen displays "Operating System: <Invalid Entry>", you cannot activate the logical server on a VM host.

  Suggested Action—Modify the logical server identity and select another Operating System Variation, then retry the activation.

- **Free Disk Space on the VM Host Is Smaller Than The Amount of Memory Chosen For The Logical Server:** When you create a Hyper-V virtual machine logical server, if the amount of free disk space on the VM Host is smaller than the amount of memory chosen for the logical server, the logical server cannot be powered on. This occurs infrequently, because free disk space is usually larger than memory size.

  Suggested Action—Use HP SIM to power on the logical server. Select the VM node and click the power on button.

All Logical Servers Minor Issues

- **Increase Java Heap Size for LSMUTIL (Logical Servers Database Utility) in Large Environments**

  In large environments, the default Java heap size of 64MB may not be sufficient resulting in Java heap errors when running LSMUTIL.

  Suggested Action

  If you encounter this issue, increase the initial and maximum heap size in LSMUTIL, as follows.

  Edit the Perl script `<path>\lsmutil.pl` to replace the line:

  ```
  $g_java = "\"$g_hpsim_root\\j2re\\bin\\java.exe\"";
  ```

  with the following line:

  ```
  $g_java = "\"$g_hpsim_root\\j2re\\bin\\java.exe\" –Xms1024m –
  Xmx1024m";
  ```

vseassist Troubleshooting Utility

Minor issues

The following are minor issues for vseassist Troubleshooting Utility.

- **"chcp" Error when Running vseassist Managed Node Configuration Checks for a 64-bit Windows Managed System:** When running **vseassist** Managed Node Configuration checks for a 64-bit Windows managed system, the following message will be displayed in stderr:

```
'chcp' is not recognized as an internal or external command, operable
program or batch file.
```

This is an issue with the remote command execution facility (DTF) of SIM, and the message can be ignored

VSE Agent Software Installation

Limitations

The following is a limitation for the VSE Agent Software Installation.

"Force Reinstallation" Option Provided by Configure or Repair Agents Tool

The Install Linux VSE Agents and Install Windows VSE Agents tools do not provide a "force reinstallation" option. However, if you install the VSE agents from the Configure or Repair Agents tool, then this option is provided.

Major issues

The following are major issues for VSE Agent Software Installation.

Updating Linux Operating System May Cause ID-VSE Agent Distribution to Fail

The newer Linux releases contain an updated version of tar that is not backward compatible. If you are using a newer version of Linux and you attempt to deploy ID-VSE agents using Configure or Repair Agents or Configure VSE Agents>Install Linux VSE Agents, the following message is displayed:

```
tar: use --wildcards to enable pattern matching... Installation failed!
```

Suggested Actions—Manually install VSE Linux agents, or downgrade the version of tar to a version that supports wildcards. Versions earlier than 1.15.91 work correctly.

Permission Denied Error when Attempting to Distribute Agents

When SELinux is set to "Enforcing" on certain Linux systems, the agent distributor cannot execute the installer binary because it cannot load shared libraries. This results in a failed attempt to distribute the agents. The following error is displayed:

```
./kginstaller-linux-integrity: error while loading shared libraries: cannot
restore segment prot after reloc: Permission denied
```

Suggested Actions—Temporarily disable SELinux, install the agents, and then reenable SELinux to successfully distribute agents by performing the following steps:

1. Run **echo 0 >/selinux/enforce** on the managed node on which agents are being installed.
2. Distribute the agents normally via the CMS.
3. Run **echo 1 >/selinux/enforce** on the managed node to reenable the Enforcing SELinux policies.

Reregister WBEM Providers Using the "Force Reinstallation" Option of Install HP-UX VSE Agents

WBEM 2.7.4 is provided with VSE for installation to HP-UX managed nodes. When a managed system is upgraded to WBEM 2.7.4, it unregisters any installed WBEM providers but then fails to reregister them. In order to reregister the WBEM providers you must reinstall them using the "force reinstallation" option of Install HP-UX VSE Agents.

Minor issues

The following is a minor issue for VSE Agent Software Installation.

- **Task Results for the VSE Agent Install Displayed as Sub-task Results:** When installing VSE agents from the Configure or Repair Agents tool, task results for the installations do not show up immediately.

Once the overall Configure or Repair Agents task is "Complete", the task results for the VSE agent install will be displayed as sub-task results.

HP Insight Rapid Deployment software (RDP) - Multipath SAN Deployment Support

Related articles

- Knowledge Base article Target Servers With Multiple Disks Deployment Support (http://h18013.www1.hp.com/products/servers/management/rdp/knowledgebase/20000038.html?jumpid=reg_R1002_USEN) (Article 20000038)

- Knowledge Base article How To Perform a Boot From SAN Installation (http://h18013.www1.hp.com/products/servers/management/rdp/knowledgebase/20000039.html?jumpid=reg_R1002_USEN) (Article 20000039)

Related documents

For more information, see the following:

- HP Insight Software 3.10 at http://www.hp.com/go/ice.

- Onboard Administrator 2.52 at http://www.hp.com/go/oa

- Virtual Connect 2.12 at http://www.hp.com/go/virtualconnect.

- HP Insight Dynamics - VSE at Insight Dynamics - VSE 4.1 Update 2 Documentation Addendum (http://h18013.www1.hp.com/products/servers/management/vse/infolibrary.html).

- HP Insight Orchestration at the HP Insight Orchestration Information Library (http://h18013.www1.hp.com/products/servers/management/vse/infolibrary.html).

- HP Insight Recovery at the HP Insight Recovery Information Library (http://h18013.www1.hp.com/products/servers/management/vse/infolibrary.html).

- Logical server management, see Insight Dynamics - VSE 4.1 Update 2 Documentation Addendum (http://h18013.www1.hp.com/products/servers/management/vse/infolibrary.html).