



# Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager Release Notes



**Version 7.8.1**

**Note**

Before using this information and the product it supports, read the information in Appendix A “Notices” on page 17.

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## About this publication

These Release Notes provide the latest information about Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager.

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## Conventions and terminology

Paragraphs that start with a bold **Note** or **Important** are notices with specific meanings that highlight key information.

**Note:** These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

The following table describes some of the terms, acronyms, and abbreviations used in this document.

Term, Acronym, or Abbreviation	Definition
BMC	Baseboard Management Controller, which is a service processor that consolidates service processor functions and a video controller in a single chip.
CMM	Chassis Management Module, which manages the Flex System chassis.
AMM	Advanced Management Module, which manages the BladeCenter® chassis.
SNMP	Simple Network Management Protocol.
(Lenovo) XClarity® Integrator (LXCI)	A tool suite that enables IT administrators to integrate the management features of the System x with Microsoft System Center.
(Lenovo) XClarity Integrator Service	The backend component of Lenovo XClarity Integrator, which provides the functionality for Lenovo XClarity Integrator to access and manage Lenovo servers.
(Lenovo) XClarity Administrator (LXCA)	A centralized, resource-management solution that simplifies infrastructure management, speeds responses, and enhances the availability of Lenovo server systems and solutions.
Operations Manager	The Microsoft System Center Operations Manager.
Managed server or managed node	A physical machine managed by Operations Manager.

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## Web resources

The following Web sites provide the resources for understanding, using, and troubleshooting the BladeCenter chassis, the Flex System chassis, the ThinkServer® servers, the ThinkSystem® servers, the ThinkAgile HX Series servers, the System x servers, and the system-management tools.

### Lenovo Web site for Microsoft Systems Management Solutions for Lenovo servers

This Web site locates the latest downloads for the XClarity Integrator offerings for Microsoft System Center Management Solutions:

- [Lenovo XClarity Integrator for Microsoft System Center Web site](#)

### **System Management with Lenovo XClarity Solutions**

This Web site provides an overview of the Lenovo XClarity solutions that integrate System x and Flex System hardware to provide system management capability:

- [System Management with Lenovo XClarity Solution Web site](#)

### **Lenovo XClarity Forum and Ideation**

The following Web sites provide the forum and ideation of all Lenovo XClarity products:

- [Lenovo XClarity Forum Web site](#)
- [Lenovo XClarity Ideation Web site](#)

### **Lenovo technical support portal**

This Web site assists you in locating support for hardware and software:

- [Lenovo Support Portal Web site](#)

### **Lenovo ServerProven**

This Web site obtains the information about hardware compatibility with Lenovo ThinkSystem servers, System x servers, BladeCenter servers, and Flex System servers:

- [Lenovo ServerProven Compatibility Web site](#)

### **Microsoft System Center Operations Manager Web site**

This Web site provides an overview of the Microsoft System Center Operations Manager:

- [Microsoft System Center Operations Manager Web site](#)

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## Chapter 1. What's new in version 7.8.1

This section provides an overview of features that are new in Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager v7.8.1.

### **New hardware support**

- **Lenovo ThinkSystem**
  - SR645 (7D2X, 7D2Y)
  - SR665 (7D2V, 7D2W)
  - SR850P (7D2F, 7D2G, 7D2H)





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## Chapter 2. Known limitations

The topics in this section provide information about limitations, problems, and workarounds that apply to Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager.

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### Issues related to installation, uninstallation, and upgrades

These topics address issues that are related to installing, uninstalling, and upgrading Lenovo XClarity Integrator Hardware Management Pack.

#### 1. If the UAC is on, installation-related activities fail when managed directly through the Control Panel or the MSI file

If you try to manage installation-related activities (for example, uninstallation) directly through the Control Panel or through the MSI file (Microsoft Windows Installer Package) on Microsoft Windows 2008 or later, and the User Access Control (UAC) is turned on, the process fails when run.

To perform installation-related activities, either turn off the UAC through the Control Panel first or use the designated Local Administrator account to perform these activities.

#### 2. Overrides saved in the Default Management Pack can prevent Hardware Management Pack from being deleted

When you attempt to delete Hardware Management Pack from Operations Manager, the following message is displayed:

```
Remove the Default Management Pack first before removing the
Management Pack because of dependency. You cannot delete the
Management Pack without removing the dependent management packs.
```

This message indicates there is at least one override saved in the Default Management Pack for rules or monitors. Overrides are saved in either the Default Management Pack or a dependent management pack.

If you plan to use these overrides at a later time, save the overrides in a management pack other than the Default Management Pack (or the management pack listed in the message). After saving the overrides, delete the management pack causing the problem from Operations Manager, and then delete the other remaining management packs. When you import Hardware Management Pack back to Operations Manager, import the management pack that you saved earlier to restore the overrides.

#### 3. "Script or executable failed to run" alerts can occur on some or most of the managed systems during deletion of the Hardware Management Pack.

#### 4. Deleting Hardware Management Pack from Operations Manager on Windows Server 2008 may prompt an alert about a script is running

If you delete Hardware Management Pack while a script defined in Hardware Management Pack is running, a message is displayed stating a script is currently running and the file containing the script is about to be deleted.

You can click **Ignore** to continue uninstalling without affecting any of the servers running the script.

Place the management server into Operations Manager Maintenance Mode before deleting Hardware Management Pack from Operations Manager.

## 5. Errors are displayed on the Operations Manager Console immediately after deleting Hardware Management Pack

Immediately after deleting Hardware Management Pack from Operations Manager, you might see a series of errors on the Operations Manager Console. This is because the GUI is sharing a view with Hardware Management Pack you are deleting.

For example, the error might display as: Invalid Column Name ... or Collection was modified.

Ignore this and any related errors and note that the enumeration operation might not run in this situation.

## 6. The Handle count threshold exceeding error reported after Hardware Management Pack is imported

On the Operations Manager management servers, after Hardware Management Pack is imported, the following alert might be displayed: Handle count threshold exceeding.

To view details about this error, complete the following steps:

1. Click **Performance** → **Windows local Application Health Rollup** → **Performance** → **Health Service Performance** → **Health Service** to open Operations Manager Health Service.
2. Click **Handle Count Threshold** and search for the following message:  
Too many rules and monitors are loaded from all the management packs that this Health Service has been configured with.

Apply this fix: [Microsoft Support – A managed application has a high number of thread handles and of event handles in the Microsoft .NET Framework 2.0 Web site](#). Also see the Microsoft Operations Manager Support Team Blog article: [The System Center Operations Manager – OpsMgr 2007 blog](#).

Restart **Health Service** and reset the health state manually each time this error occurs. You should manually reset the **health state** as a temporary measure for this issue, as doing so will have a negative effect on Operations Manager performance and the continuity of health monitoring.

## 7. Need to restart the Operations Manager Console to access the external Knowledge Base articles for a newly installed Hardware Management Pack

If you keep the Operations Manager Console open while installing Hardware Management Pack, or if you changed the installation path for Hardware Management Pack, the links to the hardware Knowledge Base articles will not be available until you restart the Operations Manager Console.

These links appear inside the Knowledge Base articles for the monitors defined in Hardware Management Pack and appear as tasks in the **Actions** pane of the Operations Manager state views.

To have the links point to the new setup location for the hardware Knowledge Base articles, close and reopen the Operations Manager Console.

## 8. The Operations Manager Console must be restarted to update the directory path for the remote blade on, off and shutdown task

If you keep the Operations Manager Console open while installing Hardware Management Pack, the Operations Manager Console environment loses the program directory path information for the remote blade on, off and shutdown OS task.

If %IBM\_DIR\_VBS% is in the program directory path when the remote blade power on, off or shutdown OS console task is requested, the following error message is displayed:  
Input Error: Cannot find script file

Close and reopen the Operations Manager Console so the new program directory path %IBM\_DIR\_VBS% is defined properly in the Operations Manager Console environment.

## 9. A dialog box confirming uninstallation is blocked by the processing bar

When the system Control Panel is used to uninstall the product, a confirmation message is displayed at the end of the uninstallation process. However, the processing bar of the installation program blocks it, preventing you from confirming the uninstallation.

There are two possible workarounds:

- Bring the underlying uninstallation confirmation window into focus by clicking on it, then click **OK** to complete the uninstallation.
- Use the uninstall shortcut option from the **Start** menu to uninstall the product. The confirmation message is not blocked when you use this method.

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## Issues related to the discovery of a server and its hardware components

These topics address issues that are related to the discovery of a server or its hardware components.

### 1. It can take several minutes for all of the hardware components to appear in the Operations Manager state views after a managed system is added to Operations Manager

After a managed system is added to Operations Manager, it can take 3 minutes or longer before the system appears in the Operations Manager Console. It can take up to 6 hours for all of the hardware components and all of the health states to fully populate in Operations Manager.

To limit the CPU demands on the managed systems for hardware health monitoring, Lenovo XClarity Integrator Hardware Management Pack implements a staged discovery of the hardware components in servers. It will take time for a newly added system to complete the initial discovery.

In a controlled lab environment, you can override the discovery intervals with a shorter interval (through the Operations Manager Authoring Console) to speed up the process. Note that such overrides should be performed with care to avoid overloading the processor of the managed systems. See the Operations Manager online help for information about overrides. Another option is to perform manual refreshes in the Operations Manager Console periodically to force the console to catch up with the latest data.

### 2. Older Systems that have RSA-II without BMC in Director Agent 6.1.x or later have critical alerts with Director Agent's compatibility even if the RSA-II daemon is installed and running

Director Agent 6.1.x and later does not support systems that have only RSA-II and no BMC. Lenovo XClarity Integrator Hardware Management Pack deliberately raises alerts for systems in this situation even if the RSA daemon is installed and running without problems.

Hardware health of systems in that situation will not be monitored correctly.

Use the Director Core Services 5.20.31 for systems that have only RSA-II and no BMC.

### 3. Hardware components of a certain class of System x systems are not discovered with the Microsoft IPMI driver

The Microsoft Intelligent Platform Management Interface (IPMI) driver requires a system BIOS to expose the Baseboard Management Controller (BMC) in the designated ACPI namespace for the driver to be able to communicate with the BMC.

For a system with Microsoft IPMI driver running, but not having a BIOS level that exposes the BMC in the designated ACPI namespace, there will be a critical alert that flags the needed BIOS update.

For a list of the latest System x servers that are in this category, see <http://www.ibm.com/systems/support/supportsite.wss/docdisplay?brandind=5000008&Indocid=MIGR-5075267>.

Do not run these systems with Microsoft IPMI driver. Instead use the OSA IPMI driver.

**Note:** The OSA IPMI driver is supported on Windows Server 2003 or earlier, but is not supported on Windows 2008 or later. Without a proper IPMI stack, the hardware health of the system will not be available.

#### **4. No power supplies, fans, temperature sensors, or voltage sensors are discovered for blade servers**

In a BladeCenter, power supplies, cooling fans, temperature sensors, and voltage sensors are all shared components of the chassis. Because a blade server itself does not have information that goes beyond the server, there are no instances of power supplies, fans, temperature sensors, or voltage sensors being discovered for a blade server.

First monitor BladeCenter with the BladeCenter management pack included in Hardware Management Pack and then use the *M/T-S/N* value of the blade server to locate the corresponding BladeCenter and watch the health conditions of these shared components of BladeCenter.

#### **5. No power supplies are discovered on xSeries 335 systems with Director Core services 5.20.31**

No power supply instances are discovered on xSeries 335 systems with Director Core Services 5.20.31.

None available at this time.

#### **6. No power supplies are discovered on IBMSystem x3755 M3 systems with Director Platform Agent 6.2.1 and later**

No power supply instances are discovered on IBMSystem x3755 M3 systems with Director Platform Agent 6.2.1 and later.

No workaround is available at this time.

#### **7. Some RAID controller names might display as serial numbers instead of readable text**

Instance names for IBM System Storage (ServeRAID-MR, MegaRAID, ServeRAID-BR, or Integrated RAID) might display as a serial number and not in readable text, such as the *LSI MegaRAID SAS Adapter*. Instead it might display as *IBM.500605B000A8F214* in the following views:

- Instance Detail
- Health Explorer
- Alert Source

No workaround is available at this time.

#### **8. Older management controllers (service processors) are not discovered**

Older service processors, including the Advanced Systems Management (ASM) PCI Adapter, the ASM processor (ASMP), and Integrated Systems Management Processor (ISMP) are not discovered by Hardware Management Pack. However, hardware components that these older service processors manage can still be discovered and monitored with a version of Director Agent that supports these configurations (for example, 5.20.31).

To achieve full coverage of hardware health of your IT infrastructure, upgrade to a newer system equipped with a Baseboard Management Controller (BMC) service processor, Remote Supervisor Adapter (RSA) II, or with the Integrated Management Module (IMM). Also install the latest supported firmware for the management controller.

#### **9. Power capping support limitations on multi-node and multi-instance machines**

The **Set Power Capping** task in Microsoft System Center Operations Manager does not support multi-node and multi-instance power systems, such as two-node servers and servers with an attached MAX5 memory expansion unit. On multi-node systems, the **Set Power Capping** task only affects the first or primary node in the system and any related power capping data applies only to the first or primary node.

If you attempt to run the **Set Power Capping** task on a multi-instance system with an attached MAX5 unit, the task may fail with a generic firmware-based error code of 255. A power cap cannot be set on a system with an attached MAX5 unless the MAX5 is first removed from the server.

#### **10. The value of Power Capping Capable is false although other Power Capping properties such as Power Maximum, Power Minimum, or Power Cap have non-zero values**

The **Power Capping Capable** property is the only property that indicates whether the server is Power Capping Capable or not. Some servers may provide non-zero values in their Power Capping properties information, such as Power Maximum, Power Minimum, or Power Cap despite the fact that they do not support power capping.

These non-zero values do not indicate that the server is Power Capping Capable. If the Power Capping feature is desired for this server, review the "Installing IBM Power CIM Provider" and "Troubleshooting" sections of the *Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager Installation and User's Guide*.

#### **11. The value of Power Maximum, Power Minimum, or Power Cap are zero**

Sometimes Lenovo XClarity Integrator Hardware Management Pack cannot collect the correct **Power Capping** properties due to an exception of the IBM Power CIM Provider on a managed server.

If the Power Capping feature is required for a server, complete the following applicable steps to resolve this issue.

- Reboot the managed server.
- If rebooting the managed server does not work, see the "Installing IBM Power CIM Provider" and "Troubleshooting" sections of the *Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager Installation and User's Guide*.

#### **12. The Set Power Capping task does not work in the SCOM console**

The **Set Power Capping** task might fail because the PowerCapping option is not enabled. The following message is displayed: ERROR - Failed to enable Power Capping.

Complete these steps.

1. When trying to enable PowerCapping, verify the **Pcap** value is between **Pmax** and **Pmin**.
2. Reboot the managed server.
3. Reinstall the IBM Power CIM Provider on the managed server.

If after completing these steps the PowerCapping task still does not work, refer to the "Troubleshooting" section in *Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager Installation and User's Guide* to set the value manually.

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## **Issues related to health monitoring of server hardware**

These topics address issues that are related to health monitoring of a server or its hardware components.

It is essential to keep current with the latest system firmware for BIOS/UEFI, BMC/IMM and other components. For the latest system firmware, visit the [Lenovo Support Portal Web site](#).

- **Duplicate active alerts are generated for certain memory and processor events**

Operations Manager generates two duplicate active alerts when receiving certain memory and processor events because the same event is handled by multiple monitors.

**Workaround:** No workaround is available at this time.

- **Not all hardware events are reportable events for all systems**

Health monitoring is dependent on hardware capability, the firmware support level, and the management software support level. As an example, some systems might have more than one physical power supply, but not all of the power supplies are instrumented or manageable.

Hardware health events are specific to hardware platforms. Not all hardware events are supported as reportable events for all hardware platforms.

This is normal behavior for Lenovo XClarity Integrator Hardware Management Pack.

**Workaround:** To achieve full coverage of hardware health for your IT infrastructure, upgrade to a newer system equipped with a Baseboard Management Controller (BMC) service processor, Remote Supervisor Adapter (RSA) II, or with an Integrated Management Module (IMM). Also install the latest supported firmware for the management controller.

- **Running out of temporary disk space on a managed system can prevent health monitoring and event alerting from working**

Lenovo XClarity Integrator Hardware Management Pack monitors system health through client-side scripts and requires temporary working disk space on a managed system. The temporary working disk space is managed by Operations Manager Health Service. If that disk space is depleted, the scripts in Hardware Management Pack cannot run, and therefore are not able to correctly detect and report the health state to Operations Manager.

The temporary working disk space is, by default, allocated from the %TEMP% folder on the managed system for the Local System Account.

**Note:** The Local System Account is the user account under which the Operations Manager Health Service runs. There is no known recommendation for the minimum amount of disk space that you shall reserve for managed systems.

When this situation occurs, the Windows event logs on the managed system for Operations Manager will contain entries similar to the following examples.

- **Example 1**

```
Event Type: Warning
Event Source: Health Service Modules
Event Category: None
Event ID: 10363
Date: 4/20/08
Time: 17:24:04
User: N/A
Computer: A-X3650-RAID
Description: Module was unable to enumerate the WMI data
```

```
Error: 0x80041032
Details: Call cancelled
```

One or more workflows were affected by this.

```
Workflow name: many
Instance name: many
Instance ID: many
Management group: scomgrp1
```

For more information, see [Microsoft Support – Events and Errors Message Center Web site](#).

- **Example 2**

```
Event Type:
Event Source: Health Service Modules
Event Category: None
Date: 4/20/08
```

Event ID: 9100  
Time: 25:33  
User:  
Computer: A-X3650-RAID  
Description: An error occurred on line 105 when executing script 'MOM Backward Compatibility Service State Monitoring Script'  
Source: Microsoft VBScript runtime error  
Description: ActiveX component can't create object: 'GetObject'

One or more workflows were affected by this.

Workflow name: System.Mom.BackwardCompatibility.ServiceStateMonitoring  
Instance name: a-x3650-raid.Lab54.local  
Instance ID: {EE77E6E4-5DC5-F316-A0CA-502E4CBFCB97}  
Management group: scomgrp1

For more information, see [Microsoft Support – Events and Errors Message Center Web site](#).

**Workaround:** Monitor the free disk space in the %TEMP% folder on the managed system for the Local System Account, and increase the free disk space as needed.

- **Some hardware alerts require a manual reset of the health state**

Lenovo XClarity Integrator Hardware Management Pack can automatically reset the health state of hardware components for most of the hardware alerts. Resets occur when there is enough specific information in the alerts to determine if it is appropriate to reset the health state of the component.

However, there are cases where information about the physical condition is too generic for Hardware Management Pack to determine if the physical condition has been resolved, or if the problem is a security concern that warrants manual acknowledgement by an IT administrator.

The following examples are categories of physical hardware problems that require manual resets of health states:

- Problems that indicate a potential security breach to physical systems
- Hardware problems related to RAID or disk drives
- Hardware problems that do not contain enough specific information, such as a generic processor error
- Hardware problems that are hardware-platform specific, such as the condition of a too-hot processor not detected through a temperature sensor outside of the processor chip

**Workaround:** Refer to the knowledge articles about Hardware Management Pack for each monitor and alert to learn if an alert or the state of a monitor requires a manual health reset.

- **Alerts and events of an offline managed system are not visible in the Operations Manager Console until the managed system comes back online and reconnects to Operations Manager**

Each of the alerts, events, and state changes of an agent-based managed system depend on the local Microsoft Health Service of the managed system that is communicating with the Operations Manager server. If the network connection between the Operations Manager server and the managed system is disrupted or if the managed system goes offline for some reason, no alerts or events are communicated to the Operations Manager server.

When the network connection resumes, the alerts and events previously recorded locally on the managed system flow to the Operations Manager server.

When communication between the managed systems and the Operations Manager server is fully established, Operations Manager views might contain outdated alerts and events from previously disconnected systems.

**Workaround:** None needed.

- **Disconnected NICs on managed systems are reported with an offline error, even if they are disabled in Windows**

For NICs that have been disabled in Windows (either through the Control Panel or other means), Lenovo XClarity Integrator Hardware Management Pack still reports the error and the alert for the physically disconnected NIC, despite it being explicitly disabled.

Hardware Management Pack monitors the physical condition of the NICs without taking into consideration their relationship with the Windows system.

**Workaround:** No workaround is available at this time; however, you can disable the NIC offline alert monitor to ignore these errors. For information about how to disable a monitor, see the Operations Manager online help.

- **Different versions of IBM Director Agent might report a different severity for the same hardware events**

Some hardware events might be reported as critical errors by Director Core Services 5.20.31, while the same events might be reported as warnings by Director Platform Agent 6.2.1 and later version.

**Workaround:** No workaround is available at this time.

- **All of the events generated with the WinEvent tool are reported under one monitor**

The only purpose of the WinEvent tool (`WinEvent.exe`), which is part of the Director Agent 5.20.x, is to validate the connection of a managed system with Operations Manager through Lenovo XClarity Integrator Hardware Management Pack. WinEvent does not fully populate all of the relevant information needed to simulate real-world hardware events. Therefore, all of the events generated with WinEvent are reported under one monitor in Hardware Management Pack.

**Workaround:** No workaround is available at this time.

- **Outstanding errors that are generated through WinEvent from IBM Director Agent 5.10.x are reported continuously by regular health checkup monitors (even after they are manually cleared in Operations Manager)**

In IBM Director Agent 5.10.x, an error generated through the WinEvent tool (`WinEvent.exe`) also affects the internal health state maintained inside of the Director Agent for the corresponding hardware component. The saved state affects the resulting health state reported by the regular health checkup monitor for that component. Consequently, even after that error is manually cleared in Operations Manager, the regular health checkup monitor still reports the error until the error is cleared at the Director Agent level.

In IBM Director Agent 5.20.x and later version, events generated through WinEvent do not affect the health state maintained inside of the Director Agent for the hardware component.

**Workaround:** Use `WinEvent.exe` to generate the pairing event (that is the same event ID) of severity level 0, to clear the error state maintained in the Director Agent for the hardware component. Alternatively, clear all the outstanding errors generated through `WinEvent.exe` by deleting the `IBM\director\cimom\data\health.dat` file and all the `IBM\director\cimom\data\health.dat\*.evt` files on the managed system and then restart the system.

- **No events are generated in Operations Manager for logging on or off of the Remote Supervisor Adapter II**

No events are generated in Operations Manager when logging on or off of the Remote Supervisor Adapter II.

**Workaround:** Install the latest firmware for the Remote Supervisor Adapter II.

- **No alerts are generated in Operations Manager when the RSA-II event log exceeds the capacity threshold or it is full**

No alerts are generated in the Operations Manager when the RSA-II event log either exceeds the capacity threshold or is full.

**Workaround:** Install the latest firmware for the Remote Supervisor Adapter II.



- **Uninstalling the OSA IPMI driver does not resolve the expected "software missing" error**

Uninstalling the OSA IPMI driver from a managed system results in a "software failed" warning, not the "software missing" error, until the system reboots. The reason for this error is because the OSA IPMI driver is not Windows Plug-and-Play compliant. Until a reboot, the driver is still present in the Windows system kernel, even though it has been removed.

**Workaround:** For systems that are listed on the IBM support site, use the Microsoft IPMI driver to replace the OSA IPMI driver. The Microsoft IPMI driver can be installed on Windows Server 2003 R2 as an optional hardware management feature, while the driver is installed automatically on Windows Server 2008 or later version.

- **External hardware knowledge articles about Hardware Management Pack are not available on an Operations Manager management server that does not have Hardware Management Pack installed**

If you are using the Operations Manager Console on a server that not installed with Lenovo XClarity Integrator Hardware Management Pack, the external knowledge pages about hardware alerts are not available.

Hardware Management Pack must be installed locally for these IBM knowledge pages to be accessible from the Operations Manager Console.

**Workaround:** To access the hardware knowledge articles, use the Operations Manager 2007 Console on a management server that has Hardware Management Pack installed.

- **The System x Power Data Chart is not available for multinode servers**

The System x Power Data Chart monitoring power information for multinode servers function is not supported in this release for these systems: System x3850 X5, System X iDataPlex® dx360 M4.

**Workaround:** Use traditional methods to monitor power data.

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## Issues related to the discovery of a BladeCenter and its modules

These topics address issues that are related to the discovery of a BladeCenter and its modules.

It is essential to have the latest firmware level of the BladeCenter Advanced Management Module (AMM). If you have an outdated firmware level for the AMM, this can prevent the discovery of all the modules. For the information about upgrade to the latest AMM firmware, see [http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm\\_1.00/btp0\\_bofm\\_t\\_upgrading\\_firmware.html](http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm_1.00/btp0_bofm_t_upgrading_firmware.html).

BladeCenter SNMP settings must also be configured correctly for a BladeCenter to be discovered and monitored correctly. Follow the instructions in the *Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager Users Guide* to set up the SNMP settings for the BladeCenter, and use Operations Manager Discovery Wizard to discover the BladeCenter as a network device.

- **A management server with multiple NICs might not reliably discover a BladeCenter if there is more than one network connection between the BladeCenter AMM and the management server**

If a BladeCenter does not appear as a network device in the Operations Manager Console after a discovery, and if the management server for discovery has more than one network connection to reach the BladeCenter AMM, then the discovery will be impacted by an SNMP on multi-NIC binding problem. As a consequence, a discovery of a BladeCenter can be intermittent.

**Workaround:** Use only one network connection between the management server and the BladeCenter AMM by either disabling all the other NICs on the management server or using another means to keep the NICs disconnected from the AMM.

- **Full discovery of a BladeCenter requires adequate time**

After the network device discovery for a BladeCenter finishes, it might take up to 2 hours for the BladeCenter module discovery process to begin. Also, it can take up to 6 hours for all of the BladeCenter module discovery processes to finish, for their initial health state to be initialized, and for all the states and properties to fully populate in the Operations Manager Console.

**Workaround:** You can override default monitoring interval values to a shorter interval. See the Operations Manager online help for more information about overrides.

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## Issues related to the health monitoring of a BladeCenter

These topics address issues that are related to the health monitoring of a BladeCenter.

It is essential to have the latest firmware level for BladeCenter Advanced Management Module (AMM). If you have an outdated firmware level for the AMM, this can prevent getting all the health states needed. For information about upgrading AMM firmware, see [http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm\\_1.00/btp0\\_bofm\\_t\\_upgrading\\_firmware.html](http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm_1.00/btp0_bofm_t_upgrading_firmware.html).

For a BladeCenter to be monitored correctly, the BladeCenter SNMP settings must be configured correctly. Review the settings by referring to the instructions in the *Lenovo XClarity Integrator Hardware Management Pack for Microsoft System Center Operations Manager Users Guide* about specifying the BladeCenter SNMP settings.

- **Operations Manager 2007 cannot receive SNMP trap data on Windows Server 2008**

If you can discover a BladeCenter successfully with an Operations Manager management server running Windows Server 2008, SNMP traps from the BladeCenter might not propagate to Operations Manager unless a specific fix pack available for Systems Center Operations Manager 2007 has been installed.

For more information, see: [Microsoft Support – System Center Operations Manager 2007 cannot receive SNMP trap data when you use a Windows Server 2008-based computer or a Windows Vista-based computer as a proxy agent for SNMP devices Web site](#).

**Workaround:** Install the fix pack for Windows Server 2008 on the Operations Manager management server designated to manage the BladeCenter.

- **A critical "SNMP Trap Generated Alert" is reported for each BladeCenter event regardless of its severity, if Microsoft's Network Device Monitoring Library is imported**

Microsoft System Center Network Device Monitoring Library management pack for System Center Essentials 2007, treats every SNMP trap it receives as a critical error and does not capture enough relevant data from the SNMP trap. This management pack does not manage a BladeCenter and can confuse IT administrators.

**Workaround:** Delete the Network Device Monitoring Library management pack from Operations Manager.

- **BladeCenter storage modules are not monitored**

BladeCenter storage modules are not monitored with Lenovo XClarity Integrator Hardware Management Pack.

**Workaround:** To manage the BladeCenter storage modules and their disk drives, use the RAID SAS Switch Module (RSSM) in the BladeCenter.

- **Removing the primary management module in a BladeCenter does not generate an alert to Operations Manager**

The primary management module of a BladeCenter cannot generate an alert to Operations Manager when it is removed physically from the BladeCenter, because the original connection to its Operations Manager management server no longer exists.

**Note:** The standby management module must have a different IP address from the primary management module.

**Workaround:** Configure Operations Manager to monitor the standby management module in addition to the primary management module. Although you will miss the event of the primary management module removal, you can maintain full coverage of health monitoring of the BladeCenter. You must temporarily make the standby management module the active management module when adding the BladeCenter to be managed through the standby management module.

- BladeCenter **multi-slot wide blades are reported as single-slot wide**

If the AMM of a BladeCenter is running at the firmware level BPET50C, the BladeCenter multi-slot wide blades are reported as single-slot width.

**Workaround:** Either upgrade the AMM firmware to level BPET54D or later version, or downgrade to level BPET48N. See [http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm\\_1.00/btp0\\_bofm\\_t\\_upgrading\\_firmware.html](http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm_1.00/btp0_bofm_t_upgrading_firmware.html).

- BladeCenter **Media Module reports empty values for the part number and serial number of the Media Tray**

The BladeCenter Media Module reports empty values for the part number and serial number of the Media Tray.

**Workaround:** Upgrade the AMM firmware to the latest firmware level. See [http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm\\_1.00/btp0\\_bofm\\_t\\_upgrading\\_firmware.html](http://pic.dhe.ibm.com/infocenter/director/v5r2/index.jsp?topic=/bofm_1.00/btp0_bofm_t_upgrading_firmware.html).

- BladeCenter **might not send out all of the SNMP traps when the AMM is overloaded**

There are extreme conditions that might cause the AMM of a BladeCenter to be overloaded, making it unable to send out all of the SNMP traps required for Hardware Management Pack to report to Operations Manager.

**Note:** Such cases of extreme activity are rare and occur only in extreme conditions such as a catastrophic failure of all the components in a BladeCenter chassis.

- BladeCenter **Media Module might indicate "Not available" for its module name for a period of time**

The module name of a BladeCenter Media Module is gathered on a timed interval basis. Because the alert source for a Media Module is the module name, the alert source for a newly inserted Media Module might be displayed as Not available for alerts that occur in the time between the insertion of the module and the time the module name is gathered during the next interval.

**Workaround:** No workaround is available at this time.

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## Issues related to the discovery of BMC

This topic addresses issues that are related to the discovery of BMC.

- **An application error might occur when invoking the Windows Discover BMC computer task**

The following application error might be displayed when invoking the Windows Discover BMC computer task:

Application: %IBM\_DIR\_VBS%\EndpointDiscovery.exe Error Message: The system cannot find the file specified.

**Workaround:** Add a new environment variable *IBM\_DIR\_VBS* with the value specified as the installation folder of Lenovo XClarity Integrator Hardware Management Pack, and then reboot your system.

- **If UAC is enabled, discovering BMC through the SCOM console might fail if not running SCOM console as Local Administrator**

If you attempt to discover a BMC through the SCOM console using the **Discover BMC** button, and User Access Control (UAC) is enabled, the discovery process might fail.

**Workaround:** To discover the BMC, either disable UAC through the Control Panel first or run the SCOM console as Local Administrator.

- **Pre-authenticated BMC might lose connection after it is managed by Lenovo XClarity Administrator**

For a BMC to which you have requested access using a local BMC account before in Lenovo XClarity Integrator, Lenovo XClarity Integrator loses access to the BMC after you manage the BMC with Lenovo XClarity Administrator.

Lenovo XClarity Administrator disables all local BMC accounts after it manages the BMC, so Lenovo XClarity Integrator cannot access the BMC using the local BMC account that you provided before.

**Workaround:** Use the account that you configured in Lenovo XClarity Administrator to request BMC access again in Lenovo XClarity Integrator.

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## Issue related to Lenovo XClarity Administrator registration

These topics address an issue that is related to Lenovo XClarity Administrator registration.

- **Failed to register Lenovo XClarity Administrator with IPv6 address**

When you use an IPv6 address to register Lenovo XClarity Administrator, the message Loading, Please wait ... is displayed but does not return because Lenovo XClarity Integrator Unified Service could not get the certificate chain from the IPv6 address. This issue is a limitation of Lenovo XClarity Integrator.

**Workaround:** To resolve the problem, manually download the certificate from Lenovo XClarity Administrator, and add the certificate to Lenovo XClarity Integrator by clicking **Manage trusted certificates** → **Add**.

- **Failed to import a Lenovo XClarity Administrator certificate when using Internet Explorer 10**

When you manually import a Lenovo XClarity Administrator certificate (PEM) file into Lenovo XClarity Integrator, the import might fail with the following message: Fail to upload certificate file. This is a known problem with Internet Explorer 10.

**Workaround:** Perform one of the following steps to work around this problem:

- Upgrade Internet Explorer to a later version or use another Web browser.
- When importing the certificate, select **Paste certificate in PEM format**. Do not use **Add from a file (PEM)** to add the certificate.

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## Tips for Operations Manager

These topics provide tips and observations for Operations Manager.

- **Objects discovered with a management pack might not display in the Operations Manager Console if the same management pack is deleted and reimported too quickly**

If you do not wait long enough before reimporting the management pack files, managed systems that were previously added to Operations Manager might not display in the Operations Manager Console.

For details about this issue, see Microsoft Support – Discovery information is missing after you delete and then reimport a management pack in Microsoft System Center Operations Manager 2007.

Refer to the "Resolution" section of this Microsoft knowledge base article.

- **Managed servers might have different health states when managed in more than one management group**

To manage servers that are in more than one Operations Manager management group, ensure that the same version of Hardware Management Pack is used for all the management groups to which these servers belong. Otherwise, there might be inconsistent health states or alerts reporting for these servers.

Because some of the health states managed by Hardware Management Pack are updated on a timed interval basis, there can be times that a server has different health states in different management groups.

Make sure the management packs in all the management groups are of the same version.

- **State changes can take more than a few minutes to roll up to the topmost level**

It might take the Operations Manager Console some time to reflect the final rolled-up state of the highest level object.

Do manual refreshes by pressing F5 to force the Operations Manager Console to display the latest data or consult the Detail state view of the object for the latest health state.

- **Data might not display in the Operations Manager state views after scrolling left and right**

Data in the health state views might not display if you frequently scroll left and right to browse all of the columns in the state view.

Do manual refreshes by pressing F5 to force the Operations Manager Console to display the latest data.

- **After resetting the health states through the Operations Manager Console, it can take 2 minutes or more to reflect the current health state**

After using Health Service to reset health states, it might take 2 minutes or more to roll up to the top most state view and reflect the current health state.

Perform a manual refresh by using **F5** to force the Operations Manager Console to display the latest data.

- **The value of the Path property for some Operations Manager objects might display as either empty or wrong**

The value of the **Path** property for some Operations Manager objects might display as either empty or wrong in the **State list** view.

- **Lenovo System x and x86/x64 blade servers**

The **Path** property for some object classes can be empty. The **Path** property for all of the systems in the **Root Computers** view has an empty value, but the **Path name** property of these objects is not empty. Hardware Management Pack does not explicitly override the **Path** property for all of the objects it creates. The **Path** property of an object can be empty if that object is based on a class that is empty and Hardware Management Pack does not explicitly override the value.

- **Lenovo BladeCenter chassis and Lenovo Flex System chassis**

The value of the **Path** property of BladeCenter Chassis is correct in the **Details** view of the Operations Manager Monitoring pane, but the value can be incorrect in the **State view** tab.

Check the value in the **Details** view of the Operations Manager Console before using the value of the **Path** in the **State list** view.

- **Views and columns in the Operations Manager State views do not revert to the default settings after the Management Pack has been deleted and reimported**

The Operations Manager Console implements sticky settings for those personalized views that are remembered from session to session. Such views are remembered even if you delete Hardware Management Pack and reimport it.

Click **Revert to default** when personalizing a view using Microsoft System Center Operations Manager 2007 R2.

- **The "Processing backlog events taking long time error" warning alert is displayed when an Operations Manager 2007 SP1 agent is installed on a computer running Windows 7 or Windows Server 2008 R2**

If an Operations Manager 2007 SP1 agent is installed on a computer that is running Windows 7 or Windows Server 2008 R2, **EventID 26017** is logged.

After this occurs, the Processing backlog events taking long time error warning alert is displayed.

No workaround is required. Either ignore the events or upgrade to Operations Manager 2007 R2. For more information, see [Microsoft Support – Support for Windows Server 2008 R2 and Windows 7 in System Center Operations Manager 2007 Web site](#).

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## Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

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