



IBM Systems
IBM Virtualization Manager
Release Notes





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Note

Before using this information and the product it supports, read the general information in "Notices" on page 15.

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Chapter 1. About this release

IBM® Virtualization Manager is an extension to IBM Director that helps you manage both physical and virtual resources from one location. Virtualization Manager enables you to work with virtualized environments that are managed by IBM Hardware Management Console (HMC), Microsoft Virtual Server, VMware, and Xen virtualization. Xen management is included as a technology preview. Virtualization Manager features a Health Summary that allows you to specify and monitor health goals, as well as a topology map view that helps visualize relationships between physical and virtual resources. With feedback from these tools, you can then take action to create additional virtual servers, modify the resources that are allocated to existing virtual servers, or migrate virtual servers to another host.

Product compatibility

IBM Virtualization Manager is supported for use with IBM Director Server 5.10 Update 3.

Compatibility with other products, such as operating systems or virtualization products from VMware or Microsoft®, are described in the Software requirements topic located in the IBM Systems Software Information Center.

IBM Virtualization Manager information resources

You can find additional information about IBM Virtualization Manager and IBM Director in the product documentation and on the World Wide Web.

Documentation

In addition to the *IBM Virtualization Manager Release Notes*, IBM Virtualization Manager is supported by the *IBM Systems Software Information Center* (<http://publib.boulder.ibm.com/eserver/swic.html>).

All documentation found in the IBM Systems Software Information Center can also be printed as Portable Document Format (PDF). You need Adobe Acrobat Reader or Xpdf to view it.

World Wide Web resources

The following Web pages provide resources for understanding, using, and troubleshooting IBM Virtualization Manager, IBM Director, and systems-management tools.

IBM Virtualization Manager

https://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/eica7/eica7_kickoff.htm

Read an overview of IBM Virtualization Manager and find information for planning, downloading, installing, configuring, and more.

IBM Director

http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html

Read an overview of IBM Director and find information for planning, downloading, installing, configuring, and more.

IBM Systems Software Information Center

<http://publib.boulder.ibm.com/eserver/swic.html>

IBM Systems Software Information Center is your source for technical information about cross-platform solutions for the IBM operating systems.

IBM personal computing support page

www.ibm.com/pc/support/

Locate support for IBM hardware and systems-management software. For systems-management software support, click **Systems management**.

IBM Systems Management Software: Download/Registration page

http://www.ibm.com/servers/eserver/xseries/systems_management/xseries_sm/dwnl.html

Download IBM systems-management software, including IBM Virtualization Manager.

IBM Systems Management page for Intel® processor-based servers

www.ibm.com/servers/eserver/xseries/systems_management

Obtain an overview of IBM systems management and IBM Director. This Web page also contains links to Web pages for IBM Director extensions including Remote Deployment Manager (RDM), Scalable Systems Manager (SSM), Server Plus Pack, and Software Distribution (Premium Edition).

IBM ServerProven® page

www.ibm.com/servers/eserver/serverproven/compat/us/

Obtain information about IBM System x, IBM BladeCenter®, and IBM IntelliStation® hardware compatibility with IBM Director.

Chapter 2. Installation and upgrade information

IBM Virtualization Manager has three software components that are installed on servers in your network as extensions to their corresponding IBM Director components:

- IBM Virtualization Manager Server is installed on the management server that is running IBM Director Server. When you install Virtualization Manager Server, the Virtualization Manager Console extension, along with the Web interface, is installed automatically on the same system. The Web interface provides tasks and unique views to help you manage your virtual environment. It provides an alternative, or supplemental, way to view and work with the resources that you manage through IBM Director.
- IBM Virtualization Manager Console is installed on systems that are running IBM Director Console.
- The applicable version of IBM Virtualization Manager Agent is installed on a managed system that is running one of the following sets of software:
 - IBM Director Agent, VMware VirtualCenter server, and VMware VirtualCenter Web service
 - IBM Director Agent and VMware ESX Server (service console only)
 - IBM Director Agent and VMware GSX Server
 - IBM Director Agent and Microsoft Virtual Server
 - IBM Director Core Services and Xen Virtualization

Note: When you install Virtualization Manager Server, the Hardware Management Console extension for IBM Director Server and IBM Director Console Version 5.10 Update 3 is installed automatically. The HMC extension enables the discovery of IBM Hardware Management Consoles (HMCs) in your environment. Then, you can view the servers and associated virtual servers that are managed by the HMC. The managed servers do not require that IBM Director Agent be installed because IBM Director communicates with the HMC through the HMC extension for IBM Director.

Detailed installation instructions, including versions of supported virtualization applications and other system requirements, are provided in the IBM Virtualization Manager topic collection located in the IBM Systems Software Information Center.

Chapter 3. Limitations, general problems, and workarounds

This chapter contains information about limitations, general problems, and workarounds.

Limitations

The limitations in IBM Virtualization Manager apply either to all IBM Virtualization Manager agents or to a specific IBM Virtualization Manager agent that is being used.

Note: Xen management is included in IBM Virtualization Manager as a technology preview.

Limitations for any agent of IBM Virtualization Manager

IBM Virtualization Manager has the following limitations for any agent of IBM Virtualization Manager:

Unable to use dircli with some language-specific versions of Windows®

IBM Director command-line interface (dircli) and IBM Virtualization Manager commands use the backslash (\) for various commands. For example, the backslash is used when designating the full path name to a virtual server configuration file. However, some language-specific versions of Microsoft Windows use a different character for backslash. Therefore, when a backslash is used with dircli, it fails to run on that language-specific version of Microsoft Windows. For example, this problem occurs with the Korean and Japanese versions of Windows.

IBM Virtualization Manager icon is not displayed properly on Windows 2000 without installing Service Pack 4

After you install an IBM Virtualization Manager component on a system that is running Windows, the IBM Virtualization Manager program is listed as a currently installed program on the Add/Remove Programs window. However, when the system is running Windows 2000 without Service Pack 4, the icon for the IBM Virtualization Manager program is not displayed properly. After Service Pack 4 has been installed, the IBM Virtualization Manager icon is displayed properly. This limitation is seen when running the English and Korean versions of Windows 2000.

Limitations when using IBM Virtualization Manager Agent for VMware VirtualCenter

IBM Virtualization Manager has the following limitations when using IBM Virtualization Manager Agent for VMware VirtualCenter:

Excessive windows prompting for undoable disk power actions

When a virtual server has one or more undoable disks and a power operation occurs on that virtual server, VMware VirtualCenter requires user input to complete the operation. If the power operation is originated by IBM Virtualization Manager, then IBM Virtualization Manager provides the required input. However, if there is a VMware Remote Console open at the time that the power operation occurs, a window opens that asks for the required information even though it has been provided by IBM

Virtualization Manager. When a user attempts to provide the information that was requested, an error message is displayed.

This same behavior can be observed when two VMware Remote Console sessions are open to the same virtual server. In that case, even though the question might be answered at one console, the window at the second console remains open and returns an error if the user attempts to answer the question.

Limitations when using IBM Virtualization Manager Agent for VMware ESX Server

IBM Virtualization Manager has the following limitations when using IBM Virtualization Manager Agent for VMware ESX Server:

Changed UUIDs can cause virtual server objects to disappear from IBM Director Console

If you turn off a virtual server with the VMware Console and select to always create a new universal unique identifier (UUID) and later use IBM Virtualization Manager to migrate that virtual server, the UUID for the virtual server is changed when the virtual server is eventually turned on at the destination host. This sequence of events causes the virtual server object to be deleted from IBM Director and causes a virtual server, Deleted event to occur.

To restore the virtual server object to IBM Director Console, you must use IBM Virtualization Manager to discover the virtual servers on the host. From IBM Director Console, in the Group Contents pane, right-click the managed object for the host and click **Host Management** → **Discover virtual servers**.

Limitations when using IBM Virtualization Manager Agent for VMware GSX Server

IBM Virtualization Manager has the following limitations when using IBM Virtualization Manager Agent for VMware GSX Server:

Shutting down and turning off a virtual server under Windows 2000 and VMware GSX Server 3.1

If you use IBM Virtualization Manager to shut down and turn off a virtual server that is running Windows 2000 under VMware GSX Server 3.1, the virtual server is only shut down, it is not turned off. You must use the VMware Console to turn the virtual server off. Further, in IBM Virtualization Manager, the virtual server remains in the transition state. After the virtual server has been turned off through the VMware Console, use IBM Virtualization Manager to rediscover the virtual server so that IBM Virtualization Manager reflects the turned-off state. These limitations do not apply to virtual servers that are running under VMware GSX Server 3.2.

Migrating a turned-on virtual server that is running Windows 2000 under VMware GSX Server 3.1

If a turned-on virtual server that is running Windows 2000 under VMware GSX Server 3.1 is migrated, the migration process cannot be completed, because the IBM Virtualization Manager Agent for GSX cannot turn off the virtual server, which is required for static migration. To resolve this issue, use the VMware Console to manually turn off the virtual server. If the virtual server is turned off within the timeout period of the IBM Virtualization Manager Server (generally 5 minutes), IBM Virtualization

Manager detects the state change of the virtual server and continues the migration. This limitation does not apply to virtual servers that are running under VMware GSX Server 3.2.

Limitations when using IBM Virtualization Manager for Microsoft Virtual Server

IBM Virtualization Manager has the following limitations when using IBM Virtualization Manager Agent for Microsoft Virtual Server:

Shutting down and turning off a virtual server when the guest operating system is locked

If you use IBM Virtualization Manager to shut down and turn off a virtual server when the guest operating system is locked, the virtual server is not shut down nor turned off. You must use the Administration Web site for Microsoft Virtual Server to turn off the virtual server. Further, in IBM Virtualization Manager, the virtual server remains in the transition state. After the virtual server has been turned off through the Administration Web site, use IBM Virtualization Manager to rediscover the virtual server so that IBM Virtualization Manager reflects the turned-off state.

Migrating a turned-on virtual server when the guest operating system is locked

If a turned-on virtual server is migrated, but the guest operating system is locked, the migration process cannot be completed as the IBM Virtualization Manager Agent for Virtual Server cannot turn off the virtual server, which is required for static migration. To resolve this issue, use the Administration Web site for Microsoft Virtual Server to manually turn off the virtual server. If the virtual server is turned off within the timeout period of the IBM Virtualization Manager Server (generally 5 minutes), IBM Virtualization Manager detects the state change of the virtual server and continues the migration.

Registration problem with Microsoft Virtual Server 2005

Sometimes Microsoft Virtual Server 2005 does not properly unregister virtual servers. When this problem occurs, a virtual server cannot be easily reregistered, which causes it to become unusable. This problem can occur during any unregister and reregister operations, but is exposed during migration as the migration process involves unregistering and reregistering virtual servers. This limitation does not apply to virtual servers that are running under Microsoft Virtual Server 2005 R2.

Limitations when using IBM Virtualization Manager Xen CIM Provider

IBM Virtualization Manager has the following limitations when using the IBM Virtualization Manager Xen CIM Provider:

IBM Virtualization Manager only supports file-backed virtual devices

Virtualization Manager does not support the Xen devices such as logical volumes and NFS-hosted images.

IBM Virtualization Manager requires that images used to create Xen virtual servers adhere to specific criteria

The IBM Virtualization Manager topic in the IBM Systems Software Information Center documents the requirements necessary for generating an image to be used when you create a virtual server on a Xen host.

Xen virtual servers created using the YaST graphical user interface, or other tools, cannot be managed with IBM Virtualization Manager

You must use Virtualization Manager to create Xen virtual servers that can be managed in the Virtualization Manager environment.

Create Virtual Server wizard indicates there are no hosts available after starting to create a Xen virtual server

After you run the Create Virtual Server wizard to create a Xen virtual server, you try to restart the wizard to create another virtual server. The Summary window is displayed indicating that there are no host systems available. This problem can occur when you restart the Create Virtual Server wizard while it is still in the process of creating a Xen virtual server.

To resolve the problem, close the Create Virtual Server wizard and wait until the wizard has finishing creating the Xen virtual server. Then, restart the wizard to create another virtual server.

The CIM Object Manager (CIMOM) server process on the Xen host system might shut down unexpectedly.

The IBM Virtualization Manager topic in the IBM Systems Software Information Center gives instructions to restart the CIMOM on the Xen host system.

General problems and workarounds

This section contains information about these general problems and workarounds that apply to IBM Virtualization Manager:

Start Vendor Software task and VMware VirtualCenter client

If a user who does not have Windows administration privileges tries to use the Start Vendor Software task to run the VMware VirtualCenter client, an exception error message is displayed that does not indicate the true problem. If an exception error occurs, make sure that the user has Windows administration privileges on the system from which the user is trying to run VMware VirtualCenter client.

Multiple power operations in a Microsoft Virtual Server environment

Sometimes one or two events are not received by IBM Virtualization Manager Server when IBM Virtualization Manager Agent is monitoring multiple events from power operations that occur on virtual servers that are in a Microsoft Virtual Server environment. This problem occurs intermittently when more than 50 virtual servers are associated with one host. When a power operation event is not received by IBM Virtualization Manager Server, IBM Virtualization Manager cannot update the state icons for the virtual server. If this happens, manually discover the virtual servers that are associated with a host.

Suspended virtual servers cannot be successfully unregistered and reregistered in a Microsoft Virtual Server environment

Sometimes unregistering a suspended virtual server in a Microsoft Virtual Server environment can cause the files for the virtual server to become corrupted. The problem becomes evident when the virtual server is reregistered later. The virtual server can be reregistered, but it will not turn on as expected. If you plan to use a virtual server again, be sure that it is not suspended before you unregister it.

The Virtualization Groups group is deleted by accident in IBM Director Console

To get the Virtualization Groups group to display again, the IBM Director Server needs to be restarted. On a Windows system, you can use the following method:

1. From the **Start** menu, take the following path, **Control Panel > Administrative Tools > Services**.
2. In the Services window, right-click **IBM Director Server** and select **Stop**.
3. When the service has stopped, right-click **IBM Director Server** and select **Start**.

On a Linux[®] system, use the following commands:

1. `/opt/ibm/director/bin/twgstop`
2. `/opt/ibm/director/bin/twgstart`

Unregistering a virtual servers in a Microsoft Virtual Server environment can leave a link file

When unregistering a virtual server, Microsoft Virtual Server sometimes leaves a link file (.lnk) on its associated host. This link file prevents the virtual server from being registered on the destination host. This problem is exposed during migration as the migration process involves unregistering and reregistering a virtual server. To resolve the problem, you must delete the link file that is associated with the virtual server from the source host. The event log from Microsoft Virtual Server lists the name of the link file. After the file is deleted, manually register the virtual server to the destination host.

An attempt to add a host to a virtual farm using IBM Director Console seems to hang

If information required on the Add Host page is incomplete, the Add Host action does not complete successfully. Close the window and attempt the operation again.

When migrating a virtual server, the drop down list might not work as intended

When migrating a virtual server, the drop down list might not allow the mouse to select an intended source. This problem is exposed if the following two conditions exist:

1. IBM Virtualization Manager Console is running on SUSE Linux Enterprise Server 9.0
2. The number of objects in the drop down menu causes the list to extend below the bottom of the panel

To resolve the problem, either maximize the window so the drop down list does not extend below the panel, or use the key board to select the object.

When using the IBM Virtualization Manager Web Interface, the browser Refresh button displays the Welcome page regardless of current location

When using the IBM Virtualization Manager Web Interface, the browser Refresh button displays the Welcome page regardless of current location.

This problem is exposed each time you attempt to refresh the current page using the browser Refresh button. To resolve the problem, use the Virtualization Manager Refresh button located on each page of the Web interface.

Child browser window refreshes with content from parent window in Web interface

From the IBM Virtualization Manager Web Interface, you navigate to a threshold, for example, Health->Thresholds. Choose a threshold and select Display Chart. A new browser opens. You then perform an action within this new window and immediately return to the parent window. On the parent window, you select an action such as viewing the properties of the threshold. When the child window automatically refreshes, the child window and the parent window both display the same page, the parent page content.

To eliminate this problem, close and reopen the Chart page if you make changes to the charting preferences on the page. If no actions are performed in the child window, you do not see this behavior. You might see a similar problem when using the Setup Advisor.

Chapter 4. Corrections to the IBM Virtualization Manager documentation

This section contains information about problems and workarounds that apply to IBM Virtualization Manager documentation or online help.

No known problems exist at this time.

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