

Hardware Information

Managing the Integrated
Virtualization Manager

ESCALA POWER5



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Managing the Integrated Virtualization
Manager

Hardware

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Managing the Integrated Virtualization Manager

The Integrated Virtualization Manager provides a Web-based system management interface and a command-line interface that you can use to manage and configure servers that use the Virtual I/O Server. On the managed system, you can create logical partitions, manage the virtual storage and virtual Ethernet, and view service information related to the server. The Integrated Virtualization Manager is packaged with the Virtual I/O Server, but it is enabled only on certain platforms and where no Hardware Management Console (HMC) is present.

You must have the Advanced POWER Virtualization feature enabled before you can install the Integrated Virtualization Manager. If your system did not come with the Advanced POWER Virtualization feature enabled, you must use the Advanced System Management Interface (ASMI) to enter the activation key that you received when you ordered the feature.

- **What's new**
Learn what information is new or significantly changed for Managing the Integrated Virtualization Manager.
 - **Printable PDF**
Use this to view and print a PDF of this information.
 - **Entering the activation code for Virtualization Engine technologies**
Learn how to enter the activation code for Virtualization Engine technologies using the Advanced System Management Interface (ASMI).
 - **Installing the Virtual I/O Server and enabling the Integrated Virtualization Manager**
Learn how to install Virtual I/O Server and enable the Integrated Virtualization Manager. When the Virtual I/O Server is installed in an environment where no Hardware Management Console (HMC) is present, the Integrated Virtualization Manager is also installed and enabled.
 - **Connecting to the Integrated Virtualization Manager Web-based interface**
Learn how to connect to the Web-based system management interface for the Integrated Virtualization Manager.
 - **Connecting to the Virtual I/O Server command-line interface**
Learn how to connect to the Virtual I/O Server command-line interface, which allows you to use commands for the Integrated Virtualization Manager.
 - **Connecting an HMC to a system managed by the Integrated Virtualization Manager**
Learn how to connect a system that is managed by the Integrated Virtualization Manager to become a system managed by a Hardware Management Console (HMC).
 - **Changing an HMC-managed system to be managed by the Integrated Virtualization Manager**
Learn how to change a system that is managed by a Hardware Management Console (HMC) to be managed by the Integrated Virtualization Manager.
 - **Related information**
Listed here are ESCALA Power5 Hardware Information topics that relate to managing the Integrated Virtualization Manager.
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What's new

Learn what information is new or significantly changed for Managing the Integrated Virtualization Manager.

- A link to instructions for accessing the Web interface to the Advanced System Management Interface (ASMI) is added to [Entering the activation code for Virtualization Engine technologies](#).
- A link to instructions for connecting to the Virtual I/O Server using OpenSSL or OpenSSH is added to [Connecting to the Virtual I/O Server command-line interface](#).
- [Connecting to the Integrated Virtualization Manager Web-based interface](#) is a new topic.
- [Connecting an HMC to a system managed by the Integrated Virtualization Manager](#) is a new topic.
- [Changing an HMC-managed system to be managed by the Integrated Virtualization Manager](#) is a new topic.

Parent topic: [Managing the Integrated Virtualization Manager](#)

Printable PDF

Use this to view and print a PDF of this information.

To view or download the PDF version of this document, select [Managing the Integrated Virtualization Manager](#) (about 156 KB).

You can view or download these related topics:

- [Partitioning with the Integrated Virtualization Manager](#) (about 360 KB) contains the following topics:
 - ◆ Setting up the initial logical partition
 - ◆ Modifying system properties
 - ◆ Modifying virtual Ethernet settings
 - ◆ Managing partitions
 - ◆ Managing storage devices
 - ◆ Creating and modifying users
 - ◆ Troubleshooting with the Integrated Virtualization Manager
- [Using the Virtual I/O Server](#) (about 1,060 KB) contains the following topics:
 - ◆ Concepts for the Virtual I/O Server
 - ◆ Scenarios for the Virtual I/O Server
 - ◆ Planning for the Virtual I/O Server
 - ◆ Installing the Virtual I/O Server
 - ◇ Installing the Virtual I/O Server in an HMC environment
 - ◇ Installing the Virtual I/O Server in a non-HMC environment
 - ◆ Managing the Virtual I/O Server
 - ◆ Troubleshooting the Virtual I/O Server
 - ◆ Virtual I/O Server command descriptions

Saving PDF files

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1. Right-click the PDF link in your browser.
2. Click the option that saves the PDF locally.
3. Navigate to the directory in which you want to save the PDF.
4. Click Save.

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You need Adobe Reader installed on your system to view or print these PDFs. You can download a free copy from the [Adobe Web site](http://www.adobe.com/products/acrobat/readstep2.html) (www.adobe.com/products/acrobat/readstep2.html).

Parent topic: [Managing the Integrated Virtualization Manager](#)

Entering the activation code for Virtualization Engine technologies

Learn how to enter the activation code for Virtualization Engine technologies using the Advanced System Management Interface (ASMI).

You must have the Advanced POWER Virtualization feature enabled before you can install the Integrated Virtualization Manager. If your system did not come with the Advanced POWER Virtualization feature enabled, you must use the Advanced System Management Interface (ASMI) to enter the activation key that

you received when you ordered the feature. For information about entering the activation key, see [Entering the activation code for Virtualization Engine technologies](#).

Your authority level in ASMI must be one of the following:

- Administrator
- Authorized service provider

To enter the activation code in ASMI, do the following:

1. Access the Web interface to the ASMI. For instructions, see [Accessing the ASMI using a Web browser](#).
2. On the ASMI Welcome panel, specify your user ID and password, and click Log In.
3. In the navigation area, expand On Demand Utilities.
4. Select POD (or CoD) Activation.
5. Enter the activation key into the field.
6. Click Continue. The Advanced POWER Virtualization feature is enabled.

Parent topic: [Managing the Integrated Virtualization Manager](#)

Related links

[Managing the Advanced System Management Interface \(ASMI\)](#)

[Managing your server using the Advanced System Management Interface](#)

Installing the Virtual I/O Server and enabling the Integrated Virtualization Manager

Learn how to install Virtual I/O Server and enable the Integrated Virtualization Manager. When the Virtual I/O Server is installed in an environment where no Hardware Management Console (HMC) is present, the Integrated Virtualization Manager is also installed and enabled.

If your system did not come with the Advanced POWER Virtualization feature enabled, you must use the ASMI to enter the activation code that you received when you ordered the feature. This activation code also enables Micro-Partitioning on the system.

When you install the Virtual I/O Server on a managed system that is not partitioned, the Virtual I/O Server automatically creates a management partition.

To install the Virtual I/O Server and enable the Integrated Virtualization Manager, do the following:

1. Cable the server, and attach an ASCII terminal to the first system port.
2. Power on the system, and enter the SMS menu by pressing and holding the F1 key.
3. Insert the Virtual I/O Server CD or DVD into the optical drive.
4. Select the CD or DVD as the boot device:
 - a. Select Select Boot Options, and then press Enter.
 - b. Select Select Install/Boot Device, and then press Enter.
 - c. Select Select 1st Boot Device, and then press Enter.
 - d. Select CD/DVD, and then press Enter.
 - e. Select the media device that corresponds to the optical device, and then press Enter.

- f. Select the device number that corresponds to the optical device, and then press Enter.
 - g. Set the boot sequence to configure the first boot device. The optical device is now the first device in the Current Boot Sequence list.
 - h. Exit the SMS menu by pressing the x key, and confirm that you want to exit SMS.
5. Install the Virtual I/O Server:
- a. Select the console, and then press Enter.
 - b. Select a language for the BOS menus, and then press Enter.
 - c. Select Start Install Now with Default Settings.
 - d. Select Continue with Install. The managed system restarts after the installation is complete, and the login prompt is displayed on the ASCII terminal.
6. Accept the license agreement by following the steps in [Viewing and accepting the Virtual I/O Server license](#).
7. Check for updates to the Virtual I/O Server. See [Updating the Virtual I/O Server](#).
8. Ensure that there is a network connection configured between the management partition and at least one of the physical Ethernet adapters on the managed system. This allows you to access the Integrated Virtualization Manager interface from a computer that is connected to the physical Ethernet adapter. You cannot use the HMC1 and HMC2 ports to connect to the management partition.
9. Log in to the management partition using the user padmin and the default password padmin.
10. When prompted, change the login password to something secure.
11. Use the **mktcpip** command at the Virtual I/O Server command-line interface to configure the network connection.

Parent topic: [Managing the Integrated Virtualization Manager](#)

[mktcpip command](#)

[Connecting to the Virtual I/O Server command-line interface](#) [Connecting to the Integrated Virtualization Manager Web-based interface](#) [Using the Virtual I/O Server](#)

Connecting to the Integrated Virtualization Manager Web-based interface

Learn how to connect to the Web-based system management interface for the Integrated Virtualization Manager.

You must know the IP address that is assigned to the Integrated Virtualization Manager.

To connect to the Web-based interface for the Integrated Virtualization Manager, do the following:

1. Open a Web browser window, and connect using the HTTP or HTTPS protocol to the IP address that was assigned to the Integrated Virtualization Manager during the installation process. For example, enter `https://123.456.7.890` in your Web browser, where `123.456.7.890` is the IP address assigned to the Integrated Virtualization Manager. The Welcome window is displayed.
2. Enter the default user ID of padmin, and enter the password that you defined during the installation process. The Integrated Virtualization Manager interface is displayed.

For information about the Web-based interface navigation, see the online help for the Integrated Virtualization Manager.

Parent topic: [Managing the Integrated Virtualization Manager](#)

Connecting to the Virtual I/O Server command-line interface

Learn how to connect to the Virtual I/O Server command-line interface, which allows you to use commands for the Integrated Virtualization Manager.

Connect to the Virtual I/O Server command-line interface using one of the following tools:

Telnet

You can use Telnet to connect to the command-line interface. Telnet does not provide a secure connection to the Virtual I/O Server. Therefore, use Telnet only if the Ethernet adapter that you have configured to access the management partition is physically isolated from networks that are not secure.

OpenSSL or Portable OpenSSH

You can use OpenSSL or Portable SSH to securely connect to the Virtual I/O Server from a remote location. You must download and install these tools onto the management partition, and you must configure these tools to work securely. See [Connecting to the Virtual I/O Server using OpenSSH](#).

Parent topic: [Managing the Integrated Virtualization Manager](#)

Related information

[Virtual I/O Server command-line interface](#)

[Virtual I/O Server command descriptions](#) <http://www.openssl.org/> <http://openssh.org/portable.html>

Connecting an HMC to a system managed by the Integrated Virtualization Manager

Learn how to connect a system that is managed by the Integrated Virtualization Manager to become a system managed by a Hardware Management Console (HMC).

Connecting an HMC to a system that is managed by the Integrated Virtualization Manager automatically disables the Integrated Virtualization Manager. The HMC takes over the management of the system. Because the management of the system is changed, you must recreate your logical partition configuration either manually or from backups.

To change the management of a system from the Integrated Virtualization Manager to an HMC, do the following:

1. Create a backup of your partition configuration using the Integrated Virtualization Manager, and download it to your local system. See [Backing up and restoring partition data](#). You can use the backup text file as a reference for recreating your partitions in Step 4.
2. Connect the HMC to the system. See [Setting up the HMC](#). The managed system is in Recovery state on the HMC.
3. Initialize the profile data using the HMC interface. See [Initializing profile data](#). This clears the partition configuration.

4. Using the backup text file that you created in Step 1, recreate your partitions using the HMC. See [Restoring profile data](#).

Parent topic: [Managing the Integrated Virtualization Manager](#)

Related links

[Changing an HMC-managed system to be managed by the Integrated Virtualization Manager](#)

[Working with partition profile information](#) [Backing up and restoring the Virtual I/O Server](#) [Creating logical partitions and partition profiles](#)

Changing an HMC-managed system to be managed by the Integrated Virtualization Manager

Learn how to change a system that is managed by a Hardware Management Console (HMC) to be managed by the Integrated Virtualization Manager.

If you want to have your system managed by the Integrated Virtualization Manager but it is currently managed by an HMC, you must restore firmware settings, network configuration, and passwords to the factory default settings. Even after you disconnect the HMC, the system is still managed by the HMC. You can restore the partition configuration from a backup or recreate it manually.

To change the management of a system from an HMC to the Integrated Virtualization Manager, do the following:

1. Back up the partition configuration using the HMC. See [Backing up partition profile data](#).
2. Power off the system.
3. Disconnect the HMC.
4. Reset the system back to factory configuration using the Advanced System Management Interface (ASMI). See [Restoring your server to factory settings](#).
5. Power on the system.
6. Connect to the graphical user interface or the command-line interface for the Integrated Virtualization Manager. See [Connecting to the Virtual I/O Server command-line interface](#).
7. Restore the backup partition configuration using the Integrated Virtualization Manager. See [Backing up and restoring partition data](#). If you do not have a backup of the partition configuration, you must recreate it manually.

The system is ready for use. All logical partition configuration and virtual I/O configuration data is restored. When you activate a partition, you might need to reset the boot list for the partition in System Management Services (SMS). See [Using the system management services](#).

Parent topic: [Managing the Integrated Virtualization Manager](#)

Related information

[Connecting an HMC to a system managed by the Integrated Virtualization Manager](#)

[Working with partition profile information](#) [Connecting to the Virtual I/O Server command-line interface](#) [Backing up and restoring the Virtual I/O Server](#)

Related information

Listed here are ESCALA Power5 Hardware Information topics that relate to managing the Integrated Virtualization Manager.

Other information

- [Partitioning with the Integrated Virtualization Manager](#)
- [Partitioning the server](#)
- [Creating a virtual computing environment](#)
- [Using the Virtual I/O Server](#)

Parent topic: [Managing the Integrated Virtualization Manager](#)

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