

Quick Start Guide for installing Linux on a Power Systems server partition using IVM

This guide helps you install Linux onto a Power Systems server partition using the Integrated Virtualization Manager (IVM).

Overview

Use this information to install Linux onto a Power Systems server partition using the Integrated Virtualization Manager (IVM) Web interface. You should already have IVM installed on your system. This installation uses a CD-ROM for the installation.

1 Step 1: Complete the prerequisites



In order to perform this task, you should already have your system powered on, VIOS installed, and IVM initially configured.

- a. PowerLinux system powered on
- b. Virtual I/O server installed
- c. Integrated Virtualization Manager initially configured
- d. Installation media for your Linux distribution

2 Step 2: Log into the Integrated Virtualization Manager Web interface



- a. 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.
- b. 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.
- c. In the Integrated Virtualization Manager interface, select `View/Modify Virtual Ethernet`.
- d. Click `Initialize Virtual Ethernet`. A virtual Ethernet provides Ethernet connectivity among the partitions.
- e. Click `Apply`. After Virtual Ethernet is initialized.
- f. If your installation requires external networking, create a virtual Ethernet bridge:
 - i. Select `Virtual Ethernet Bridge` tab.
 - ii. Select the physical adapter to bridge.
 - iii. Click `Apply`.

3 Step 3: Create a partition

To create a partition, follow these steps:

- a. In the Integrated Virtualization Manager Web interface, click `View/Modify Partition`.
- b. Click `Create Partition`
- c. Enter a name for the partition. Click `Next`.
- d. Specify memory for your partition. If you have created a shared memory pool, your partitions can share memory. Otherwise, select `Dedicated`. Click `Next`.
- e. Specify the number of processors and the processing mode for your partition. Click `Next`.
- f. Specify a virtual Ethernet for the partition. If you do not want to configure an adapter, select a virtual Ethernet of none. Click `Next`.
- g. Create a new virtual disk or assign existing virtual disks and physical volumes that are not currently assigned to a partition. Click `Next`.
- h. Verify the Virtual disk and Storage pool name for your virtual disk and specify a Virtual disk size. Click `Next`.
- i. Configure optical devices for your partition by expanding the `Physical Optical Devices` and `Virtual Optical Devices` and selecting which devices you want to assign to the partition. Click `Next`.
- j. Verify your partition configuration settings and click `Finish`.

The partition is created and available from the `View/Modify Partitions` list.

4 Step 4: Activate the partition



- a. From the View/Modify Partitions list, select the box next to your partition
- b. Select More Tasks
- c. Select Open a terminal window
- d. Click Activate next to your partition
- e. In the terminal window, enter 1 to start SMS.

5 Step 5: Boot Linux installation media



- a. At the Boot selection window, enter 1 to select the SMS Menu. Enter 1 before the firmware boot screen is completely shown on the display, because it will disappear when complete. If you miss the screen, reboot the system.
- b. At this time, you can insert the VIOS media disk into the disk drive.
- c. Enter 2 to Continue to password entry on the Language selection menu. Enter admin.
- d. On the main SMS menu, enter 5 to select the Select Boot Options option.
- e. Enter 1 to select Install/Boot Device.
- f. Enter 7 to view all of the available boot devices.
- g. Enter the number corresponding to the device you want to use. If your device is not displayed, you can enter N to display more.
- h. Enter 2 to perform a Normal Mode Boot.
- i. Enter 1 to leave the SMS menu and to start the boot process.
- j. At the boot prompt from the installer, type `linux vnc` to install Red Hat Enterprise Linux or `install vnc=1 vncpassword=abc12345` to install SUSE Linux Enterprise Server and press **Enter**. The kernel will begin loading.

6 Step 6: Start VNC session and install Linux



After the kernel has started to load, the installer need some information from the system in order to set up a VNC session. You must have a valid TCP/IP stack in order to use VNC. Either use DHCP or manually define your networking information using directions provided by the Linux distribution.

- a. On the Network device window, select `eth0` as your network device. Select OK and enter.
- b. Select to test your installation media or to skip.
- c. After the system has started the VNC server, you will see a message to connect your VNC client followed by an IP address. Take note of this IP address.
- d. Start your VNC client on your laptop or PC.
- e. Enter the IP address from the system as your VNC Server. Add `:1` to the end of the IP address and click connect.
- f. Complete the installation by following the installer screens to install Linux.

More information



For more information, see the following resources:

- Linux information for IBM systems at <https://www.ibm.com/support/knowledgecenter/linuxonibm/liaaa/ic-homepage.htm>
- IBM Knowledge Center: <https://www.ibm.com/support/knowledgecenter/>.
- The Linux on Power developer portal at <https://developer.ibm.com/linuxonpower/>.