

Configuring Linux that is preinstalled on IBM POWER9 servers



Version 1.0.1

Quick Start Guide for configuring Linux that is preinstalled on an IBM POWER9 server.

This guide describes a quick and easy way to configure an IBM POWER9 server that is preinstalled with Linux.

Overview

Use this information to configure Linux on an IBM Power System server.

1 Step 1: Completing the prerequisites and booting your firmware



Before you power on the system, ensure that you have the following items:

- Ethernet cable
- VGA monitor. The VGA resolution must be set to 1024x768-60Hz.
- USB Keyboard
- Power cords and outlet for your system.

Complete these steps:

- If your system belongs in a rack, install your system into that rack. For instructions, see IBM Power Systems information at <https://ibm.biz/BdFBGg>.
- Connect an Ethernet cable to the embedded Ethernet port next to the serial port on the back of your system. Connect the other end to your network.
- Connect your VGA monitor to the VGA port on back of system.
- Connect your USB keyboard to an available USB port
- Connect the power cords to the system and plug them into the outlets.

At this point, your firmware is booting. Wait for the green LED on the power button to start flashing, indicating that it is ready to use. If your system does not have a green LED indicator light, then wait 1 to 2 minutes.

2 Step 2: Configuring the IP address

Note: You cannot use IPMITool to connect to your system and you must use a serial connection to the BMC instead. For more information, see [Managing BMC-based systems](#).

To set up or enable your network connection to the BMC firmware, use the Petitboot bootloader interface. Follow these steps:

- a. Power on your server using the power button on the front of your system. Your system will power on to the Petitboot bootloader menu. This process takes about 1 - 2 minutes to complete. Do not walk away from your system! When Petitboot loads, your monitor will become active and you will need to push any key in order to interrupt the boot process.
- b. At the Petitboot bootloader main menu, select Exit to Shell.
- c. To set up for BMC ethernet from petitboot command prompt, press the Enter key to exit to the command prompt.
- d. Program your BMC IP address by running the following commands:

```
ipmitool lan set 1 ipsrc static
ipmitool lan set 1 ipaddr <ip address>
ipmitool lan set 1 netmask <netmask>
ipmitool lan set 1 defgw ipaddr <gateway>
ipmitool raw 0x06 0x40
ipmitool lan print 1
```

- e. You should be able to ping the BMC now. If your ping does not return successfully within a reasonable amount of time (2 - 3 minutes), try these additional steps:
 - i. Power your system off with this command from the petitboot shell: `poweroff.h`
 - ii. Unplug the power cords from the back of the system. Wait 30 seconds and then apply power to boot BMC.

3 Step 3: Powering on your server

Note: After your system powers on, the Petitboot interface loads. If you do not interrupt the boot process by pressing any key within 10 seconds, Petitboot automatically boots the first option.

To power on your server from a PC or notebook that is running Linux, follow these steps:

- Default user name: root
- Default password: OpenBmc (where, OpenBMC is using a zero and not a capital O)
- a. Open a terminal program on your PC or notebook.
- b. Log in to the BMC by running the following commands.

```
ssh root@<BMC server_ip_address>  
root@<BMC server password>
```

where *BMC server_ip_address* is the IP address of the BMC and *BMC server password* is the password to authenticate.

- c. To power on your server, run the following command:

```
$ root@witherspoon:~# obmcutil poweron
```

- d. Connect to OS console and use the default password OpenBmc.

```
ssh -p 2200 root@<BMC server_ip_address>  
root@
```

where *BMC server_ip_address* is the IP address of the BMC and *BMC server password* is the password to authenticate.

4 Step 4: Booting Linux



To boot your Linux distribution, select it in the Petitboot bootloader menu and press Enter.

Preinstalled IBM Power systems have default users and passwords set up. This information is included with your system paperwork. In general, the default user names and passwords are as follows:

On a system preinstalled with Ubuntu:	Default user: <code>ibm</code> Default user: <code>passw0rd</code>
On a system preinstalled with other distributions:	Default user: <code>root</code> Default user: <code>PASSW0RD</code>

More information



For more information, see the following resources:

- IBM Knowledge center at <https://www-01.ibm.com/support/knowledgecenter/>
- The Linux on Power® Community at <http://ibm.co/VLiIfS>.