Installing the Escala E2-705 and E4-705

BULL

ESCALA Power7

Installing the Escala E2-705 and E4-705

The ESCALA Power7 publications concern the following models:

 - Bull Escala E5-700 (Power 750 / 8233-E8B)
 - Bull Escala M6-700 (Power 770 / 9117-MMB)
 - Bull Escala M6-705 (Power 770 / 9117-MMC)
 - Bull Escala M7-700 (Power 780 / 9179-MHB)
 - Bull Escala M7-705 (Power 780 / 9179-MHC)
 - Bull Escala E1-700 (Power 710 / 8231-E2B)
 - Bull Escala E1-705 (Power 710 / 8231-E1C)
 - Bull Escala E2-700 / E2-700T (Power 720 / 8202-E4B)
 - Bull Escala E2-705 / E2-705T (Power 720 / 8202-E4C)
 - Bull Escala E3-700 (Power 730 / 8231-E2B)
 - Bull Escala E3-705 (Power 730 / 8231-E2C)
 - Bull Escala E4-700 / E4-700T (Power 740 / 8205-E6B)
 - Bull Escala E4-705 (Power 740 / 8205-E6C)

References to Power 755 / 8236-E8C models are irrelevant.

Hardware

Trademarks and Acknowledgements

We acknowledge the right of proprietors of trademarks mentioned in this book.

Contents

Safety notices

Safety notices may be printed throughout this guide.

- **DANGER** notices call attention to a situation that is potentially lethal or extremely hazardous to people.
- **CAUTION** notices call attention to a situation that is potentially hazardous to people because of some existing condition.
- **Attention** notices call attention to the possibility of damage to a program, device, system, or data.

World Trade safety information

Several countries require the safety information contained in product publications to be presented in their national languages. If this requirement applies to your country, a safety information booklet is included in the publications package shipped with the product. The booklet contains the safety information in your national language with references to the U.S. English source. Before using a U.S. English publication to install, operate, or service this product, you must first become familiar with the related safety information in the booklet. You should also refer to the booklet any time you do not clearly understand any safety information in the U.S. English publications.

Laser safety information

The servers can use I/O cards or features that are fiber-optic based and that utilize lasers or LEDs.

Laser compliance

The servers may be installed inside or outside of an IT equipment rack.

DANGER

> **When working on or around the system, observe the following precautions:**
>
> **Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:**
> - **Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.**
> - **Do not open or service any power supply assembly.**
> - **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
> - **The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.**
> - **Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.**
> - **Connect any equipment that will be attached to this product to properly wired outlets.**
> - **When possible, use one hand only to connect or disconnect signal cables.**
> - **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
> - **Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.**
> - **Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.**
>
> **To Disconnect:**
> 1. **Turn off everything (unless instructed otherwise).**
> 2. **Remove the power cords from the outlets.**
> 3. **Remove the signal cables from the connectors.**
> 4. **Remove all cables from the devices**
>
> **To Connect:**
> 1. **Turn off everything (unless instructed otherwise).**
> 2. **Attach all cables to the devices.**
> 3. **Attach the signal cables to the connectors.**
> 4. **Attach the power cords to the outlets.**
> 5. **Turn on the devices.**
>
> **(D005a)**

DANGER

Observe the following precautions when working on or around your IT rack system:

- Heavy equipment–personal injury or equipment damage might result if mishandled.
- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- To avoid hazardous conditions due to uneven mechanical loading, always install the heaviest devices in the bottom of the rack cabinet. Always install servers and optional devices starting from the bottom of the rack cabinet.
- Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices.

- Each rack cabinet might have more than one power cord. Be sure to disconnect all power cords in the rack cabinet when directed to disconnect power during servicing.
- Connect all devices installed in a rack cabinet to power devices installed in the same rack cabinet. Do not plug a power cord from a device installed in one rack cabinet into a power device installed in a different rack cabinet.
- An electrical outlet that is not correctly wired could place hazardous voltage on the metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock.

CAUTION

- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, front, or back of a unit used for air flow through the unit.
- Consideration should be given to the connection of the equipment to the supply circuit so that overloading of the circuits does not compromise the supply wiring or overcurrent protection. To provide the correct power connection to a rack, refer to the rating labels located on the equipment in the rack to determine the total power requirement of the supply circuit.
- *(For sliding drawers.)* Do not pull out or install any drawer or feature if the rack stabilizer brackets are not attached to the rack. Do not pull out more than one drawer at a time. The rack might become unstable if you pull out more than one drawer at a time.
- *(For fixed drawers.)* This drawer is a fixed drawer and must not be moved for servicing unless specified by the manufacturer. Attempting to move the drawer partially or completely out of the rack might cause the rack to become unstable or cause the drawer to fall out of the rack.

(R001)

CAUTION:
Removing components from the upper positions in the rack cabinet improves rack stability during relocation. Follow these general guidelines whenever you relocate a populated rack cabinet within a room or building:

* Reduce the weight of the rack cabinet by removing equipment starting at the top of the rack cabinet. When possible, restore the rack cabinet to the configuration of the rack cabinet as you received it. If this configuration is not known, you must observe the following precautions:
    – Remove all devices in the 32U position and above.
    – Ensure that the heaviest devices are installed in the bottom of the rack cabinet.
    – Ensure that there are no empty U-levels between devices installed in the rack cabinet below the 32U level.
* If the rack cabinet you are relocating is part of a suite of rack cabinets, detach the rack cabinet from the suite.
* Inspect the route that you plan to take to eliminate potential hazards.
* Verify that the route that you choose can support the weight of the loaded rack cabinet. Refer to the documentation that comes with your rack cabinet for the weight of a loaded rack cabinet.
* Verify that all door openings are at least 760 x 230 mm (30 x 80 in.).
* Ensure that all devices, shelves, drawers, doors, and cables are secure.
* Ensure that the four leveling pads are raised to their highest position.
* Ensure that there is no stabilizer bracket installed on the rack cabinet during movement.
* Do not use a ramp inclined at more than 10 degrees.
* When the rack cabinet is in the new location, complete the following steps:
    – Lower the four leveling pads.
    – Install stabilizer brackets on the rack cabinet.
    – If you removed any devices from the rack cabinet, repopulate the rack cabinet from the lowest position to the highest position.
* If a long-distance relocation is required, restore the rack cabinet to the configuration of the rack cabinet as you received it. Pack the rack cabinet in the original packaging material, or equivalent. Also lower the leveling pads to raise the casters off of the pallet and bolt the rack cabinet to the pallet.

(R002)

(L001)

(L002)
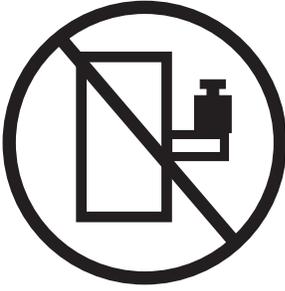
(L003)
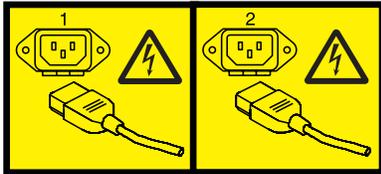
or

All lasers are certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for class 1 laser products. Outside the U.S., they are certified to be in compliance with IEC 60825 as a class 1 laser product. Consult the label on each part for laser certification numbers and approval information.

CAUTION:
This product might contain one or more of the following devices: CD-ROM drive, DVD-ROM drive, DVD-RAM drive, or laser module, which are Class 1 laser products. Note the following information:
- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of the controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

(C026)

CAUTION:
Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. (C027)

CAUTION:
This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)

CAUTION:
Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following information: laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam. (C030)

CAUTION:
The battery contains lithium. To avoid possible explosion, do not burn or charge the battery.

Do Not:
* **___ Throw or immerse into water**
* **___ Heat to more than 100°C (212°F)**
* **___ Repair or disassemble**

Exchange only with the approved part. Recycle or discard the battery as instructed by local regulations. (C003a)

Power and cabling information for NEBS (Network Equipment-Building System) GR-1089-CORE

The following comments apply to the servers that have been designated as conforming to NEBS (Network Equipment-Building System) GR-1089-CORE:

The equipment is suitable for installation in the following:
* Network telecommunications facilities
* Locations where the NEC (National Electrical Code) applies

The intrabuilding ports of this equipment are suitable for connection to intrabuilding or unexposed wiring or cabling only. The intrabuilding ports of this equipment *must not* be metallically connected to the interfaces that connect to the OSP (outside plant) or its wiring. These interfaces are designed for use as intrabuilding interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection to connect these interfaces metallically to OSP wiring.

Note: All Ethernet cables must be shielded and grounded at both ends.

The ac-powered system does not require the use of an external surge protection device (SPD).

The dc-powered system employs an isolated DC return (DC-I) design. The DC battery return terminal *shall not* be connected to the chassis or frame ground.

Follow the steps outlined in this topic for installing your 7/20 (02E/4C) and the 05E/6C (05E/6B).

Before you begin

Before you install your server, read the following items:

The latest version of this document is maintained online. For the online version, see .
- To plan your server installation, see Planning for the system.
- If you are using a Hardware Management Console (HMC) as your management console, complete the following steps:
  1. If you are using a previously existing HMC, ensure that your HMC is at the correct release (7.7.4 or later).
- If you are using a Systems Director Management Console (SDMC) as your management console, see Managing the SDMC

Procedure

Install the server.
- If you are installing a stand-alone server, see Table 1.
- If you are installing a rack-mounted server, see Table 2 on page 3.
- If you are installing a server that is already in a factory-installed rack, see Table 3 on page 5.

To install the stand-alone server 7/20 (02E/4C) and the 05E/6C (05E/6B), complete the following high-level tasks:

Table 1. Tasks to install the stand-alone server

Task	Where to find associated information
Perform inventory. Ensure that you have the rails and the cable management arm. Ensure that you have both a Philips-head and a flat-head screwdriver.	Locate the inventory list for your server, and verify that you received all of the parts that you ordered. Your order information is located in the ship group next to your system box. You can also obtain order information from your marketing representative or Business Partner.
Remove all packaging materials.	

Table 1. Tasks to install the stand-alone server (continued)

Task	Where to find associated information
Remove the shipping bracket on the rear left of the system that protects the power supplies. This shipping bracket is not needed for system installation. Ensure you have re-seated the power supplies.	To remove the shipping bracket, do the following: 1. Remove the screws. 2. Pull the power supplies out slightly so that you can remove the shipping bracket. 3. Reseat the power supplies. **Note:** If expansion units are present, you must also remove the shipping brackets that cover the power supplies.
Install and connect your expansion unit, disk drives, and PCI adapters, if applicable. **Notes:** • Consult your project manager or read the system plans to move or install any disk drives and PCI adapters. • Do not power on your system. You will be instructed to power on the system when setting up the console.	For more information, see Enclosures and expansion units, Disk drives, and Model 8202-E4C and 8205-E6C PCI adapters
Cable the system and set up a console, interface, or terminal.	To cable the system, see Cable the system and set up a console, interface, or terminal.
Connect the power cables and apply power.	For more information, see Connecting the power cables to the system
Completing the server setup.	For more information, see Completing server setup if you have an HMC, or Completing server setup if you do not have an HMC
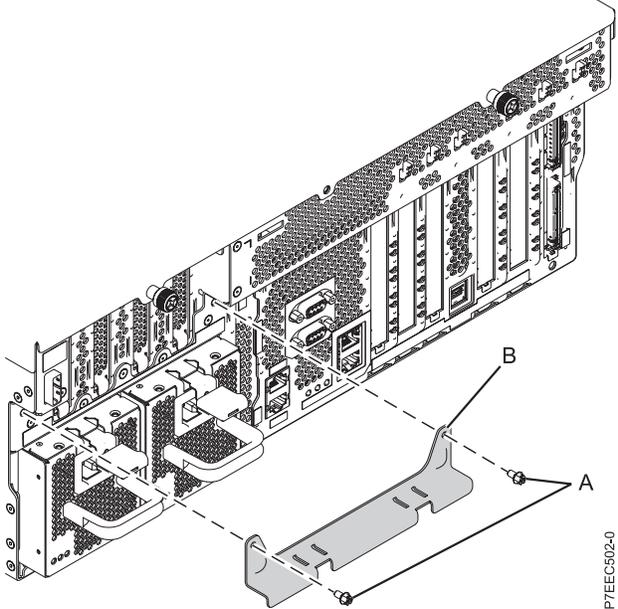
Task	Where to find associated information
Install the front cover door.	To install the front cover door, follow these steps: 1. Position the cover on the front of the system so that the two thumbscrews **(C)** align with the screw holes on the front of the system or expansion unit **(A)**. 2. Push the cover-release latches **(B)** in the direction of the arrows to attach the cover to the front of the system as shown in the following figure. The latches hold the cover in place. 3. Tighten the black screws. 4. Close the front rack door.
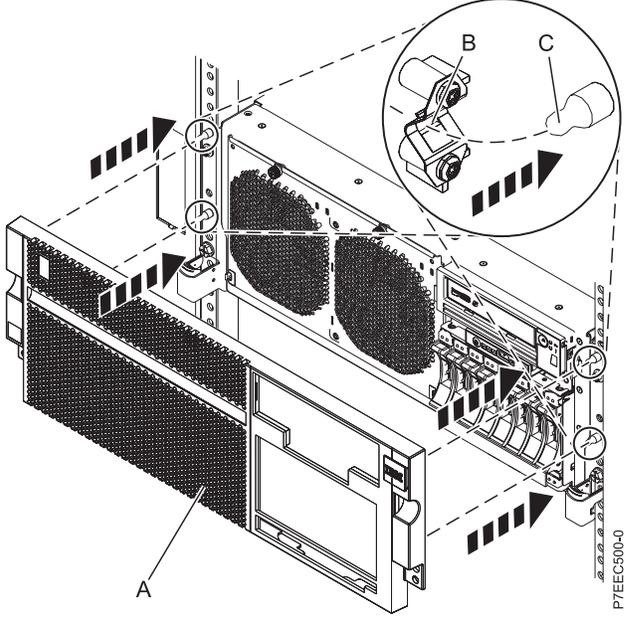
To install the rack-mounted 7/20 (02E/4C) and the 05E/6C (05E/6B), complete the following high-level tasks:

Table 2. Tasks to install the server into a rack

Task	Where to find associated information
Perform the inventory. Ensure that you have the rails and the cable management arm. Ensure that you have both a Philips-head and a flat-head screwdriver.	Locate the inventory list for your server, and verify that you received all of the parts that you ordered. Your order information is located in the ship group next to your system box. Each shipment should contain the following items that are required for this installation procedure: • Left and right rack-mounting rails • Cable-management arm • Mounting screws • Power® supply cables If your shipment contains parts that are not required to complete the installation procedure, store those parts until they are required to be used.You can also obtain order information from your marketing representative or Business Partner.

Table 2. Tasks to install the server into a rack (continued)

Task	Where to find associated information
Remove all packaging materials.	
Remove the shipping bracket on the rear left of the system that protects the power supplies. This shipping bracket is not needed for system installation.	To remove the shipping bracket, complete the following: 1. Remove the screws. 2. Pull the power supplies out slightly so that you can remove the shipping bracket. 3. Reseat the power supplies again. **Note:** If expansion units are present, you must also remove the shipping brackets that cover the power supplies.
Verify that you have a rack, if you need one.	You must first have a rack installed. If you do not have a rack installed, see Installing the rack (http://publib.boulder.ibm.com/infocenter/systems/ scope/hw/topic/p7hbf/installrack.htm).
Determine where you are going to install the rails and mark the location.	To determine and mark the location, see Determining the location and Marking the location.
Attach the mounting hardware to the rack and install the cable management arm.	To install the mounting hardware to the rack, see Attaching the mounting hardware to the rack and installing the system onto the rails. To install the cable management arm, see Installing the cable-management arm.
Install and connect your expansion unit, disk drives, and PCI adapters, if applicable. **Notes:** • Consult your project manager or read the system plans to move or install any disk drives and PCI adapters. • Do not power on your system. You will be instructed to power on the system when setting up the console.	For more information, see Enclosures and expansion units, Disk drives, and Model 8202-E4C or 8205-E6C PCI adapters
Cable the system and set up a console, interface, or terminal.	To cable the system, see Cable the system and set up a console, interface, or terminal.

Table 2. Tasks to install the server into a rack (continued)

Task	Where to find associated information
Connect the power cables and apply power.	For more information, see Connecting the power cables to the system
Completing the server setup.	For more information, see Completing server setup if you have an HMC, or Completing server setup if you do not have an HMC

To install an 7/20 (02E/4C) or a 05E/6C (05E/6B) server that is already in a factory-installed rack, complete the following high-level tasks:

Table 3. Tasks to install the factory-racked server

Task	Where to find associated information
Perform the inventory. Ensure you have both a Philips-head and a flat-head screwdriver.	Locate the inventory list for your server, and verify that you received all of the parts that you ordered. Your order information is located in the ship group next to your system box. You can also obtain order information from your marketing representative or Business Partner.
Remove all packaging materials.	
Verify the rack position.	You must first install the rack. If you do not have a rack installed, see Installing the rack (http://publib.boulder.ibm.com/infocenter/systems/scope/hw/topic/p7hbf/installrack.htm).
Remove the shipping brackets on the rear of the system that protect the power supplies. This shipping bracket is not needed for system installation. **Note:** Depending on your configuration, there might be shipping brackets on either side of the rear of the system and also covering the power supplies. Both must be removed.	To remove the shipping bracket, do the following: 1. Remove the screws. 2. Pull the power supplies out slightly so that you can remove the shipping bracket. 3. Reseat the power supplies again. **Note:** If expansion units are present, you must also remove the shipping brackets that cover the power supplies.
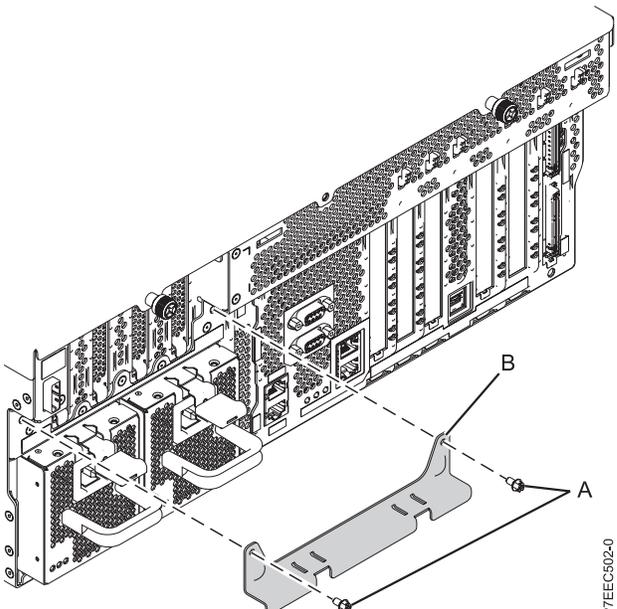
Table 3. Tasks to install the factory-racked server (continued)

Task	Where to find associated information
Install and connect your expansion unit, disk drives, and PCI adapters, if applicable. **Notes:** • Consult your project manager or read the system plans to move or install any disk drives and PCI adapters. • Do not power on your system. You will be instructed to power on the system when setting up the console.	For more information, see Enclosures and expansion units, Disk drives, and Model 8202-E4C or 8205-E6C PCI adapters
Cable the system and set up a console, interface, or terminal.	To cable the system, see Cable the system and set up a console, interface, or terminal.
Completing the server setup.	For more information, see Completing server setup if you have an HMC, or Completing server setup if you do not have an HMC

Installing the server into a rack

With the rack installed, you must install your server into the rack and set up the cable-management arm.

Note: If present, use the rack-mount template to perform these tasks.

Determining the location

You might need to determine where to install the system in the rack. Use this procedure to perform this task.

About this task

Before installing the system unit into a rack, complete the following steps:

Procedure

1. Read the Rack safety notices.
2. Plan where to place the units. Place the larger and heavier units in the lower part of the rack.

   This system unit is four Electronic Industries Alliance (EIA) units high. An EIA unit is 1.75 in. (inches) or 44.45 mm (millimeters) in height. The rack contains three mounting holes for each EIA unit of height. This system unit therefore, is 7 in. (inches) or 177.8 mm (millimeters) high and covers 12 mounting holes in the rack.
3. If necessary, remove the filler panels to allow access to the inside of the rack enclosure where you plan to place the unit.
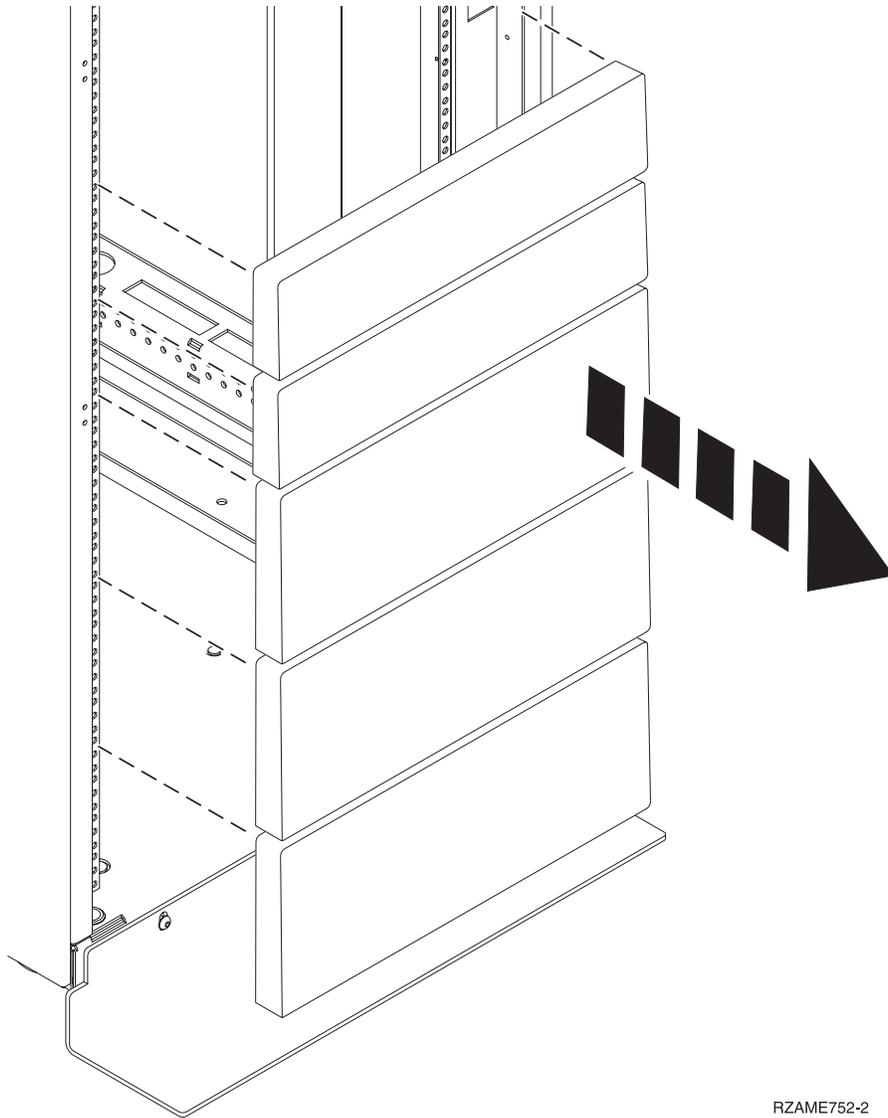
RZAME752-2

Figure 1. Removing the filler panels

4. If necessary, remove the front and back rack doors.

Marking the location

You might need to mark the installation location. Use this procedure to perform this task.

About this task

To mark the installation location and install the nut clips into a rack, complete the following steps:

Procedure

1. Determine where in the rack to place the system. Install units in the lower part of the rack first. Place larger and heavier units in the lower part of the rack. Record the EIA location. The system is four Electronic Industries Alliance (EIA) units high. An EIA unit is 1.75 in. (inches) or 44.45 mm

(millimeters) in height. The rack contains three mounting holes for each EIA unit of height. This system, therefore, is 7 in. (inches) or 177.8 mm (millimeters) high and covers 12 mounting holes in the rack.

2. Facing the front of the rack and working from the right side, locate the bottom EIA unit that your expansion unit uses. Make a note of the EIA location. Use tape, a marker, or a pencil to mark the bottom hole of this EIA unit as **A**. Mark the rack so the mark can also be seen from the rear of the rack.
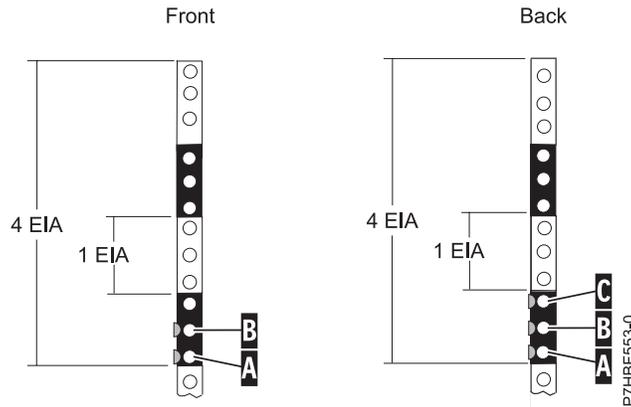

Figure 2. Marking holes on the front and rear of the rack frame

3. Beginning with the hole identified by the mark **(A)**, count up one hole and place a second mark **(B)**. Mark the rack so the mark can also be seen from the rear of the rack, as shown in Figure 2.

4. Repeat the last two steps on the left side of the rack.

5. Facing the rear of the rack and working from the right side, locate the bottom EIA unit that your expansion unit uses. Make a mark next to the bottom hole of this EIA unit as **(A)**.

6. Beginning with the hole identified by the mark **(A)**, count up one hole and place a second mark **(B)**, as shown in Figure 2.

7. Beginning with the hole identified by the mark **(B)**, count up one hole and place a third mark **(C)**, as shown in Figure 2.

8. Repeat the last two steps on the left side of the rack.

Attaching the 02E/4C and 05E/6C mounting hardware to the rack

You might need to attach the mounting hardware to the rack. Use the procedure in this section to perform this task. The information provided is intended to promote safety and reliable operation. This section also includes illustrations of the related hardware components and shows how these components relate to each other.

About this task

Attention: To avoid rail failure and potential danger to yourself and to the unit, ensure that you have the correct rails and fittings for your rack. If your rack has square support flange holes or screw-thread support flange holes, ensure that the rails and fittings match the support flange holes used on your rack. Do not install mismatched hardware using washers or spacers. If you do not have the correct rails and fittings for your rack, contact your reseller.

To install the rack-mounting hardware into the rack, complete the following steps:

Procedure

1. Each slide rail is marked with either an R (right) or an L (left). Select one of the slide rails and push up on the front movable tab **(1).** Then, pull out the front latch **(2)** to slide out the front side rail. If a thumbscrew is installed in the slide rail **(3)**, remove it.
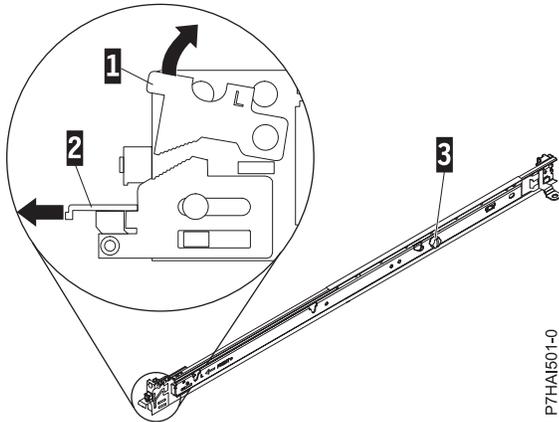

Figure 3. Slide rail and movable tab

> **Note:** Make sure that the movable tab remains extended and does not click back into place.

2. Remove the screw from the end of the rail **(3)**.

   Align the two pins on the rear of the slide rail with the top and bottom holes that were previously marked in the selected U on the rear of the rack. Push the rails so that the pins go into the holes **(1)**, and drop the slide rail down **(2)** until it latches into place.

   > **Note:** The pin fixtures of the slide rails support either round-hole or square-hole rack models, as shown.
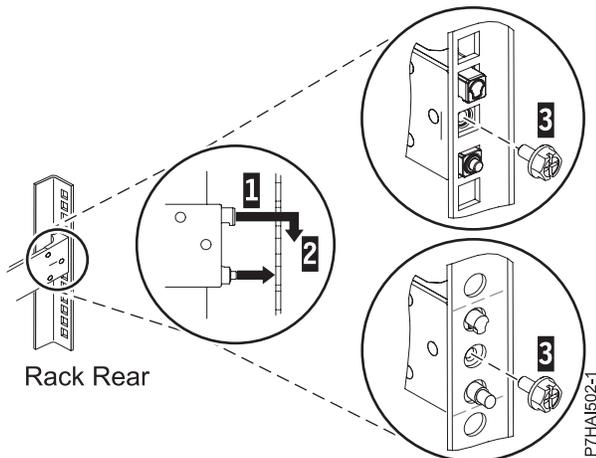

Figure 4. Align the pins with the holes in the rear of the rack

3. Reinstall the screws that were removed in step 2

4. Pull the slide rail forward and insert the two pins **(1)** on the front of the rail into the two lower holes of the EIA marked on the front of the rack. Drop the rail into place until it clicks into place.

Rack Front

P7HBF510-0
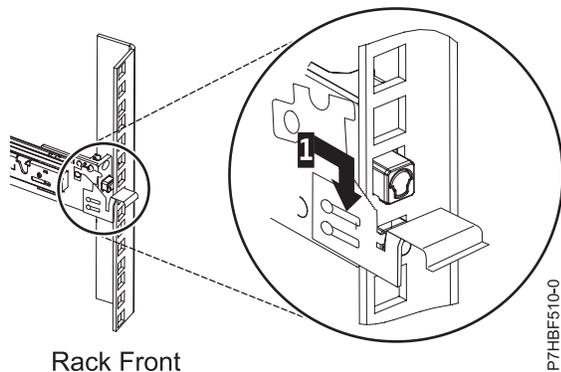
Figure 5. Rack front rail with pins seated

Note: If the rear shipping cover on the system is present, remove it now.

5. Push the front latch **(2)** in all the way. Make sure that the latch is fully seated.

Rack Front

P7HBF511-0
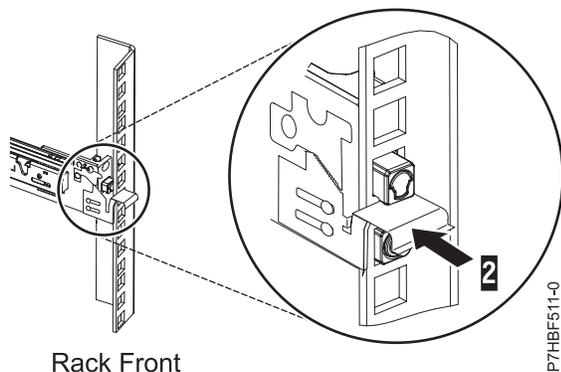
Figure 6. Rack front rail with latch seated

Note: If you need to reposition the rail, release the front latch and push the rail toward the back of the rack.

6. Repeat 1 on page 10 to 5 to install the other rail into the rack.
7. Pull the slide rails forward **(1)** until they click twice into place. Carefully lift the server and tilt it into position over the slide rails so that the rear nail heads **(2)** on the server line up with the rear slots **(3)** on the slide rails. Slide the server down until the rear nail heads slip into the two rear slots, and then slowly lower the front of the server **(4)** until the other nail heads slip into the other slots on the slide rails. Make sure that the front latch **(5)** slides over the nail heads.

Note: Three people are required to lift the server onto the rails.
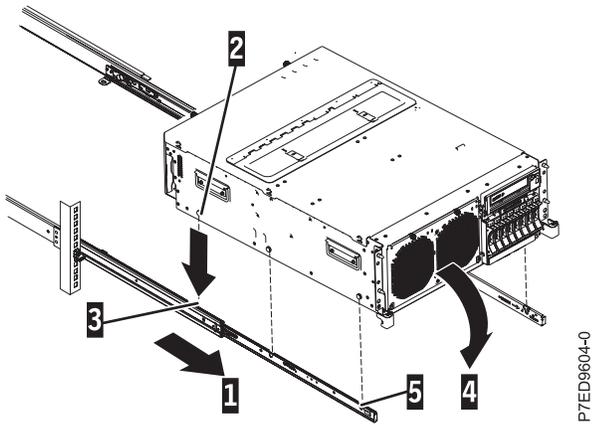
Figure 7. Slide rails extended, server nail heads aligned with slots in rail

8. Lift the blue release latches **(1)** on the slide rails and push the server **(2)** all the way into the rack until it clicks into place.
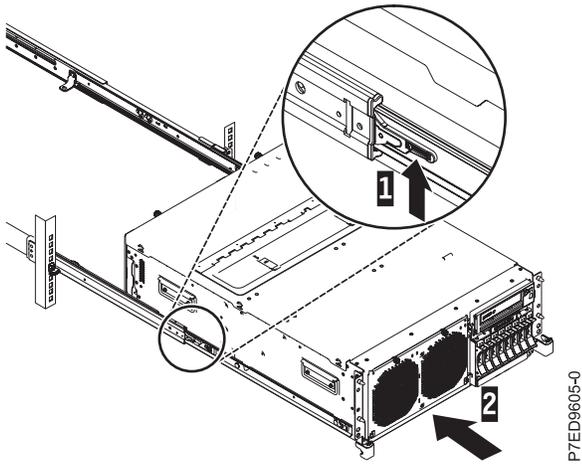
Figure 8. Release latches and server

9. Remove the shipping bracket that is on the left side of the rear of the system before you cable it. To remove the shipping bracket, do the following:

   a. Remove the two screws (**A**).
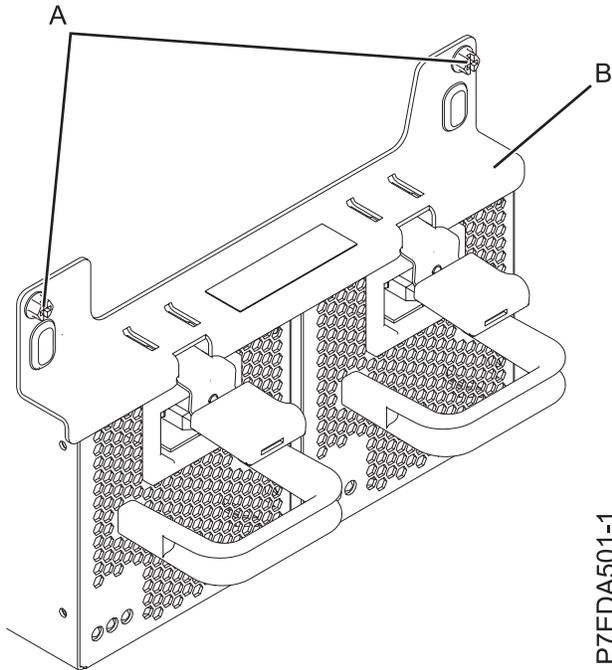
Figure 9. Shipping bracket removal

   b. Pull the bracket off of the system (**B**) so that the power supplies unlatch from the bracket.

   c. Push the power supplies back into the system, ensuring that they are fully seated and latched.

Installing the cable-management arm

You might need to install the cable-management arm. Use this procedure to perform this task.

About this task

The following figure shows the parts of the cable-management arm in relative position to each other before their assembly.
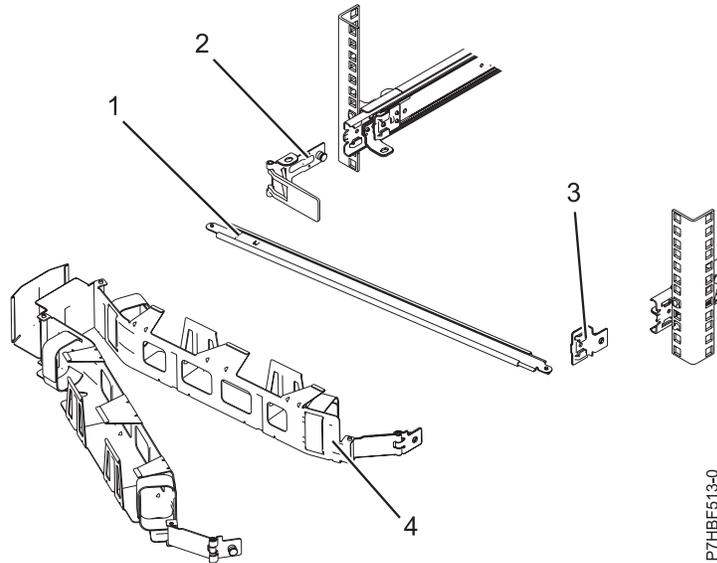
Figure 10. Relative positions of cable-management arm parts before assembly

To install the cable-management arm, complete the following steps:

Note: The procedure for installing the cable-management arm involves the assembly of the following parts:

1	Support arm
2	Cable-management stop bracket
3	Mounting bracket
4	Cable-management arm

Procedure

1. The cable-management arm must be installed on the right side of the server, when you are facing it from the rear. The following figure shows it being installed on the right side. Connect one end of the support arm **(1)** to the right slide rail so that you can swing the other end of the support arm **(2)** toward the left side of the rack.
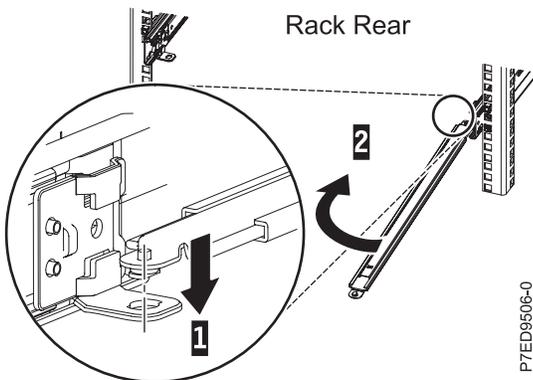
Figure 11. Support arm connection

2. Locate the hole at the bottom inside corner of the L-shaped cable-management stop bracket **(1)**. Position the unattached end of the support arm so that the locking tab on the underside of its tip aligns with the bracket hole. Insert the tab into the hole and turn the bracket **(2)** to secure it to the

support arm.
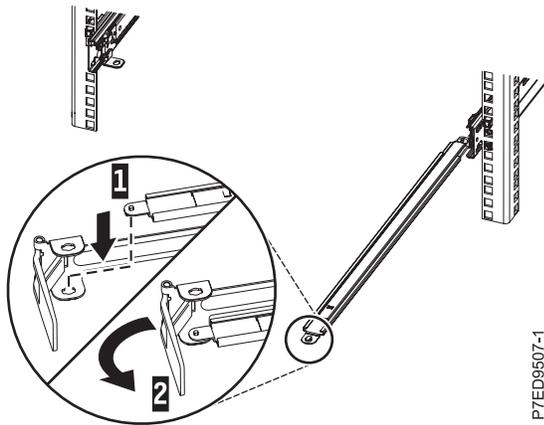
Figure 12. Cable-management stop bracket secured to the support arm

3. To attach the other side of the support arm to the rear of the slide rail, pull the pin out **(1)**, and then slide the bracket **(2)** into the left slide rail.
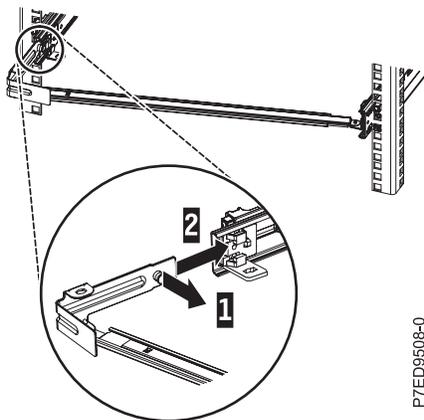
Figure 13. Pin extended with bracket installed into slide rail

4. Pull out the mounting bracket pin **(1)** and slide the mounting bracket **(2)** into the right slide rail. Push the bracket into the slide rail until the spring-loaded pin snaps into place.
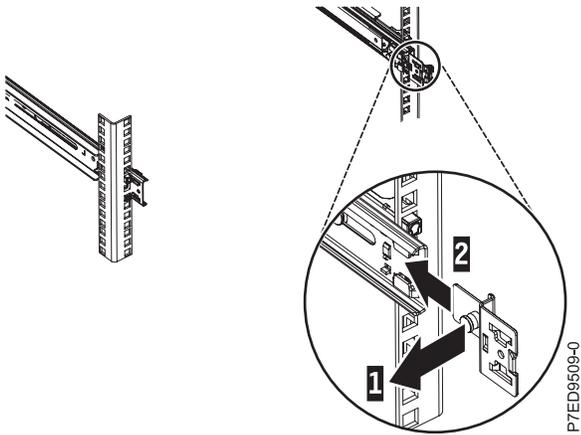
Figure 14. Mounting bracket pin extended and mounting bracket installed into slide rail

5. Place the cable-management arm on the support arm. Pull out the cable-management arm pin **(1)**, and then slide the cable-management arm tab **(2)** into the slot on the inside of the right slide rail. Push the tab until it snaps into place. Pull out the other cable-management arm pin **(3)**, and then slide that cable management arm tab into the mounting bracket slot **(4)** on the outside of the right slide rail. Push the tab until it snaps into place.
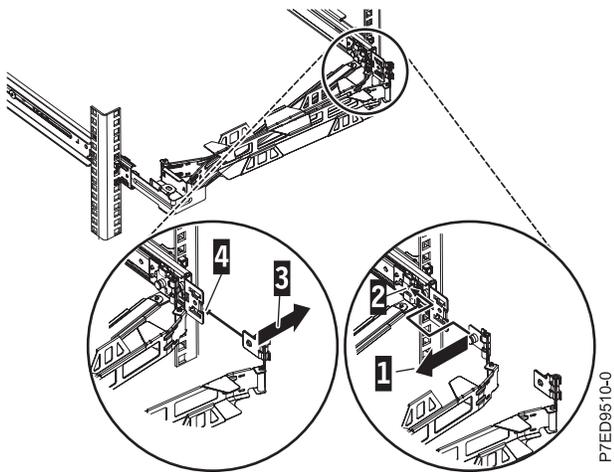
Figure 15. Cable-management arm connection

6. Route the power cords and other cables (including the keyboard, monitor, and mouse cables, if required) on the cable-management arm **(1)**. Attach all cables to the rear of the server except for the power cord. Secure the cord and cables with cable ties or hook-and-loop fasteners.

   Note: Allow slack in all cables to avoid tension on the cables as the cable-management arm moves.
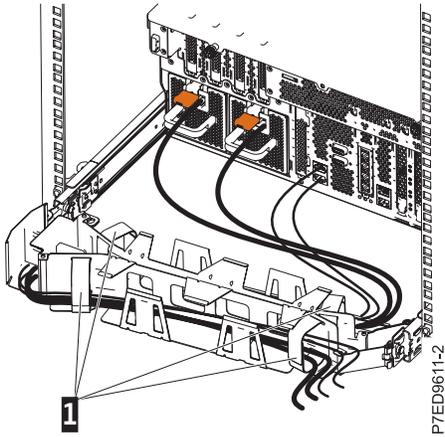
Figure 16. Power cord attachment and routing

7. Slide the server into the rack until it snaps into place.

Connecting the expansion units, disk drives and PCI adapters

Use this information to learn about connecting and configuring expansion units and disk drives to system units.

1. For information on connecting expansion units, see Enclosures and expansion units
2. For information on connecting disk drives, see Disk drives
3. For information on connecting PCI adapters, see PCI adapters

Cabling the server and setting up the console

Your console, monitor, or interface choices are guided by whether you create logical partitions, which operating system you install in your primary partition, and whether you install a Virtual I/O Server (VIOS) in one of your logical partitions.

Note: If you ordered your system or expansion unit preinstalled into a rack, you must remove the shipping bracket that is on the left side of the rear of the system or expansion unit before you cable it.

Go to the instructions for the applicable console, interface, or terminal in the following table.

Table 4. Available console types

Console type	Operating system	Logical partitions	Cable required	Cabling and setup instructions
Systems Director Management Console	AIX®, IBM® i, Linux, or VIOS	Yes	Ethernet (or crossover cable)	"Cabling the server to the Systems Director Management Console"
ASCII terminal	AIX, Linux, or VIOS	Yes for VIOS, no for AIX and Linux	Serial cable equipped with a null modem	"Cabling the server with an ASCII terminal" on page 20
Hardware Management Console	AIX, IBM i, Linux, or VIOS	Yes	Ethernet (or crossover cable)	"Cabling the server to the Hardware Management Console" on page 21
Operations Console	IBM i	Yes Use your Operations Console to manage existing IBM i partitions.	Ethernet cable for LAN connection	"Cabling the server and accessing Operations Console" on page 22
Integrated Virtualization Manager for VIOS	AIX, IBM i, and Linux	Yes	Ethernet cable for network connection	"Cabling the server with an ASCII terminal" on page 20

Cabling the server to the Systems Director Management Console

The Systems Director Management Console (SDMC) controls hosts, including the management of virtual servers.

Before you begin

Before you begin, if you have not already done so, install and configure your SDMC. For instructions about installing and configuring the SDMC, see Installing and configuring the SDMC.

Procedure

1. If you want to directly attach your SDMC hardware appliance to the managed system, connect **Ethernet Connector 1** on the SDMC to the **HMC1** port on the managed system.

Ethernet
Connector 1

LINK HMC1
Tx/Rx

P7EDA504-0
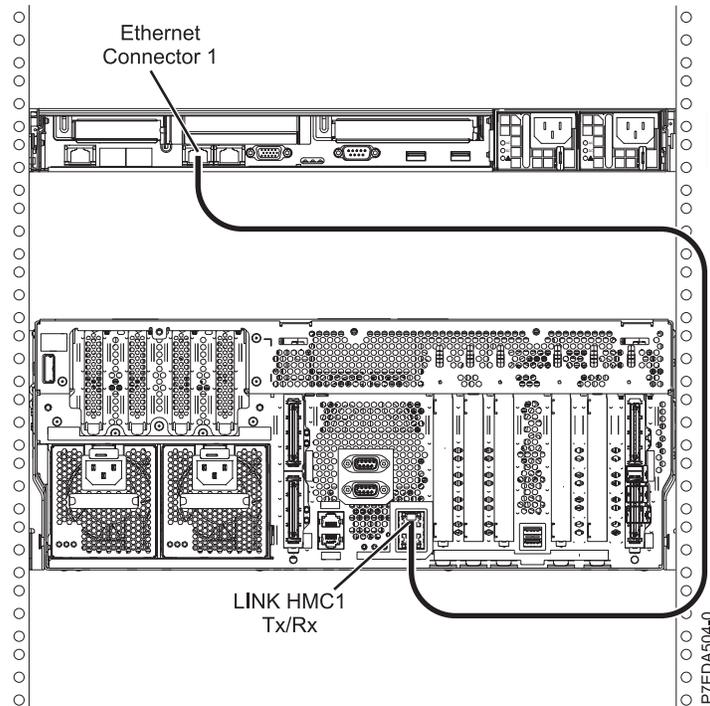
To learn more about connecting an SDMC to a private network so that it can manage more than one managed system, see Configuring the network.

2. Complete your server setup. For instructions, see "Completing server setup if you have an Systems Director Management Console" on page 29.

Cabling the server with an ASCII terminal

If you are not creating logical partitions, you can use an ASCII terminal to manage a server that is running the AIX, Linux, or VIOS operating systems. From the ASCII terminal, you can access the Advanced System Management Interface (ASMI) to perform additional installation tasks.

About this task

The ASCII terminal is connected to the server through a serial link. The ASCII interface to the ASMI provides a subset of the web interface functions. The ASCII terminal is available only when the system is in the standby state. It is not available during the initial program load (IPL) or run time.

Note: If you are using a serial connection to the ASMI terminal, you must use a conversion cable. This cable (part number 46K5108) is used to convert the ASCII terminal 9–pin Dshell connector to an RJ45 serial port connector on the system. For more information about the locations of the connectors on the system, see 8202-E4C or 8205-E6C locations.

To cable an ASCII terminal to the server, complete the following steps:

Procedure

1. Using a serial cable that is equipped with a null modem, connect the ASCII terminal to system connector 1 (S1, which is the default) or 2 (S2) on the rear of the server
2. Connect the power cord from the server to a power source.
3. Wait for the green light on the control panel to start flashing.
4. Ensure that your ASCII terminal is set to the following general attributes.

These attributes are the default settings for the diagnostic programs. Be sure that your terminal is set according to these attributes before proceeding to the next step.

Table 5. Default settings for the diagnostic programs

General setup attributes	3151 /11/31/41 settings	3151 /51/61 settings	3161 /64 settings	Description
Line speed	19,200	19,200	19,200	Uses the 19,200 (bits per second) line speed to communicate with the system unit.
Word length (bits)	8	8	8	Selects 8 bits as a data word length (byte).
Parity	No	No	No	Does not add a parity bit and is used together with the word length attribute to form the 8–bit data word (byte).
Stop bit	1	1	1	Places a bit after a data word (byte).

5. Press a key on the ASCII terminal to allow the service processor to confirm the presence of the ASCII terminal.
6. When the login display appears for the ASMI, enter `admin` for the user ID and password.
7. Change the default password when you are prompted.

   You have completed the setup for an ASCII terminal, and have started the ASMI.
8. Continue with "Completing server setup if you do not have a management console" on page 32.

Cabling the server to the Hardware Management Console

The Hardware Management Console (HMC) controls managed systems, including the management of logical partitions.

Before you begin

If you have not already done so, install and configure your HMC. For instructions about installing and configuring the HMC, see Installation and configuration scenarios.

To manage POWER7® processor-based servers, the HMC must be at Version 7.7.4 or later. To view the HMC version and release, complete the following steps:

1. In the navigation area, click **Updates**.
2. In the work area, view and record the information that appears in the HMC Code Level section, including the HMC version, release, maintenance level, build level, and base versions.

To cable the server to the HMC, complete the following steps:

Procedure

1. If you want to directly attach your HMC to the managed system, connect **Ethernet Connector 1** on the HMC to the **HMC1** port on the managed system.
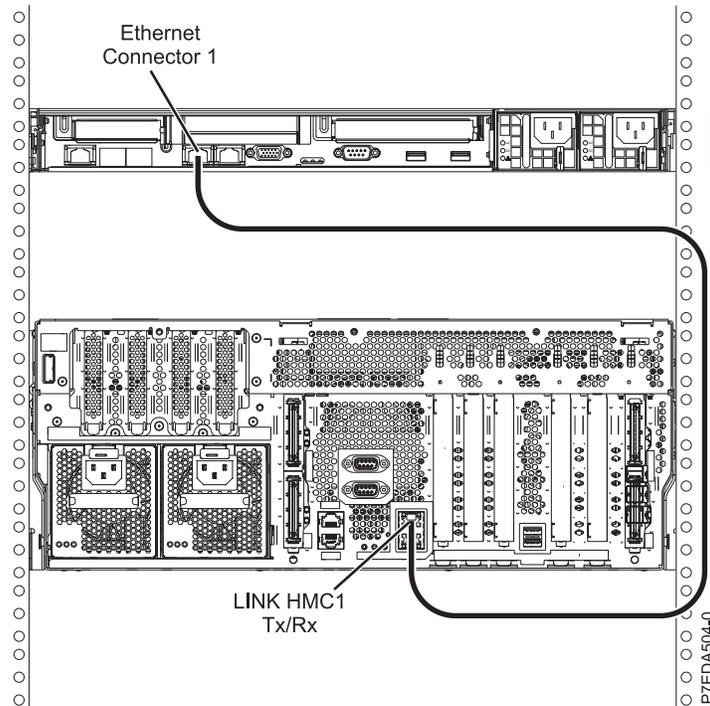
To learn more about connecting an HMC to a private network so that it can manage more than one managed system, see HMC network connections (http://publib.boulder.ibm.com/infocenter/systems/scope/hw/topic/p7hai/netconhmc.htm).

Note:

- You can also have multiple systems attached to a switch that is then connected to the HMC. For more information, see HMC network connections.
- If you are using a switch, ensure that the speed in the switch is set to **auto/auto**. If the server is directly attached to the HMC, ensure the HMC's Ethernet adapter speed is set to **auto/auto**. For more information about setting media speeds, see Setting the media speed.

2. If you are connecting a second HMC to your managed server, connect to the Ethernet port that is labeled **HMC2** on the managed server.

3. Complete your server setup. For instructions, see "Completing server setup if you have a Hardware Management Console" on page 31.

Cabling the server and accessing Operations Console

You can use Operations Console to manage a server that is running the operating system whether you have logical partitions or not. However, you must first use an alternative tool to create the logical partitions.

Before you begin

To prepare to cable the server and access the Operations Console, complete the following steps:

1. Ensure that your server is powered off.

2. Obtain a static IP address that will be assigned to the server's LAN console adapter for use by the console, including information about the IP, subnet mask, and default gateway.

3. Select a unique host name and register the host name and the IP address in your site's Domain Name System (DNS).

Note: This IP address is for use by Operations Console and different from the IP address that is used to connect a normal Telnet session. The IP address must not be in use by another server. Ping the IP address to verify that no other device is using the IP address.

Cabling the server and accessing the Integrated Virtualization Manager

When you install the Virtual I/O Server (VIOS) in an environment where no Hardware Management Console (HMC) or Systems Director Management Console (SDMC) is present, the VIOS automatically creates a management partition whose interface is the Integrated Virtualization Manager (IVM).

About this task

To prepare for and install the VIOS and enable the Integrated Virtualization Manager, complete the following steps:

Procedure

1. Connect a serial cable from a PC or ASCII terminal to a system port on the server.
2. Complete the following steps:
   a. Verify that you have access to the Advanced System Management Interface (ASMI) using the web interface. For details, see Accessing the ASMI using a web browser.
   b. Verify that you have administrator or authorized service provider authority in ASMI.
   c. Using the Web-based ASMI, change the following settings as appropriate for the type of partition on which you are installing the Integrated Virtualization Manager:

      For an AIX or Linux partition, complete the following steps to change the partition boot mode:
      1) In the navigation area, expand **Power/Restart Control**.
      2) Click **Power On/Off System**.
      3) Select **Boot to SMS menu** in the **AIX/Linux partition mode** by boot field.
      4) Click **Save settings and power on**.
   d. Open a terminal session on the PC, using an application such as HyperTerminal, and wait for the SMS menu to appear. Be sure that the line speed is set to 19,200 bits per second to communicate with the system unit.
   e. Using the Web-based ASMI, change the partition boot mode back so that the server loads the operating environment during startup:
      1) Expand **Power/Restart Control**.
      2) Click **Power On/Off System**.
      3) Select **Continue to operating system** in the **AIX/Linux partition mode** boot field.
      4) Click **Save settings**.
3. Insert the *Virtual I/O Server* CD or DVD into the optical drive.
4. In SMS, select the CD or DVD as the boot device:
   a. Select **Select Boot Options**, and press Enter.
   b. Select **Select Install/Boot Device**, and press Enter.
   c. Select **CD/DVD**, and press Enter.
   d. Select the media type that corresponds to the optical device, and press Enter.
   e. Select the device number that corresponds to the optical device, and press Enter.
   f. Select **Normal Boot**, and confirm that you want to exit SMS.
5. Install the Virtual I/O Server:
   a. Select the console, and press Enter.
   b. Select a language for the BOS menus, and 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. After you install the IVM, finish the installation by accepting the license agreement, checking for updates, and configuring the TCP/IP connection.

Supporting information for setting up consoles

Use this information if you need to access the Advanced System Management Interface by using a web browser if you need to set IP addresses on your notebook, or if you need to troubleshoot a connection.

Accessing the ASMI using a web browser

If your system is not managed by an HMC, you can connect a PC or notebook to the server to access the Advanced System Management Interface (ASMI). You need to configure the Web browser address on the PC or notebook to match the manufacturing default address on the server.

Before you begin

About this task

To set up the Web browser for direct or remote access to the ASMI, complete the following steps:

Procedure

1. If the server is not powered on, perform the following steps:
   a. Connect your power cord or cords to the server.
   b. Plug the power cord or cords into the power source.
   c. Wait for the control panel to display 01. A series of progress codes are shown before 01 appears.

      Notes:
      - The system is powered on if the light on the control panel is green.
      - To view the control panel, press the blue switch to the left, then pull out the control panel all the way, and then pull it down.

   Important: Do not connect an Ethernet cable to either the HMC1 port or the HMC2 port until you are directed to do so later in this procedure.

2. Select a PC or notebook that has Netscape 9.0.0.4, Microsoft Internet Explorer 7.0, Opera 9.24, or Mozilla Firefox 2.0.0.11 to connect to your server.

   Note: If the PC or notebook on which you are viewing this document does not have two Ethernet connections, another PC or notebook needs to be connected to your server to access the ASMI.

   If you do not plan to connect your server to your network, this PC or notebook is your ASMI console.

   If you plan to connect your server to your network, this PC or notebook temporarily connects directly to the server for setup purposes only. After setup, you can use any PC or notebook on your network that is running Netscape 9.0.0.4, Microsoft Internet Explorer 7.0, Opera 9.24, or Mozilla Firefox 2.0.0.11 as your ASMI console.

   Note: Complete the following steps to disable the TLS 1.0 option in Microsoft Internet Explorer to access the ASMI using Microsoft Internet Explorer 7.0 running on Windows XP:
   a. From the **Tools** menu in Microsoft Internet Explorer, select **Internet Options**.
   b. From the Internet Options window, click the **Advanced** tab.
   c. Clear the **Use TLS 1.0** check box (in the Security category) and click **OK**.

3. Connect an Ethernet cable from the PC or notebook to the Ethernet port labeled HMC1 on the back of the managed system. If HMC1 is occupied, connect an Ethernet cable from the PC or notebook to the Ethernet port labeled HMC2 on the rear of the managed system.

   Important: If you attach an Ethernet cable to the service processor before the system reaches power off standby, the IP address shown in the Service processor network configuration table might not be valid. For details, see "Correcting an IP address" on page 26.

4. Use Table 6 to help you determine and record the information needed to set the IP address of the service processor on the PC or notebook. The Ethernet interface on the PC or notebook needs to be configured within the same subnet mask as the service processor so that they can communicate with each other. For example, if you connected your PC or notebook to HMC1, the IP address for your PC or notebook could be 169.254.2.140 and the subnet mask would be 255.255.255.0. Set the gateway IP address to the same IP address as the PC or notebook

Table 6. Network configuration information for the service processor in a POWER7 processor-based system

POWER7 processor-based systems	Server connector	Subnet mask	IP address of the service processor	Example of an IP address for your PC or notebook
Service processor A	HMC1	255.255.255.0	169.254.2.147	169.254.2.140
	HMC2	255.255.255.0	169.254.3.147	169.254.3.140
Service processor B (if installed)	HMC1	255.255.255.0	169.254.2.146	169.254.2.140
	HMC2	255.255.255.0	169.254.3.146	169.254.3.140

5. Set the IP address on your PC or notebook by using the values from the table. For details, see "Setting the IP address on your PC or notebook."

6. To access the ASMI using a Web browser, complete the following steps:

   a. Use Table 6 to determine the IP address of the service processor Ethernet port that your PC or notebook is connected to.

   b. Type the IP address in the **Address** field on the Web browser of your PC or notebook and press Enter. For example, if you connected your PC or notebook to HMC1, type `https://169.254.2.147` in the Web browser on your PC or notebook.

   Note: It might take up to 2 minutes for the ASMI login display to be shown in the Web browser after the Ethernet cable is plugged into the service processor in step 3. During this time, if you use control panel function 30 to view the IP addresses on the service processor, incomplete or inaccurate data is shown.

7. When the Login display appears, enter `admin` for the user ID and password.

8. Change the default password when prompted.

9. Choose from the following options:

   - If you do not plan to connect your PC or notebook to your network, this ends this procedure. You can now perform tasks such as changing the time of day or changing the altitude setting.
   - If you plan to connect your PC or notebook to your network, see Accessing the ASMI without an HMC .

Setting the IP address on your PC or notebook

To access the ASMI through a web browser, you first need to set the IP address on a PC or notebook. The following procedures describe setting the IP address on a PC or notebook running the Linux operating system and the Microsoft Windows XP, 2000, and Vista operating systems.

About this task

You will need the information that you recorded in step 4 on page 25 in the Accessing the ASMI using a web Browser topic to complete the following procedure.

Windows XP and Windows 2000
About this task

To set the IP address within Windows XP and Windows 2000, complete the following steps:

Procedure
1. Click **Start** > **Control Panel**.
2. On the control panel, double-click **Network Connections**.
3. Right-click **Local Area Connection**.
4. Click **Properties**.
5. Select **Internet Protocol (TCP/IP)**, and then click **Properties**.

   Attention: Record the current settings before making any changes. Use this information to restore these settings if you disconnect the PC or notebook after setting up the ASMI web interface.

   Note: If `Internet Protocol (TCP/IP)`does not appear in the list, do the following steps:
   a. Click **Install**.
   b. Click **Protocol**, and then click **Add**.
   c. Click **Internet Protocol (TCP/IP)**.
   d. Click **OK** to return to the Local Area Connection Properties window.
6. Click **Use the Following IP Address**.
7. Complete the **IP address**, **Subnet mask**, and **Default gateway** fields by using the values you recorded in the Accessing the ASMI using a web Browser topic.
8. Click **OK** on the Local Area Connection Properties window. It is not necessary to restart your PC.

Windows Vista
About this task

To set the IP address within Windows Vista, complete the following steps:

Procedure
1. Click **Start** > **Control Panel**.
2. Ensure **Classic View** is selected.
3. Click **Network and Sharing Center**.
4. Click **View status** in the Public network area.
5. Click **Properties**.
6. If the Security window is shown, click **Continue**.
7. Highlight **Internet Protocol Version 4** and click **Properties**.
8. Select **Use the following IP address**.
9. Complete the **IP address**, **Subnet mask**, and **Default gateway** fields by using the values you recorded in the Accessing the ASMI using a web Browser topic.
10. Click **OK** > **Close** > **Close**.

Correcting an IP address

If you attach an Ethernet cable to the service processor before the system reaches power off standby, the IP address shown in the service processor network configuration table might not be valid.

About this task

If a cable is attached and not connected to anything, nothing happens. The address could potentially change if an Ethernet cable that is attached to a network is connected to that port and if the system is turned on. If you are unable to access the ASMI by using a network connection, complete one of the following tasks:

- Attach an ASCII terminal to the service processor by using a serial cable. For details, see "Cabling the server with an ASCII terminal" on page 20.
- Determine the current IP address. For more information about determining the current service processor IP address, see Function 30: Service processor IP address and port location.
- Move the reset toggle switches on the service processor from their current position to the opposite position. To perform this task, you must remove and replace the service processor. For details, contact your next level of support.

Connecting the power cables to the system

You might need to connect power cables to the system. Use this procedure to perform this task.

About this task

To connect power cables to the system, complete these steps:

Note: Before you connect the power cables to the system, you must remove the power supply shipping bracket (if present).

Procedure

1. While facing the rear of the system unit, insert the system power cord up through the cable-management arm.
2. Plug the power cord into the system unit.

    Note: If the system is equipped with two power supplies If you want to configure the system with redundant power supplies, you must connect each power cable to its power source.
3. Plug the system power cord and the power cords for any other attached devices into the alternating current (ac) power source.
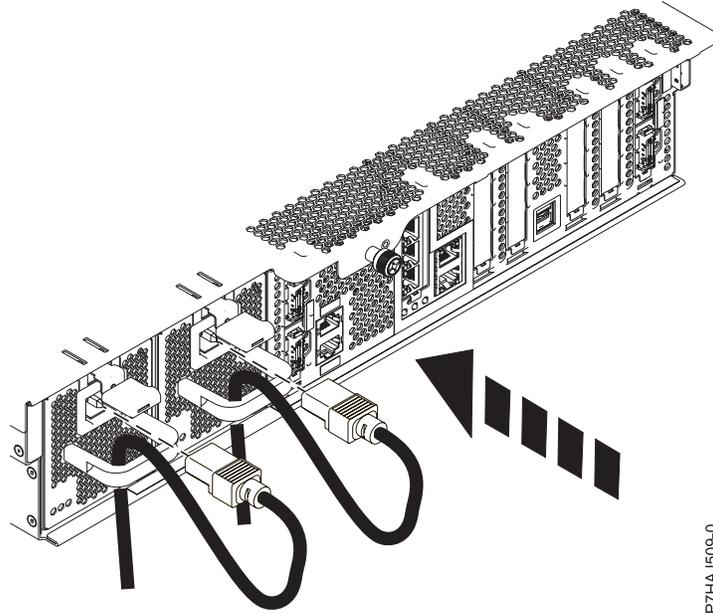
P7HAJ509-0

Note: The green power status indicator on the front panel flashes to indicate the system is in standby mode and ready to be powered on.

4. Power on the system and any devices connected to the system unit.

Completing server setup

The tasks for completing the server setup depend on whether you have a Hardware Management Console (HMC). Learn more about the tasks you must perform to complete your managed system installation.

If you have an HMC or Systems Director Management Console (SDMC), use it to complete the following high-level tasks:
1. Update the time of day on the managed system by using the Advanced System Management Interface (ASMI).
2. Check the firmware level on the managed system.
3. If required, update the managed system firmware levels.
4. Power on the managed system.
5. Create logical partitions (or virtual servers), or deploy an imported system plan.
6. Install an operating system, if it is not already installed.

For detailed instructions about how to perform these tasks, see "Completing server setup if you have an Systems Director Management Console" or"Completing server setup if you have a Hardware Management Console" on page 31.

If you do not have an HMC or SDMC, complete the following tasks:
1. Check the firmware level on the managed system and update the time of day using ASMI.
2. Power on the managed system.
3. Install and update an operating system (if it is not already installed).
4. Update system firmware, if required.

For detailed instructions about how to perform these tasks, see "Completing server setup if you do not have a management console" on page 32.

Completing server setup if you have an Systems Director Management Console

You must perform these tasks to complete server (host) setup with a Systems Director Management Console (SDMC).

About this task

To complete server (host) setup with an SDMC, complete the following steps:

Procedure
1. Plug in the power cords and route the power cords through the cable retention brackets. Navigate to the **SDMC Resources** tab and wait for the host system to be discovered.
2. In the **Resources** table, click the link that says **No Access**. Enter a password. The user ID defaults to HMC, and the default password is abc123. Click **Request Access** and then click **Close** to close the tab.
3. Change the managed system passwords. If the **Detailed State** column for the system displays password change required, right-click the system and select **Update Password**.
4. Update the time of day on the host system by using the Advanced System Management Interface (ASMI).
   To set up and access the ASMI, complete the following steps:

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a. From the **Resources** tab, right-click the system.

b. Click **Operations > Launch Advanced System Management (ASM)**.

To change the time of day using the ASMI, complete the following steps:

a. On the ASMI Welcome pane, enter admin for the user ID and password, and click **Log In**.

b. In the navigation area, expand **System Configuration**.

c. Click **Time of Day**. The right pane displays a form that shows the current date (month, day, and year) and time (hours, minutes, seconds).

d. Change the date value, the time value, or both, and click **Save settings**.

5. Check the firmware level on the host system.

To update the host system firmware, complete the following steps:

a. Right-click the managed system, and then click **Release Management** > **Check for Updates**. Alternatively, you can also select the **Manage** tab, and then click **Update Manager** > **Check for Updates**.

b. Select the type of update, and then click **OK**. The Job Scheduler window opens. Select either **Run** or **Schedule**.

c. Click **Check for updates** to run or schedule a check for new updates. When the check for updates is completed, the updates needed by the host are displayed in the table.

d. If your management server does not have a connection to the Internet, you can download updates from this IBM Web site: www.ibm.com/eserver/support/fixes/fixcentral.

   1) On the Fix Central page:

      a) From the **Product Group**, click **SDMC**.

      b) Identify the machine type and model and the current firmware level of your host. To identify the machine type, model, and current firmware of your host, right-click the host and click **Show Installed Updates**.

      c) From the **Installed Version** list, select your current version.

      d) From the **Platform** list, click **All**.

   2) Click **Continue**. The Identify Fixes page is displayed. It processes a list of fixes to download. After the list of fixes is gathered, the Select fixes and download method window opens.

   3) Select the fix group that you want to download. Also, make sure that the **Include prerequisites and co-requisite fixes (you can de-select the ones you don't need later)** option and the **Download using Download Director** option at the bottom of the page are selected. Click **Continue**. The Select Fixes page is displayed and its changes to the Agree to terms and conditions page.

   4) Select **I agree** if you agree to the terms and conditions. The Download files using Download **SDMC** page is displayed.

   5) Click **Download** Now to start the download of the update.

   6) Copy the update to the management server and unzip the update to a local directory that is close to the root directory.

   7) Use the update manager **Import updates** task to import the updates. On the Import Updates page in the **Path** field, specify the local directory path that contains the files that were unpacked and click **OK**.

   8) After the import is completes, return to the Update **SDMC** page.

e. Select all updates in the table, and then click **Install** to start the install wizard.

6. Power on your host system. To power on your host system by using the SDMC, right-click the host and select **Operations >Power on**.

7. Optional: Prepare the host for creating virtual servers. If this is a new host or if this host does not yet have virtual servers created, complete the following to prepare this host for creating virtual servers:

a. Configure the system with a single, full-system virtual server.

b. Ensure that your hardware placement in the racks matches your system plan.

c. Activate the virtual server and verify that the physical adapters are connected and reporting to the server.

d. Ensure that your components are running correctly, and then delete the full system virtual server.

8. Create multiple virtual servers. For more information about creating virtual servers, see Creating virtual servers.

9. Install operating systems on the virtual servers you created, and then update the operating systems as needed.

   For instructions to install the AIX operating system, see Installing AIX.

   For instructions to install the Linux operating system, see Installing Linux on Power Systems™ servers.

   For instructions to install the VIOS operating system, see Installing VIOS.

Completing server setup if you have a Hardware Management Console

You must perform these tasks to complete server setup with a Hardware Management Console (HMC).

Before you begin

To manage POWER7 systems, the HMC must be at Version 7.7.4 or later.

About this task

To complete server setup with an HMC, do the following steps:

Procedure

1. Plug in the power cords. Wait for the system to enter standby mode.

2. Change the managed system passwords. To change the managed system passwords, do the following steps:

   a. In the navigation area, expand **Systems Management > Servers**.

   b. In the contents area, select the managed system.

   c. In the operations area, click **Update passwords**.

3. Update the time of day on the managed system by using the Advanced System Management Interface (ASMI).

   To set up and access the ASMI, do the following steps:

   a. In the navigation area, expand **Systems Management > Servers**.

   b. In the contents area, select the managed system.

   c. In the task area, expand **Operations**.

   d. Click **Launch Advanced System Management (ASM)**.

   To change the time of day by using the ASMI, complete the following steps:

   a. On the ASMI Welcome pane, enter admin for the user ID and password, and click **Log In**.

   b. In the navigation area, expand **System Configuration**.

   c. Click **Time of Day**. The right pane displays a form that shows the current date (month, day, and year) and time (hours, minutes, and seconds).

   d. Change the date value, the time value, or both, and click **Save settings**.

   e. Logout from ASMI and close window.

4. Check the firmware level on the managed system.

   To check the firmware level on the managed system, in the navigation area, click **Updates**. Firmware information is displayed in the contents area.

5. Compare your installed firmware level with available firmware levels. If required, update your firmware levels:

a. Compare your installed firmware level with available firmware levels. For more information, see .

b. If required, update your managed system firmware levels. In the navigation area, select **Updates**.

c. In the contents area, select your managed system.

d. Click **Change Licensed Internal Code for the current release**.

6. Power on your managed system by using the correct Power on parameter. To power on your managed system by using the HMC, do the following steps:

a. View your managed system's properties and verify that the logical partition Start policy is set to **User-Initiated**. To verify that the logical partition Start policy is set to **User-Initiated**, do the following:

   1) In the navigation area, expand **Systems Management > Servers**.

   2) In the contents area, select the managed system.

   3) In the tasks area, click **Properties**.

   4) Click the **Power-On Parameters** tab.

   5) Ensure that the **Partition start policy** field is set to **User-Initiated**.

b. Power on the managed system. To power on the managed system, do the following:

   1) In the navigation area, expand **Systems Management > Servers**.

   2) In the contents area, select the managed system.

   3) Click **Operations > Power on**.

   4) Select a power on option and click **OK**.

7. Create partitions or deploy an imported system plan.

For instructions about creating partitions, see Partitioning with the HMC.

For instructions about deploying system plans, see Deploying a system plan by using an HMC.

8. Install an operating system and update the operating system.

For instructions to install the AIX operating system, see Installing AIX.

For instructions to install the Linux operating system, see Installing Linux on Power Systems servers.

For instructions to install the VIOS operating system, see Installing VIOS.

Completing server setup if you do not have a management console

You must perform these tasks to complete server setup without an Hardware Management Console (HMC) or Systems Director Management Console (SDMC).

Procedure

1. Plug in the power cords, if you have not already done so.

2. To check the firmware level on the managed system and to update the time of day, do the following steps:

a. Access the Advanced System Management Interface (ASMI). For more information, see Accessing the ASMI without an HMC .

b. On the ASMI Welcome pane, note the existing level of server firmware in the upper-right corner under the copyright statement.

c. Update the time of day. In the navigation area, expand **System Configuration**.

d. Click **Time of Day**. The right pane displays a form that shows the current date (month, day, and year) and time (hours, minutes, and seconds).

e. Change the date value, the time value, or both, and click **Save settings**.

3. Connect your disk drives, and PCI adapters, if applicable. For more information, see Disk drives, and PCI adapters

4. To start a system that is not managed by an HMC, SDMC or ASMI, do the following steps:

a. Open the front door of the managed system.

b. Press the power button on the control panel. See Power on

5. Install an operating system and update the operating system, if required.

   For instructions to install the VIOS operating system, see Installing VIOS.

6. Update the system firmware, if required.
   - For instructions to get firmware fixes through the AIX or Linux operating system, see Getting server firmware fixes through AIX or Linux without a management console.
   - If you are using VIOS, see Updating the Virtual I/O Server's firmware and device microcode with an Internet connection.

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Avis de conformité à la réglementation d'Industrie Canada

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European Community contact:
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Tele: +49 7032 15-2937
email: tjahn@de.ibm.com

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