System i and System p

Cabling your server

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Note

Before using this information and the product it supports, read the information in "Notices" on page 267 and the *IBM Systems Safety Information* manual, G229-9054.

Twelfth Edition (September 2007)

Contents

Safety and environmental 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

IBM® System i® models and System p® servers can use I/O cards or features that are fiber-optic based and that utilize lasers or LEDs.

Laser compliance

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)

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

The following comments apply to the IBM System i models and IBM System p 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.

Product recycling and disposal

This unit must be recycled or discarded according to applicable local and national regulations. IBM encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. IBM offers a variety of product return programs and services in several countries to assist equipment owners in recycling their IT products. Information on IBM product recycling offerings can be found on IBM's Internet site at http://www.ibm.com/ibm/environment/products/prp.shtml.

Esta unidad debe reciclarse o desecharse de acuerdo con lo establecido en la normativa nacional o local aplicable. IBM recomienda a los propietarios de equipos de tecnología de la información (TI) que reciclen responsablemente sus equipos cuando éstos ya no les sean útiles. IBM dispone de una serie de programas y servicios de devolución de productos en varios países, a fin de ayudar a los propietarios de equipos a reciclar sus productos de TI. Se puede encontrar información sobre las ofertas de reciclado de productos de IBM en el sitio web de IBM http://www.ibm.com/ibm/environment/products/prp.shtml.

EU Only

Note: This mark applies only to countries within the European Union (EU) and Norway.

Appliances are labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European WEEE Directive, electrical and electronic equipment (EEE) is to be collected separately and to be reused, recycled, or recovered at end of life. Users of EEE with the WEEE marking per Annex IV of the WEEE Directive, as shown above, must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and recovery of WEEE. Customer participation is important to minimize any potential effects of EEE on the environment and human health due to the potential presence of hazardous substances in EEE. For proper collection and treatment, contact your local IBM representative.

Battery return program

This product may contain sealed lead acid, nickel cadmium, nickel metal hydride, lithium, or lithium ion battery. Consult your user manual or service manual for specific battery information. The battery must be recycled or disposed of properly. Recycling facilities may not be available in your area. For information on disposal of batteries outside the United States, go to http://www.ibm.com/ibm/environment/products/batteryrecycle.shtml or contact your local waste disposal facility.

In the United States, IBM has established a return process for reuse, recycling, or proper disposal of used IBM sealed lead acid, nickel cadmium, nickel metal hydride, and other battery packs from IBM Equipment. For information on proper disposal of these batteries, contact IBM at 1-800-426-4333. Please have the IBM part number listed on the battery available prior to your call.

For Taiwan: Please recycle batteries.

For the European Union:

Note: This mark applies only to countries within the European Union (EU).

Batteries or packaging for batteries are labeled in accordance with European Directive 2006/66/EC concerning batteries and accumulators and waste batteries and accumulators. The Directive determines the framework for the return and recycling of used batteries and accumulators as applicable throughout the European Union. This label is applied to various batteries to indicate that the battery is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European Directive 2006/66/EC, batteries and accumulators are labeled to indicate that they are to be collected separately and recycled at end of life. The label on the battery may also include a chemical symbol for the metal concerned in the battery (Pb for lead, Hg for mercury and Cd for cadmium). Users of batteries and accumulators must not dispose of batteries and accumulators as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and treatment of batteries and accumulators. Customer participation is important to minimize any potential effects of batteries and accumulators on the environment and human health due to the potential presence of hazardous substances. For proper collection and treatment, contact your local IBM representative.

For California: Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

The foregoing notice is provided in accordance with California Code of Regulations Title 22, Division 4.5 Chapter 33. Best Management Practices for Perchlorate Materials. This product/part may include a lithium manganese dioxide battery which contains a perchlorate substance.

IBM Cryptographic Coprocessor Card Return Program

The following information applies only for systems originally sold prior to July 1, 2006:

This machine may contain an optional feature, the cryptographic coprocessor card, which includes a polyurethane material that contains mercury. Please follow local ordinances or regulations for disposal of this card. IBM has established a return program for certain IBM Cryptographic Coprocessor Cards. More information can be found at http://www.ibm.com/ibm/environment/products/prp.shtml.

About this publication

This topic provides users with guidance on how to properly cable IBM System p5® and i5, eServer™ p5 and i5, OpenPower®, and IntelliStation® POWER® hardware.

For information about the accessibility features of this product, for users who have a physical disability, see “Accessibility features,” on page 265.

Cabling your server

Learn how to cable your server with a console or interface that is available for your server. This might include the Advanced System Management Interface (ASMI), Hardware Management Console (HMC), Integrated Virtualization Manager, Operations Console, twinaxial console, or the Thin Console for System i5®.

If you are installing a new server and have not created a customized setup checklist, see Creating a customized initial server setup checklist. The initial server setup checklist provides an end-to-end setup checklist for you to use throughout the entire initial server setup of your server. The checklist ensures that the system is capable of starting and that it is functional before you perform more complex and custom configurations. For more information, see Initial server setup.

To learn more about the cabling options that are available for your server, see the following console and interface descriptions. Then, for more information, see Planning for consoles, interfaces, and terminals.

Advanced System Management Interface
The Advanced System Management Interface (ASMI) is the interface to the service processor that allows you to perform general and administrator-level service tasks, such as reading service processor error logs, reading vital product data, setting up the service processor, and controlling the system power. The ASMI might also be referred to as the service processor menus. Set up access to the ASMI if you plan to manage the IBM AIX®, Linux®, or i5/OS® operating systems without an HMC.

Hardware Management Console
The Hardware Management Console (HMC) is a dedicated workstation that runs integrated system management software. The HMC manages hardware tasks and configures logical partitions on managed systems. It also acts as a focal point for hardware detection and reporting.

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 IBM System p5 and eServer p5 servers that use the IBM 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.

Operations Console (for IBM System i5 and eServer i5 models only)
Operations Console allows you to use one or more PCs to access and control, either remotely or locally, the server console and control panel functions. Set up Operations Console if you plan to manage the i5/OS operating system in a partitioned environment or if you plan to manage a server with the i5/OS operating system in a nonpartitioned environment. If you plan to manage a server with i5/OS in a nonpartitioned environment, you must also set up access to the ASMI to communicate with the service processor.

Twinaxial Console (for IBM System i5 and eServer i5 models only)
The twinaxial console uses a basic command-line interface to access and manage the server, and it does not require the use of a PC to act as a console. Set up the twinaxial console if you plan to manage the i5/OS operating system in a partitioned environment or if you plan to manage a server with the i5/OS operating system in a nonpartitioned environment. If you plan to manage a server with i5/OS in a nonpartitioned environment, you must also set up access to the ASMI to communicate with the service processor.

Thin Console for System i5 (for IBM System i5 and eServer i5 models only)
The Thin Console provides a 5250 system console for the IBM i5/OS environment on select

systems that are not managed by an HMC. Additional hardware support is not required because the Thin Console connects to the server directly by using one of the HMC ports and is configured in i5/OS as the HMC using all virtual resources. This console device is not supported on an Ethernet network even if the server is already connected. A cable must connect this device directly to the HMC port (either HMC1 or HMC2) on the server, and no other console device can be attached to the remaining HMC port.

Related information

Creating a customized initial server setup checklist

Initial server setup

Planning for consoles, interfaces, and terminals

Cabling your model 9405-520 with a console

Select which console you want to connect your server to.

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a Thin Console

Learn how to connect the Thin Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Thin Console

__ Complete the setup instructions that were provided with the Thin Console, such as:
  - Connect the keyboard, mouse, power cable, and Ethernet cable to the ports on the Thin Console.
  - Plug in the monitor, and power it on.
  - Plug in the Thin Console. It automatically powers on.

__ Select the keyboard language, and then press Enter.

Connecting the Thin Console

__ Connect the other end of the Ethernet cable directly to the HMC port (either HMC 1 or HMC 2) on the server. Connections and ports are labeled to facilitate the setup process.

Restrictions:

- Do not attach another Thin Console or an HMC to the remaining HMC port.
- The Thin Console is not available on an Ethernet network, even if the server is already connected.

Note: If you are connecting the Thin Console to an existing server, the DST Sign-on window might display.

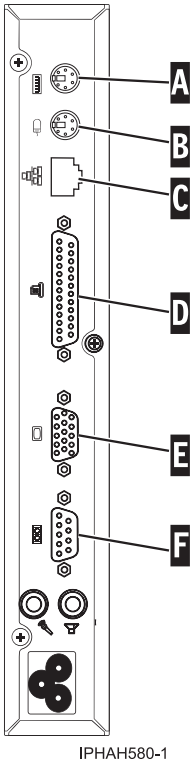


Figure 1. Back view of a Thin Console for System i5

Letter	Description
A	Keyboard port
B	Mouse port
C	10/100 BaseT Ethernet port
D	Parallel port
E	Monitor port
F	Serial port

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBM System i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries® Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter into position C3.

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP™) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

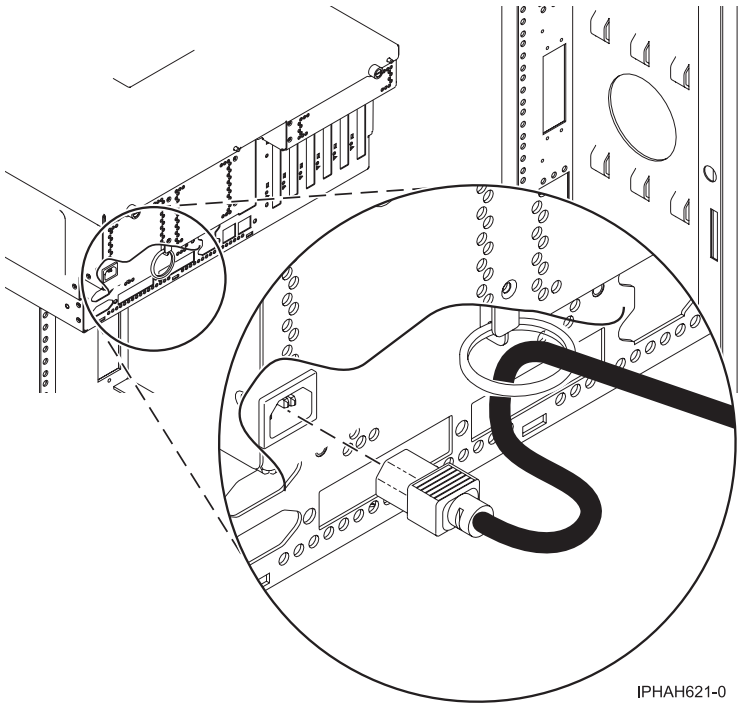
__ Do you have a PCI Cryptographic Coprocessor card?

- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

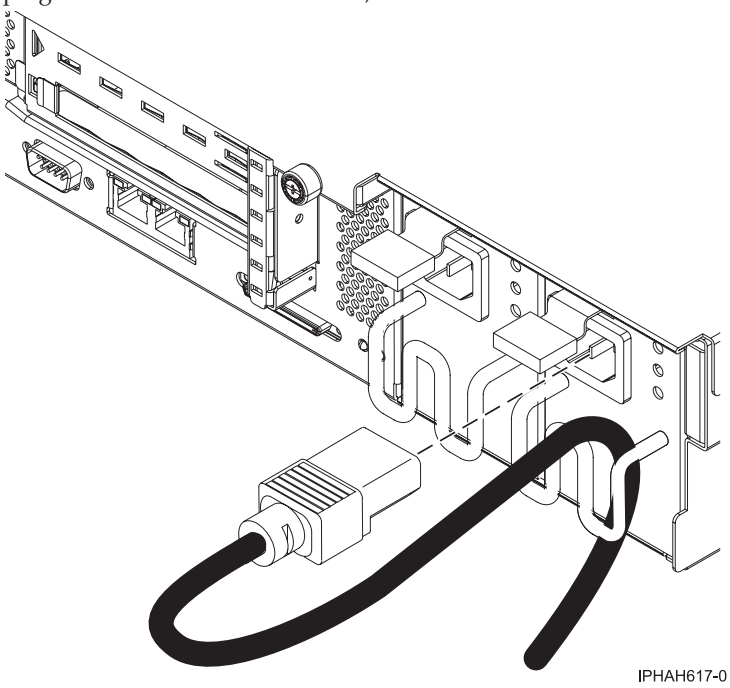
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, use the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

Routing the cables through the cable-management arm

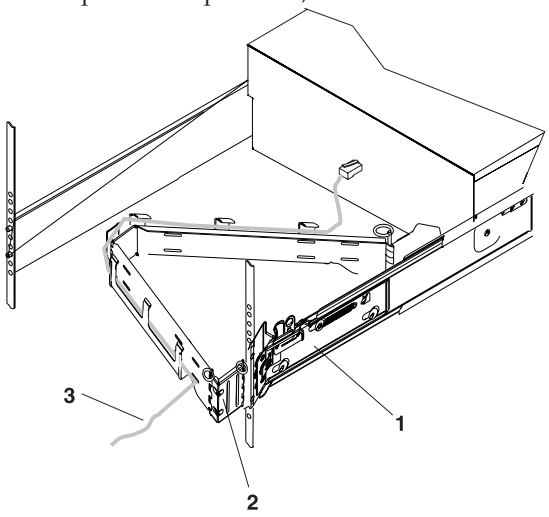
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.

Note:

1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

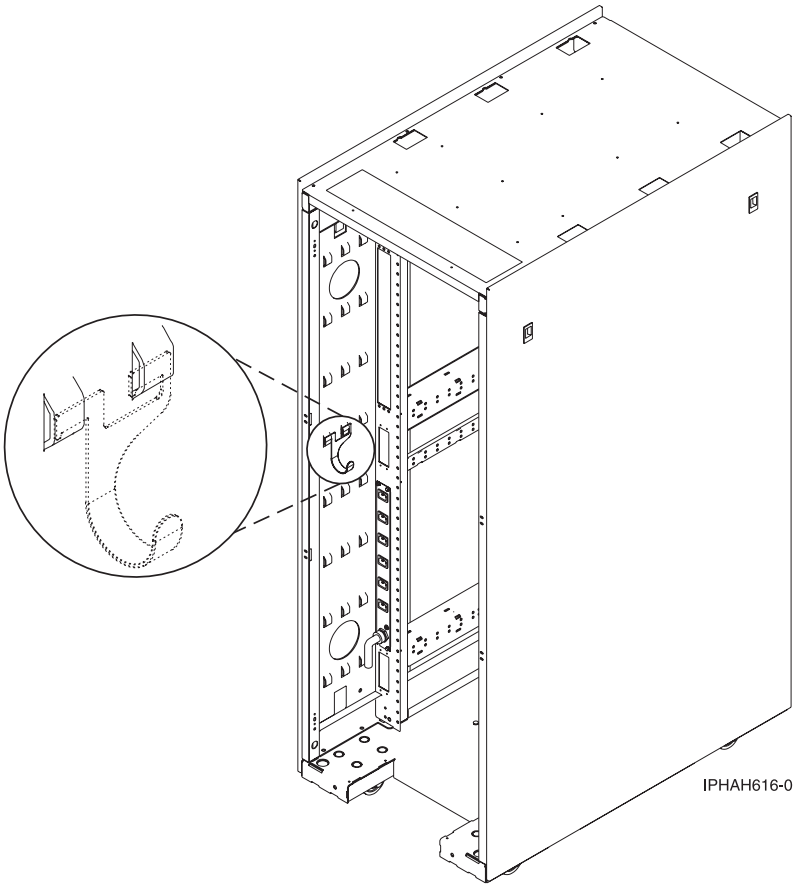
__ When prompted, enter a new HMC access password. This password is case sensitive.

__ Press the white Power On button. There is a short delay of approximately 5 to 20 minutes until the server powers on. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a twinaxial console

Learn how to connect the twinaxial cable, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the twinaxial cable

__ On the back of the server, locate the position that contains adapter 2746. This is your twinaxial adapter. The adapter should be in the appropriate position.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

__ Locate the 8-port twinaxial attachment cable (part number 21F5093). Attach the cable to the connector on the 2746 twinaxial adapter.

__ Connect a twinaxial cable from the workstation that you will use as the system console to port 0 on the 8-port twinaxial attachment cable.
Note: The workstation address of your console must be set to 0. To set the address, see the reference material that was included with your workstation.

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

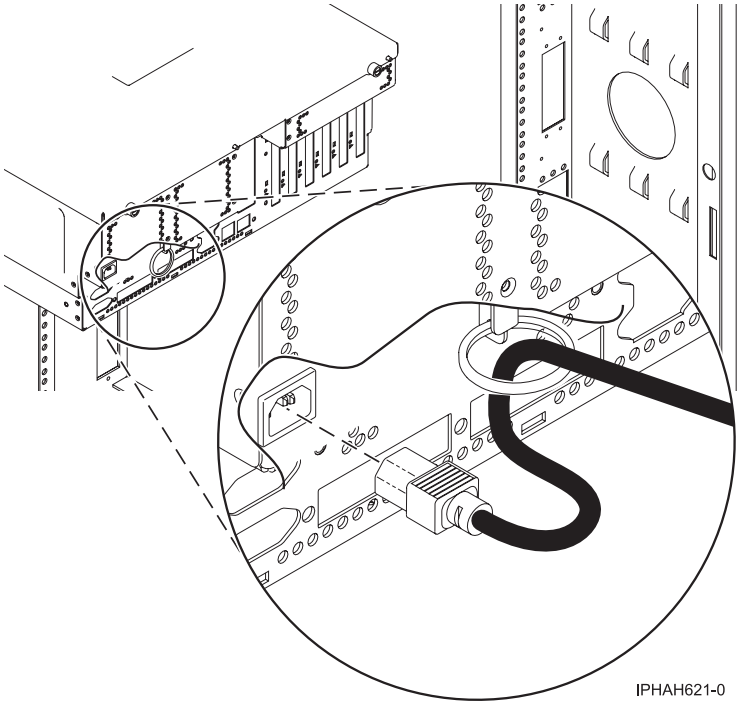
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

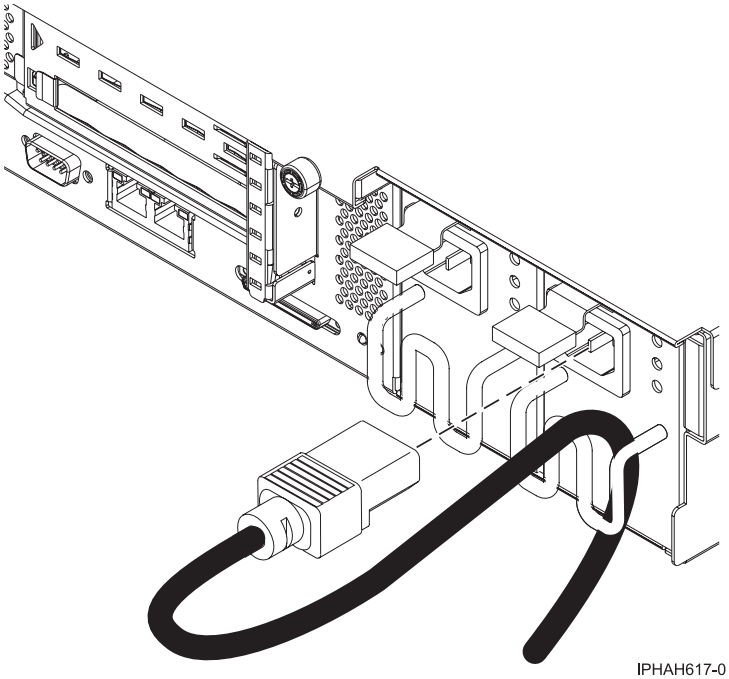
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

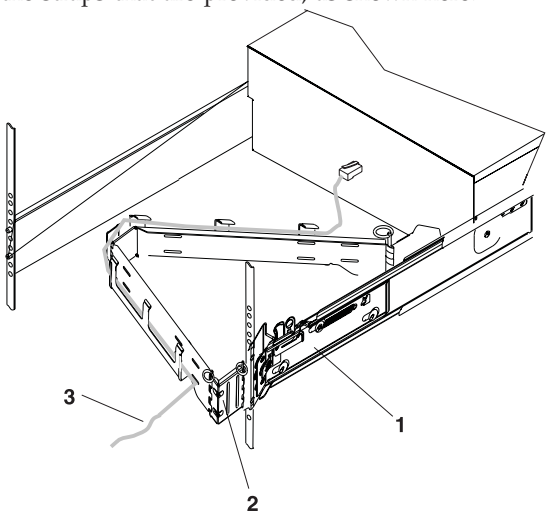
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

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__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in and turn on your console.

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.
Note:

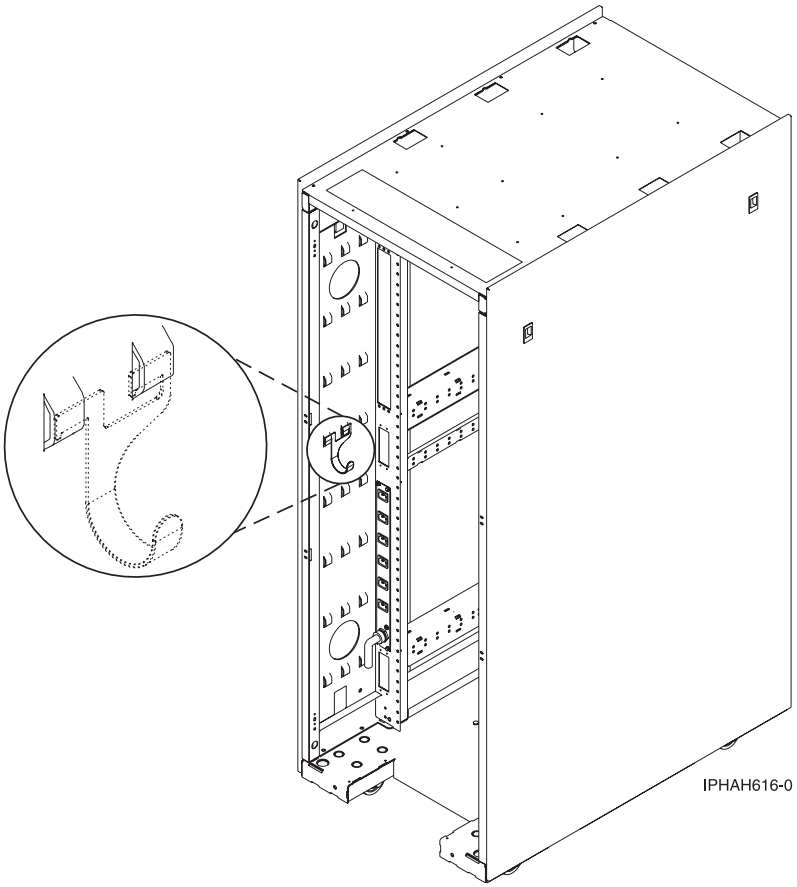
1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

__ Press the white Power On button. There is a short delay until the server powers on, approximately 5 to 20 minutes. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling your model 9406-520 with a console or interface

Select which console or interface you want to connect your server to.

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Cabling a model 9406-520, 9406-525, or 9407-515 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

Tip: These instructions also apply to users who will use the Virtual Partition Manager.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

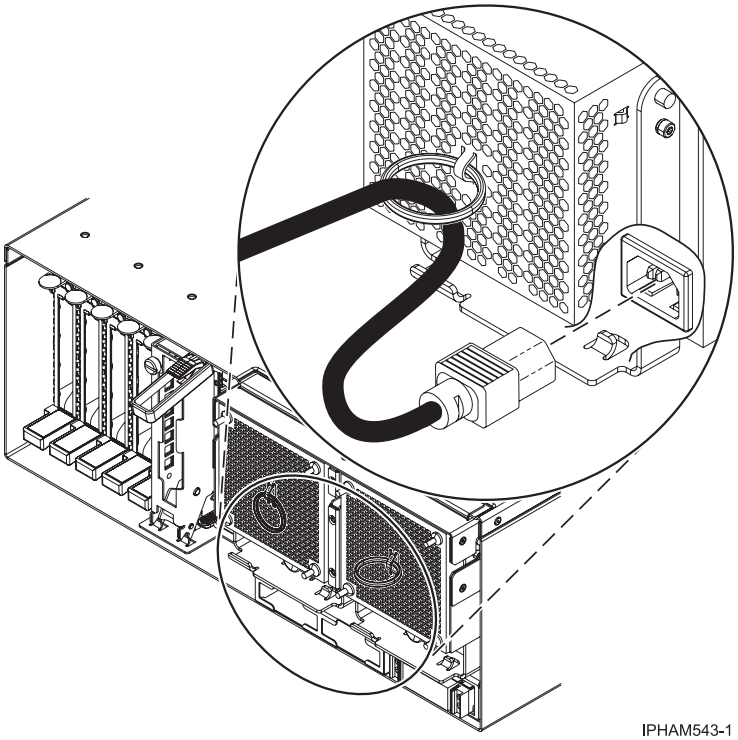
Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

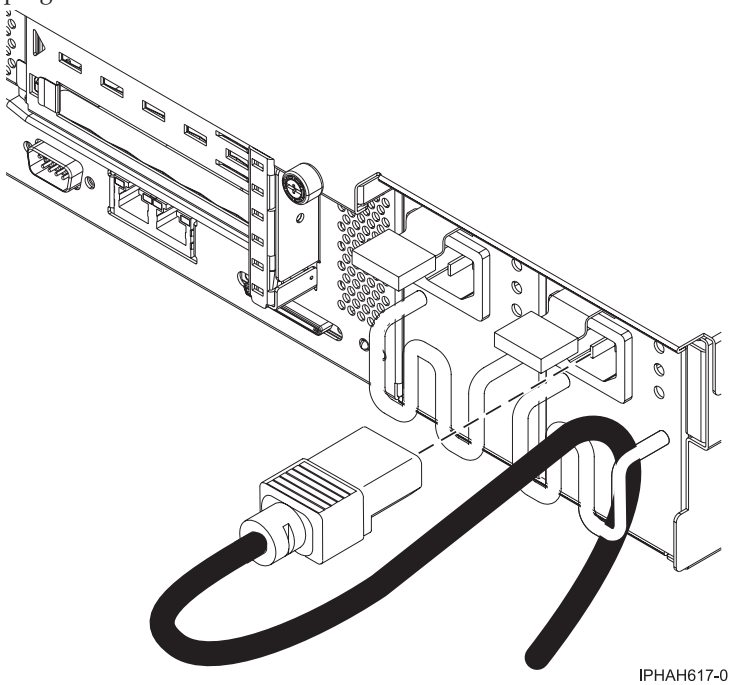
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

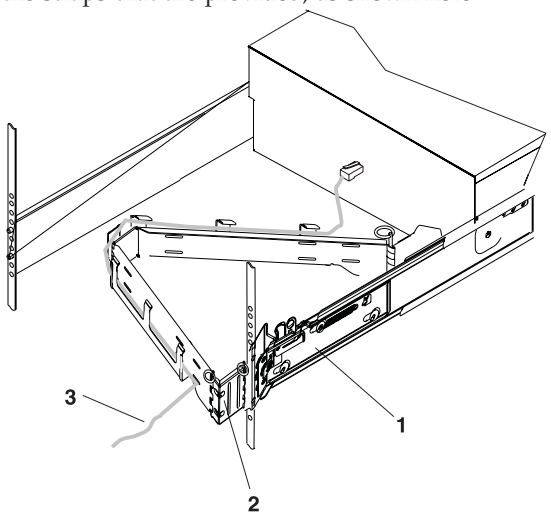
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

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__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

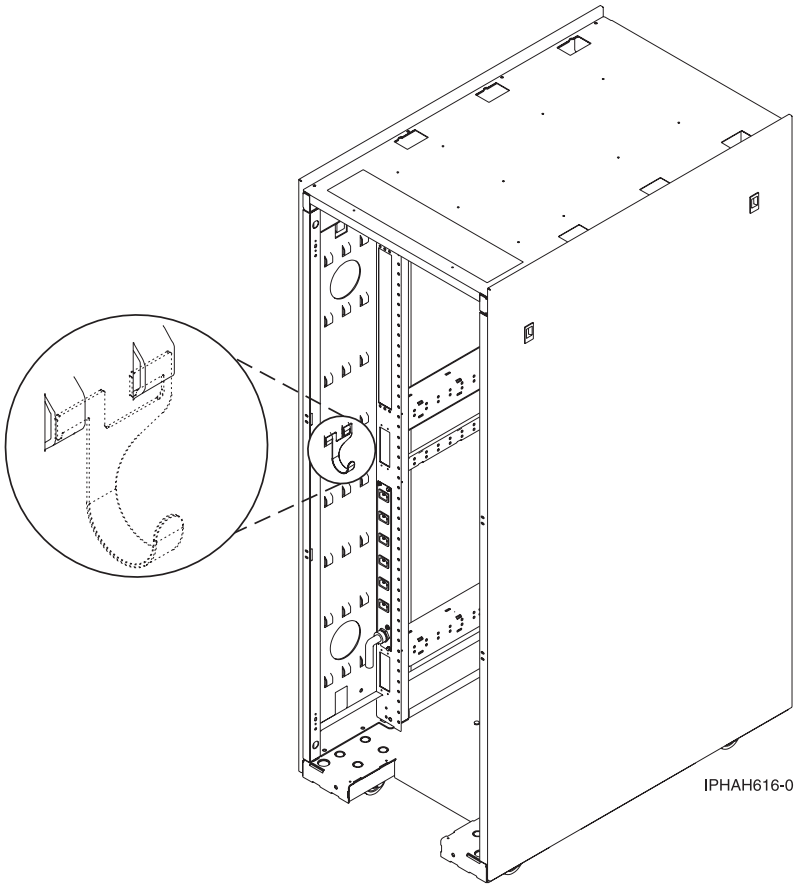
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9406-520, 9406-525, or 9407-515 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

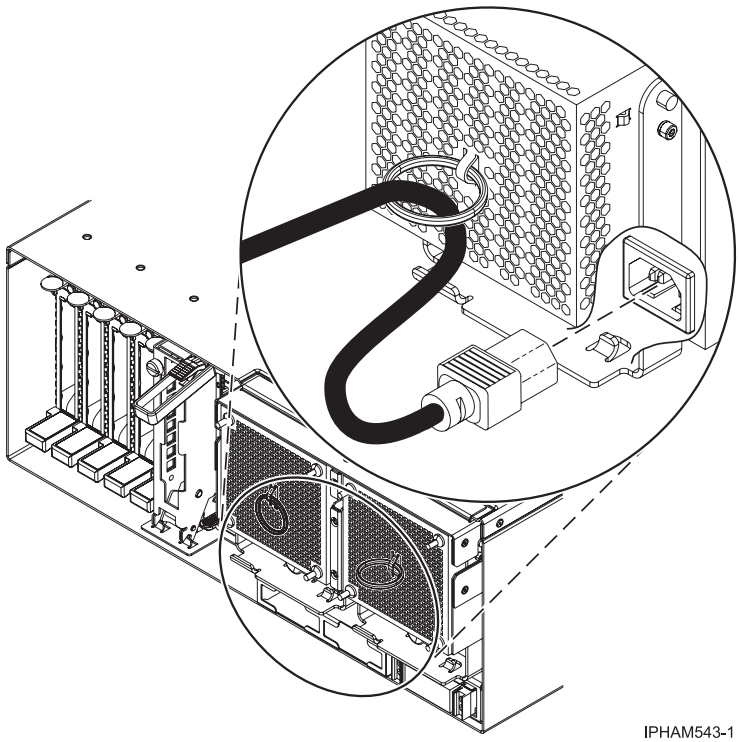
__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

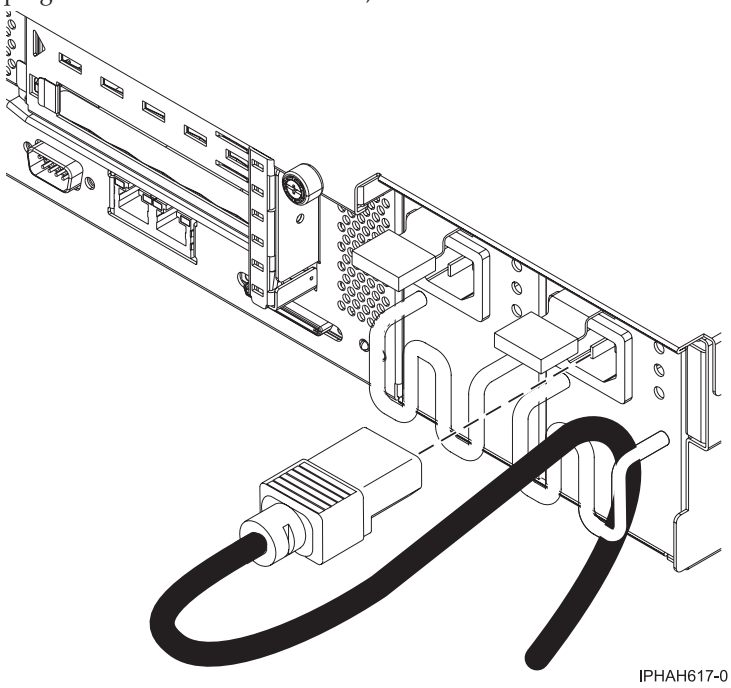
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

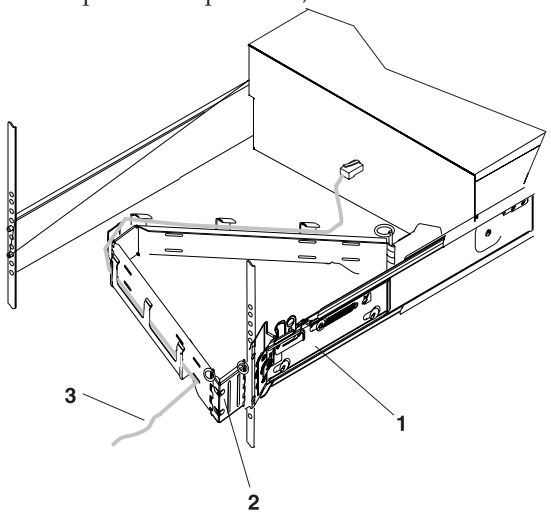
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

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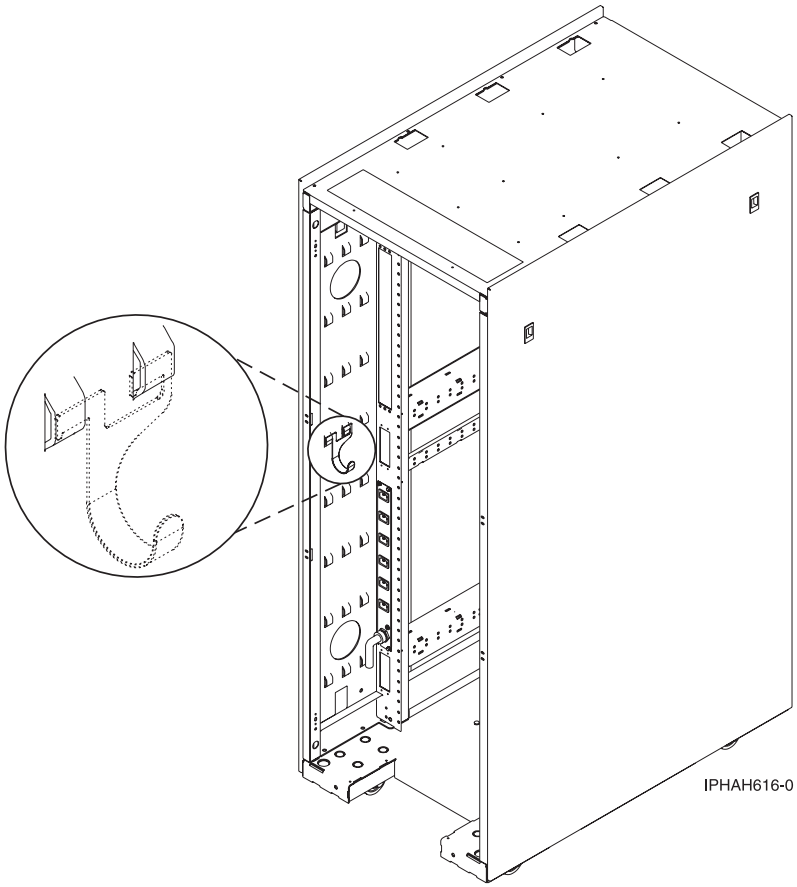
__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling the Operations Console attachment for model 9406-520, 9406-525, or 9407-515

Learn how to connect the Operations Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, and route the cables.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Operations Console. Choose from the options below.

__ **Option 1:** To connect the Operations Console cable (directly attached):

  __ Shut down and unplug the PC that will serve as the system console.

  __ Locate the Operations Console cable (97H7557 or 39J5835). Connect the Operations Console cable to the corresponding connector on the 2793 or 2794 adapter in the appropriate position on the back of the server.

  - Position C3 for the models 520, 525, and 515
  - Position C2 for the models 550 and 570

  __ Connect the other end of the Operations Console cable to the first or only system port, which is located on the back of the PC that is being used as the console.

__ **Option 2:** To connect the Ethernet cable (on a network (LAN)):

  __ Shut down and unplug the PC that will serve as the system console.

Connecting the Operations Console. Choose from the options below.

__ Connect an Ethernet or token-ring cable from the PC that will serve as the system console to your local network. Connect another network cable from the same local network to the first embedded Ethernet port (P1-T5) or the adapter card in the appropriate position on the back of the server.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

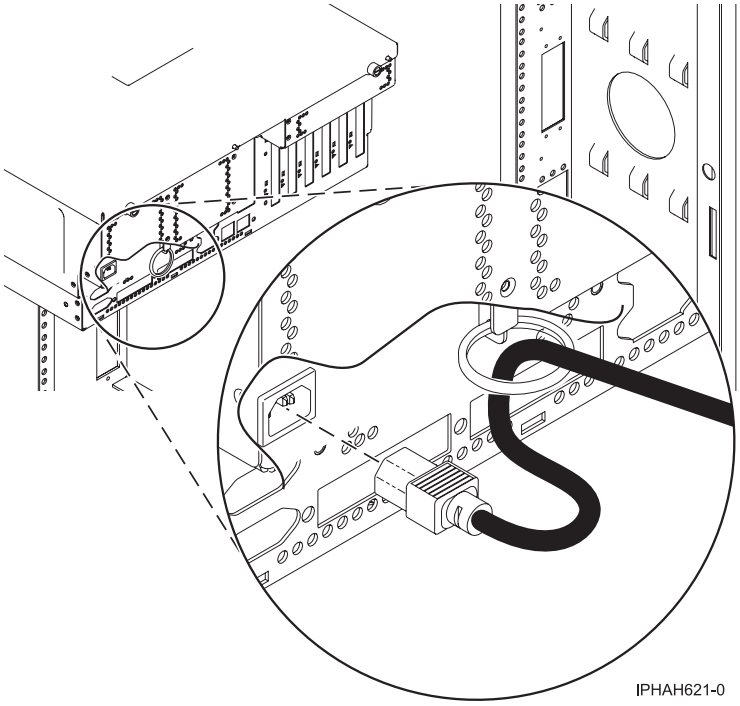
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

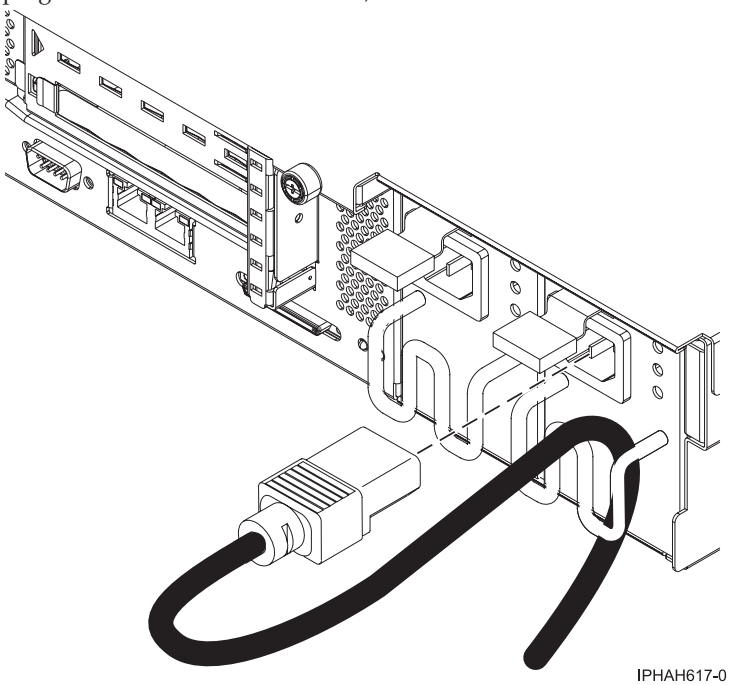
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters. If the cable did not come with your server, you will have to supply it.

If you do not have any external cables to connect to the adapters on the back of your server or expansion unit, continue with the next section.

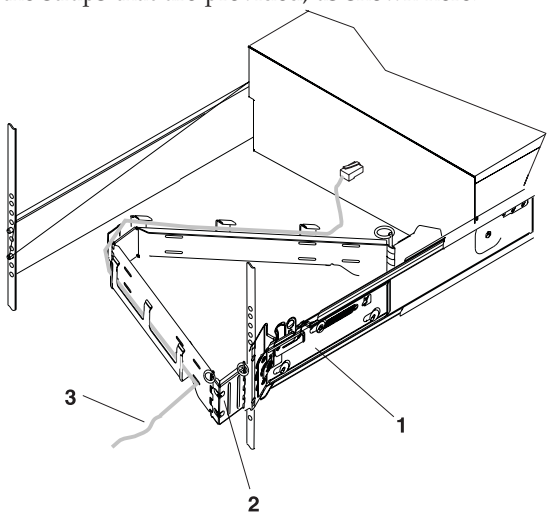
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

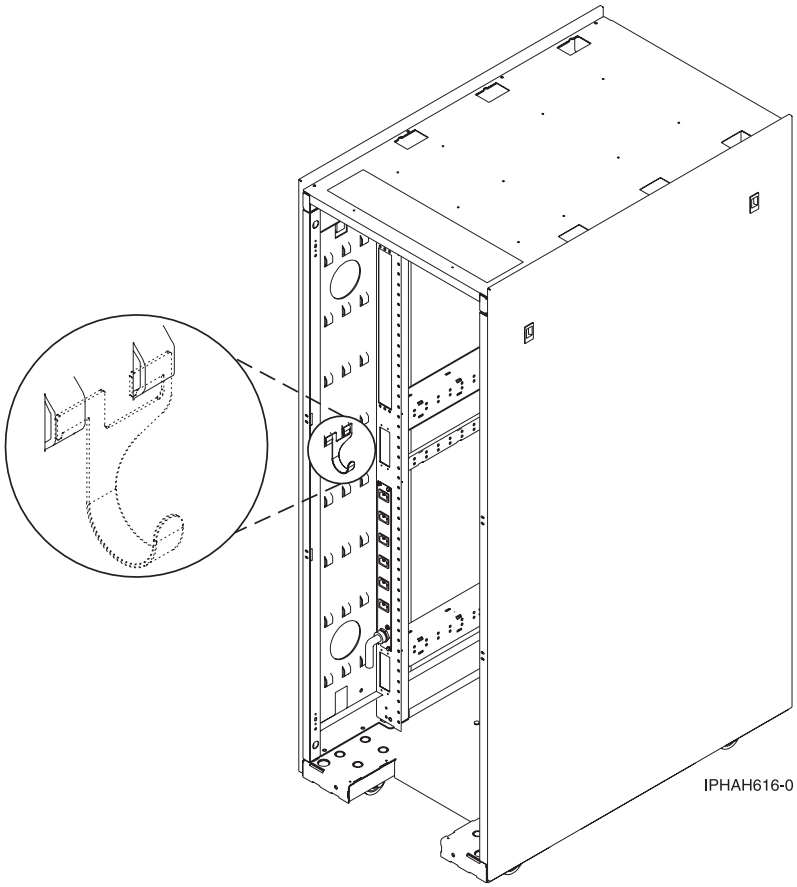
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a Thin Console

Learn how to connect the Thin Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Thin Console

__ Complete the setup instructions that were provided with the Thin Console, such as:
  - Connect the keyboard, mouse, power cable, and Ethernet cable to the ports on the Thin Console.
  - Plug in the monitor, and power it on.
  - Plug in the Thin Console. It automatically powers on.

__ Select the keyboard language, and then press Enter.

Connecting the Thin Console

__ Connect the other end of the Ethernet cable directly to the HMC port (either HMC 1 or HMC 2) on the server. Connections and ports are labeled to facilitate the setup process.

Restrictions:

- Do not attach another Thin Console or an HMC to the remaining HMC port.
- The Thin Console is not available on an Ethernet network, even if the server is already connected.

Note: If you are connecting the Thin Console to an existing server, the DST Sign-on window might display.

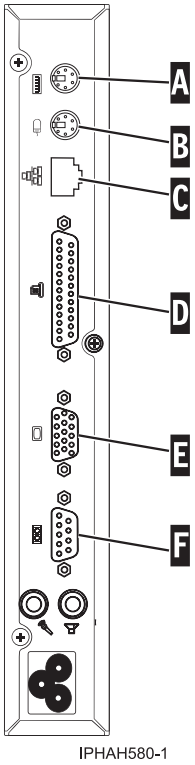


Figure 2. Back view of a Thin Console for System i5

Letter	Description
A	Keyboard port
B	Mouse port
C	10/100 BaseT Ethernet port
D	Parallel port
E	Monitor port
F	Serial port

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBM System i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter into position C3.

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

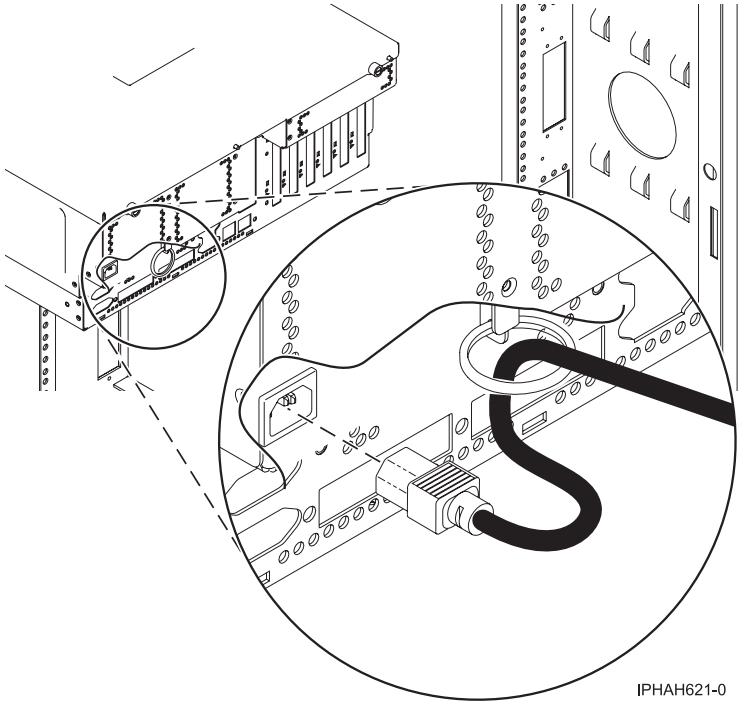
__ Do you have a PCI Cryptographic Coprocessor card?

- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

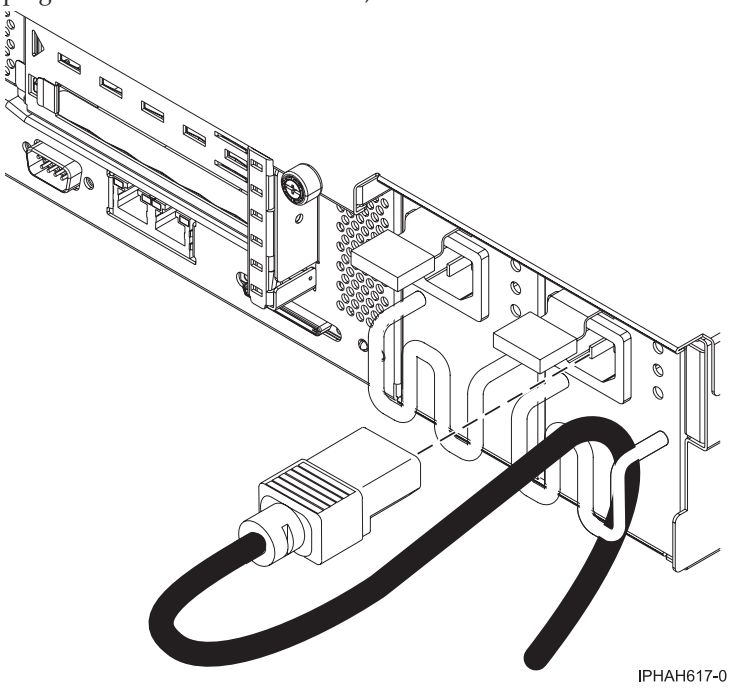
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, use the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

Routing the cables through the cable-management arm

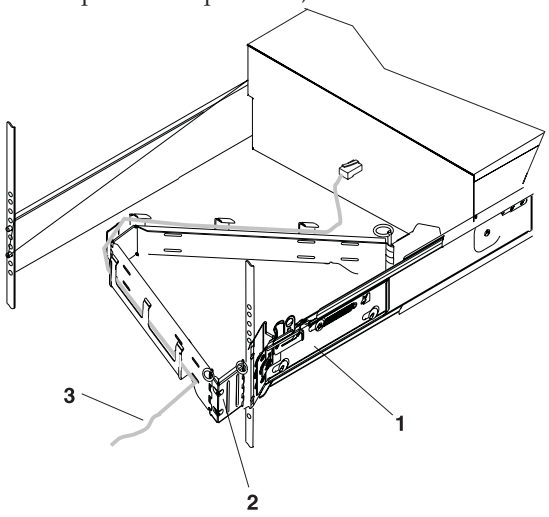
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.

Note:

1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

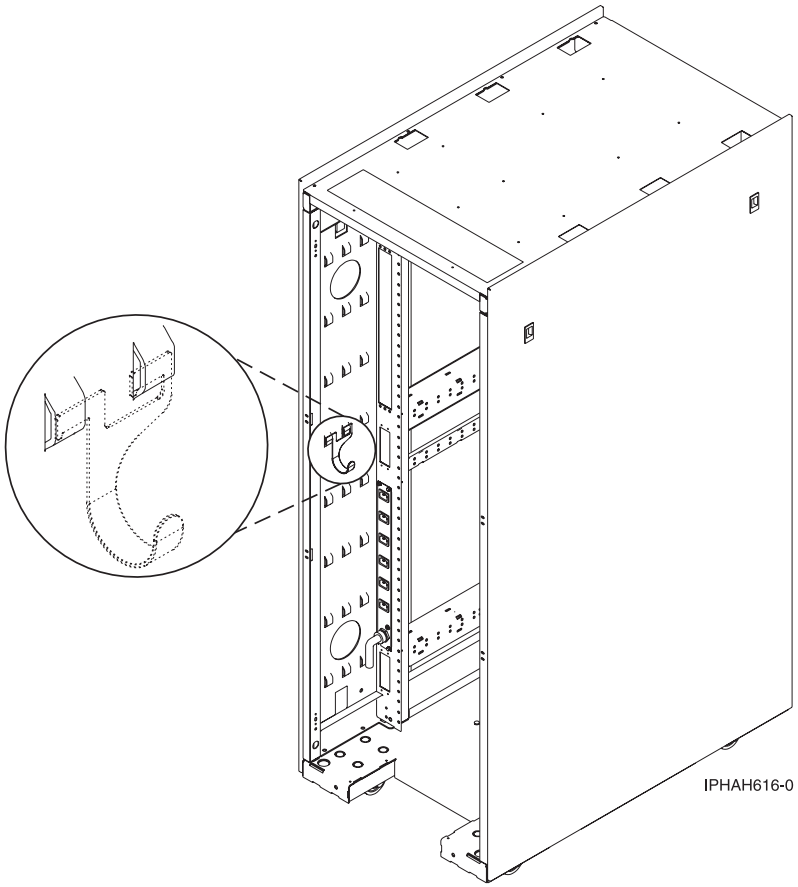
__ When prompted, enter a new HMC access password. This password is case sensitive.

__ Press the white Power On button. There is a short delay of approximately 5 to 20 minutes until the server powers on. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a twinaxial console

Learn how to connect the twinaxial cable, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the twinaxial cable

__ On the back of the server, locate the position that contains adapter 2746. This is your twinaxial adapter. The adapter should be in the appropriate position.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

__ Locate the 8-port twinaxial attachment cable (part number 21F5093). Attach the cable to the connector on the 2746 twinaxial adapter.

__ Connect a twinaxial cable from the workstation that you will use as the system console to port 0 on the 8-port twinaxial attachment cable.
Note: The workstation address of your console must be set to 0. To set the address, see the reference material that was included with your workstation.

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

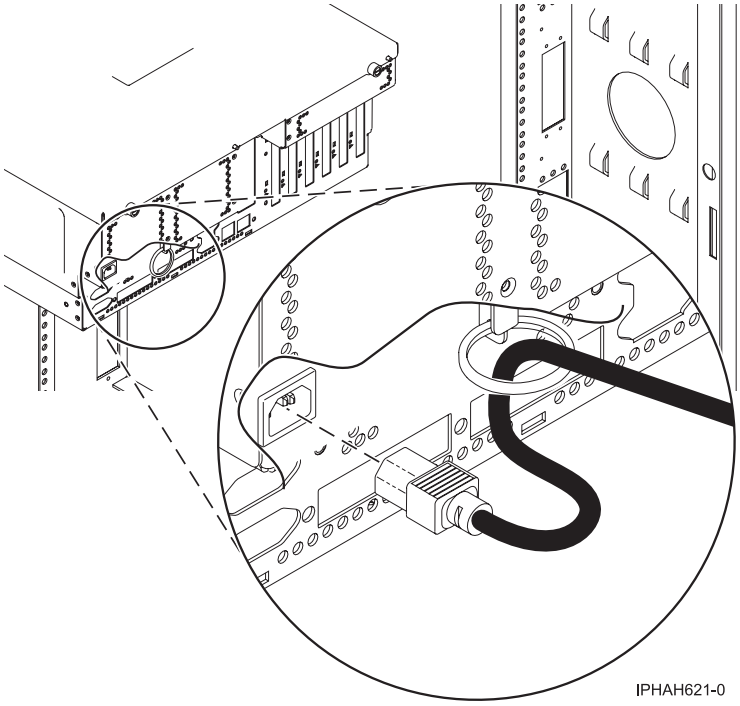
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

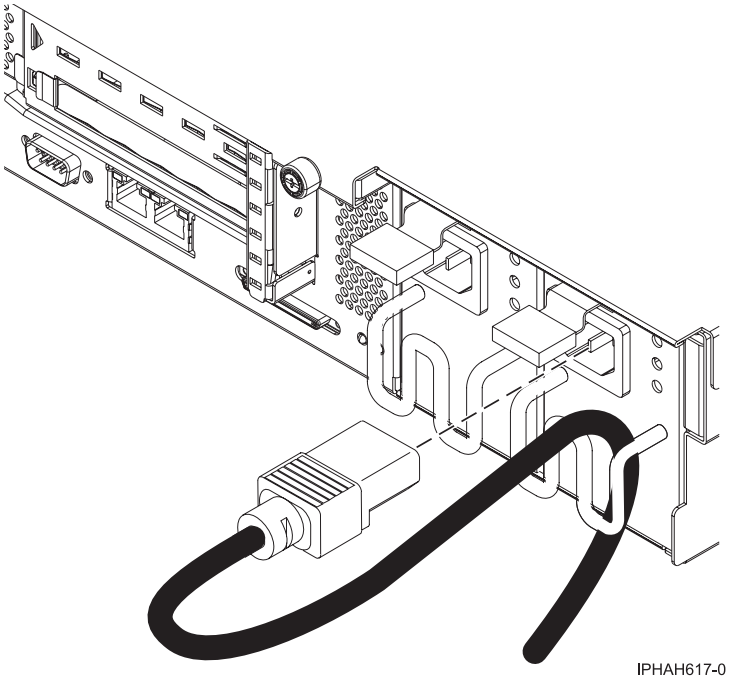
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

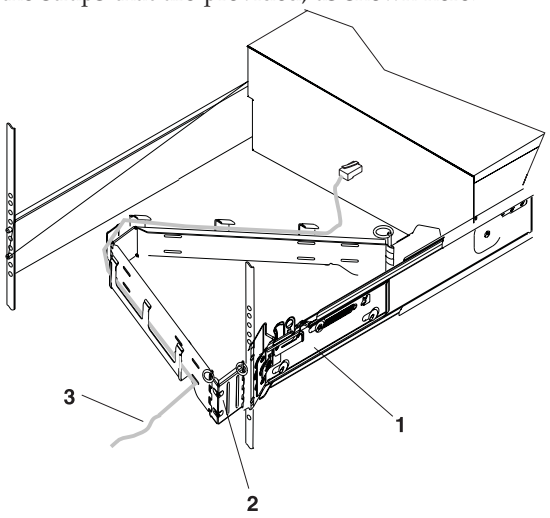
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in and turn on your console.

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.
Note:

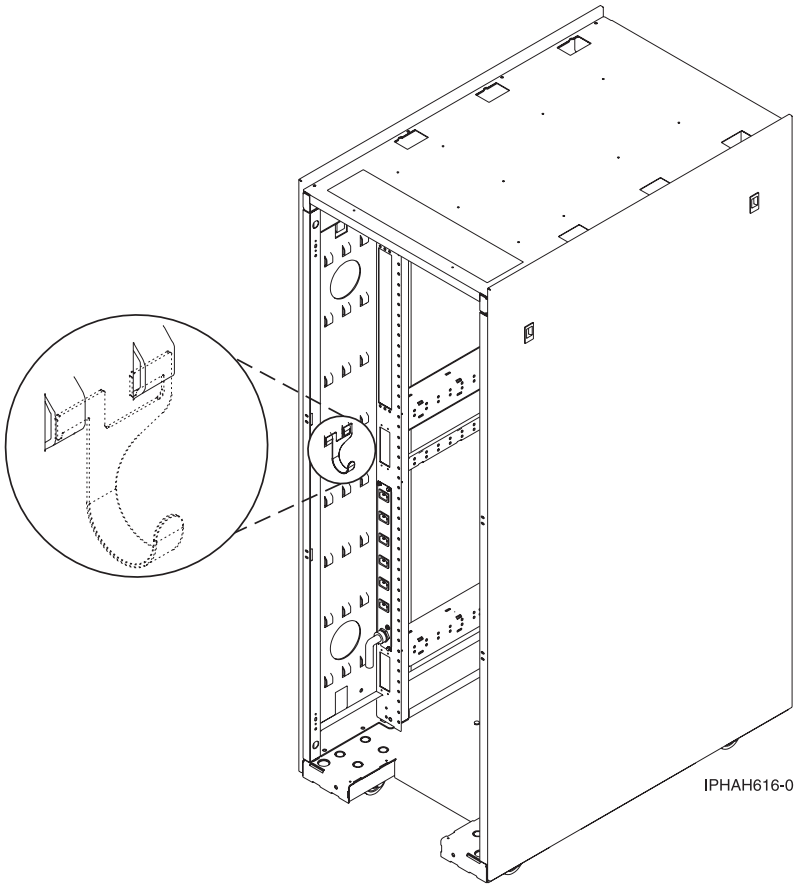
1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

__ Press the white Power On button. There is a short delay until the server powers on, approximately 5 to 20 minutes. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling your model 9406-525 with a console or interface

Select which console or interface you want to connect your server to.

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Cabling a model 9406-520, 9406-525, or 9407-515 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

Tip: These instructions also apply to users who will use the Virtual Partition Manager.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

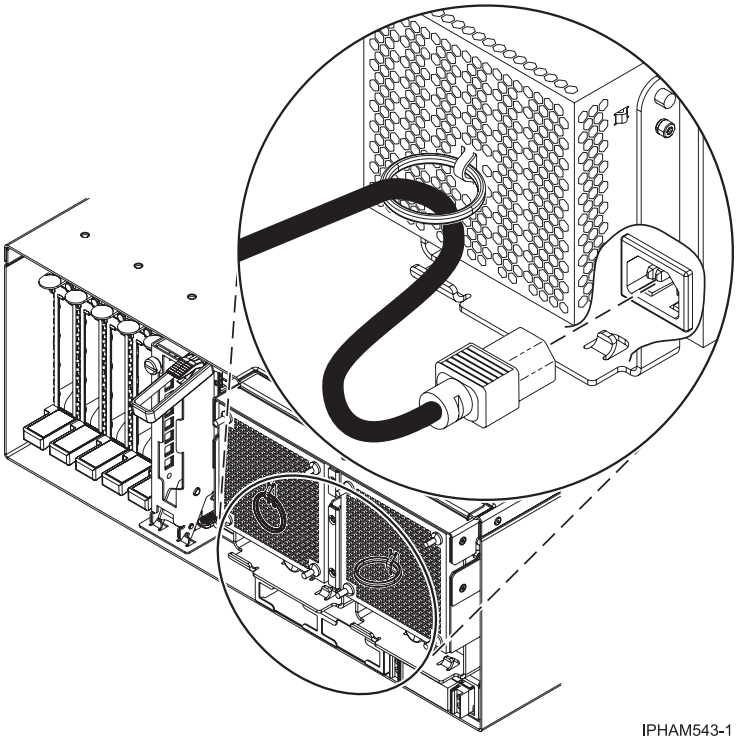
Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

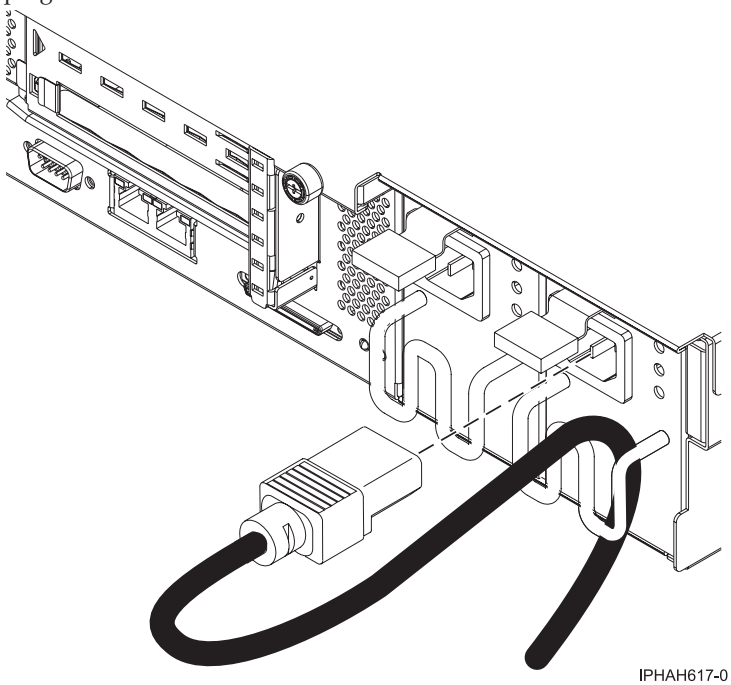
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

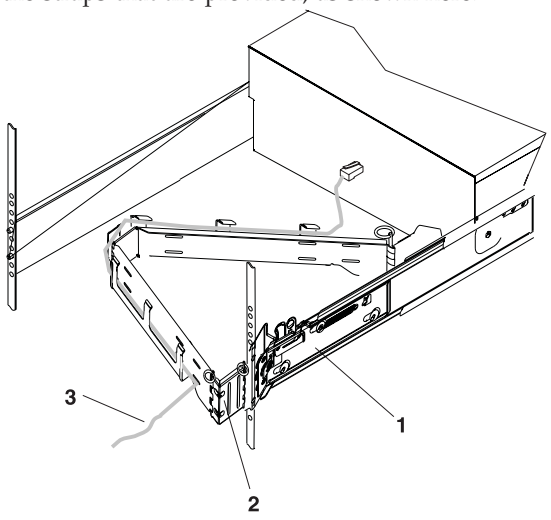
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

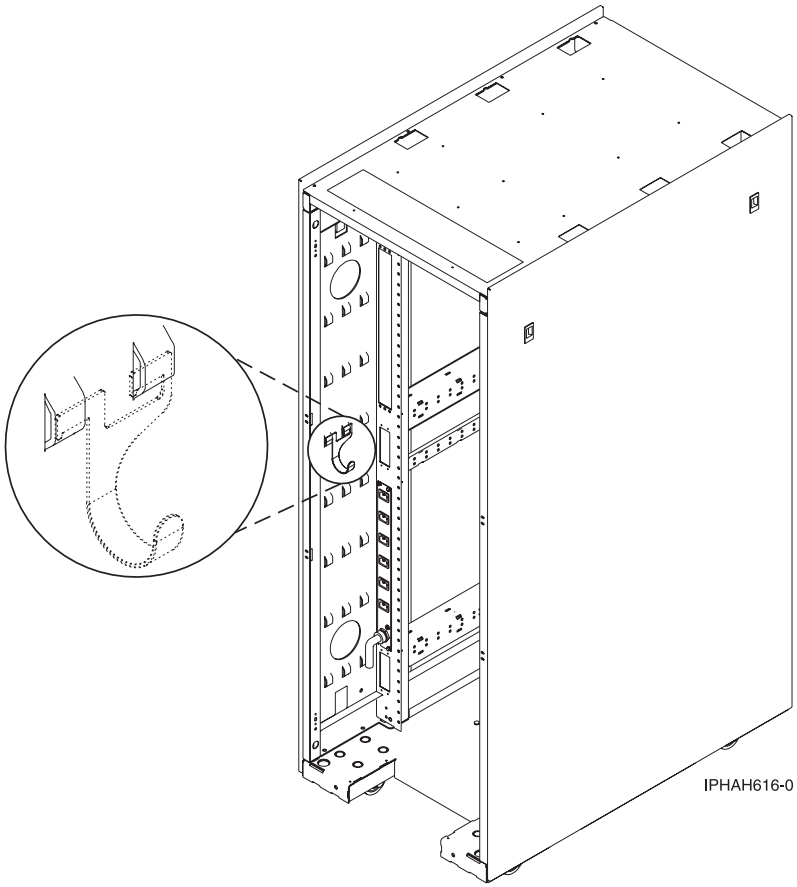
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9406-520, 9406-525, or 9407-515 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

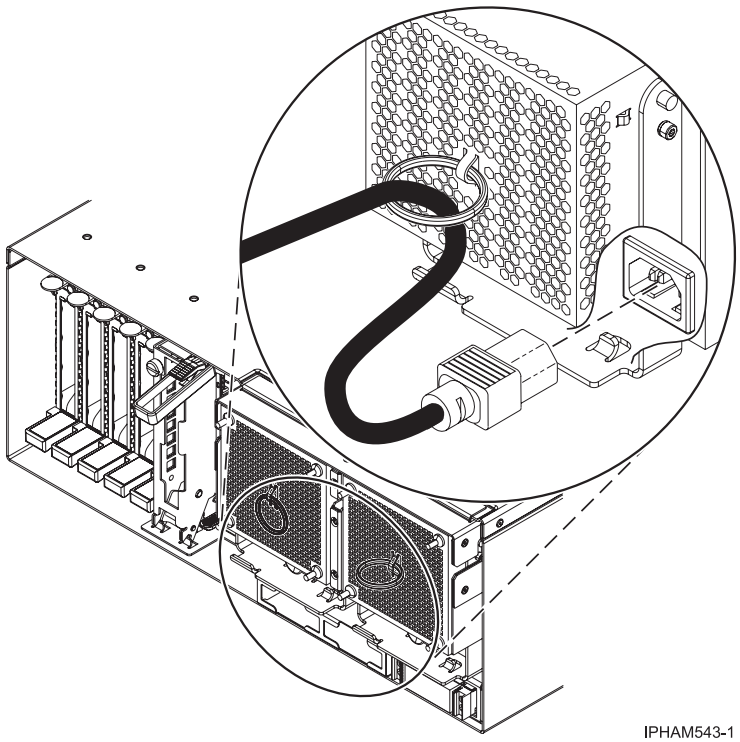
__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

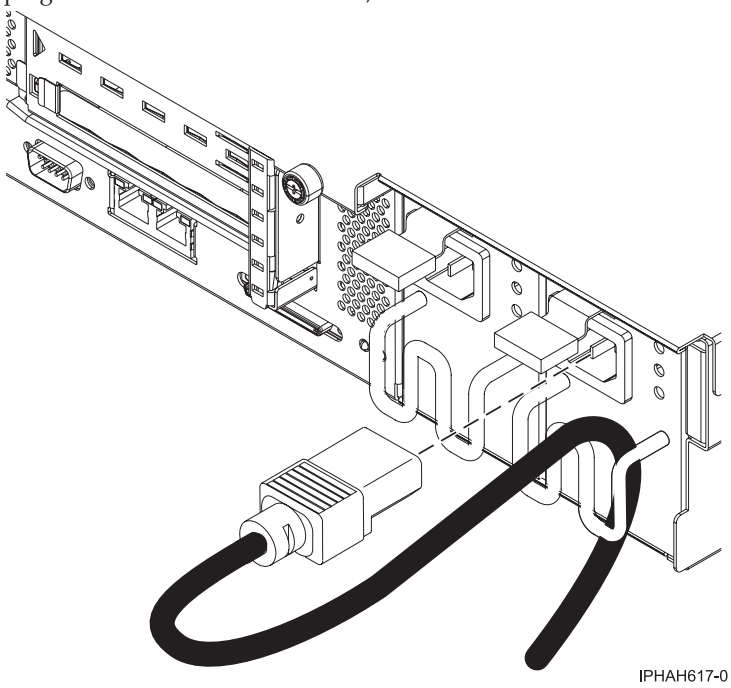
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

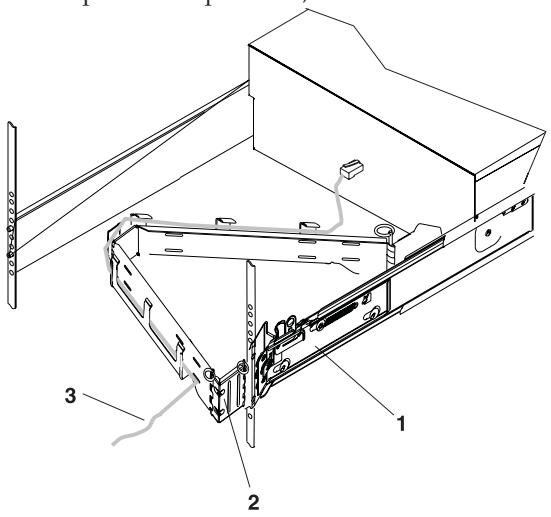
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

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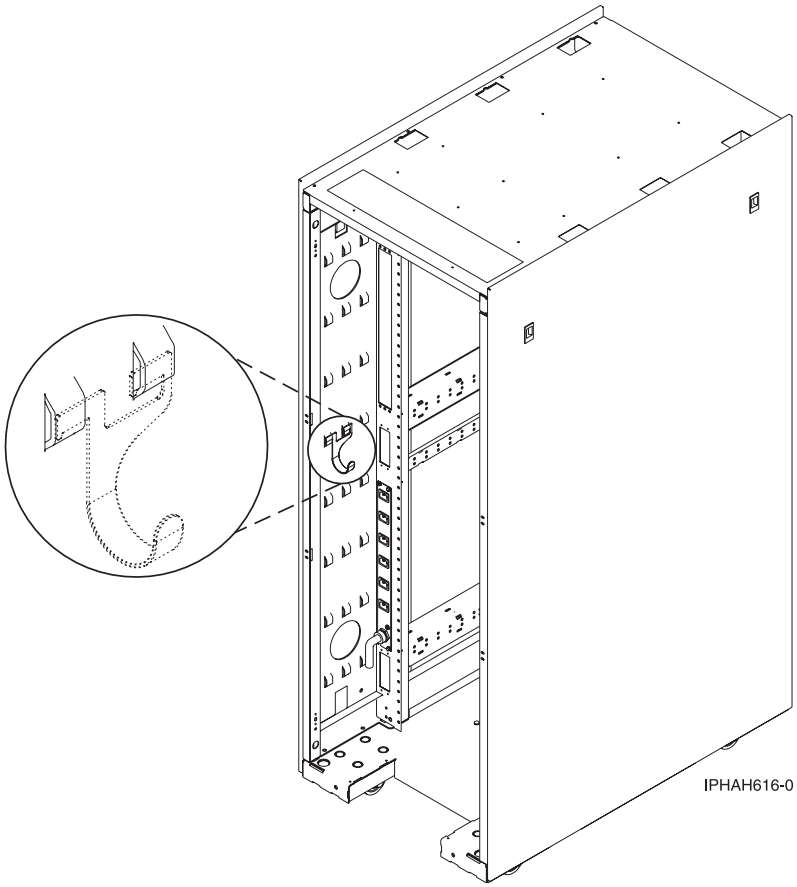
__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling the Operations Console attachment for model 9406-520, 9406-525, or 9407-515

Learn how to connect the Operations Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, and route the cables.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Operations Console. Choose from the options below.

__ **Option 1:** To connect the Operations Console cable (directly attached):

- __ Shut down and unplug the PC that will serve as the system console.
- __ Locate the Operations Console cable (97H7557 or 39J5835). Connect the Operations Console cable to the corresponding connector on the 2793 or 2794 adapter in the appropriate position on the back of the server.
  - Position C3 for the models 520, 525, and 515
  - Position C2 for the models 550 and 570
- __ Connect the other end of the Operations Console cable to the first or only system port, which is located on the back of the PC that is being used as the console.

__ **Option 2:** To connect the Ethernet cable (on a network (LAN)):

- __ Shut down and unplug the PC that will serve as the system console.

Connecting the Operations Console. Choose from the options below.

__ Connect an Ethernet or token-ring cable from the PC that will serve as the system console to your local network. Connect another network cable from the same local network to the first embedded Ethernet port (P1-T5) or the adapter card in the appropriate position on the back of the server.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

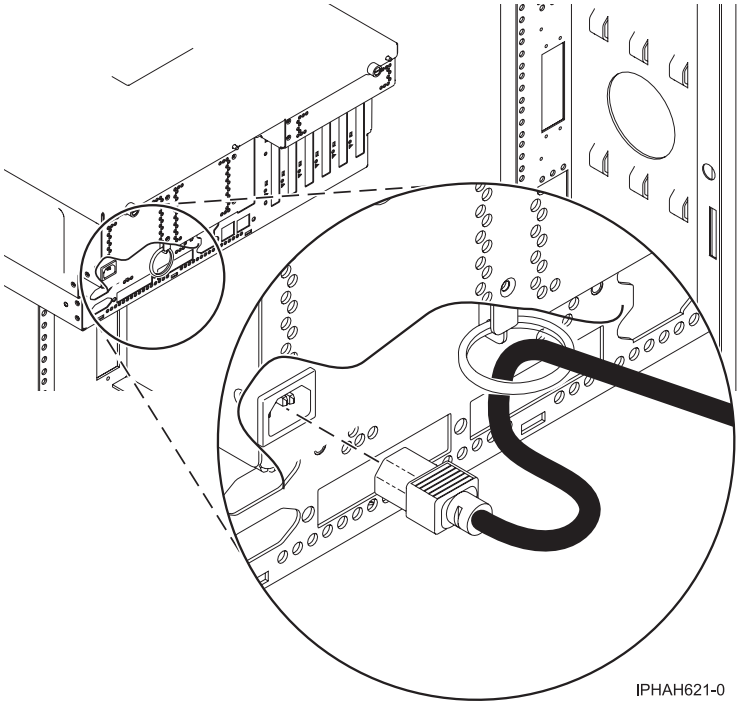
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

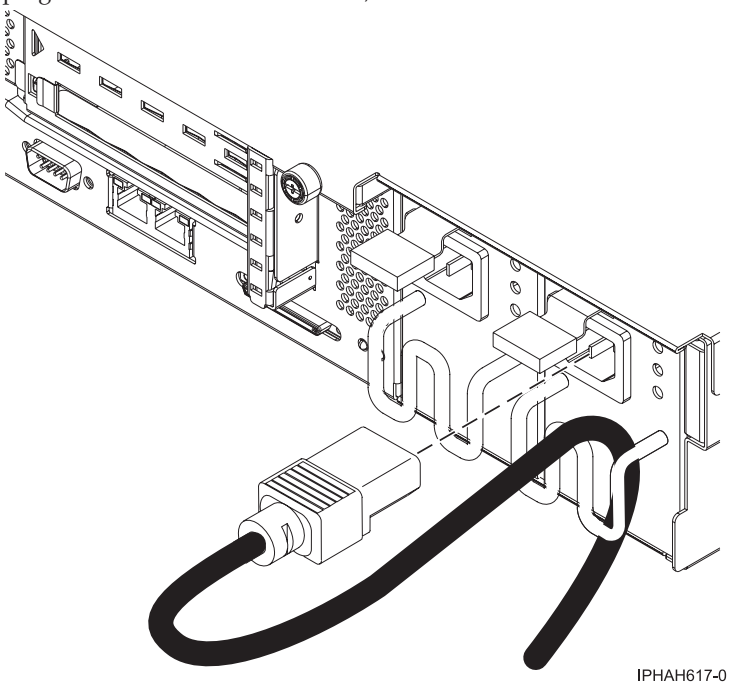
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters. If the cable did not come with your server, you will have to supply it.

If you do not have any external cables to connect to the adapters on the back of your server or expansion unit, continue with the next section.

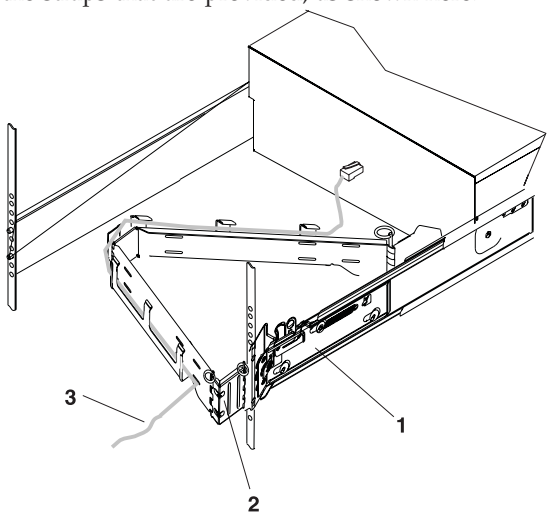
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

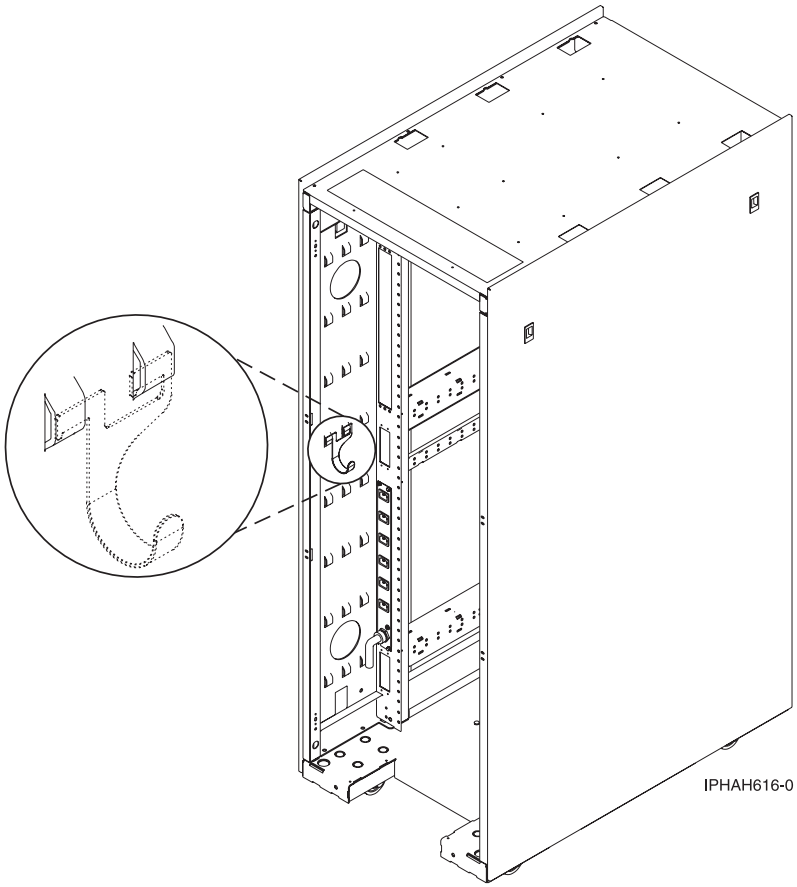
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a Thin Console

Learn how to connect the Thin Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Thin Console

__ Complete the setup instructions that were provided with the Thin Console, such as:
- Connect the keyboard, mouse, power cable, and Ethernet cable to the ports on the Thin Console.
- Plug in the monitor, and power it on.
- Plug in the Thin Console. It automatically powers on.

__ Select the keyboard language, and then press Enter.

Connecting the Thin Console

__ Connect the other end of the Ethernet cable directly to the HMC port (either HMC 1 or HMC 2) on the server. Connections and ports are labeled to facilitate the setup process.

Restrictions:

- Do not attach another Thin Console or an HMC to the remaining HMC port.
- The Thin Console is not available on an Ethernet network, even if the server is already connected.

Note: If you are connecting the Thin Console to an existing server, the DST Sign-on window might display.

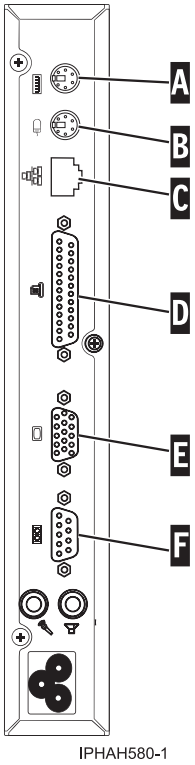


Figure 3. Back view of a Thin Console for System i5

Letter	Description
A	Keyboard port
B	Mouse port
C	10/100 BaseT Ethernet port
D	Parallel port
E	Monitor port
F	Serial port

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBM System i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter into position C3.

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

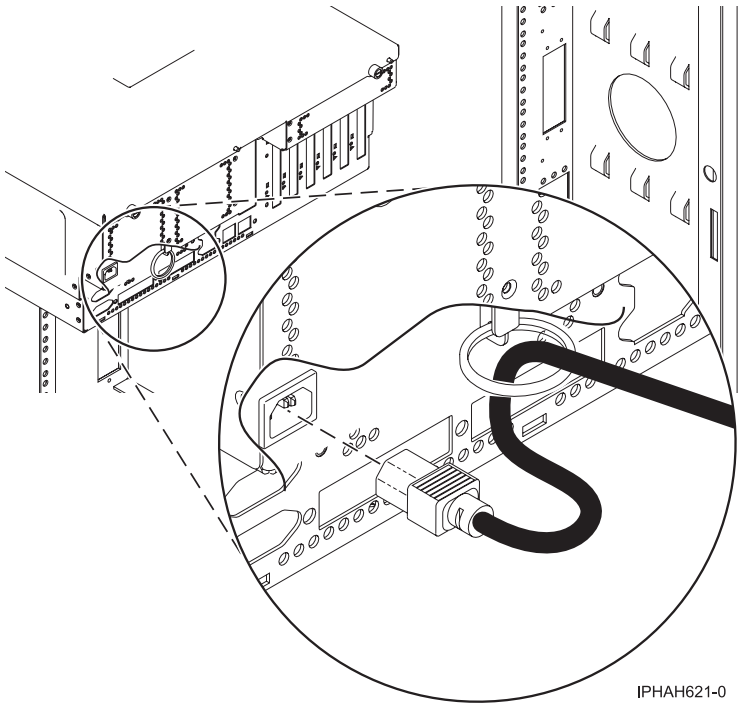
__ Do you have a PCI Cryptographic Coprocessor card?

- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

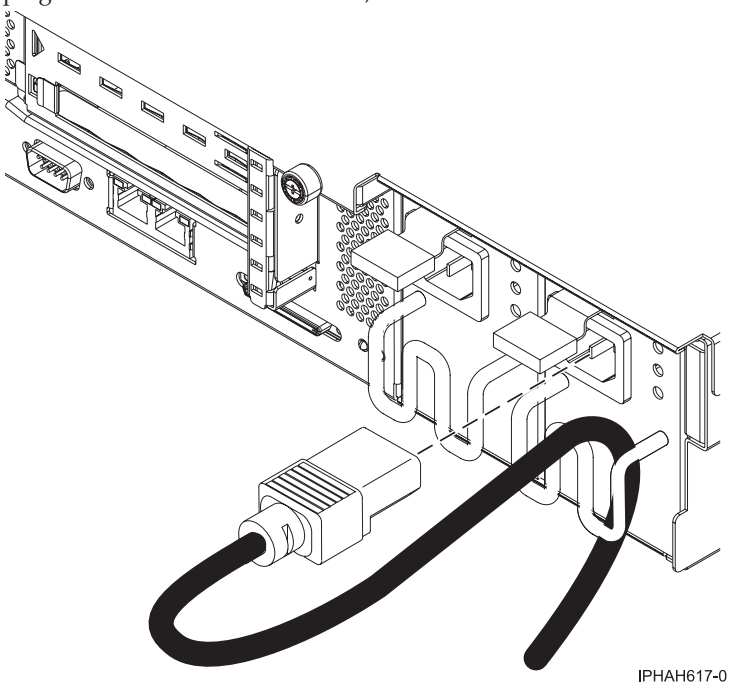
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, use the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

Routing the cables through the cable-management arm

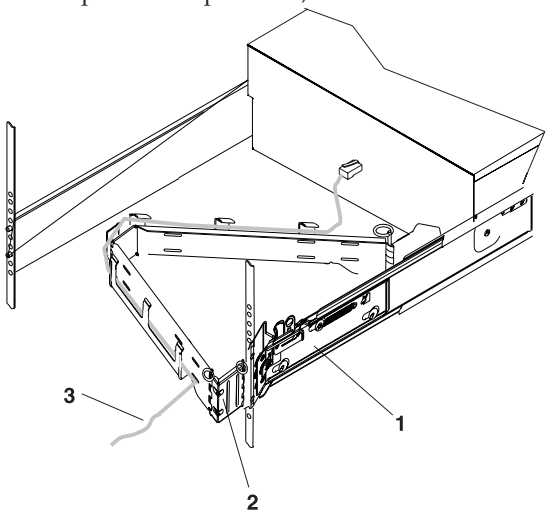
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.

Note:

1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

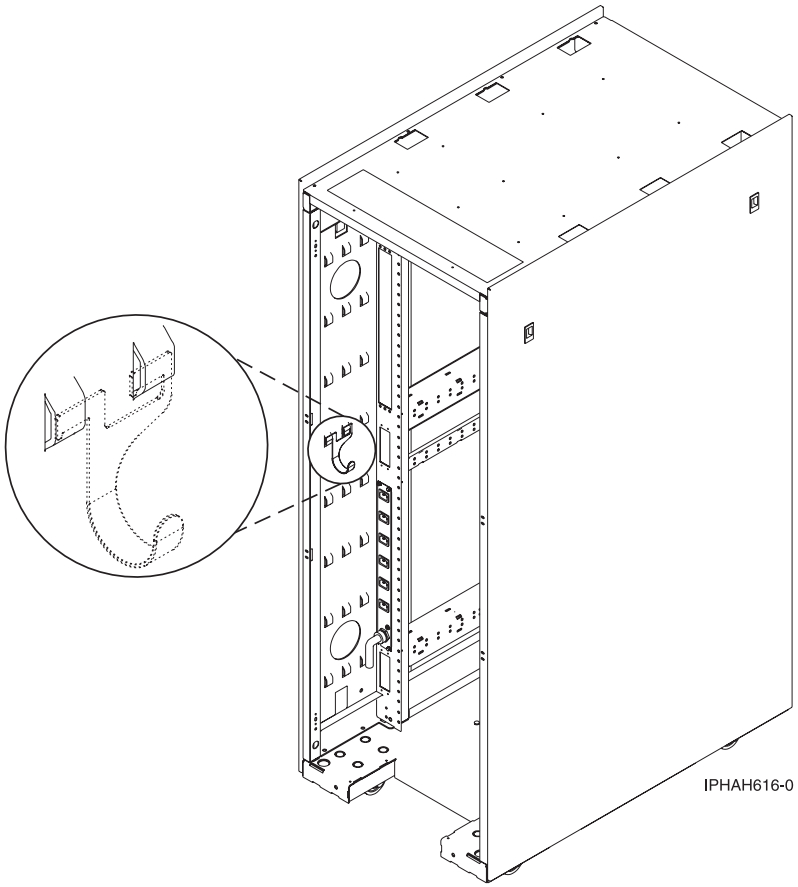
__ When prompted, enter a new HMC access password. This password is case sensitive.

__ Press the white Power On button. There is a short delay of approximately 5 to 20 minutes until the server powers on. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a twinaxial console

Learn how to connect the twinaxial cable, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the twinaxial cable

__ On the back of the server, locate the position that contains adapter 2746. This is your twinaxial adapter. The adapter should be in the appropriate position.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

__ Locate the 8-port twinaxial attachment cable (part number 21F5093). Attach the cable to the connector on the 2746 twinaxial adapter.

__ Connect a twinaxial cable from the workstation that you will use as the system console to port 0 on the 8-port twinaxial attachment cable.
Note: The workstation address of your console must be set to 0. To set the address, see the reference material that was included with your workstation.

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

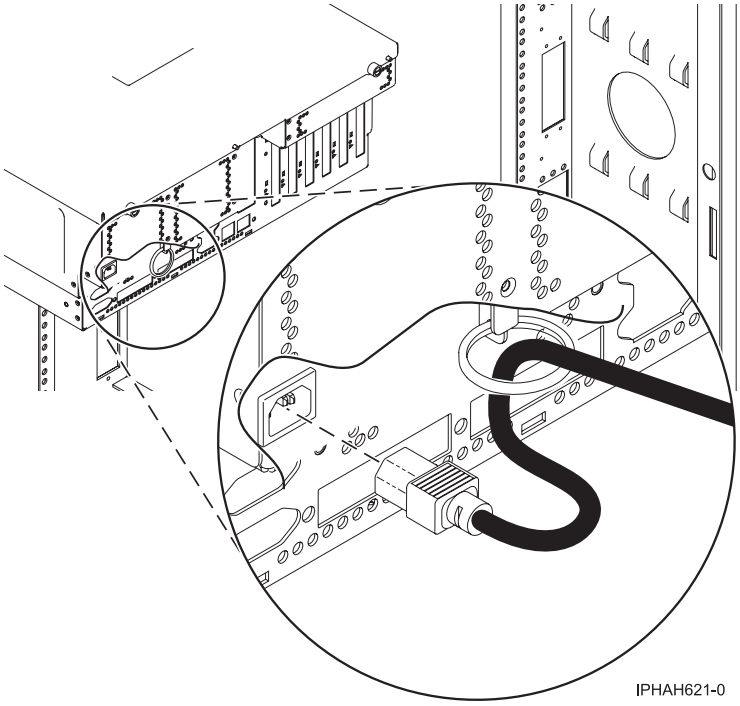
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

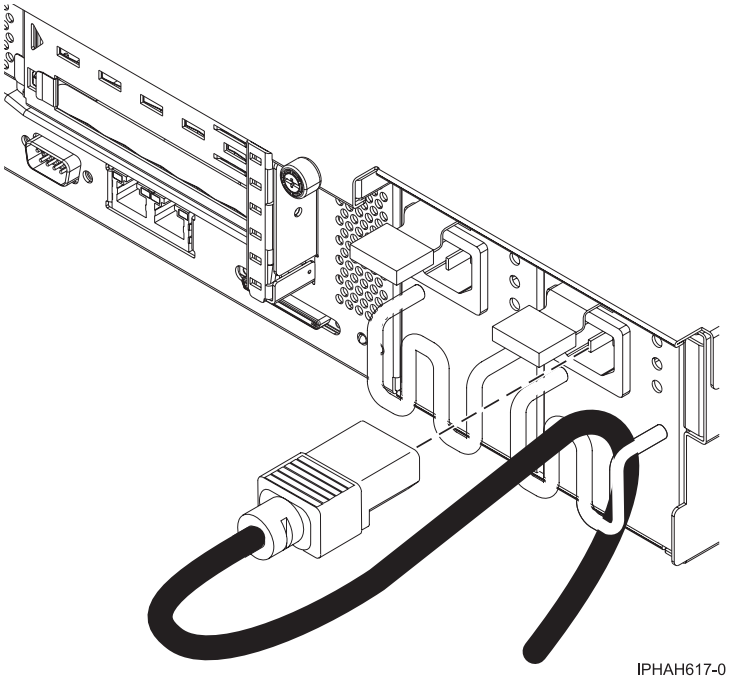
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

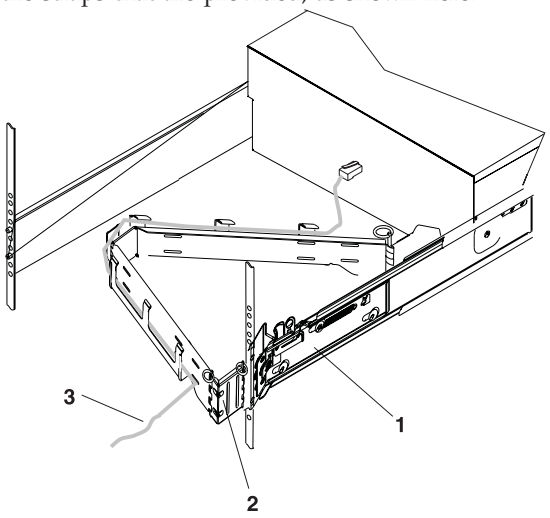
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in and turn on your console.

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.
Note:

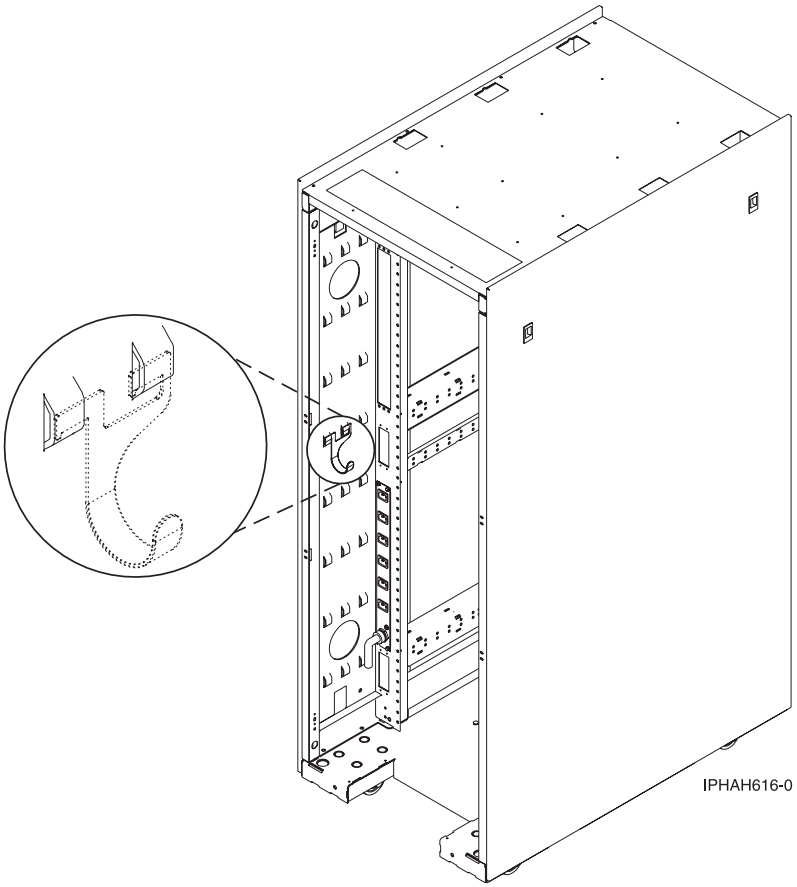
1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

__ Press the white Power On button. There is a short delay until the server powers on, approximately 5 to 20 minutes. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling your model 9407-515 with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Cabling a model 9406-520, 9406-525, or 9407-515 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

Tip: These instructions also apply to users who will use the Virtual Partition Manager.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

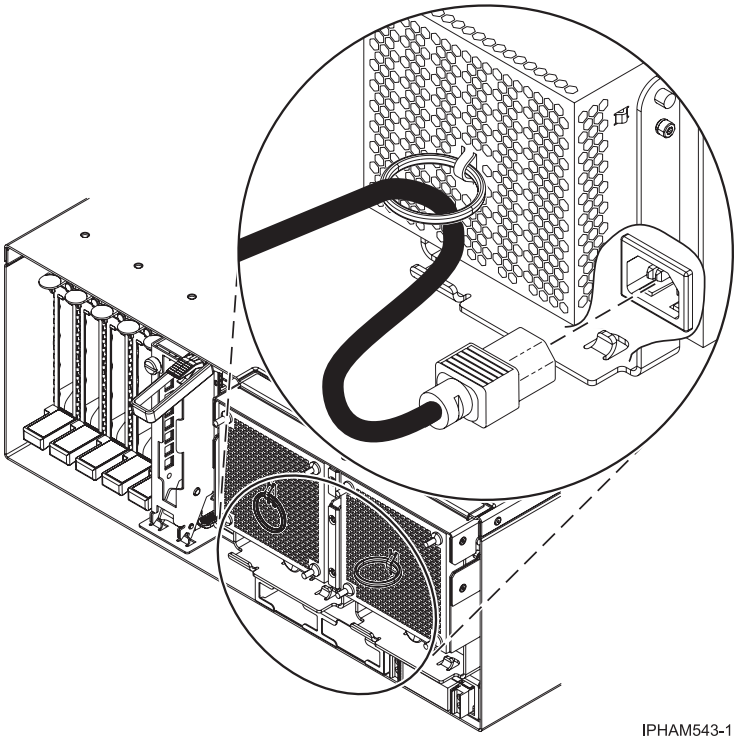
Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

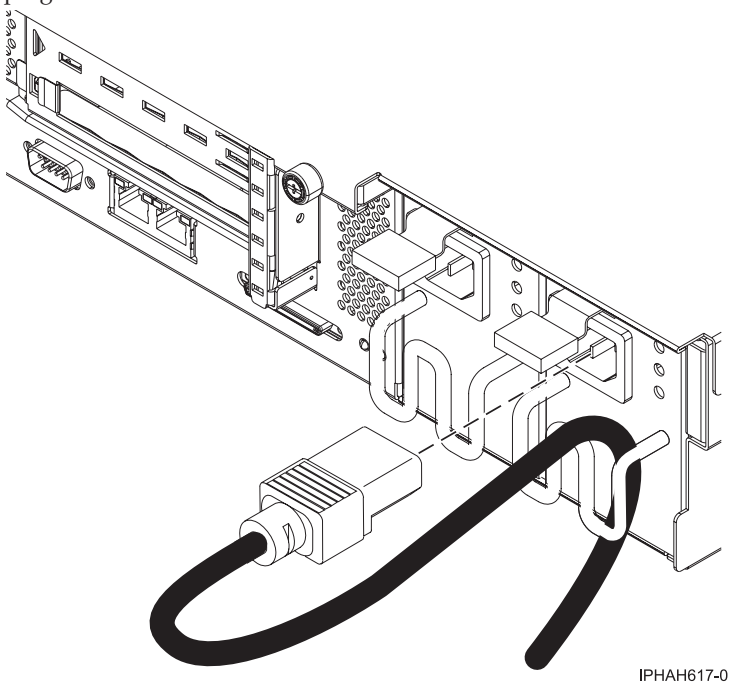
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

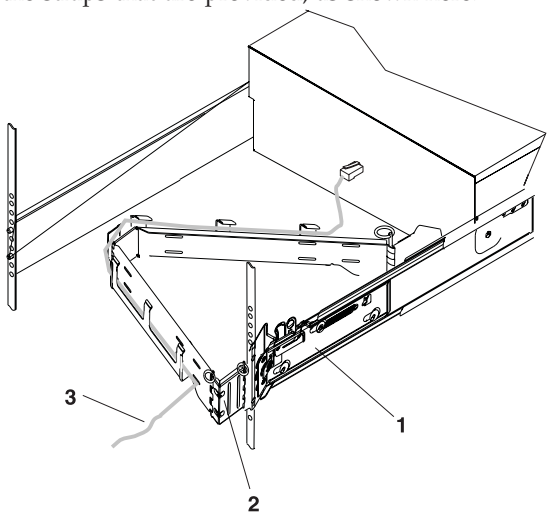
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

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__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

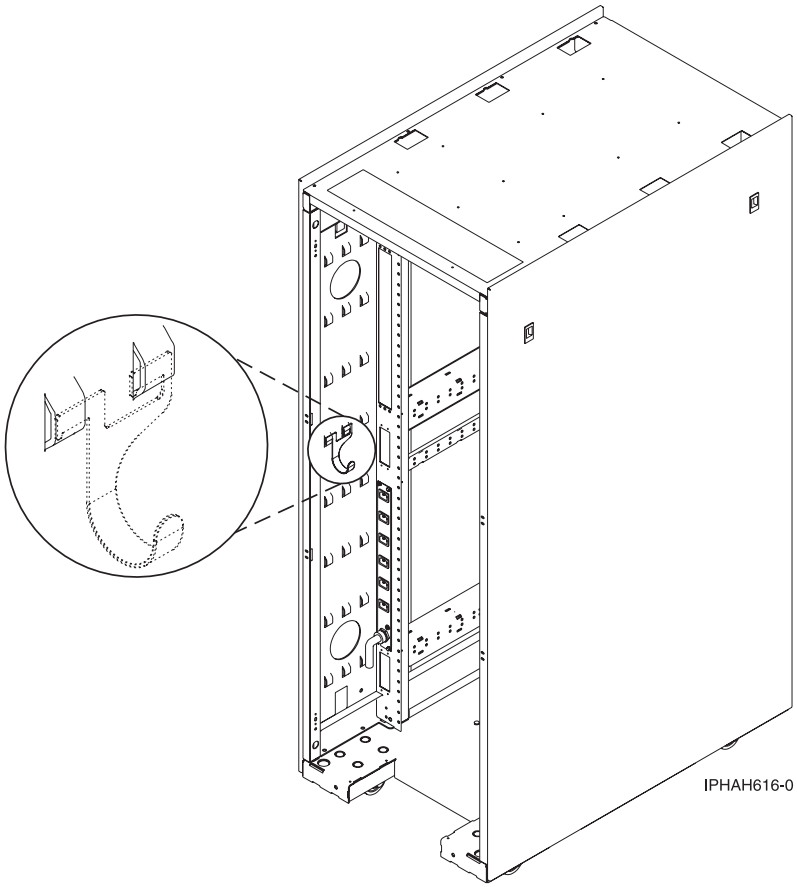
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9406-520, 9406-525, or 9407-515 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

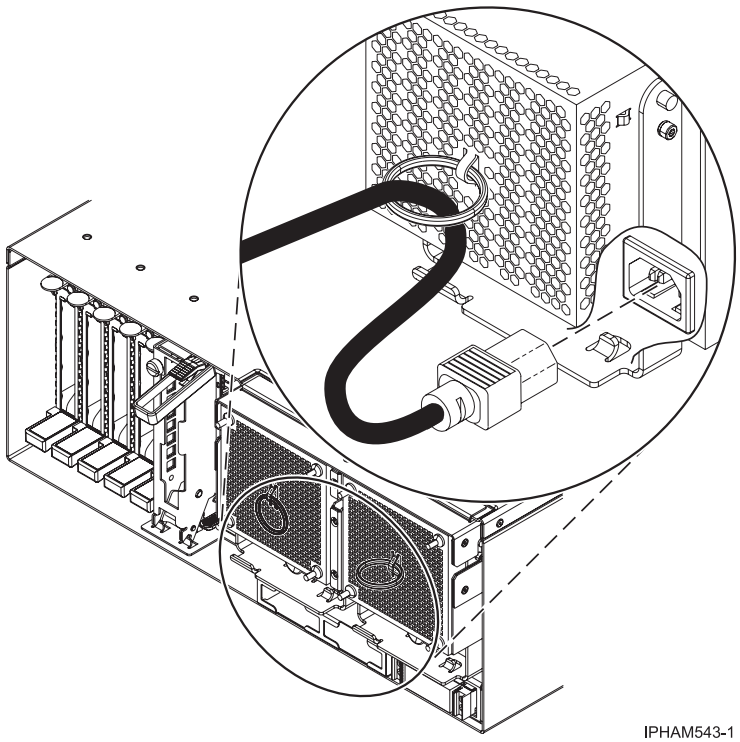
__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

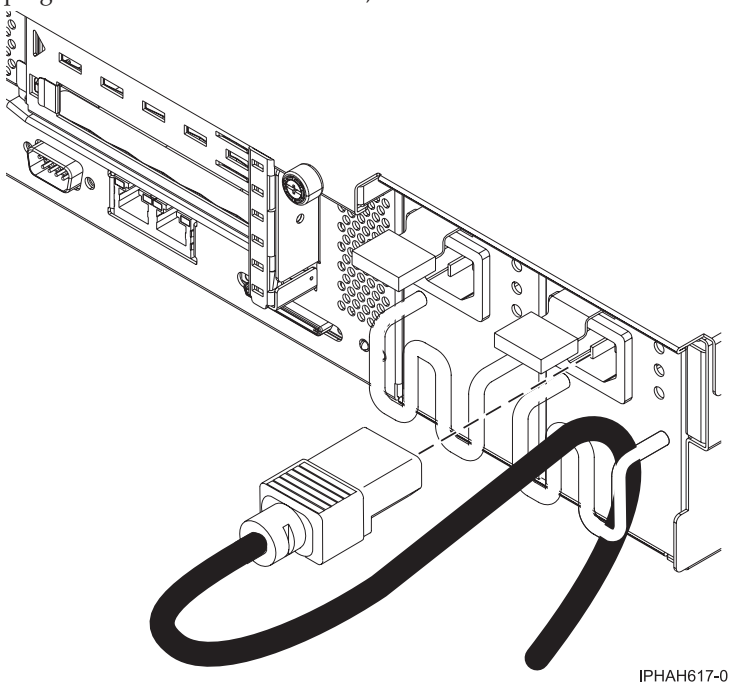
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

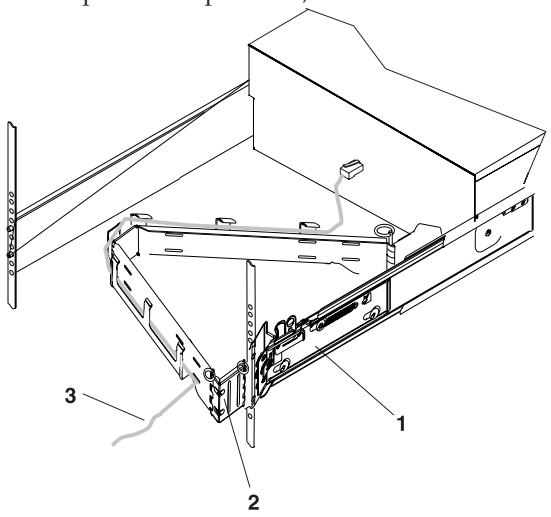
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

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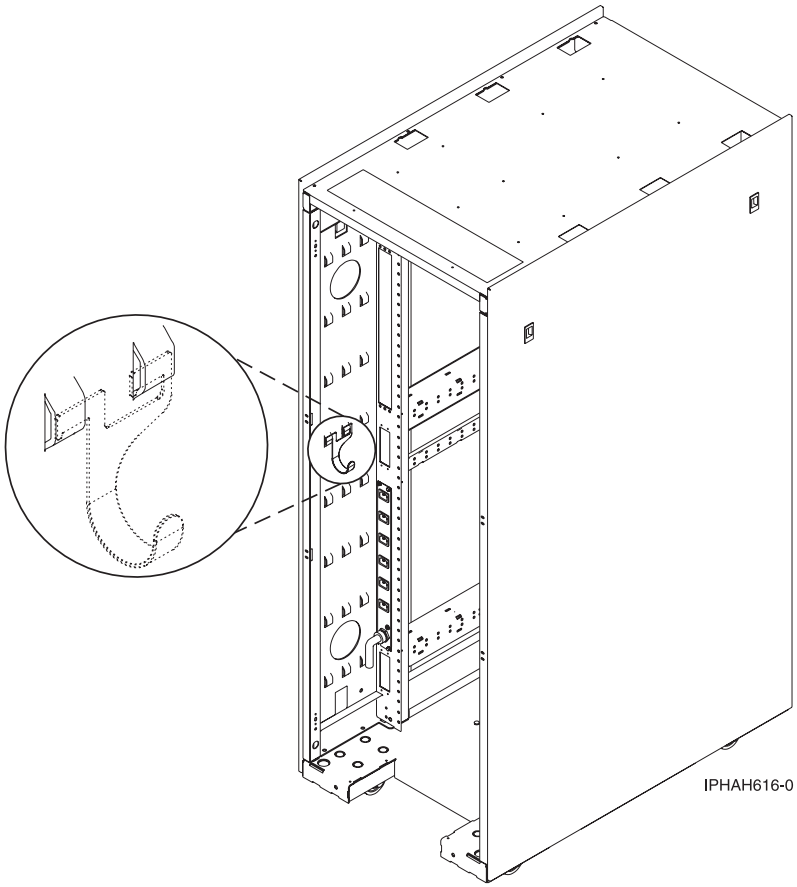
__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling the Operations Console attachment for model 9406-520, 9406-525, or 9407-515

Learn how to connect the Operations Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, and route the cables.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Operations Console. Choose from the options below.

__ **Option 1:** To connect the Operations Console cable (directly attached):

  __ Shut down and unplug the PC that will serve as the system console.

  __ Locate the Operations Console cable (97H7557 or 39J5835). Connect the Operations Console cable to the corresponding connector on the 2793 or 2794 adapter in the appropriate position on the back of the server.

  - Position C3 for the models 520, 525, and 515
  - Position C2 for the models 550 and 570

  __ Connect the other end of the Operations Console cable to the first or only system port, which is located on the back of the PC that is being used as the console.

__ **Option 2:** To connect the Ethernet cable (on a network (LAN)):

  __ Shut down and unplug the PC that will serve as the system console.

Connecting the Operations Console. Choose from the options below.

__ Connect an Ethernet or token-ring cable from the PC that will serve as the system console to your local network. Connect another network cable from the same local network to the first embedded Ethernet port (P1-T5) or the adapter card in the appropriate position on the back of the server.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

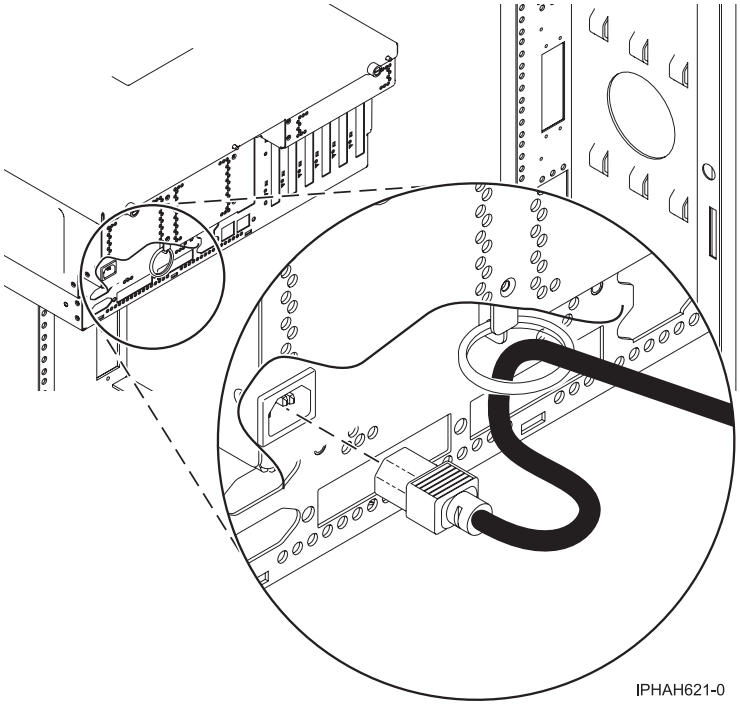
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

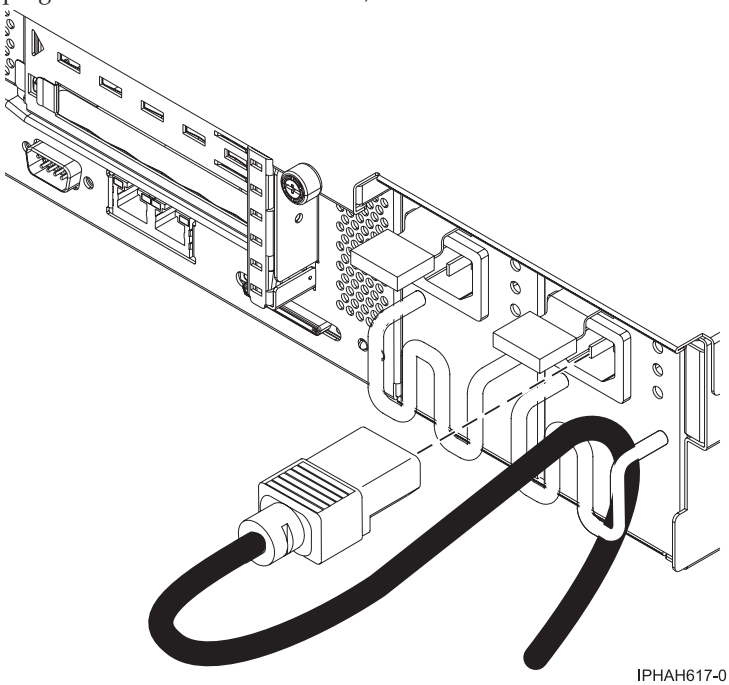
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters. If the cable did not come with your server, you will have to supply it.

If you do not have any external cables to connect to the adapters on the back of your server or expansion unit, continue with the next section.

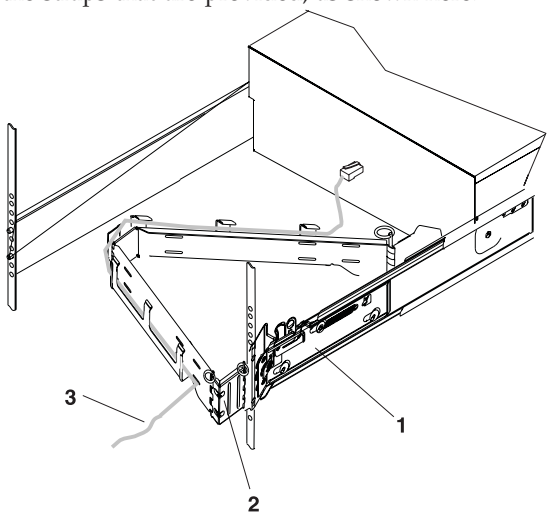
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

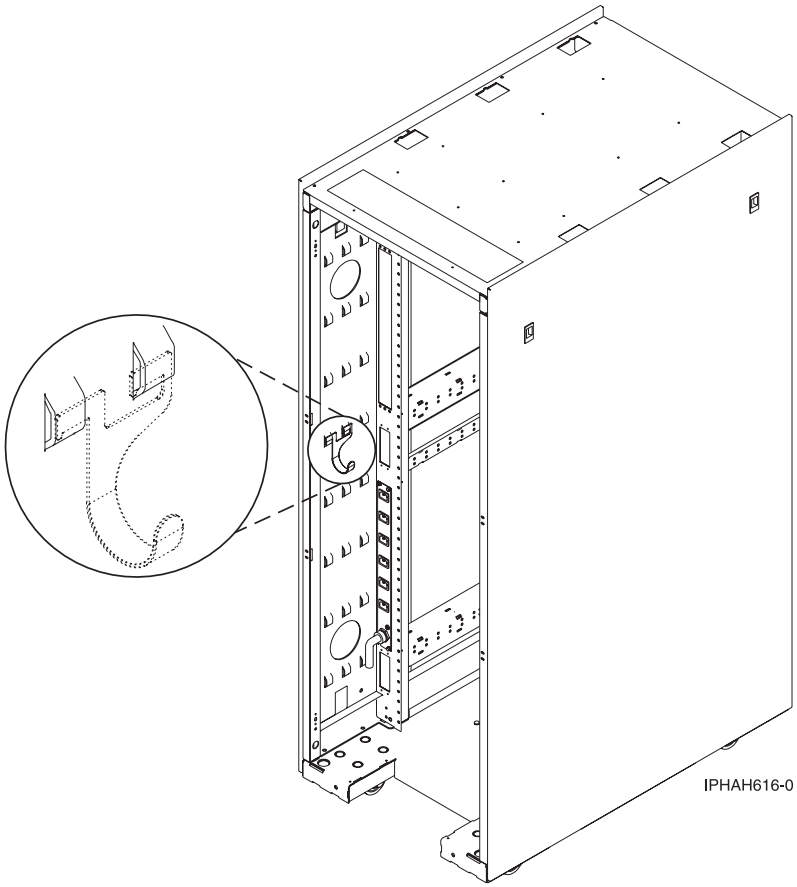
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a Thin Console

Learn how to connect the Thin Console, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the Thin Console

__ Complete the setup instructions that were provided with the Thin Console, such as:
- Connect the keyboard, mouse, power cable, and Ethernet cable to the ports on the Thin Console.
- Plug in the monitor, and power it on.
- Plug in the Thin Console. It automatically powers on.

__ Select the keyboard language, and then press Enter.

Connecting the Thin Console

__ Connect the other end of the Ethernet cable directly to the HMC port (either HMC 1 or HMC 2) on the server. Connections and ports are labeled to facilitate the setup process.

Restrictions:

- Do not attach another Thin Console or an HMC to the remaining HMC port.
- The Thin Console is not available on an Ethernet network, even if the server is already connected.

Note: If you are connecting the Thin Console to an existing server, the DST Sign-on window might display.

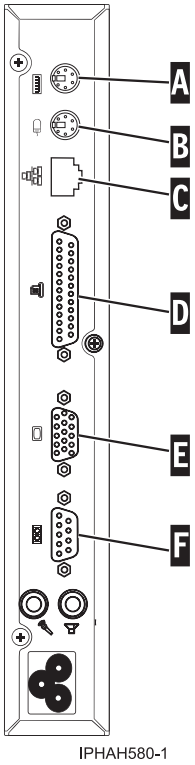


Figure 4. Back view of a Thin Console for System i5

Letter	Description
A	Keyboard port
B	Mouse port
C	10/100 BaseT Ethernet port
D	Parallel port
E	Monitor port
F	Serial port

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBM System i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter into position C3.

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

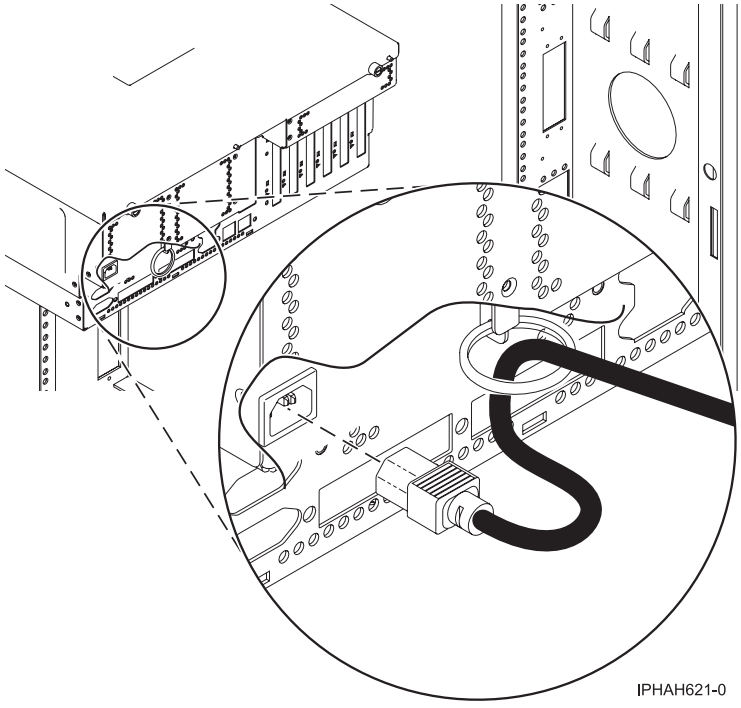
__ Do you have a PCI Cryptographic Coprocessor card?

- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

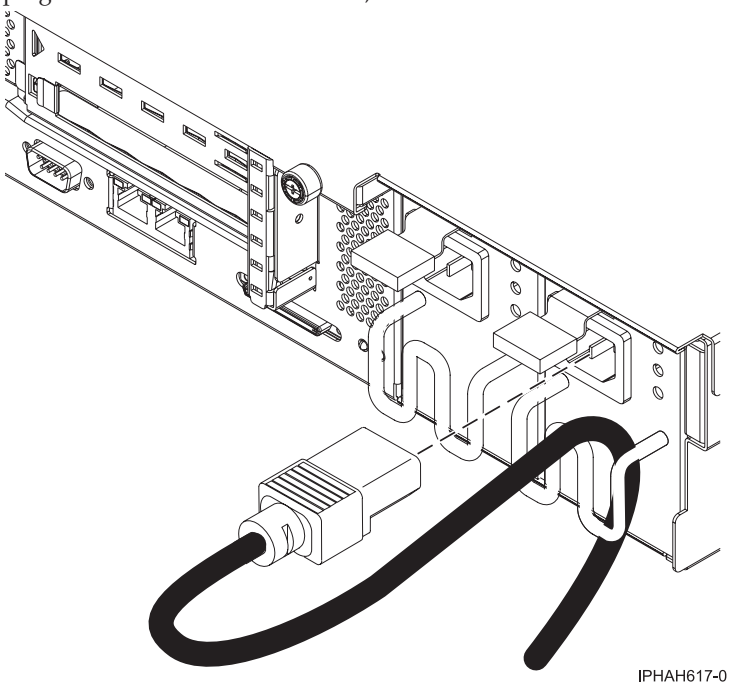
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, use the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

Routing the cables through the cable-management arm

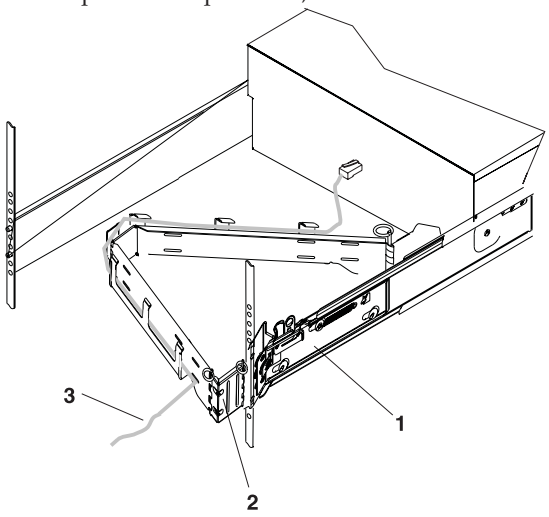
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.

Note:

1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

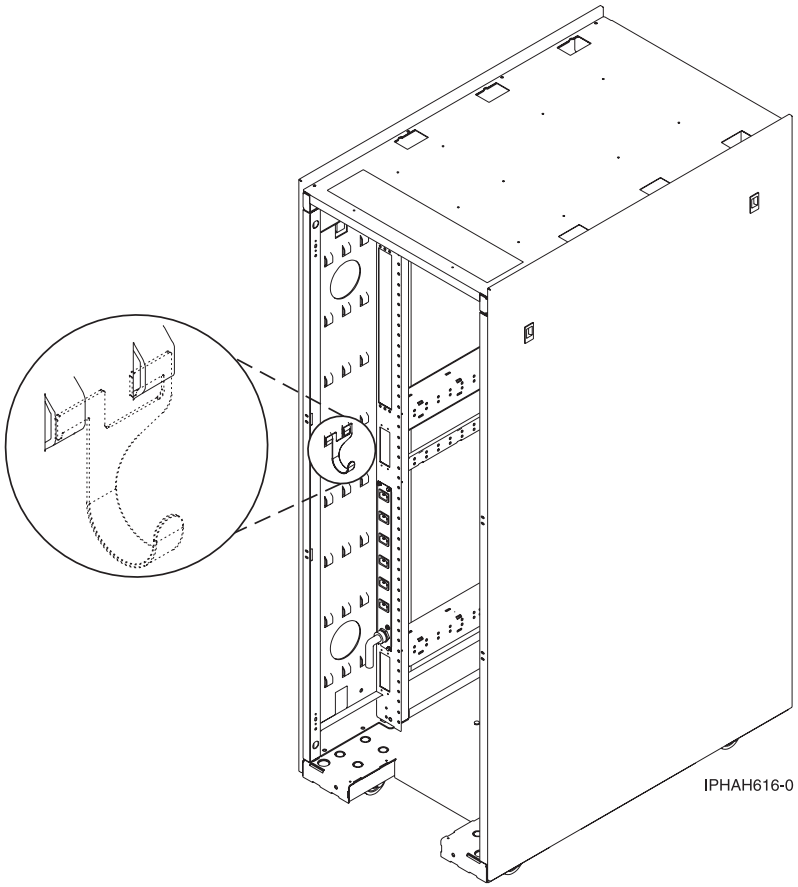
__ When prompted, enter a new HMC access password. This password is case sensitive.

__ Press the white Power On button. There is a short delay of approximately 5 to 20 minutes until the server powers on. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a twinaxial console

Learn how to connect the twinaxial cable, power cords, external cables, and the optional electronic customer support cable, cable the expansion units, attach devices, install the PCI Cryptographic Coprocessor card, route the cables, and start the server.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Connecting the twinaxial cable

__ On the back of the server, locate the position that contains adapter 2746. This is your twinaxial adapter. The adapter should be in the appropriate position.

- Position C5 or C2 for the models 520, 525, and 515
- Position C4 for the model 550
- Position C4 or C6 for the model 570

__ Locate the 8-port twinaxial attachment cable (part number 21F5093). Attach the cable to the connector on the 2746 twinaxial adapter.

__ Connect a twinaxial cable from the workstation that you will use as the system console to port 0 on the 8-port twinaxial attachment cable.
Note: The workstation address of your console must be set to 0. To set the address, see the reference material that was included with your workstation.

Connecting the electronic customer support cable (optional)

Electronic customer support helps automate management of your server and streamline your support. Use the IBM eServer Technical Support Advantage information that is included with your server to learn about electronic customer support or see the Support for IBMSystem i Web site (http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/brandmain?brandind=5000027). You can configure electronic customer support by using the *iSeries Setup and Operations* CD that came with your server. For more information, see Service and support.

__ Connect a telephone cable to the RJ11 connector of the adapter in the appropriate position.

- Position C3 for the models 520, 525, and 515
- Position C2 for the models 550 and 570

__ Connect the other end of the telephone cable to an analog telephone jack.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Attaching devices using a system port.

Attaching devices by using a system port

__ If you have an IBM System i5 or eServer i5 server and you are connecting it to an uninterruptible power supply, the serial uninterruptible power supply conversion cable is required. For instructions, see Serial uninterruptible power supply conversion cable. **Do not plug the uninterruptible-power-supply power cord into the outlet and do not start your server.**

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Installing the PCI Cryptographic Coprocessor card

__ Do you have a PCI Cryptographic Coprocessor card?

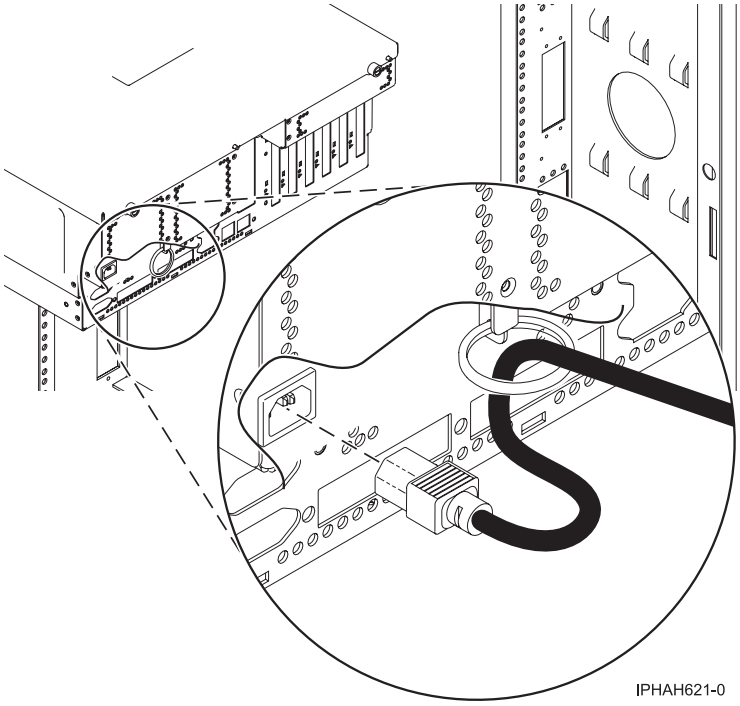
- **Yes.** Install it now using the PCI-X Cryptographic Coprocessor instructions. This card was shipped in a separate box. Return here after the card is installed.
- **No.** Proceed to the next section, Connecting the power cords.

Connecting the power cords

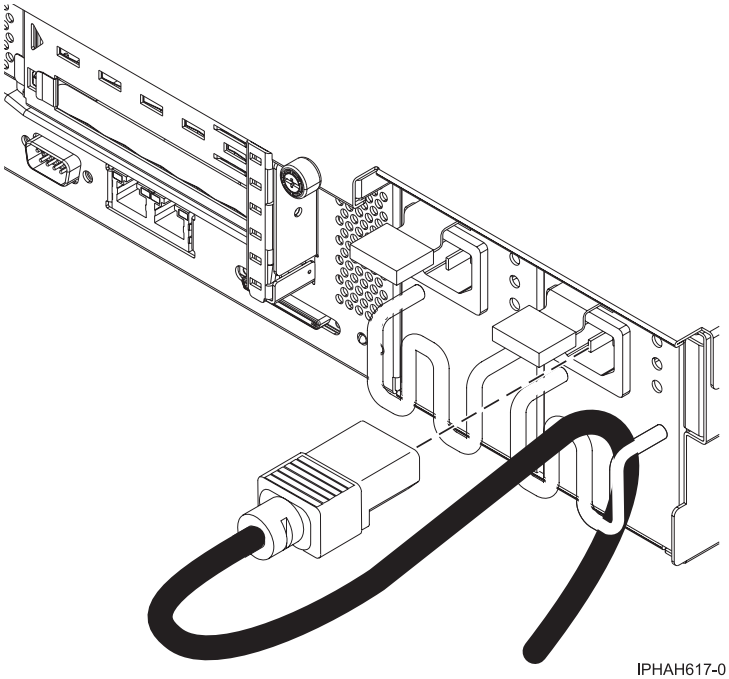
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Are you installing an uninterruptible power supply?

__ **No.** Connect the server power cords to the server. Do not plug the power cord into the power outlet. Do not start your server.

__ **Yes.** To complete the installation of the uninterruptible power supply, see the Powerware Web site.

Connecting the external cables

__ To connect the cables to the matching adapters on the back of your server, see the table in Cables and adapters.
Note: If the cable did not come with your server, you will have to supply it.

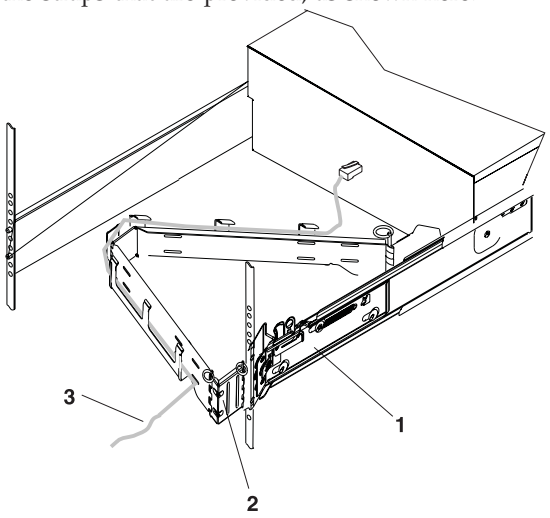
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

__ Plug in and turn on your console.

__ Plug in your server or uninterruptible power supply and attached expansion units.

__ Open the control panel door on the front of the server. The control panel should be lit and display `01 N V=F`. The server is not yet powered on.
Note:

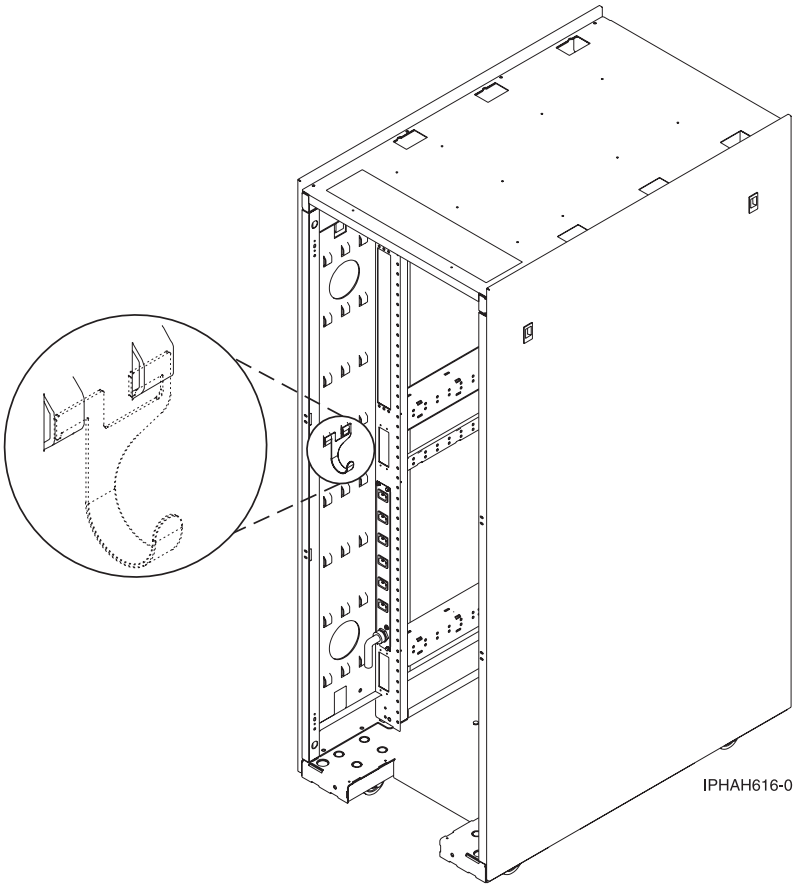
1. Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.
2. If `01 N V=F` is not displayed, you might need to change the mode. To change the mode, see Accessing the control panel functions.

__ Press the white Power On button. There is a short delay until the server powers on, approximately 5 to 20 minutes. When the server powers on, the control panel displays `01 B N V=F`. If the control panel displays `A900 2000`, the console is not connected yet.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Service and support

Expansion units

Accessing the control panel functions

Related tasks

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

PCI-X Cryptographic Coprocessor

Cables and adapters

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

Related information

Support for IBM System i

Powerware

Cabling your model 9110-510 with a console or interface

For a graphical representation of the slots and connectors, see the back view of the model.

Related reference

Back view of a model 9110-510 server

Cabling a model 9110-510 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, route the cables and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

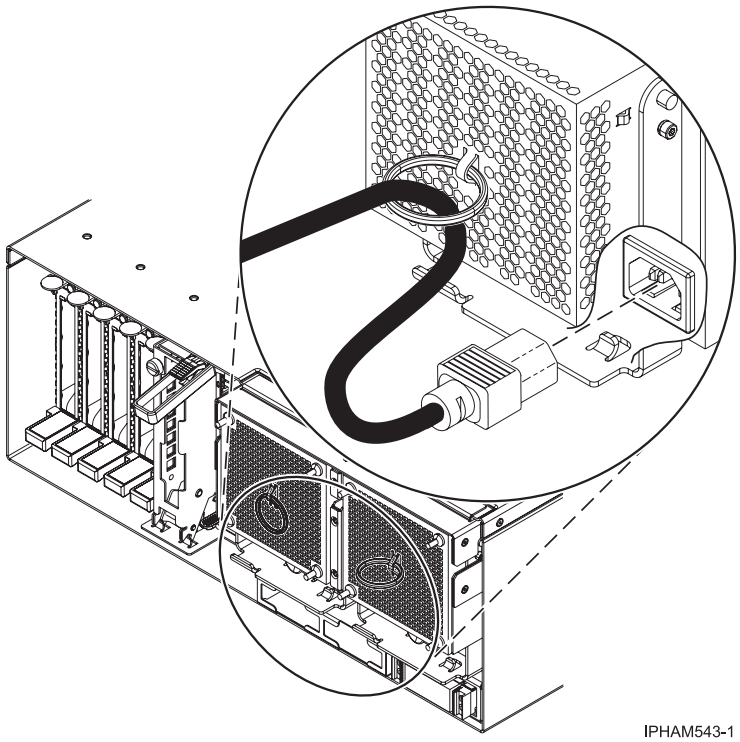
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

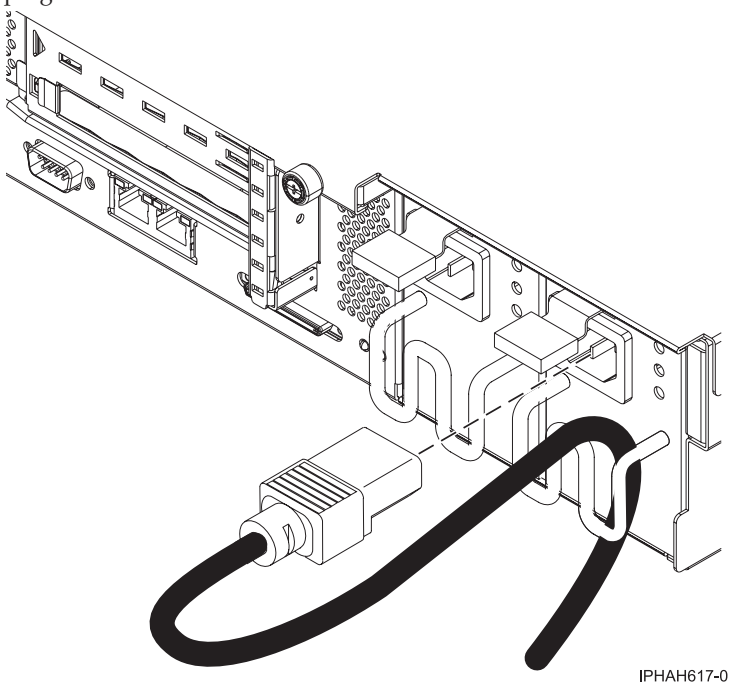
  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

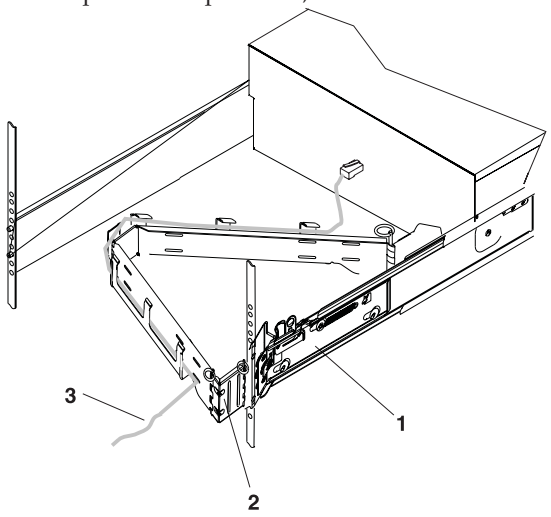
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

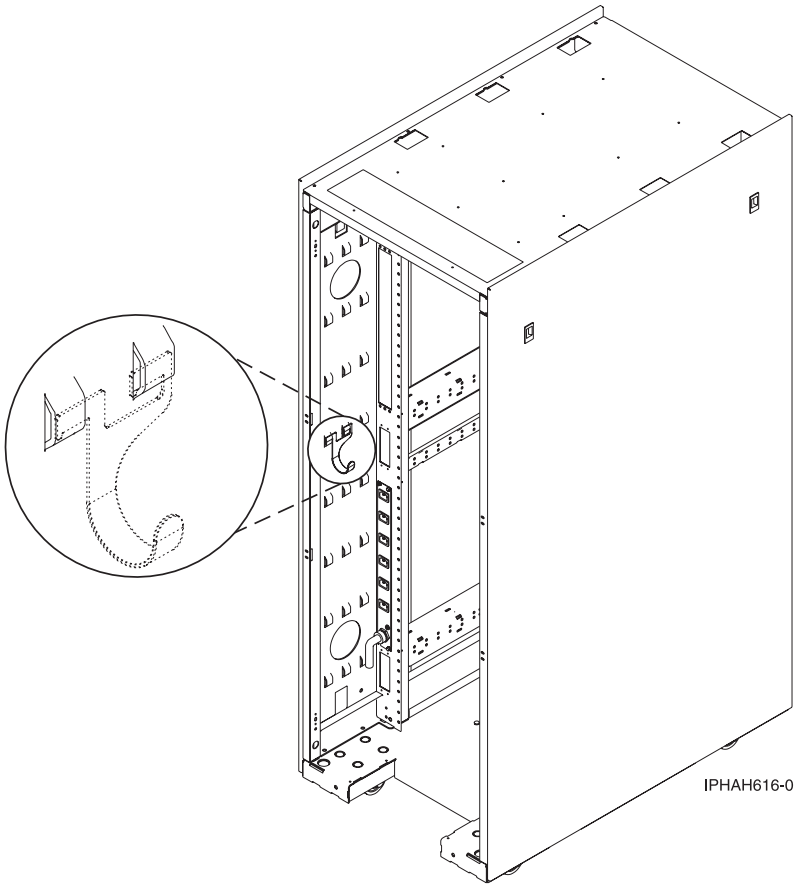
Starting your server

__ Power the system on.
Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 51x or 710 in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9110-510 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

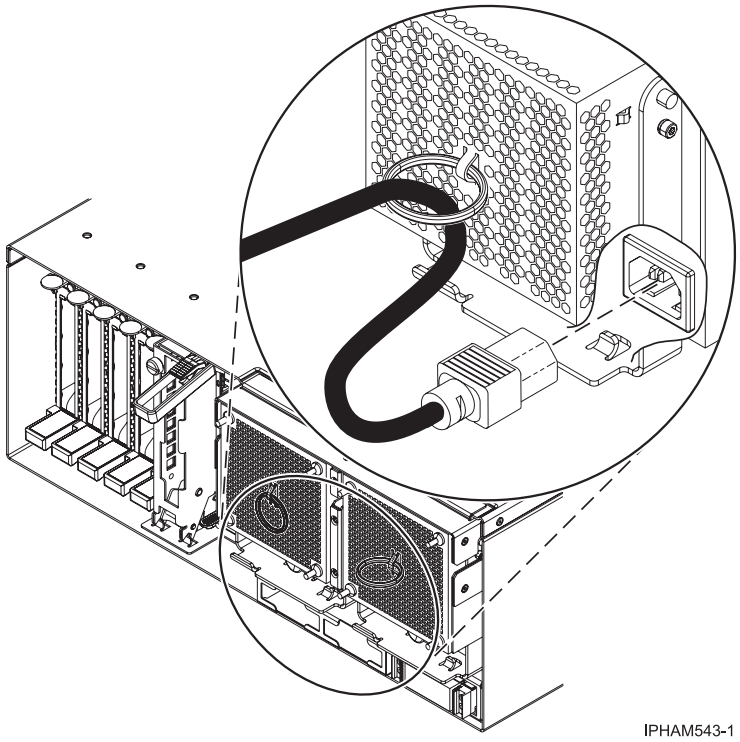
__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

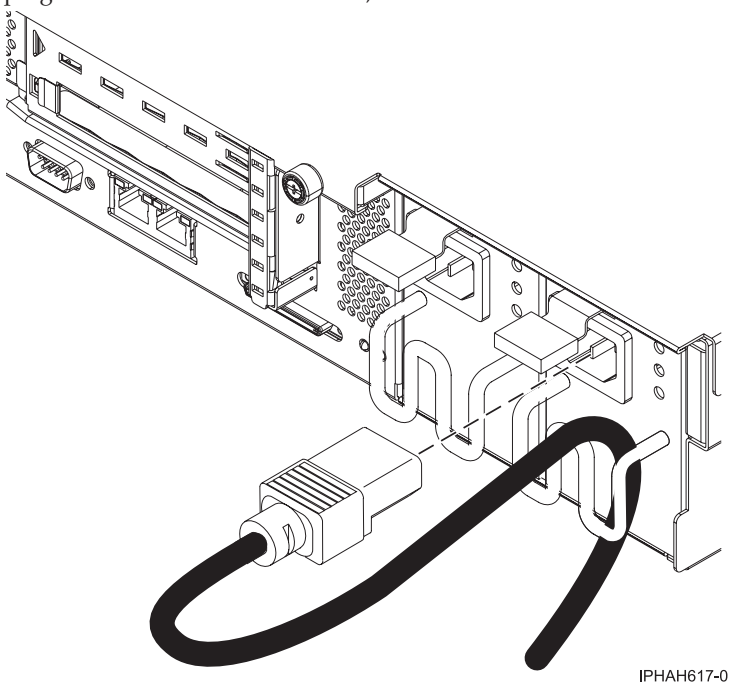
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

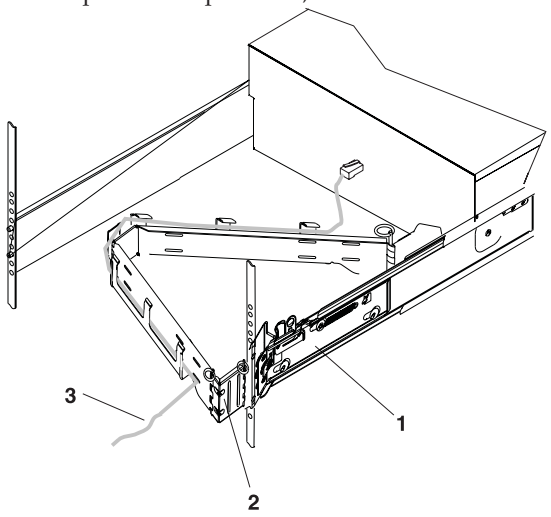
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

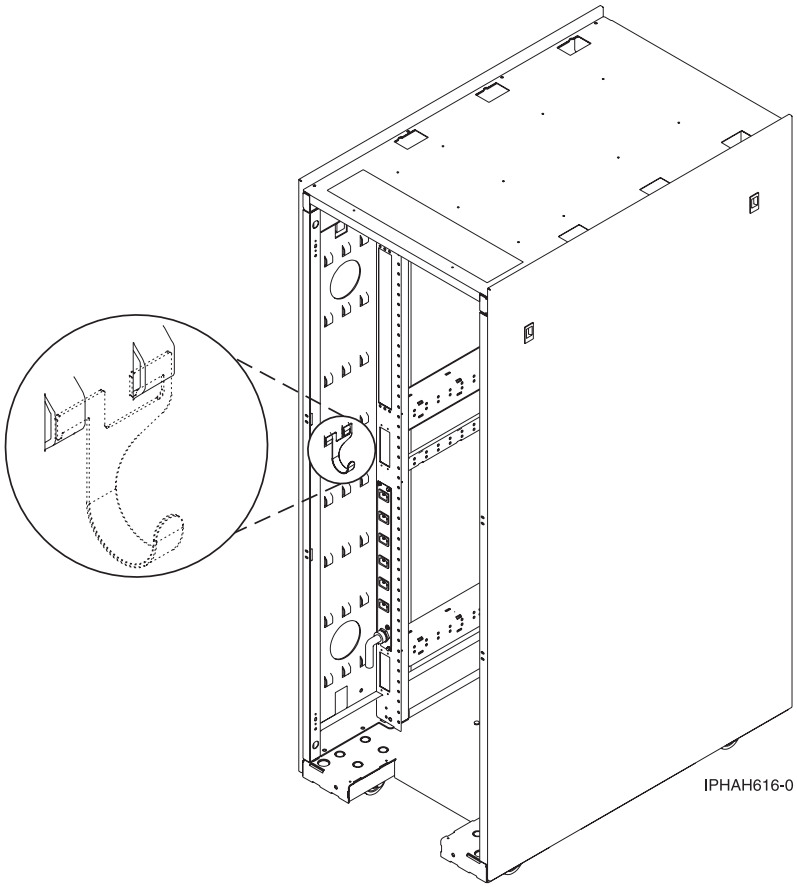
IPHAH615-0

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the model 51x or 710 in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9110-510 to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft® Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

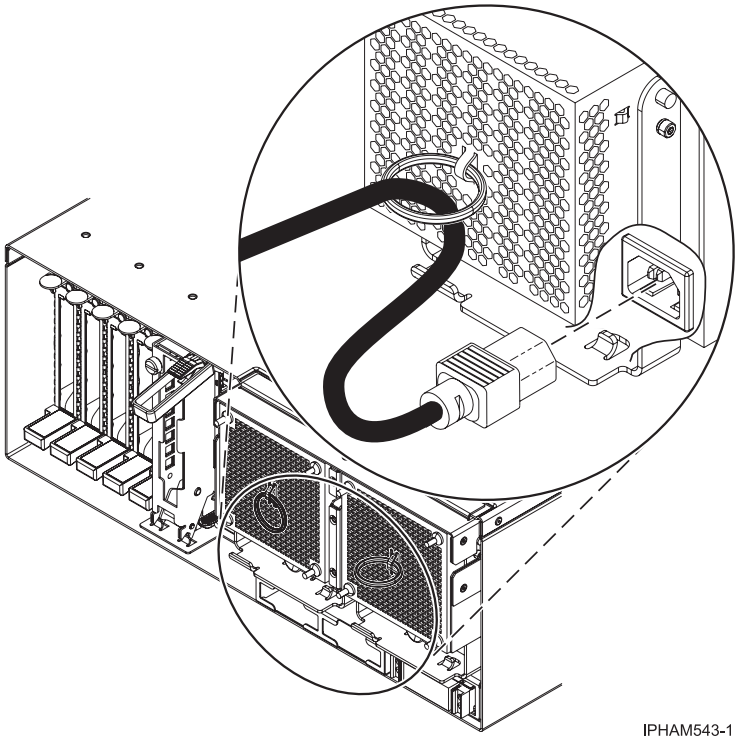
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

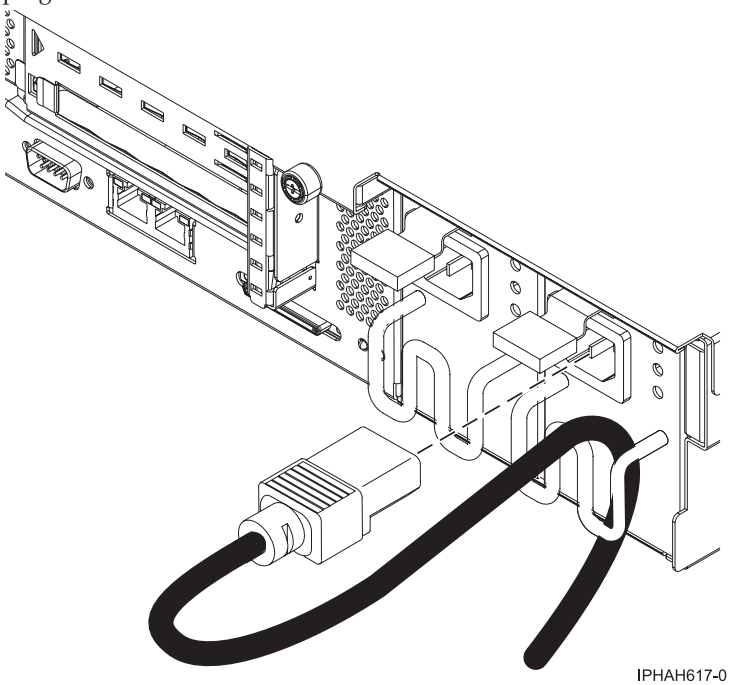
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



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__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

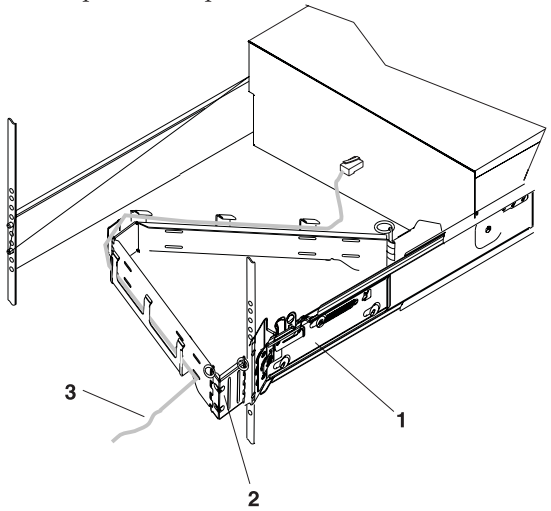
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

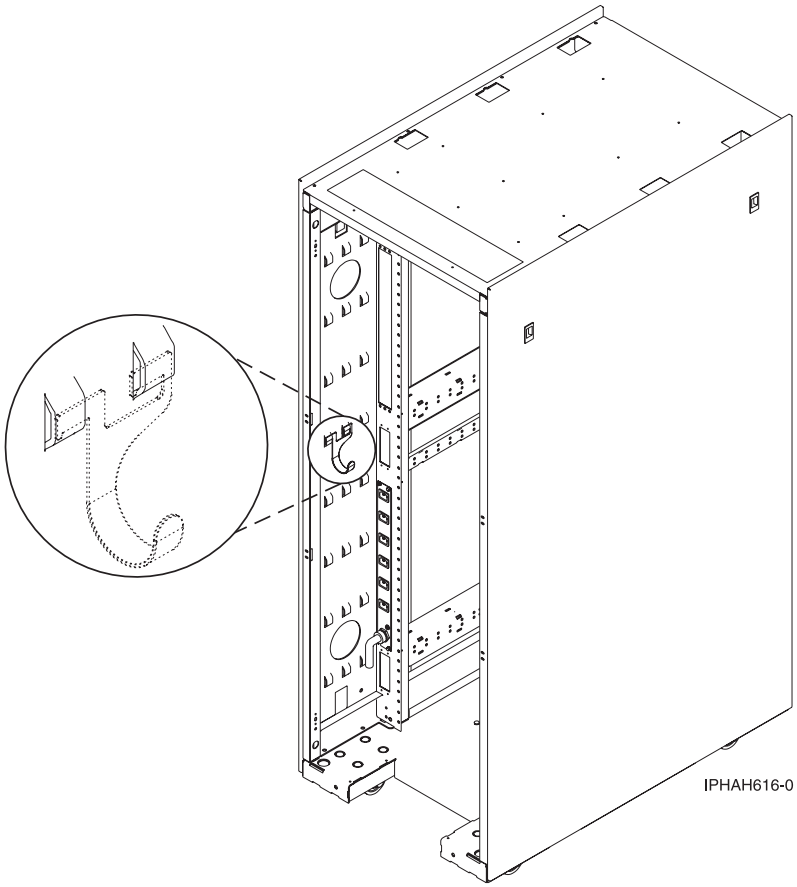
Routing the cables through the cable-management arm

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 51x or 710 in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 9110-51A with a console or interface

For a graphical representation of the slots and connectors, see the back view of the model.

Related reference

Back view of a model 9110-51A server

Cabling a model 9110-51A to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

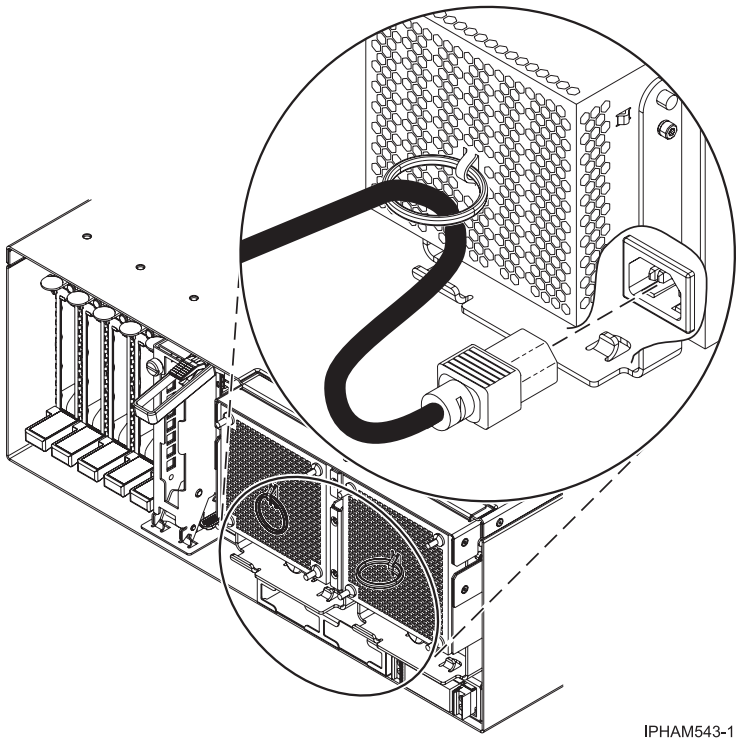
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

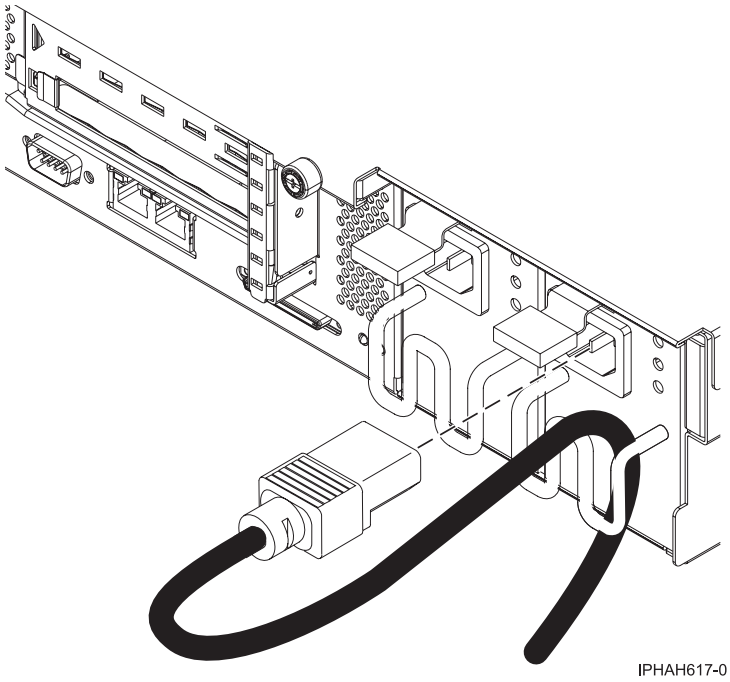
  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

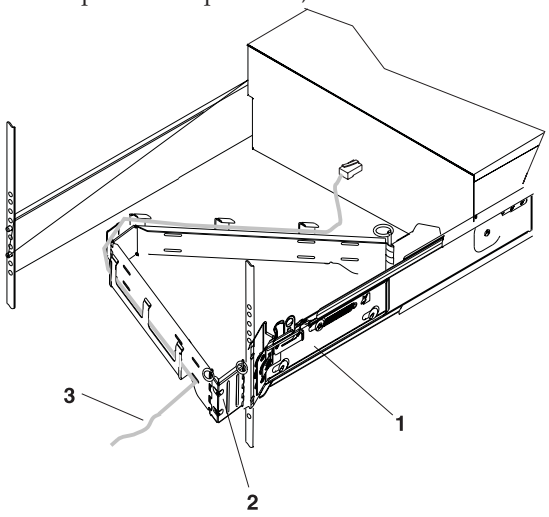
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

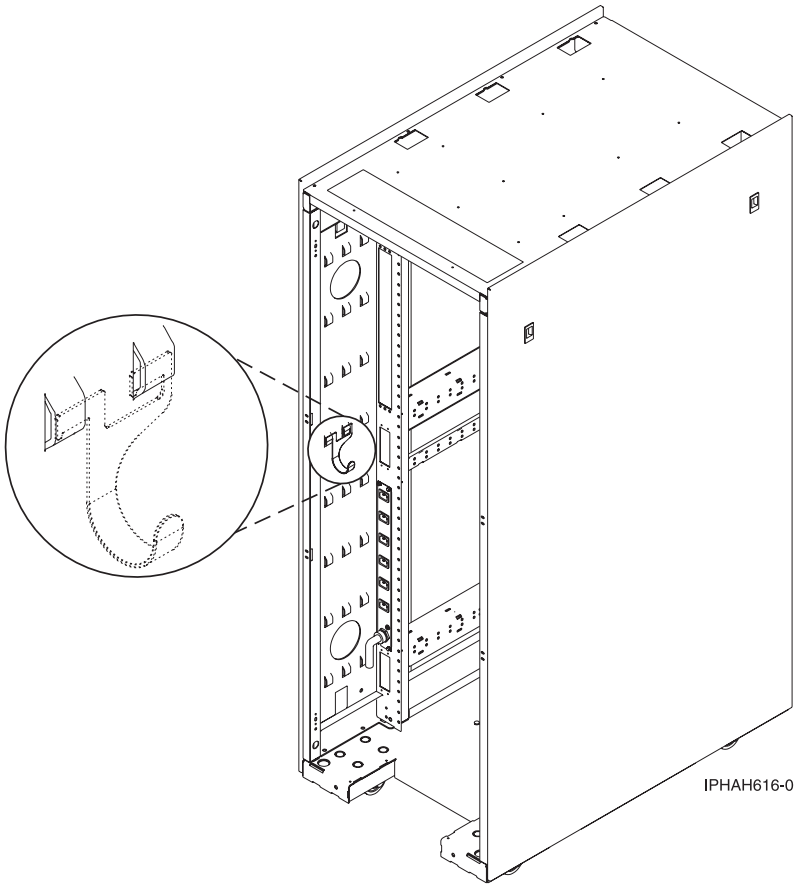
Starting your server

__ Power the system on.
Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 51x or 710 in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9110-51A and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

(D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

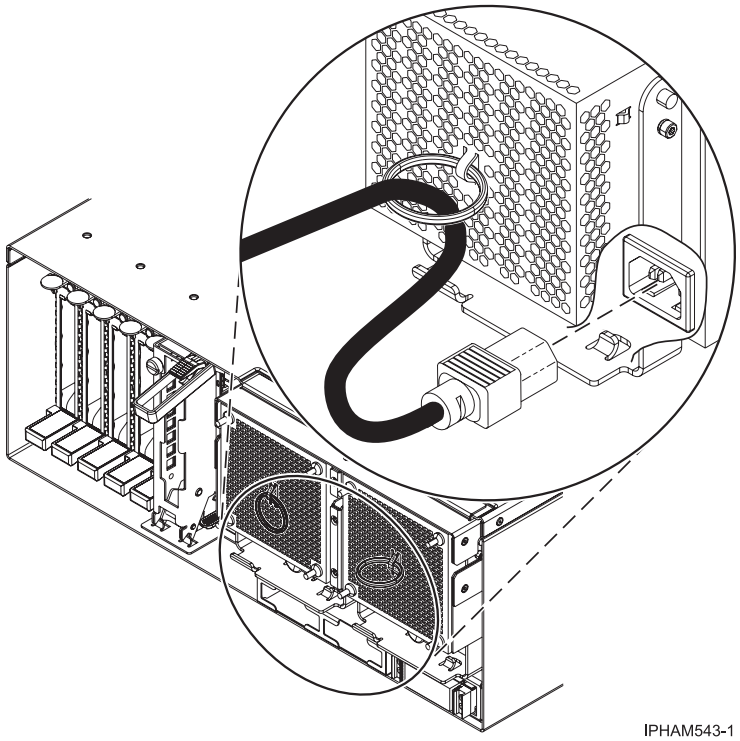
__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

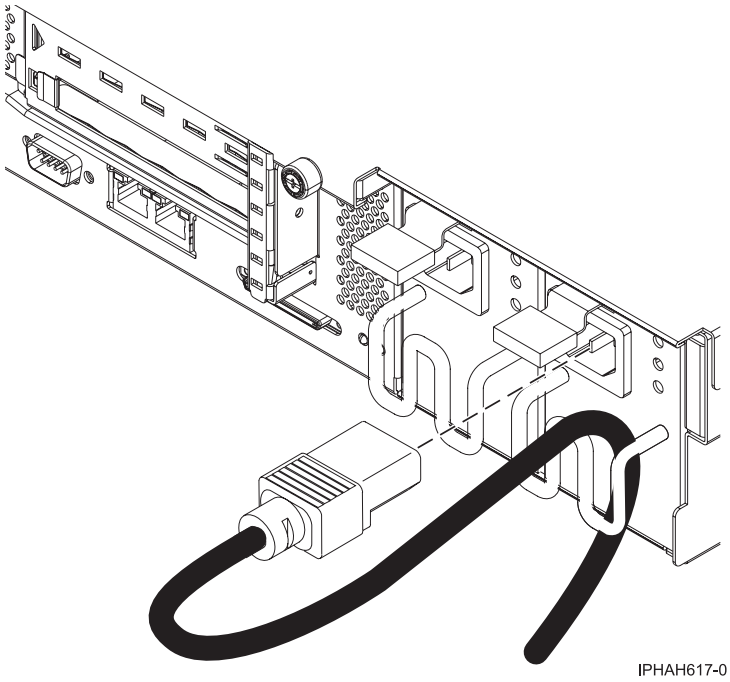
__ Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server. See the following figure as an example:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server. See the following figure as an example:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the Hardware Management Console cables

__ Cable the HMC.

Routing the cables through the cable-management arm

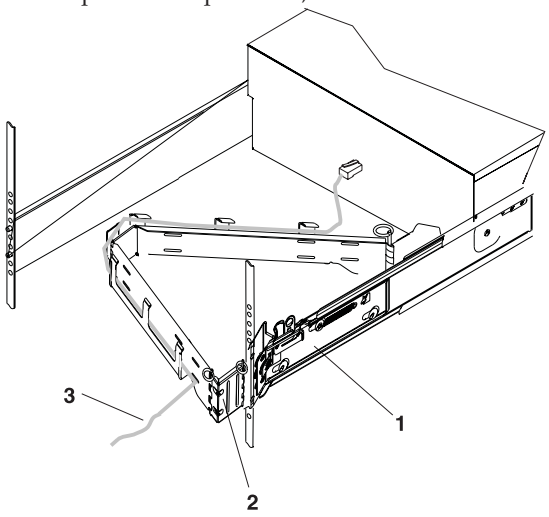
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

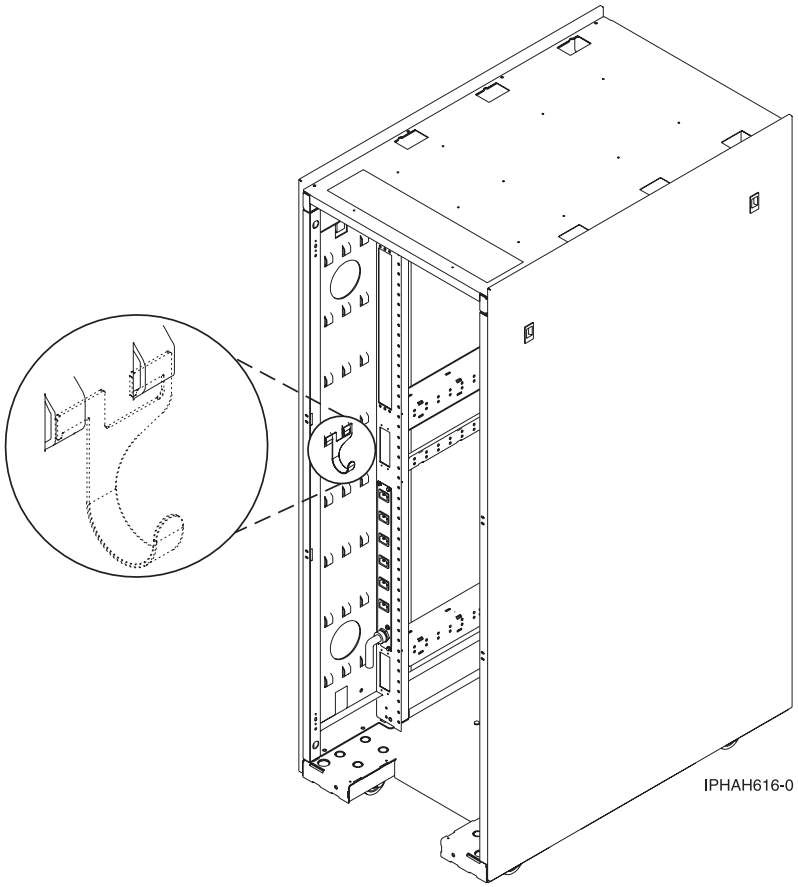
IPHAH615-0

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook can help manage the server cables in the back of the rack. To install the cable hook, slide it into the slots located on the back of the rack as shown in the following figure.



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the model 51x or 710 in the service position

Related reference

Cables and adapters

Cabling a model 9110-51A to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

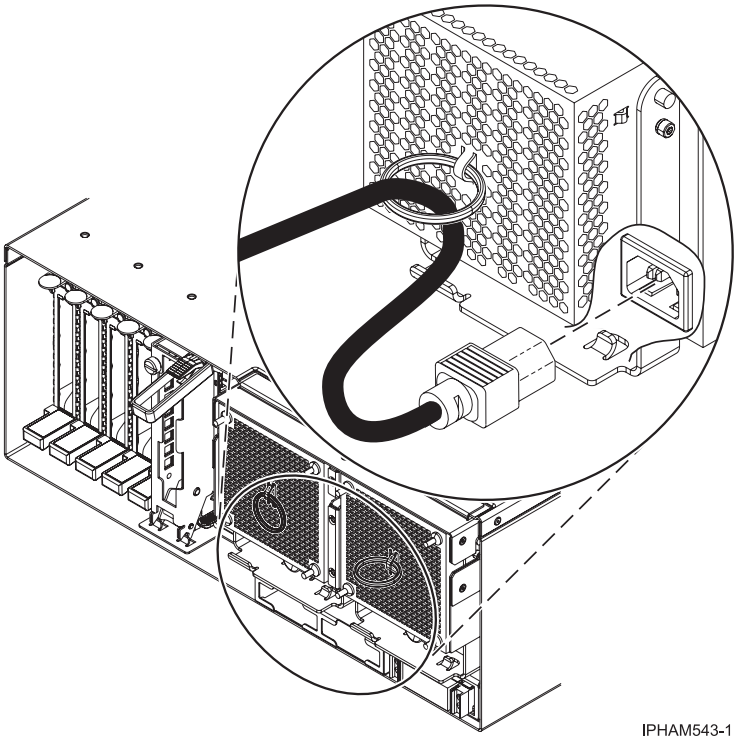
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

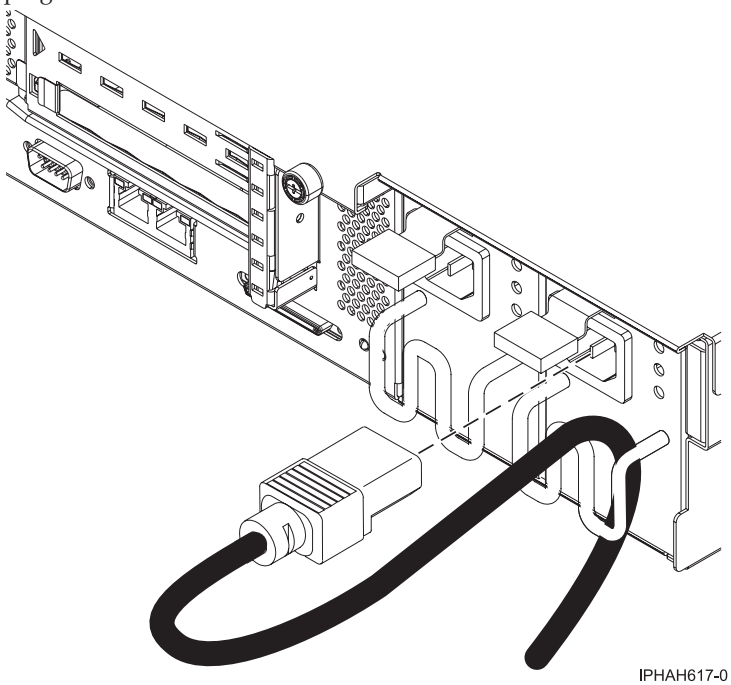
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

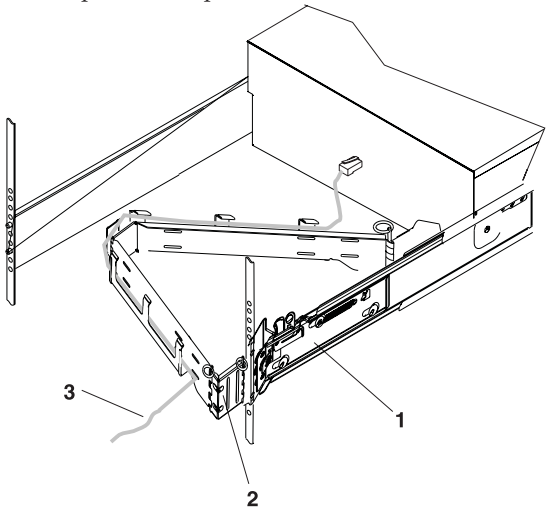
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

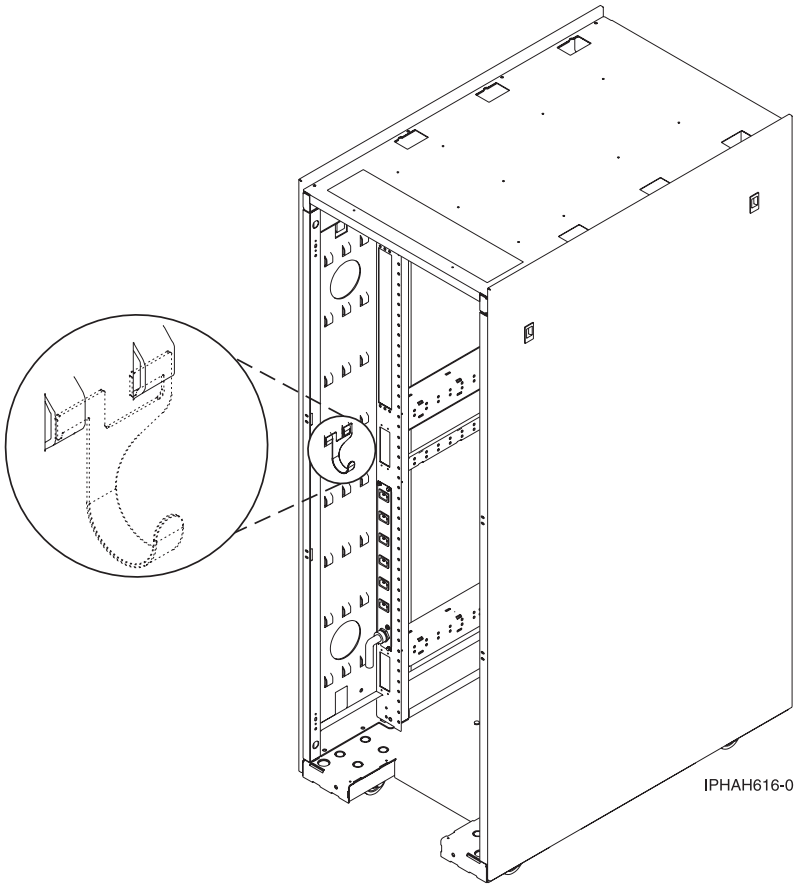
Routing the cables through the cable-management arm

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 51x or 710 in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your 9111-285 with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9111-285 workstation

Cabling a 9111-285 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your workstation:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

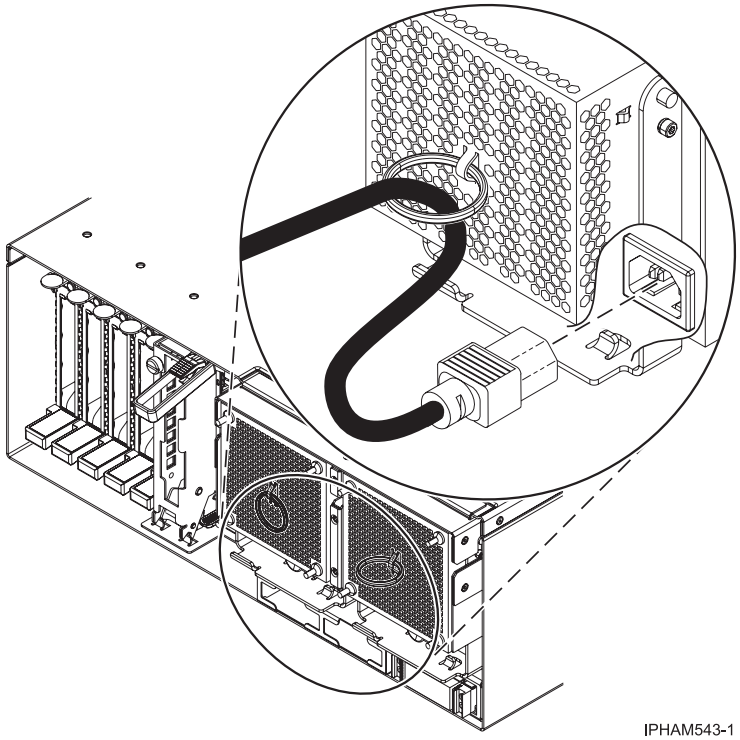
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

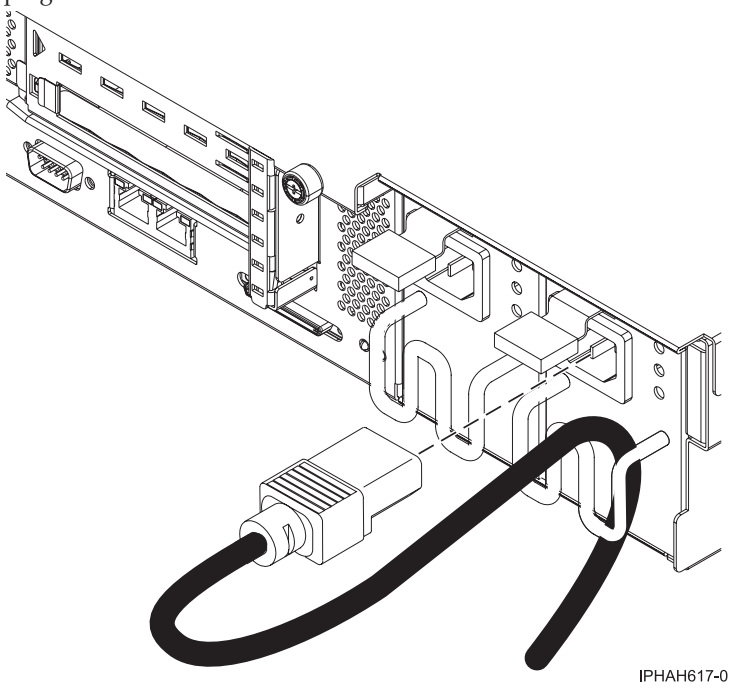
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Starting your workstation

__ Power the system on.
Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

_ Return to your initial setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Powering the system on and off

Related reference

References

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a 9111-285 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your workstation:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to the HMC.

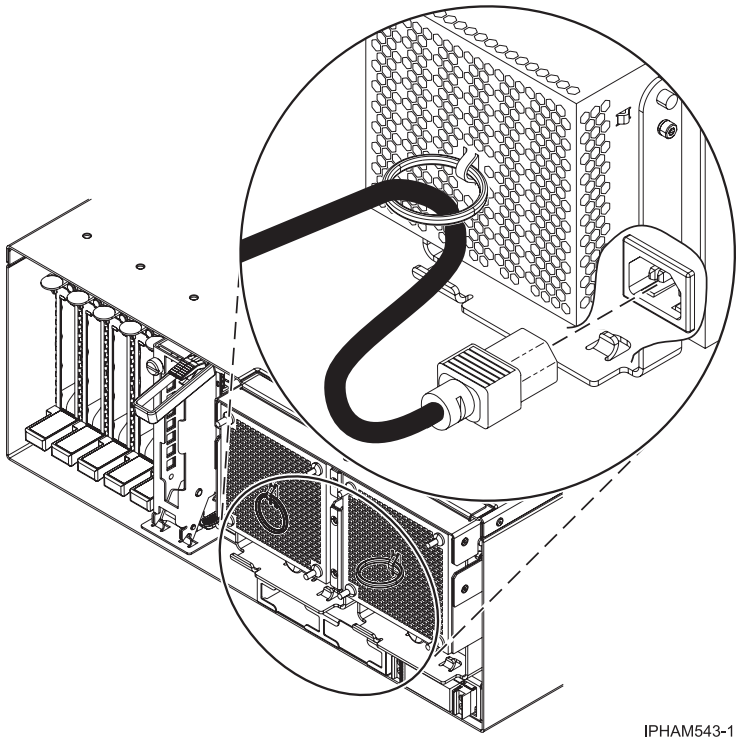
Attaching devices by using a system port

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

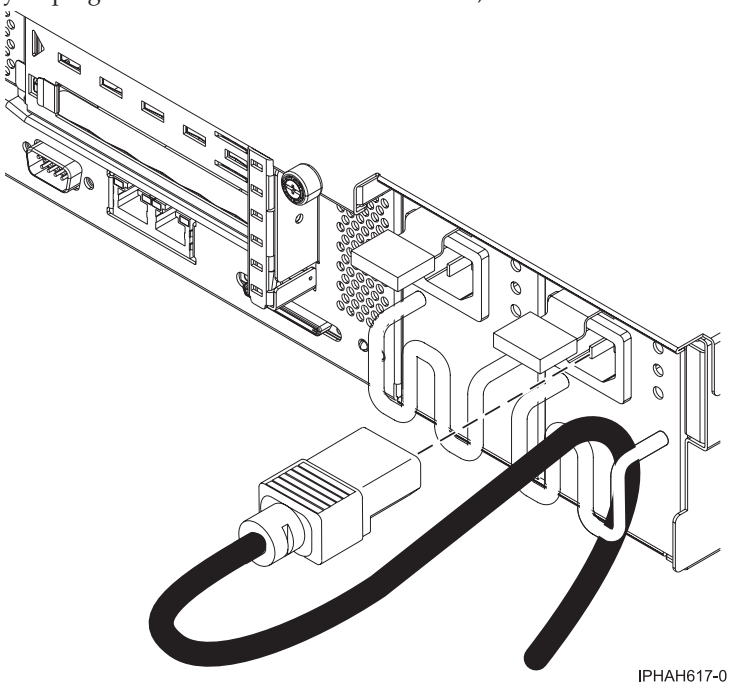
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

  __ If your workstation is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the workstation, as shown here:



Connecting the power cords

__ If your workstation is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the workstation, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your workstation to a power source before the HMC is configured as the DHCP server, the workstation will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your workstation to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

After you finish

_ Return to your initial setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Related tasks

Cabling the HMC

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 9111-520 with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9111-520 server

Cabling a model 9111-520 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

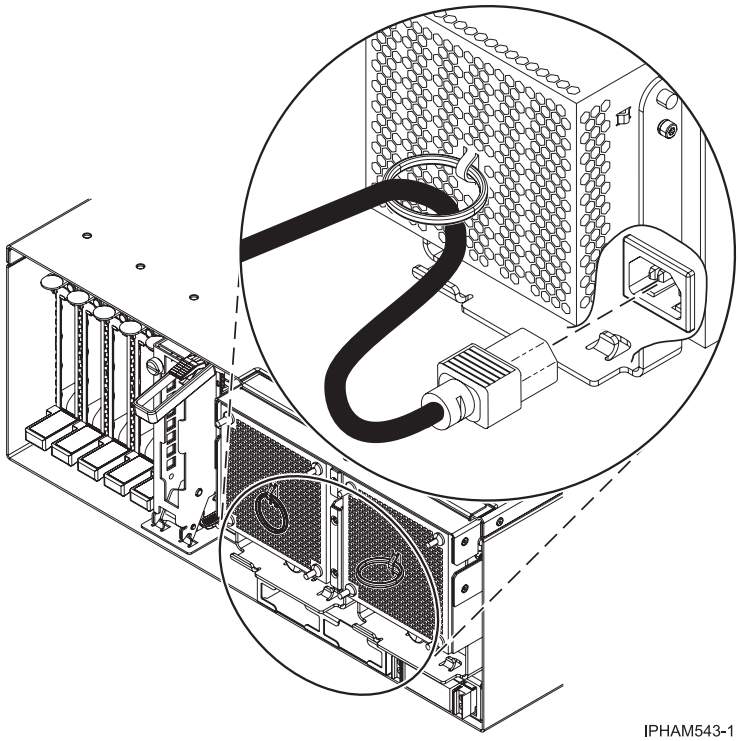
Attaching devices by using a system port
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

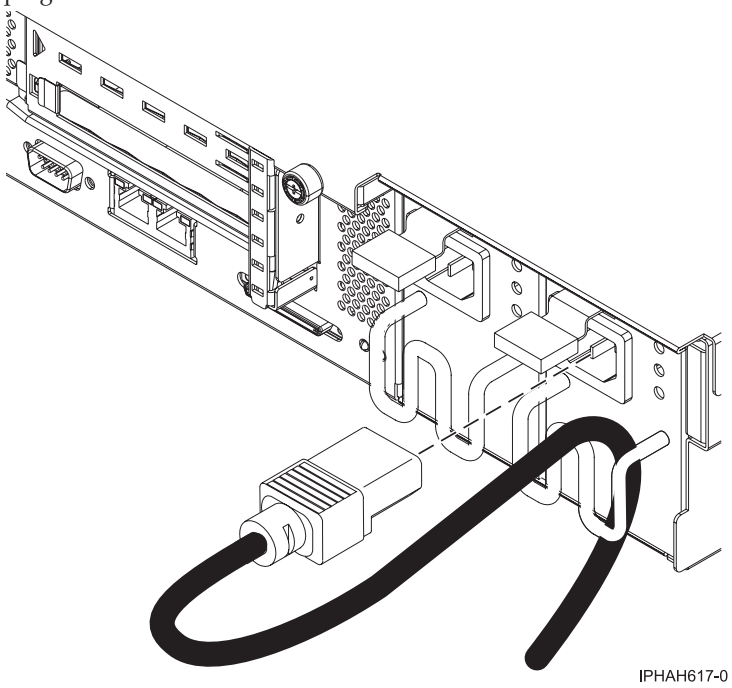
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

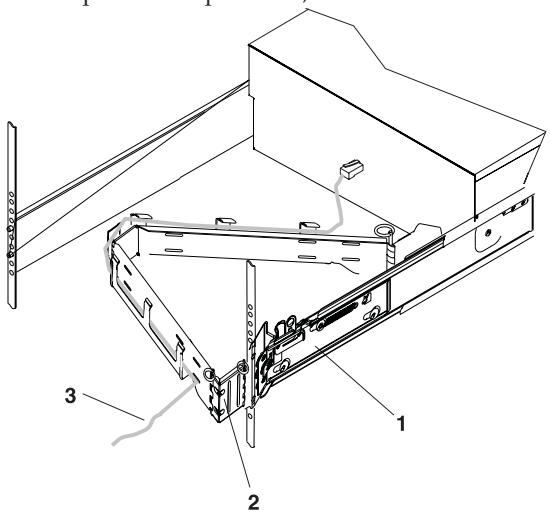
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

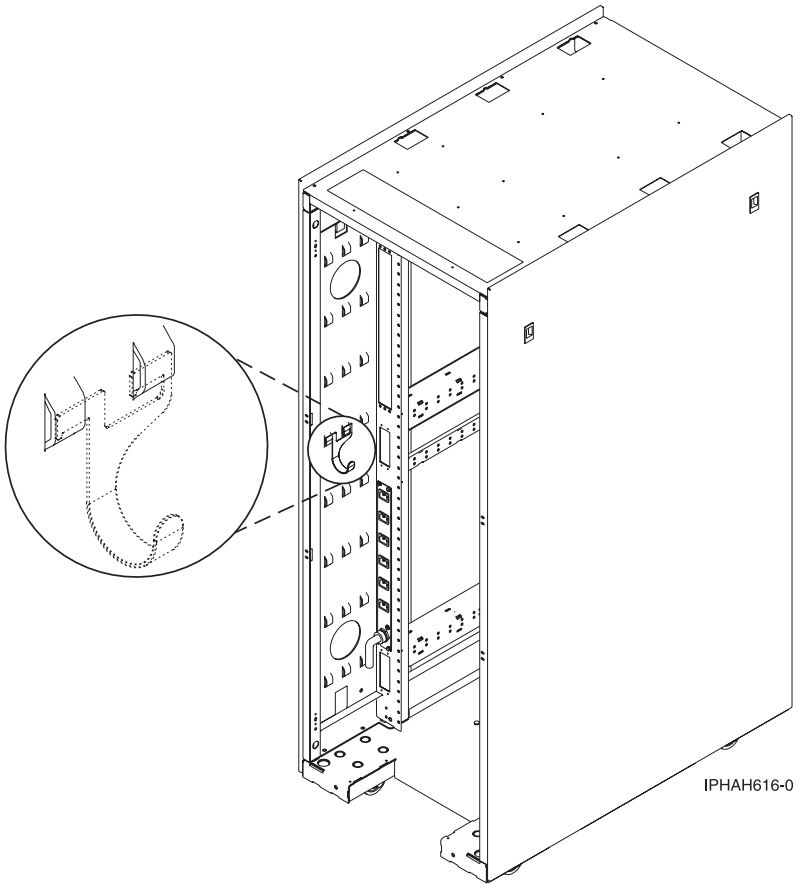
Starting your server

__ Power the system on.
Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9111-520 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

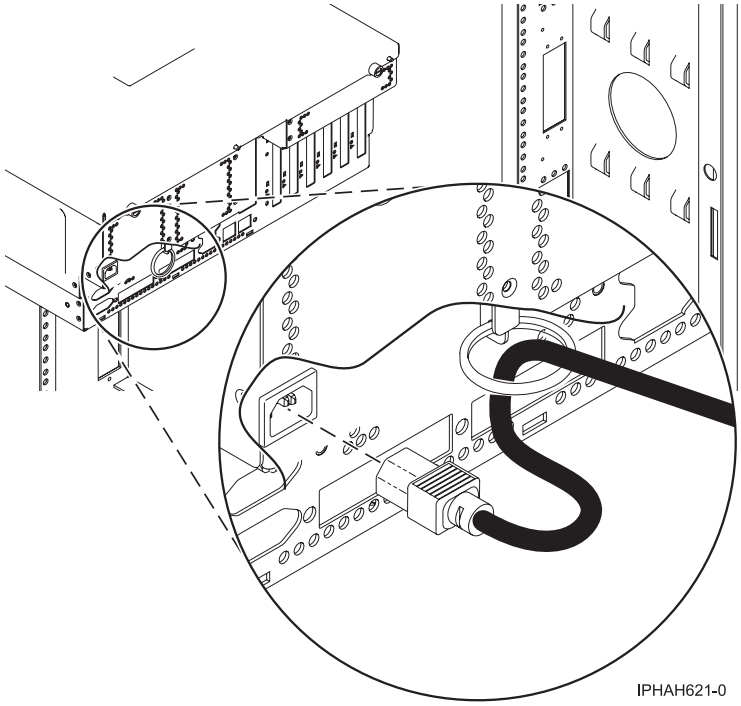
__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

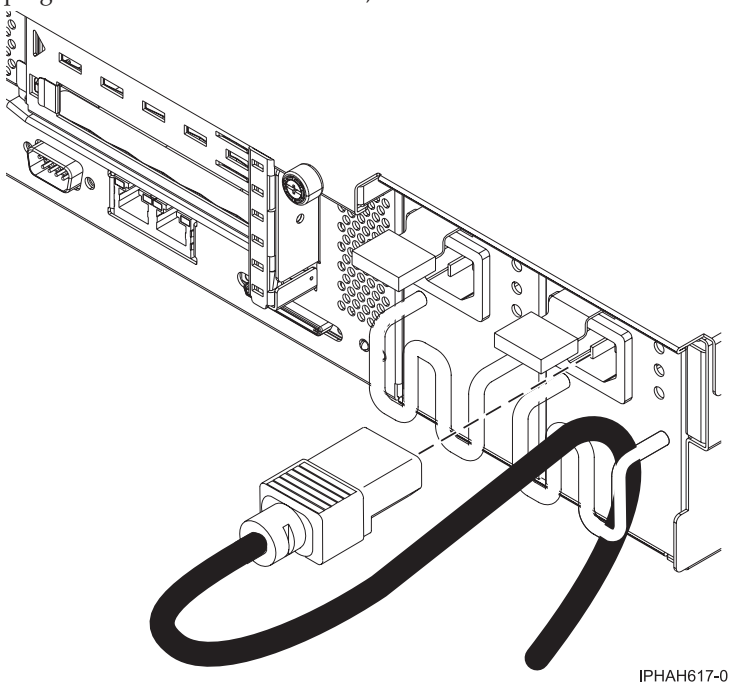
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

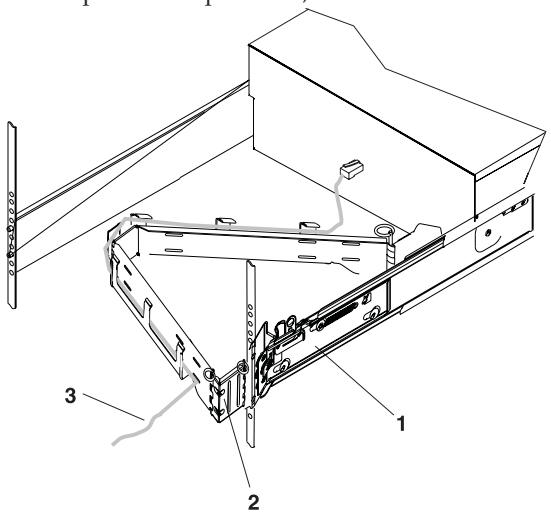
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

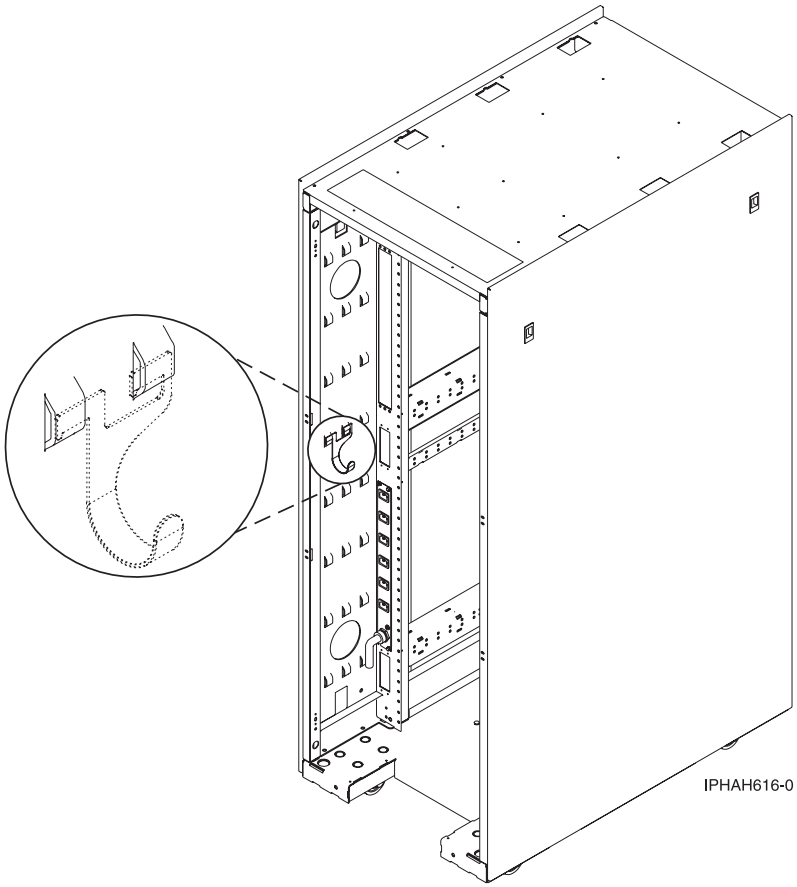
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9111-520 to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

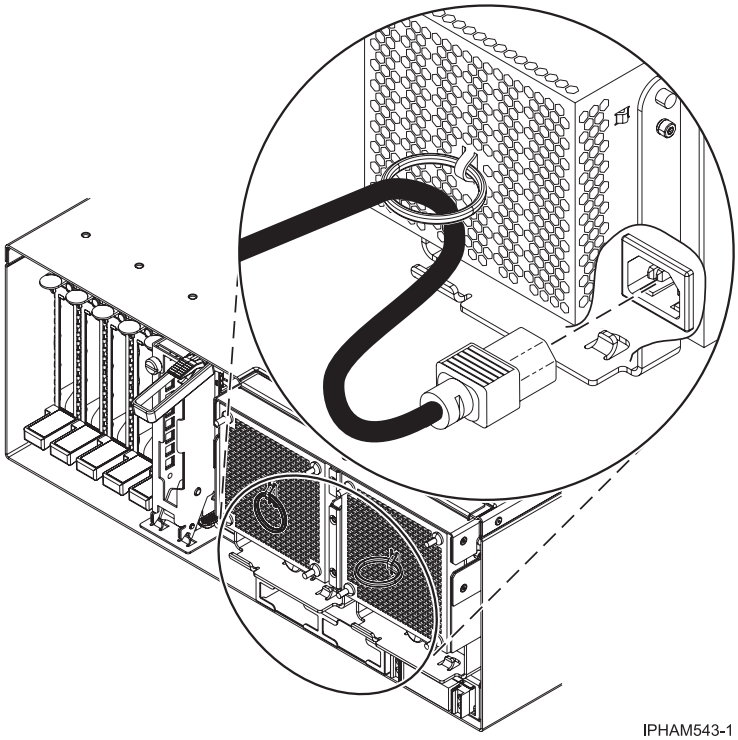
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

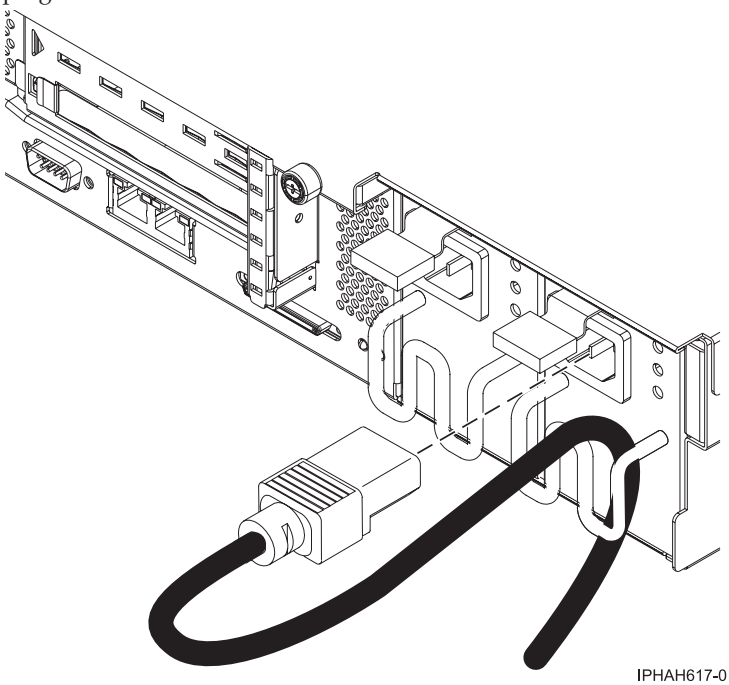
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

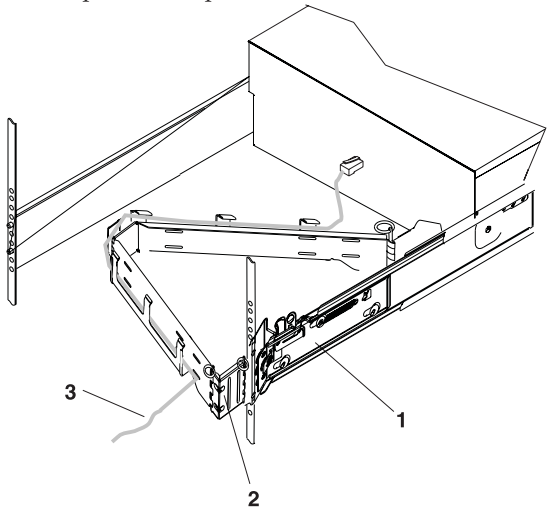
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

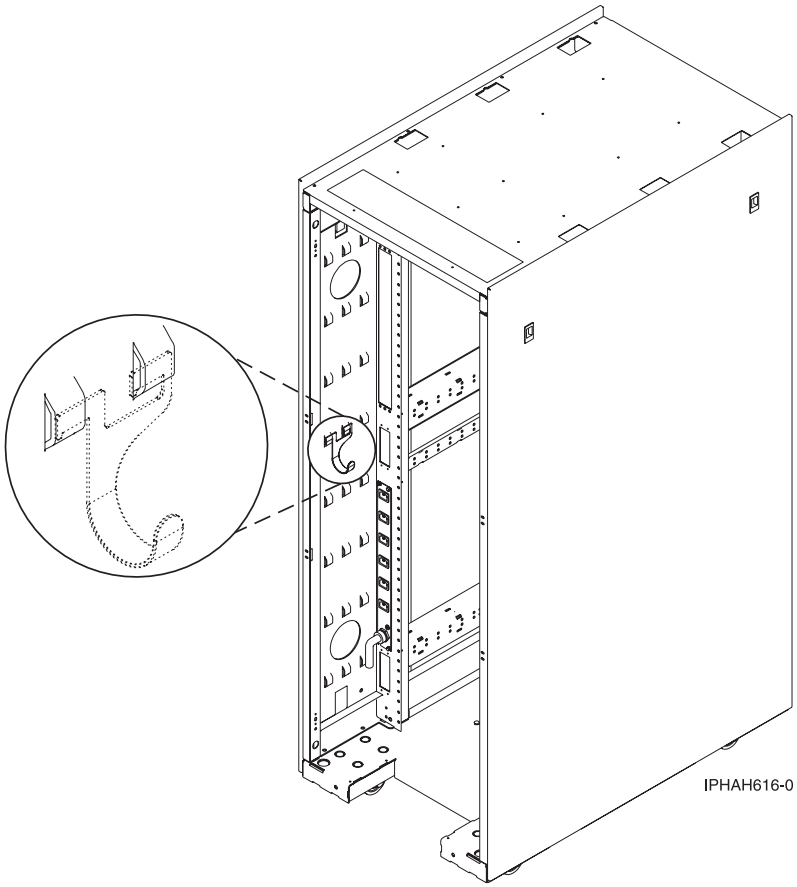
Routing the cables through the cable-management arm

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 9113-550 with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of a model 9113-550 server

Cabling a model 9113-550 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

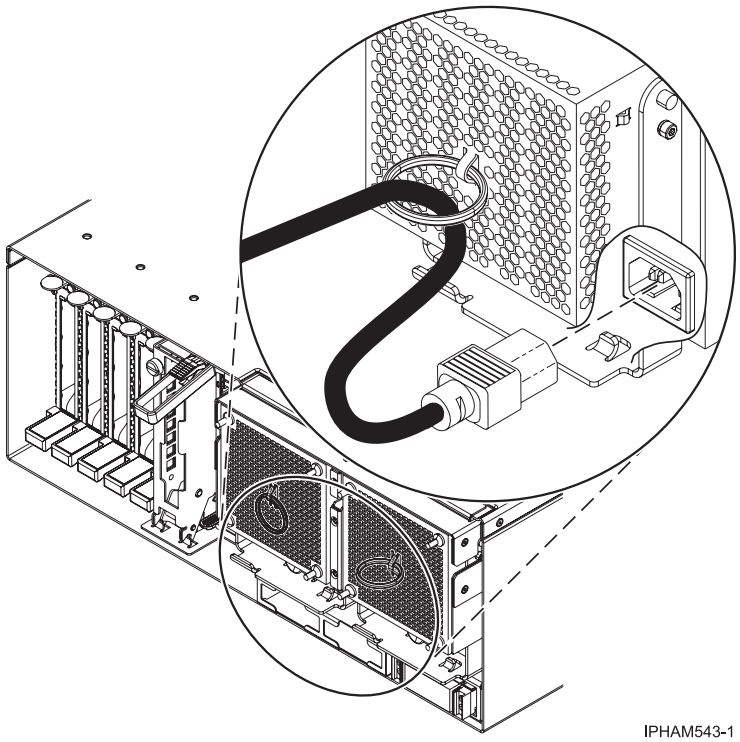
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

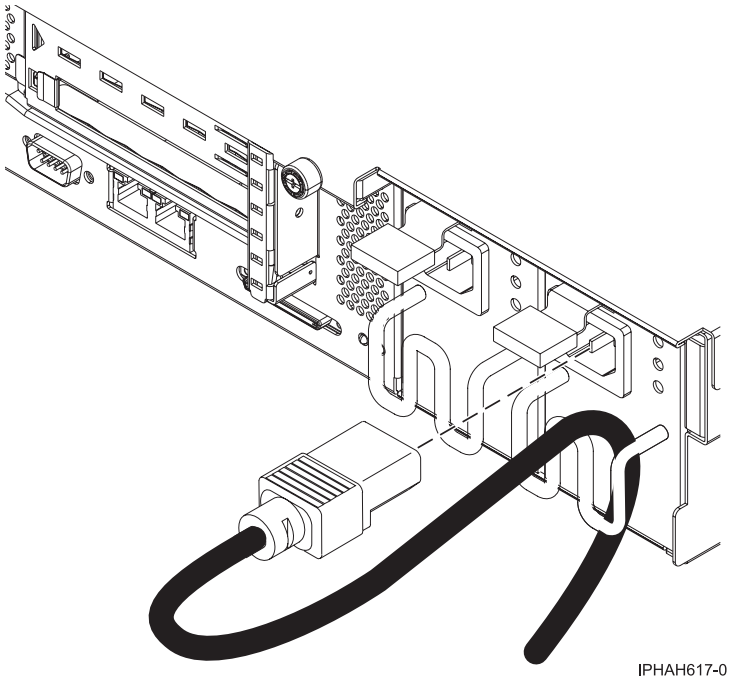
  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

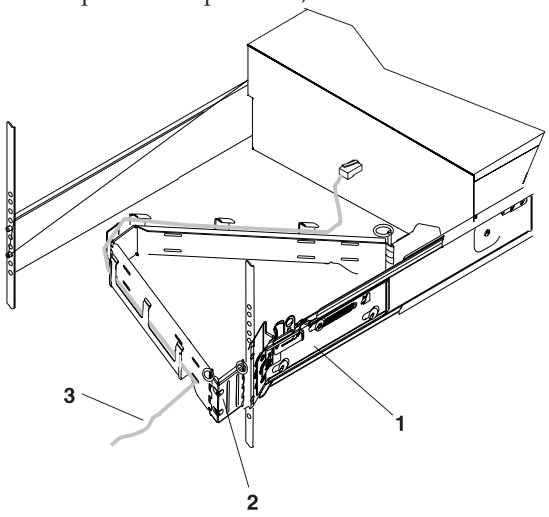
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

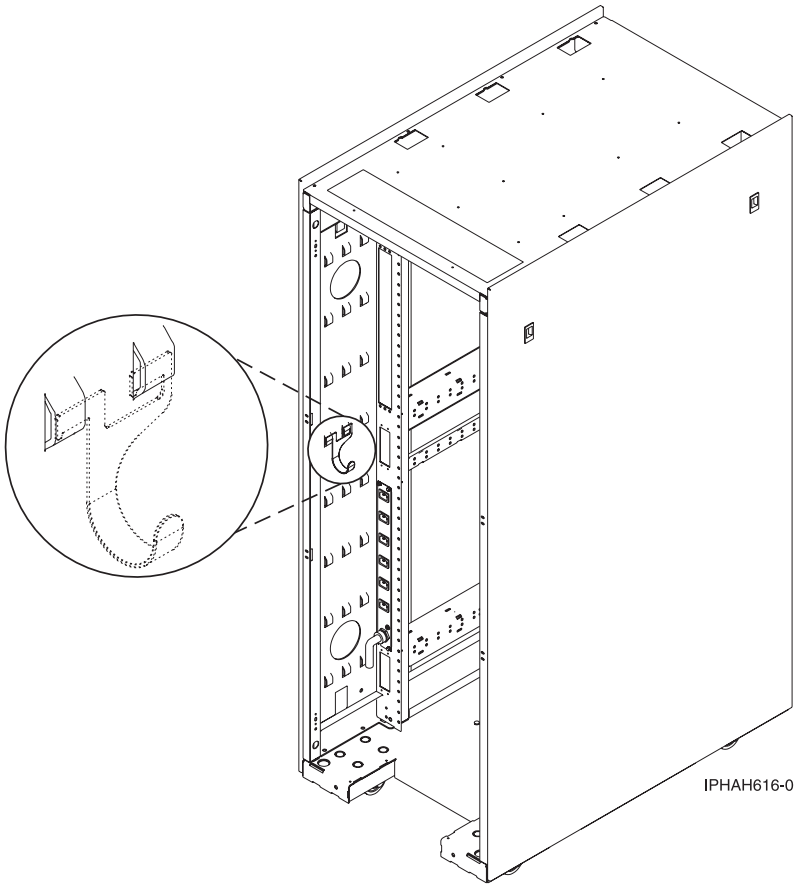
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9113-550 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

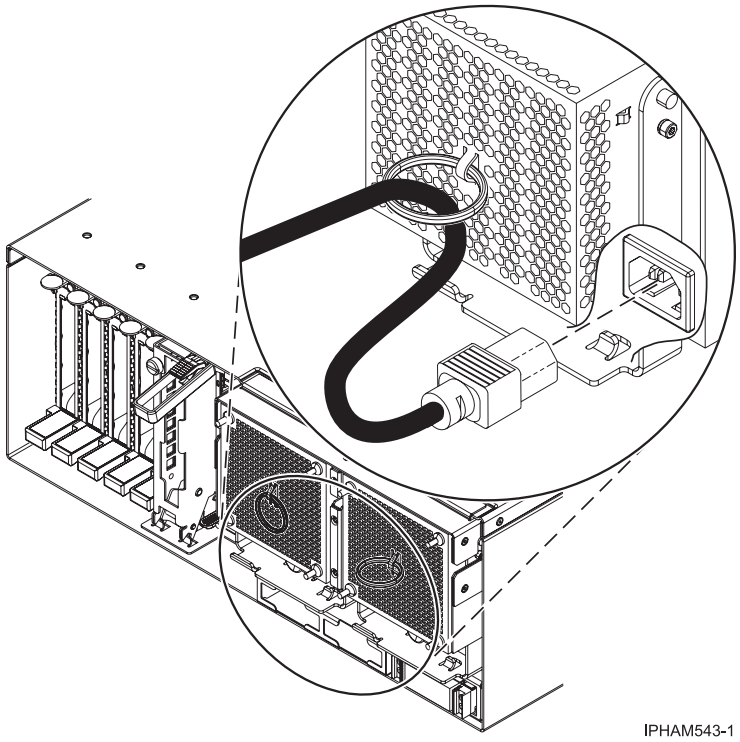
__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

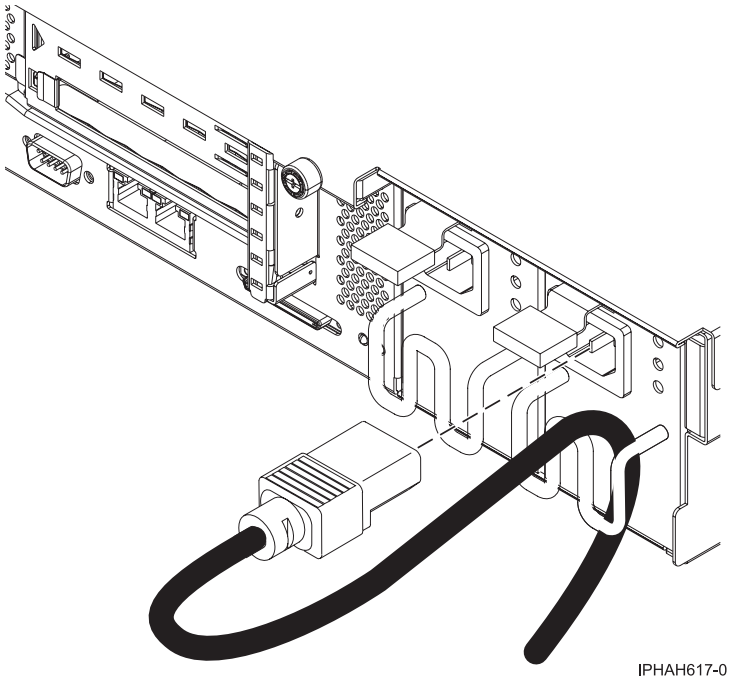
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

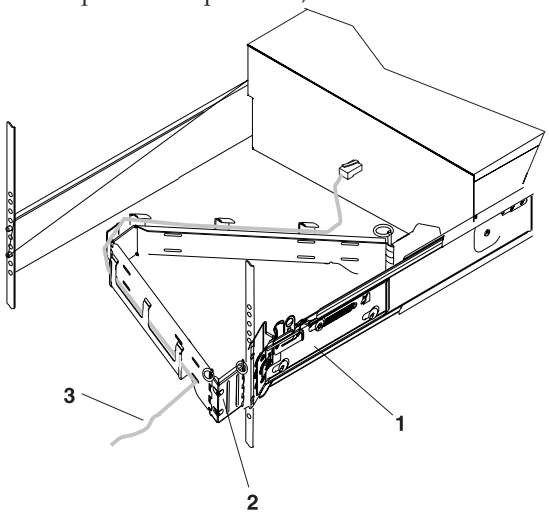
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

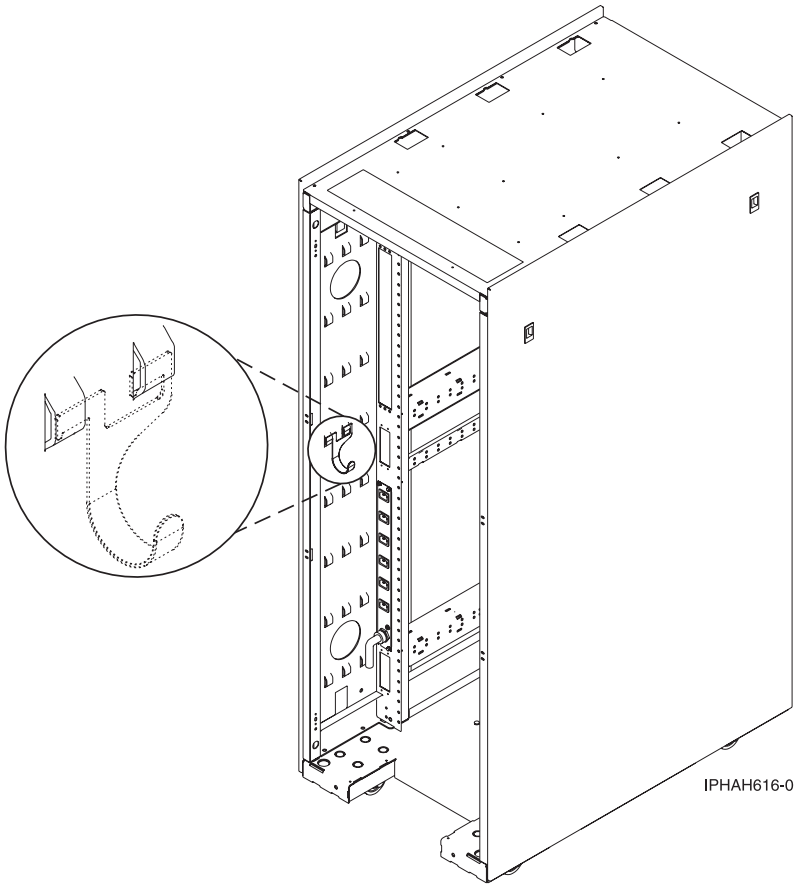
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Serial uninterruptible power supply conversion cable

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9113-550 to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

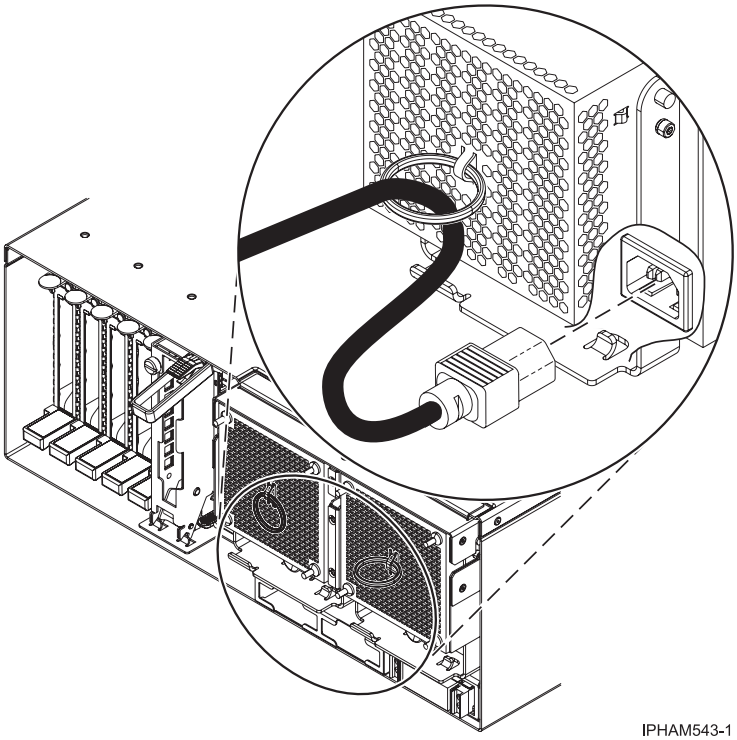
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

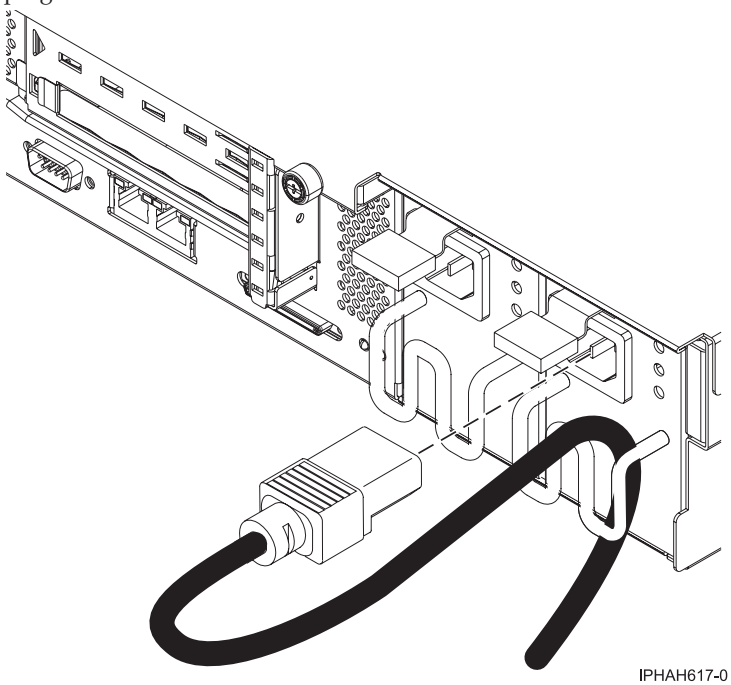
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

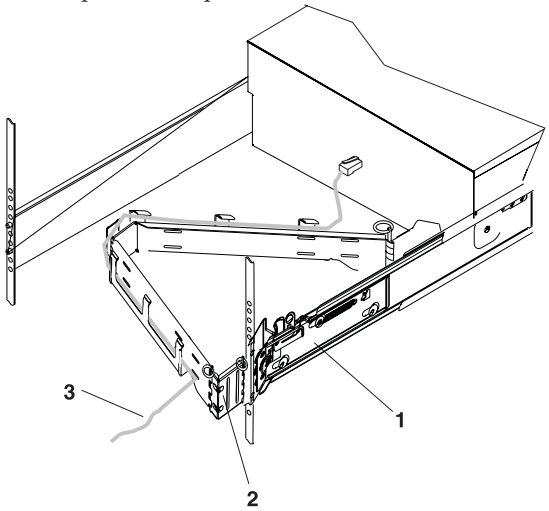
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

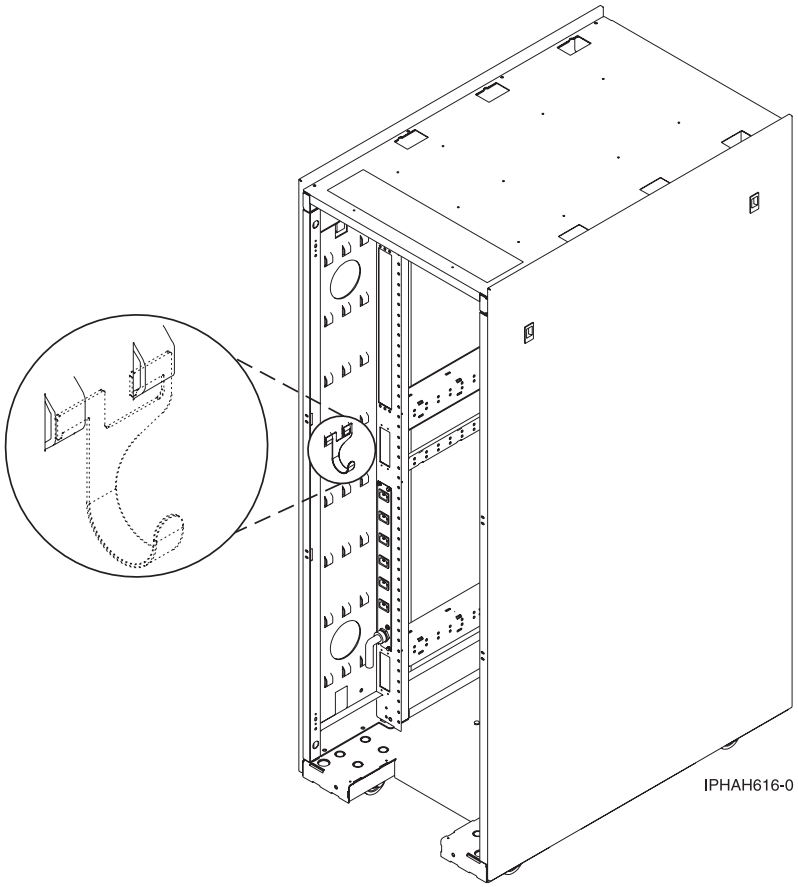
Routing the cables through the cable-management arm

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 9115-505 with a console or interface

For a graphical representation of the slots and connectors, see the back view of the model.

Related reference

Back view of a model 9115-505 server

Cabling a 9115-505 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, route the cables and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

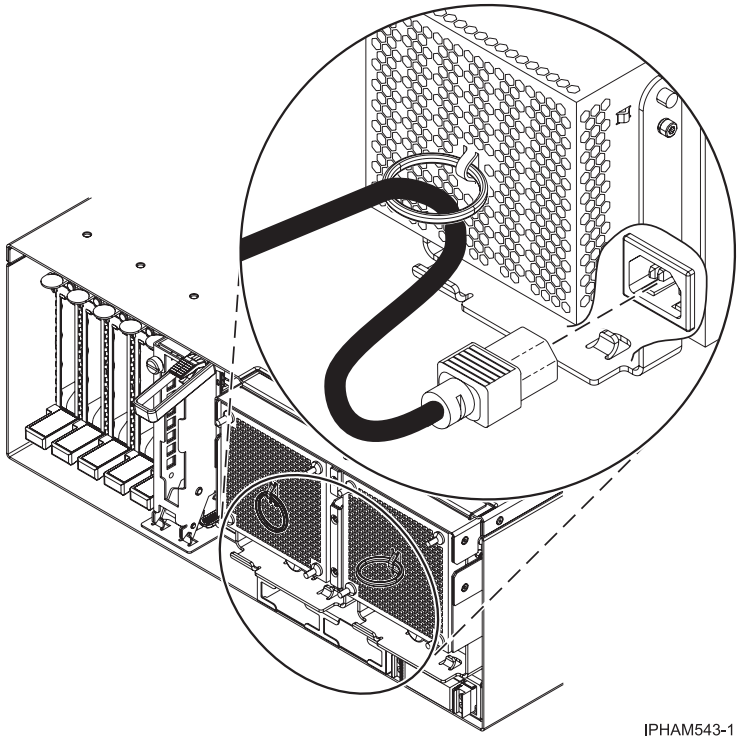
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

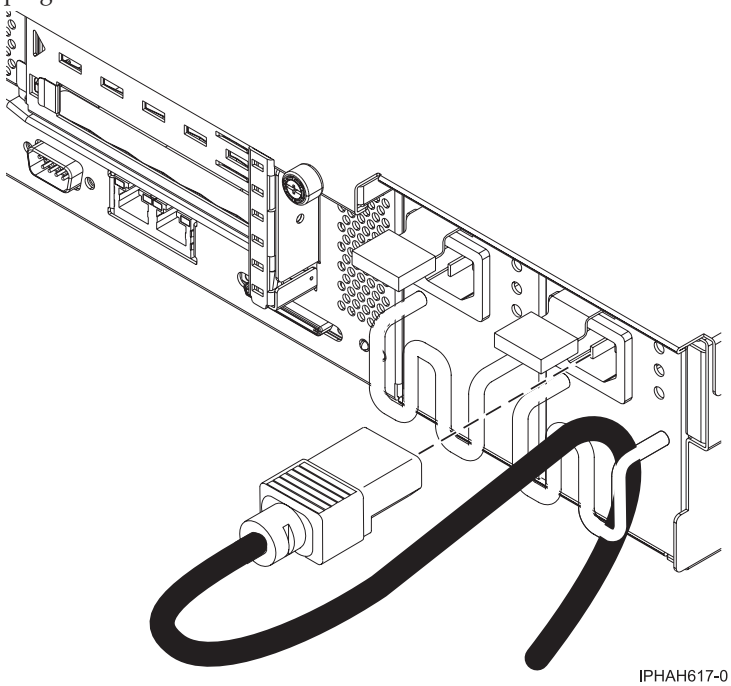
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cords into the system, display, and attached devices.

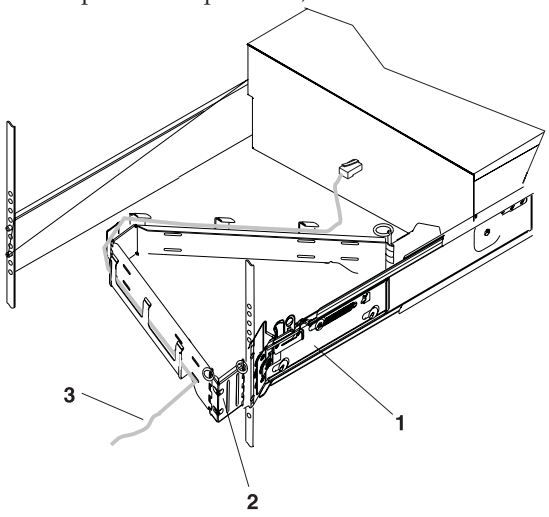
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the system into the service position. For instructions, see Place the model 505 in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

Routing the cables through the cable-management arm

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

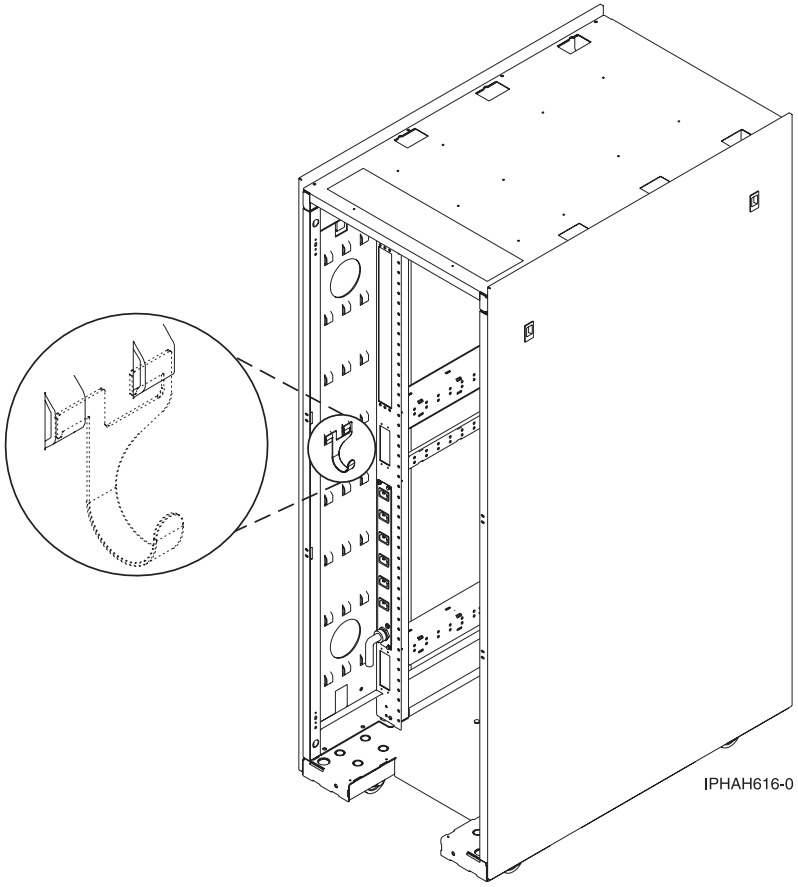
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 505 in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a 9115-505 and the Hardware Management Console (HMC)

Learn how to connect the HMC, external cables, and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

(D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to theHMC.

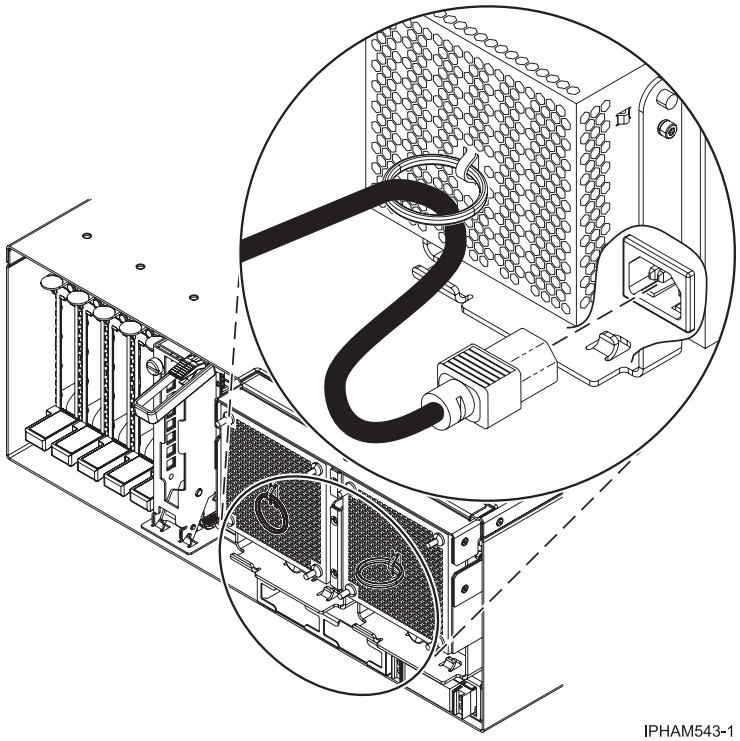
Attaching devices by using a system port

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

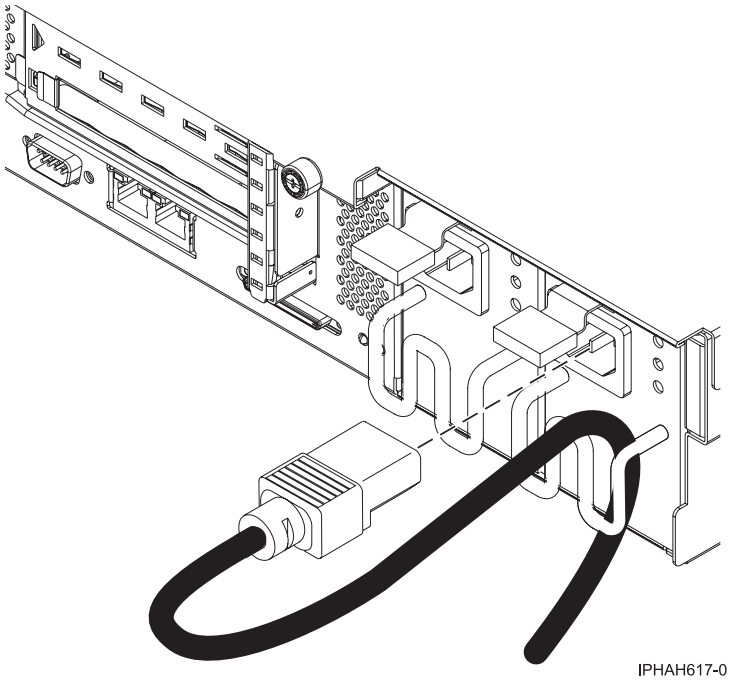
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

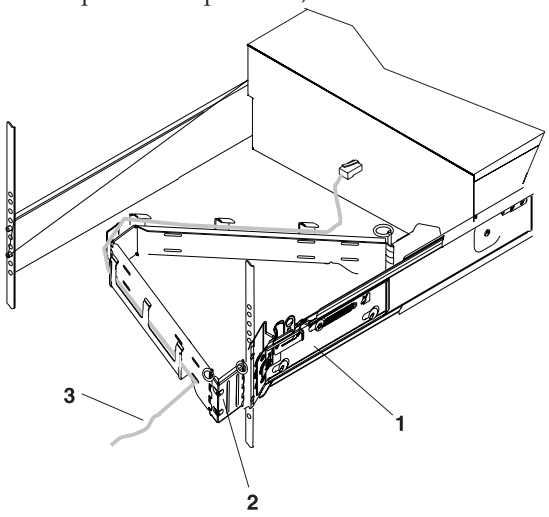
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the model 505 in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

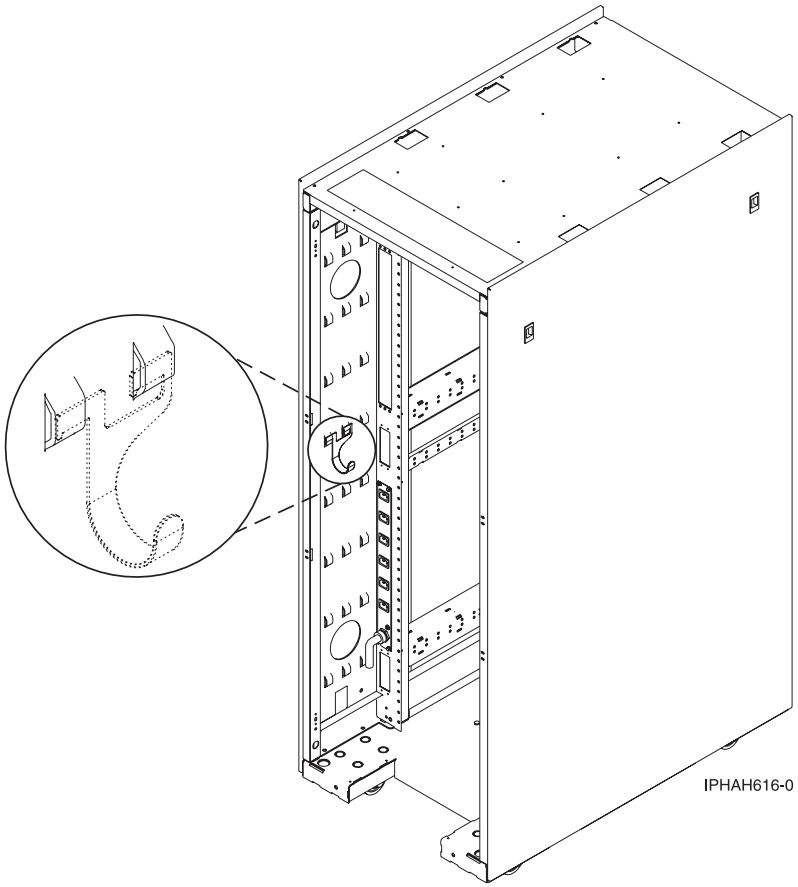
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Related tasks

Cabling the HMC

Place the model 505 in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9115-505 to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

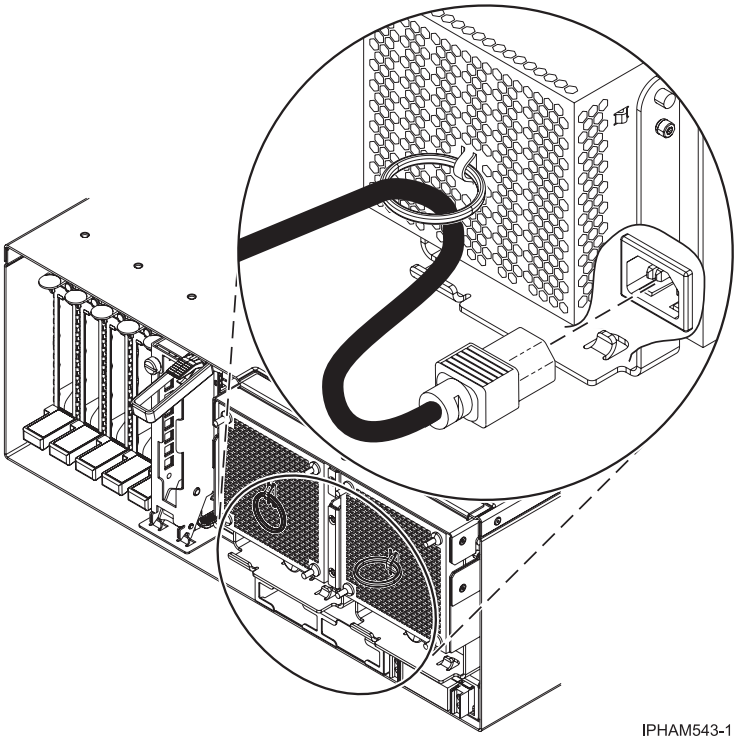
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

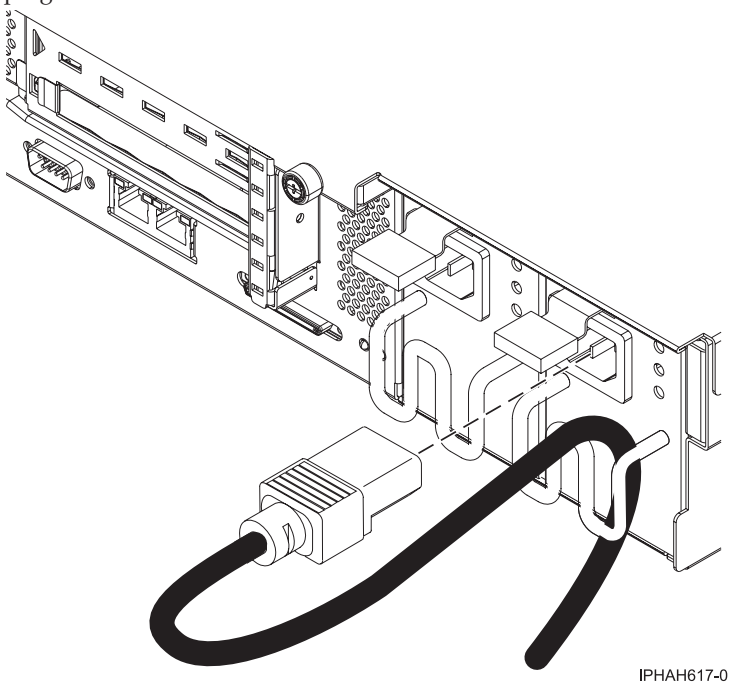
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



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__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

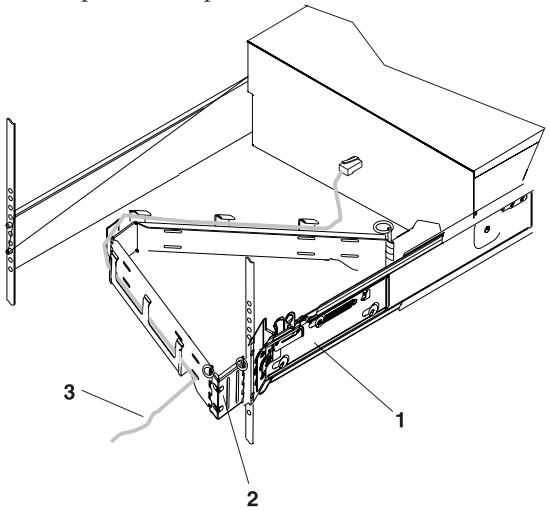
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the model 505 in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

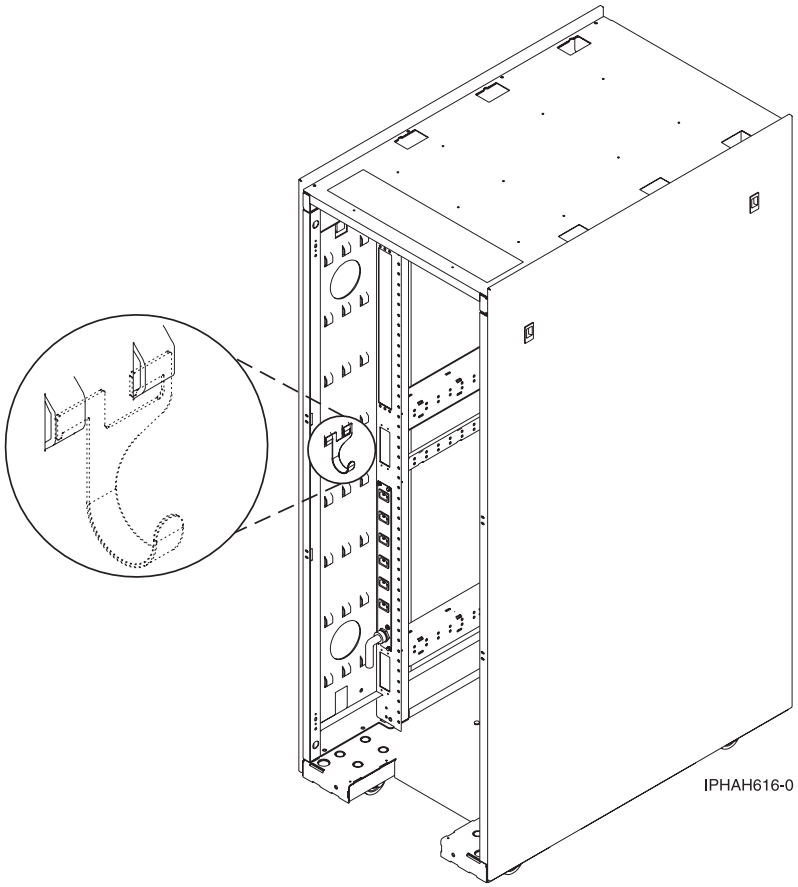
Routing the cables through the cable-management arm

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 505 in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 9131-52A with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back view of a model 9131-52A server

Cabling a model 9131-52A to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

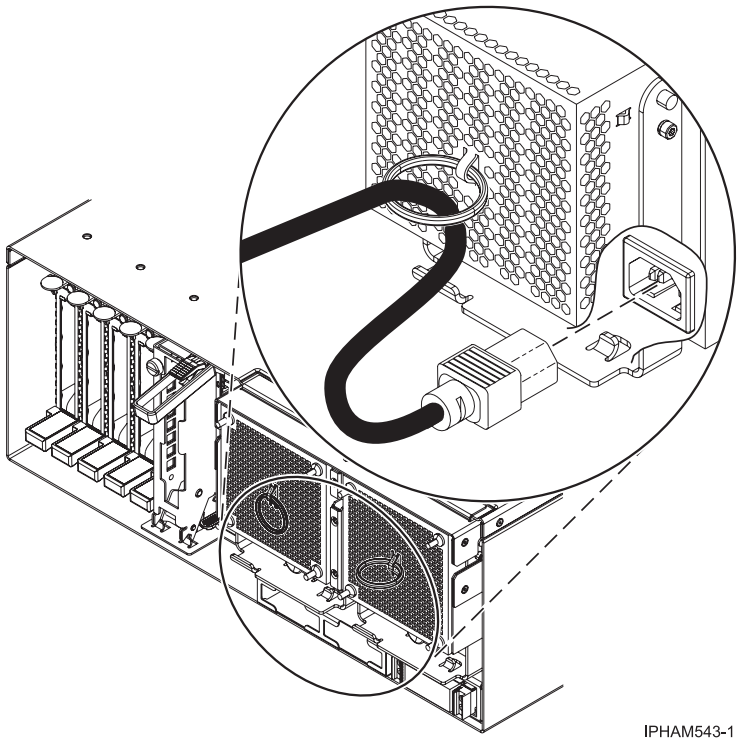
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

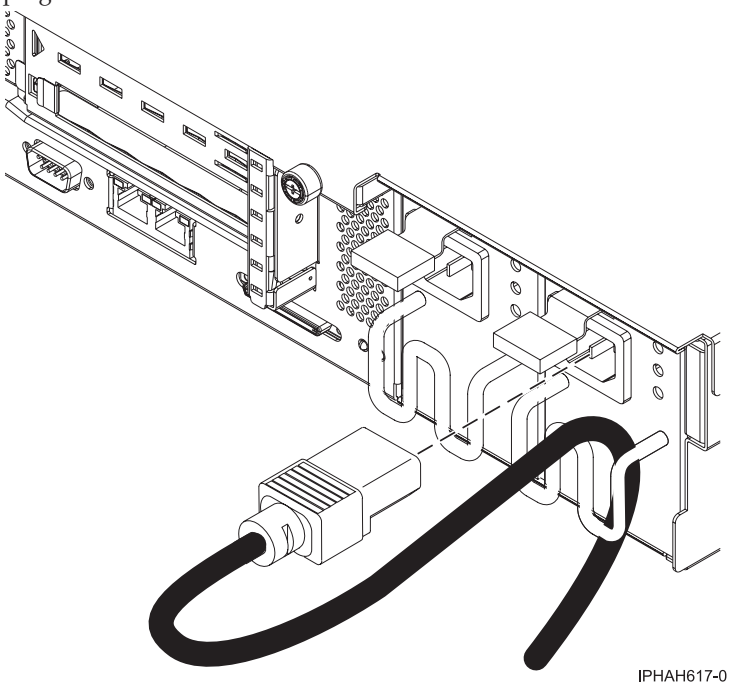
  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

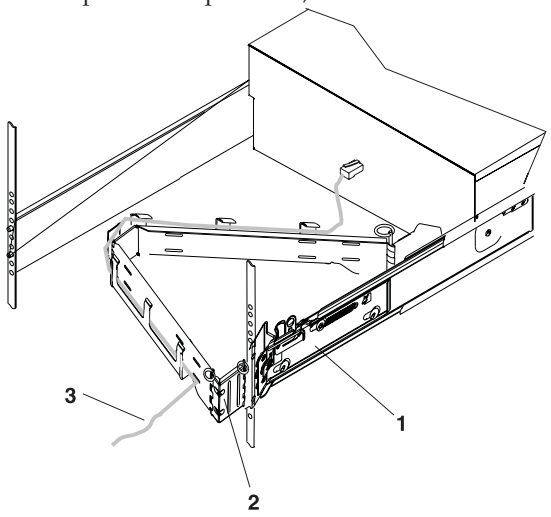
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

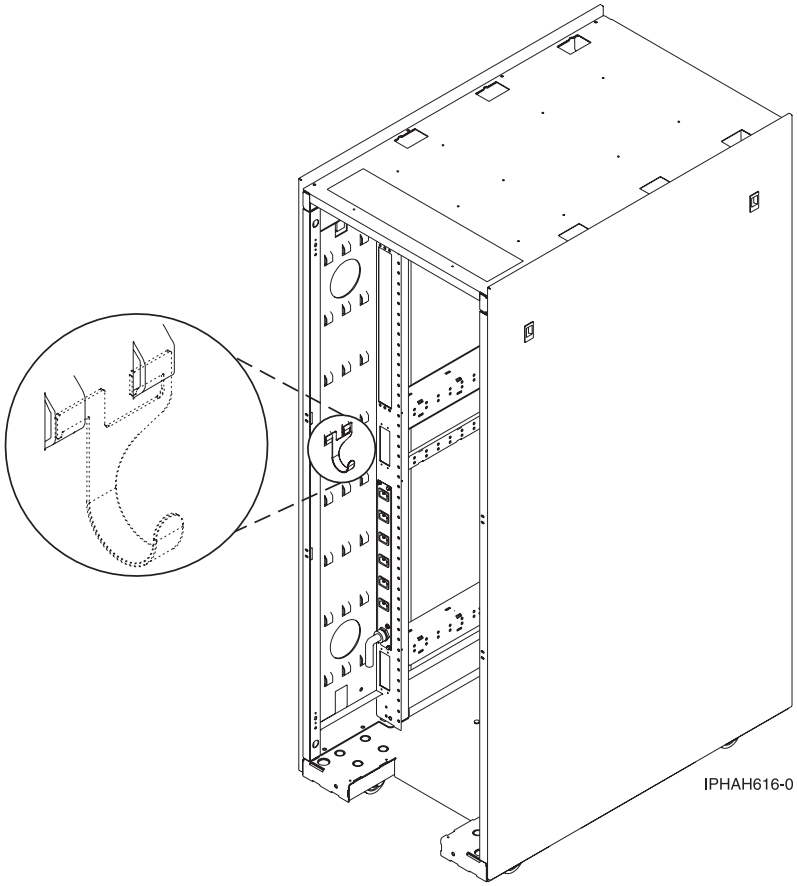
Starting your server

__ Power the system on.
Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9131-52A and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

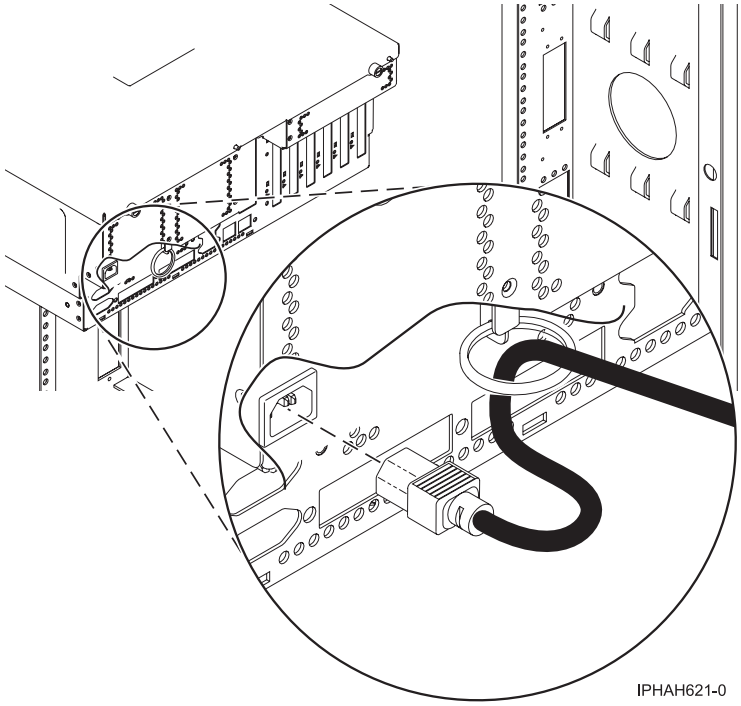
__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing IBM (HACMP) cables to asystem port on the back of the server is not supported.

Connecting the power cords

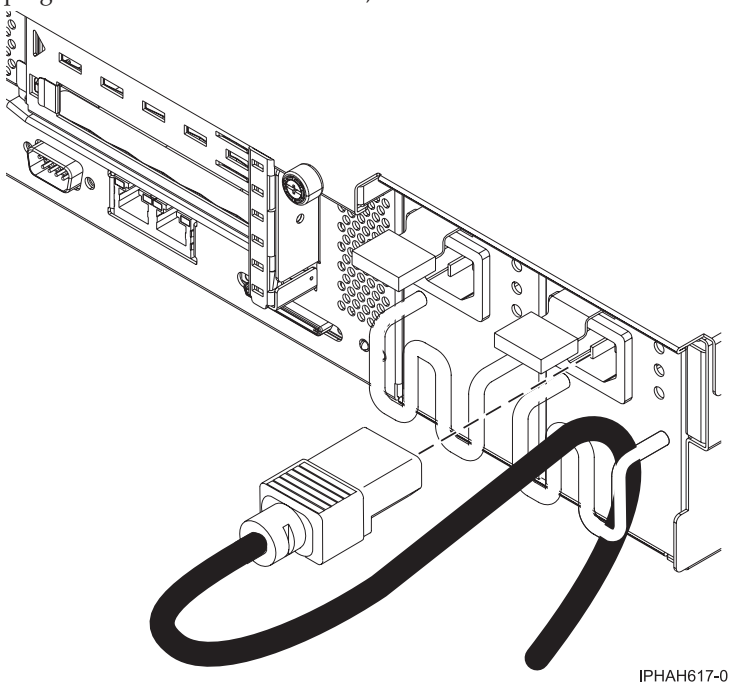
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

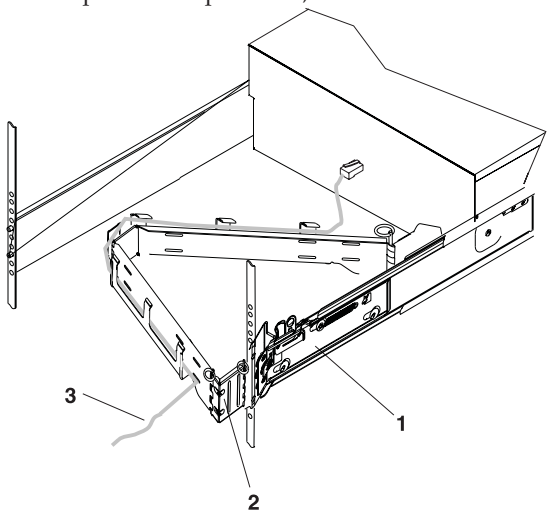
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

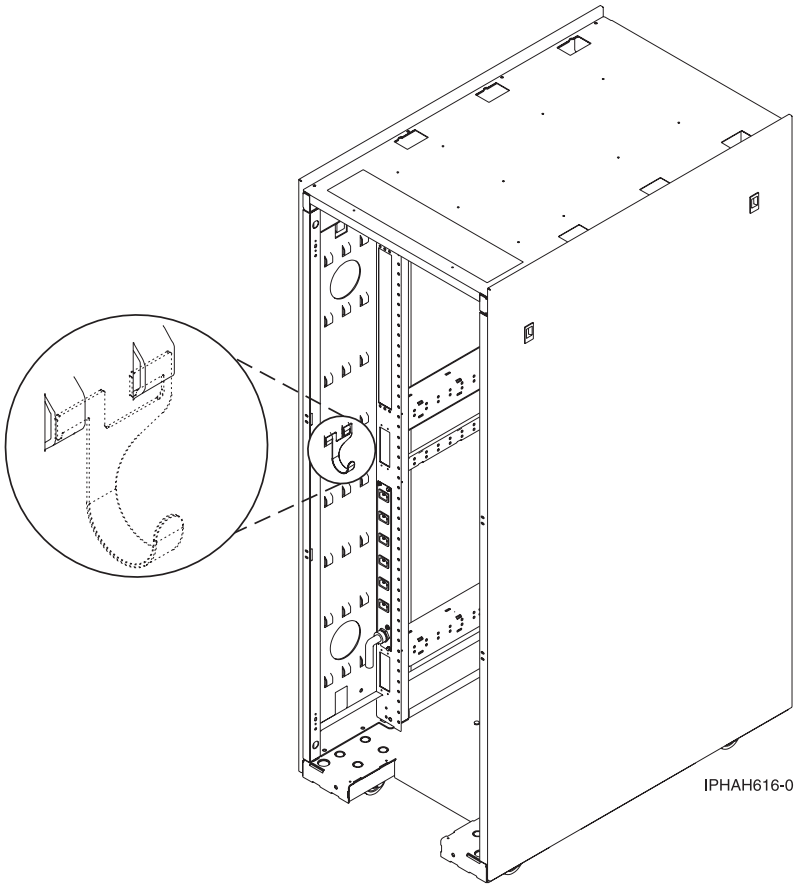
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9131-52A to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

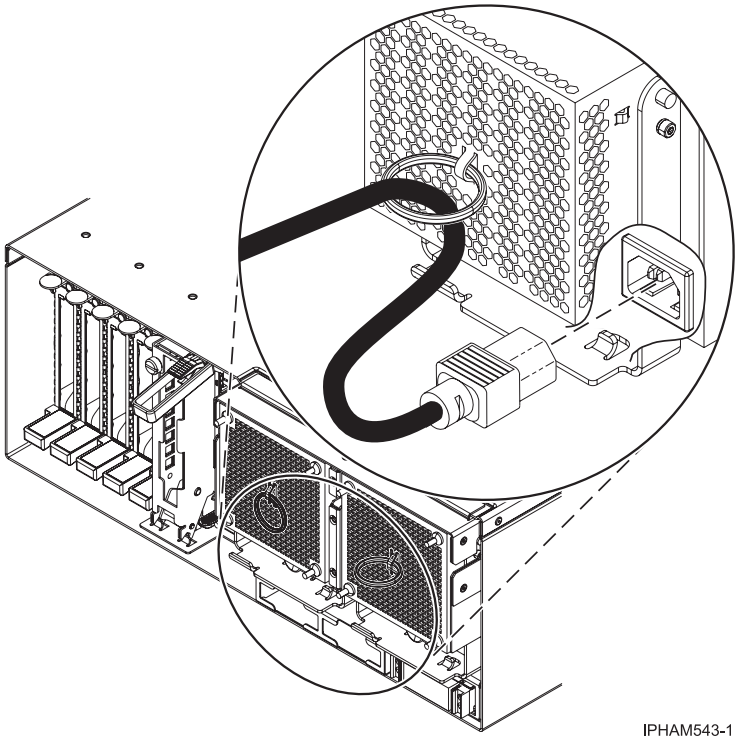
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

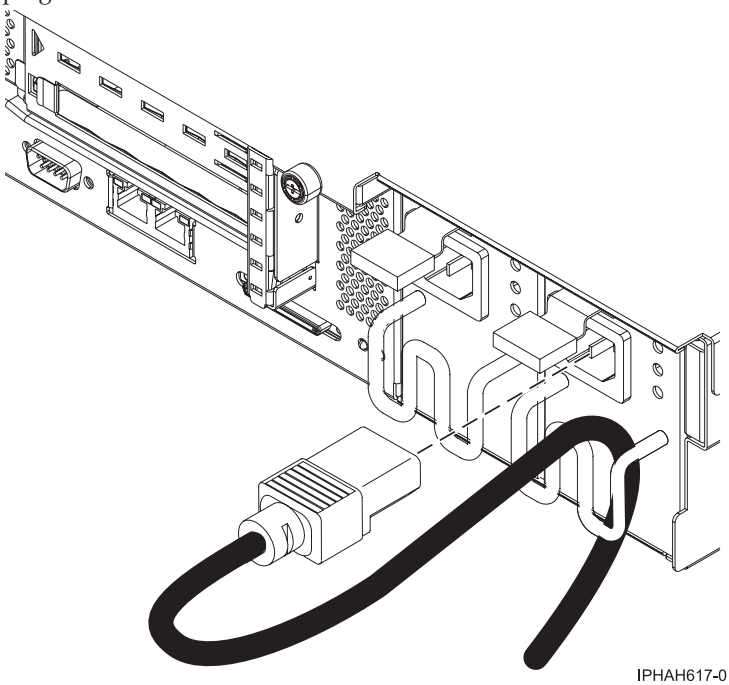
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



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__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

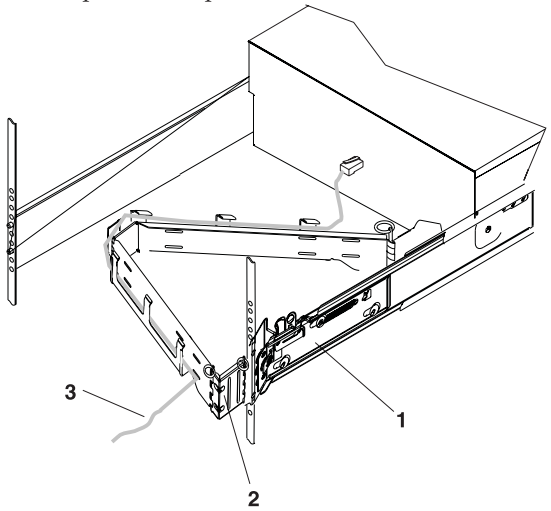
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

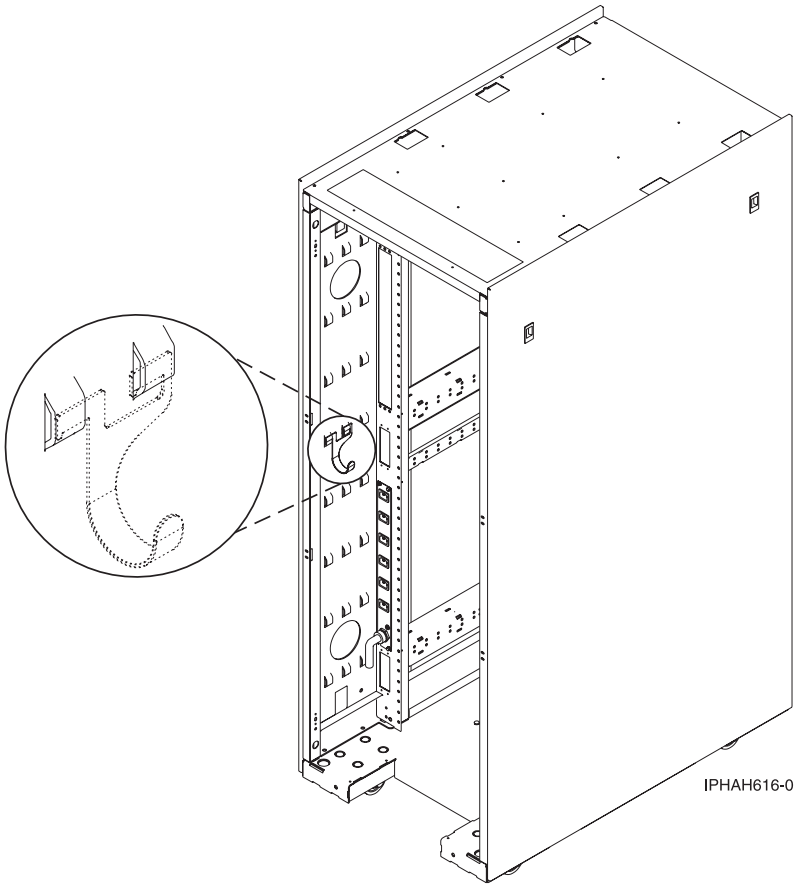
Routing the cables through the cable-management arm

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

References

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 9133-55A with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back view of a model 9133-55A server

Cabling a model 9133-55A to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

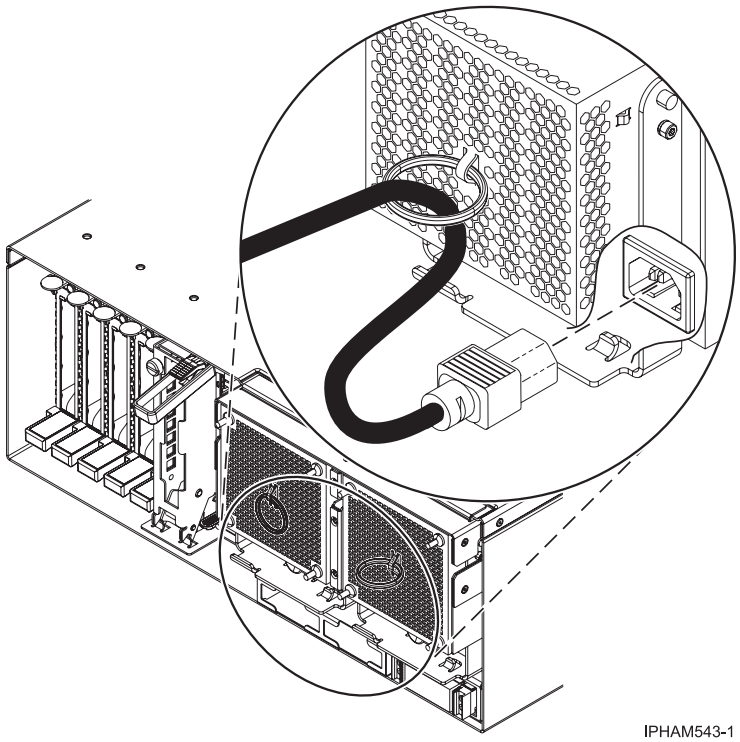
Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

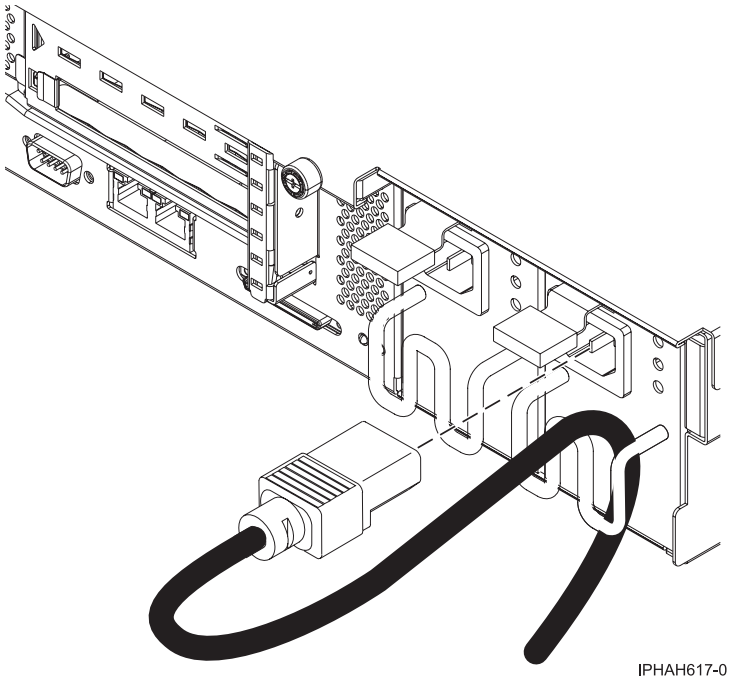
  __ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

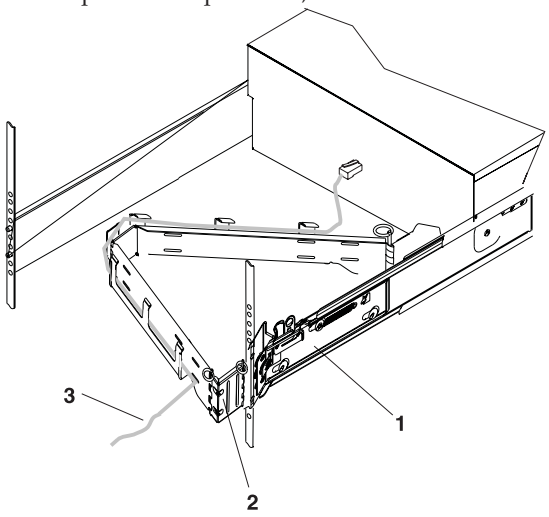
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

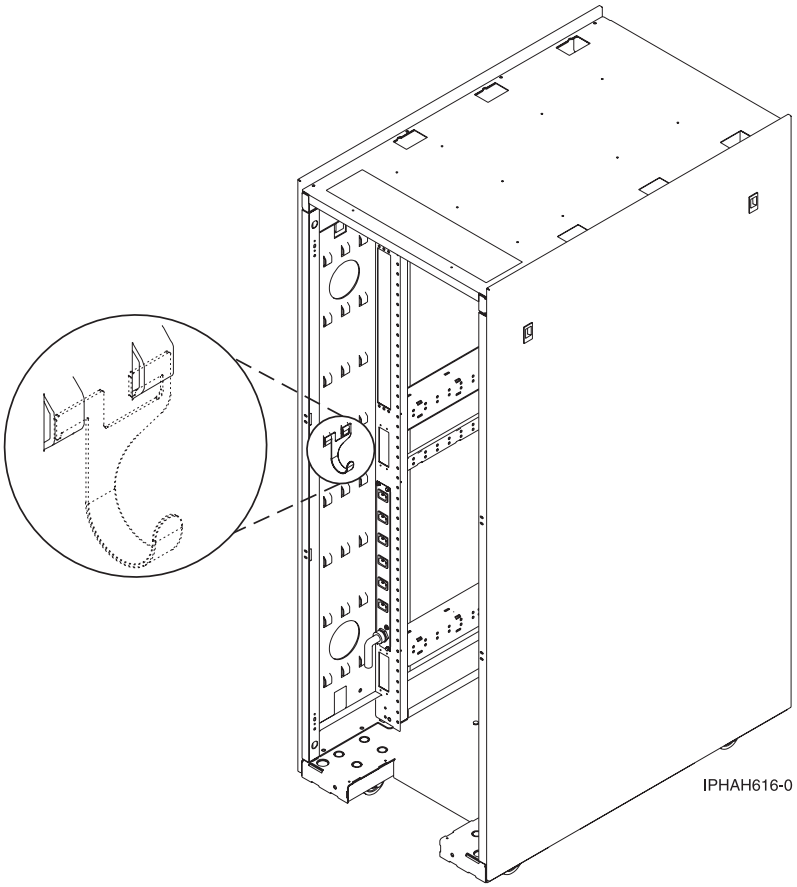
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9133-55A and theHardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

(D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

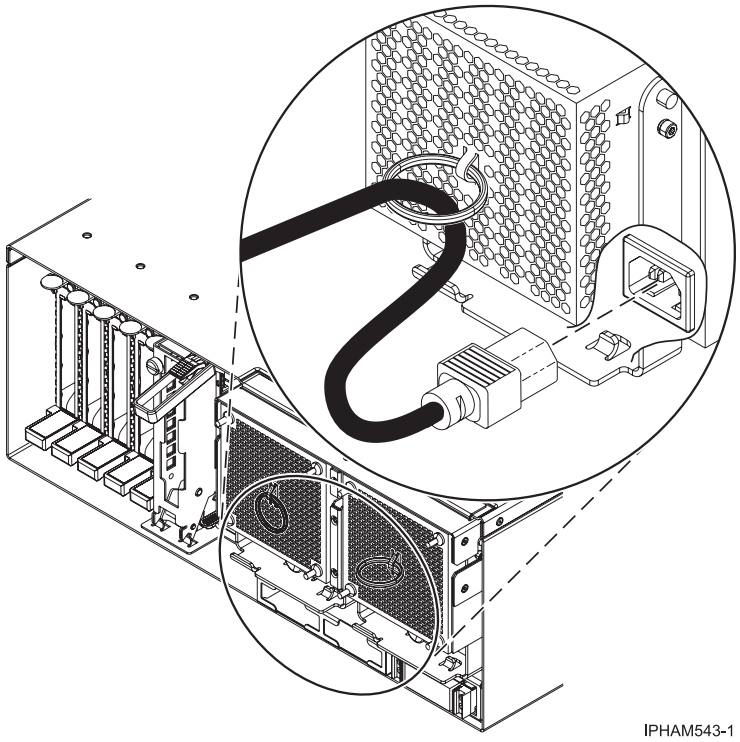
__ If you have an IBM System p5 or eServer p5 server, each system port on the back of the server is disabled when your server is connected to theHMC.

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

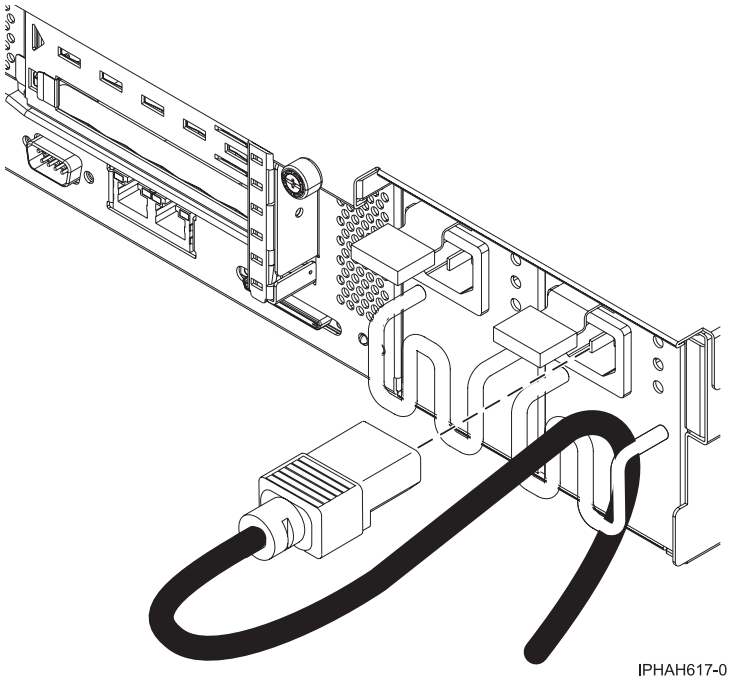
__ You should route power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

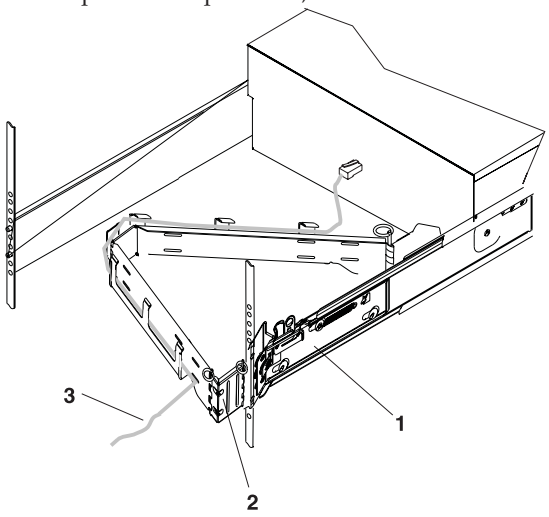
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

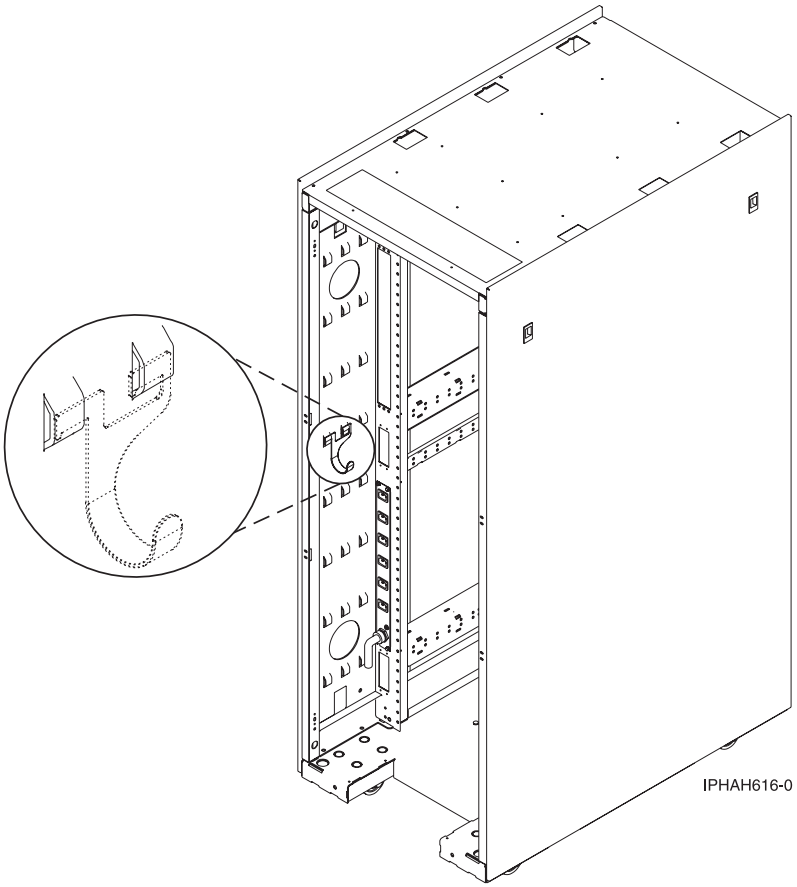
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model 9133-55A to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

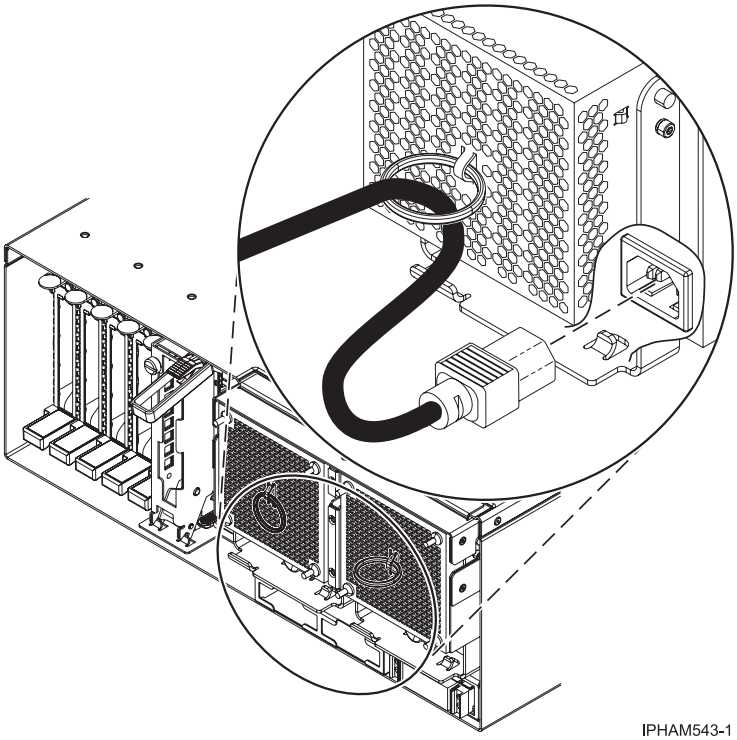
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



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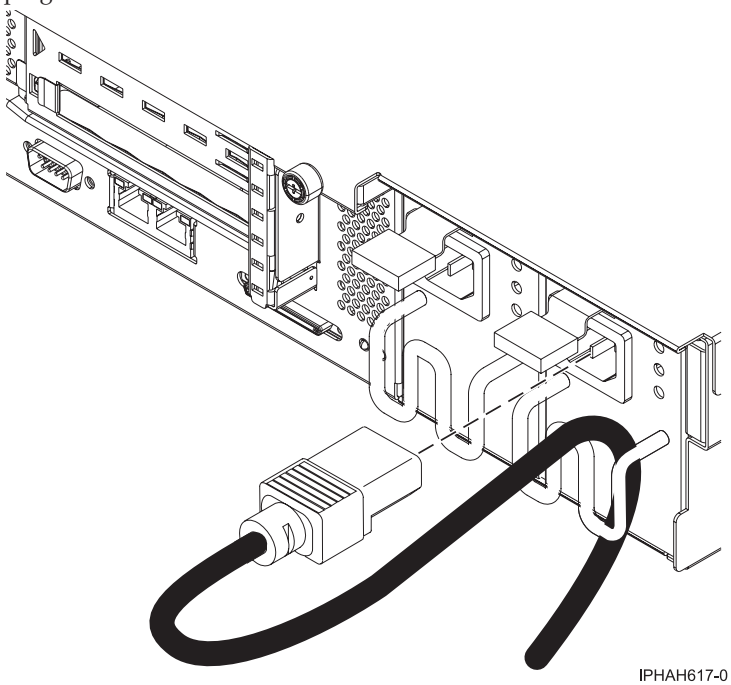
__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you have an IBM System p5 or eServer p5 server and you are connecting it to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. For the IBM System p5 or eServer p5 servers, any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

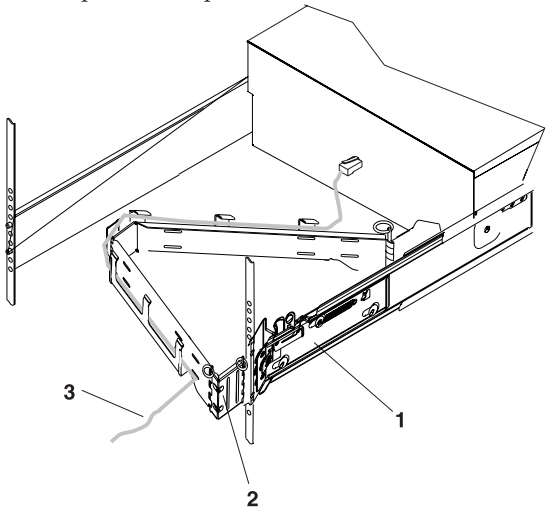
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

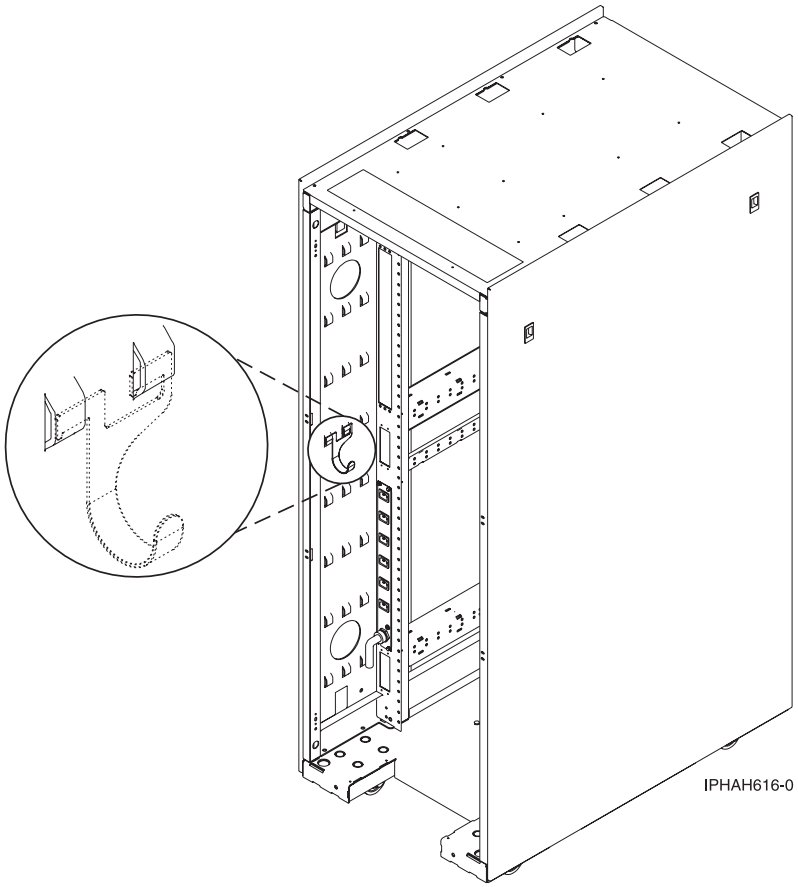
Routing the cables through the cable-management arm

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

References

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your model 7037-A50 server

For a graphical representation of the slots and connectors, see the back view of the model.

Attention: This product is equipped with a three-wire power cable and plug for user safety. Use this power cable with a properly grounded electrical outlet to avoid electrical shock.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

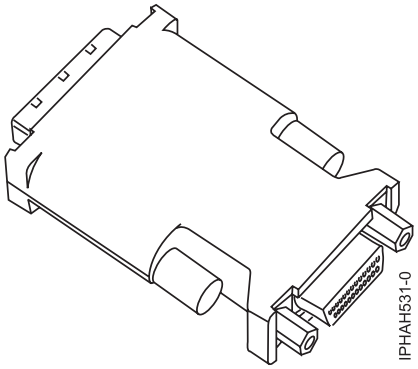
Connecting the power cords

__ Connect the power supply of your system to a power source.

Connecting the external cables

__ Connect a TTY terminal or terminal emulator to a serial port (T4 or T5), or connect a display monitor to an optional graphics adapter in one of the PCI slots (P1-C5 through P1-C9).
Tip: Some graphics adapters require a DVI-I to VGA converter. If you are using one of these graphics adapters, attach the supplied converter (04N7533) to your monitor cable before connecting to the graphics adapter.

Figure 5. DVI-I to VGA converter



__ Connect a keyboard and mouse to the rear USB ports (T6 and T7), or connect a keyboard and mouse to the front USB ports (T1 and T2).

__ If you want to connect the system with your network, connect a network cable to one of the Ethernet ports (T8 or T9).

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your server.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

__ Route the cables through the cable-management arm, and secure the cables with the straps that are provided.

After you finish

_ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Related reference

Back view of a model 7037-A50

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your 7047-185 workstation

For a graphical representation of the slots and connectors, see the back view of the model.

Attention: This product is equipped with a three-wire power cable and plug for user safety. Use this power cable with a properly grounded electrical outlet to avoid electrical shock.

To cable your system unit:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

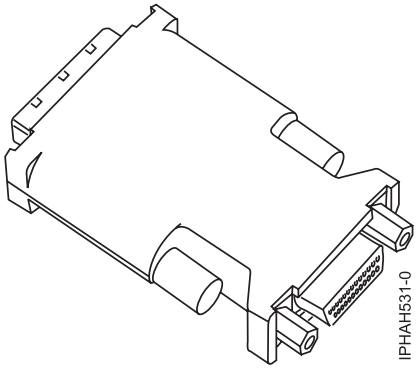
Connecting the power cords

__ Connect the system power supply to a power source.

Connecting the external cables

__ Connect a TTY terminal or terminal emulator to a serial port (T4 or T5), or connect a display monitor to an optional graphics adapter in one of the PCI slots (P1-C5 through P1-C9).
Tip: Some graphics adapters require a DVI-I to VGA converter. If you are using one of these graphics adapters, attach the supplied converter (04N7533) to your monitor cable before connecting to the graphics adapter.

Figure 6. DVI-I to VGA converter



__ Connect a keyboard and mouse to the rear USB ports (T6 and T7), or connect a keyboard and mouse to the front USB ports (T1 and T2).

__ If you want to connect the system with your network, connect a network cable to one of the Ethernet ports (T8 or T9).

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your system unit.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your workstation.
Note: If the cable did not come with your workstation, you will have to supply it.

After you finish

_ Return to your initial setup checklist and complete the next step.

Related reference

Back view of a 7047-185 workstation

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your OpenPower 710 with a console or interface

For a graphical representation of the slots and connectors, see the back view of the model.

Related reference

Back view of the OpenPower 710 server

Cabling the OpenPower 710 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you are connecting your server to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

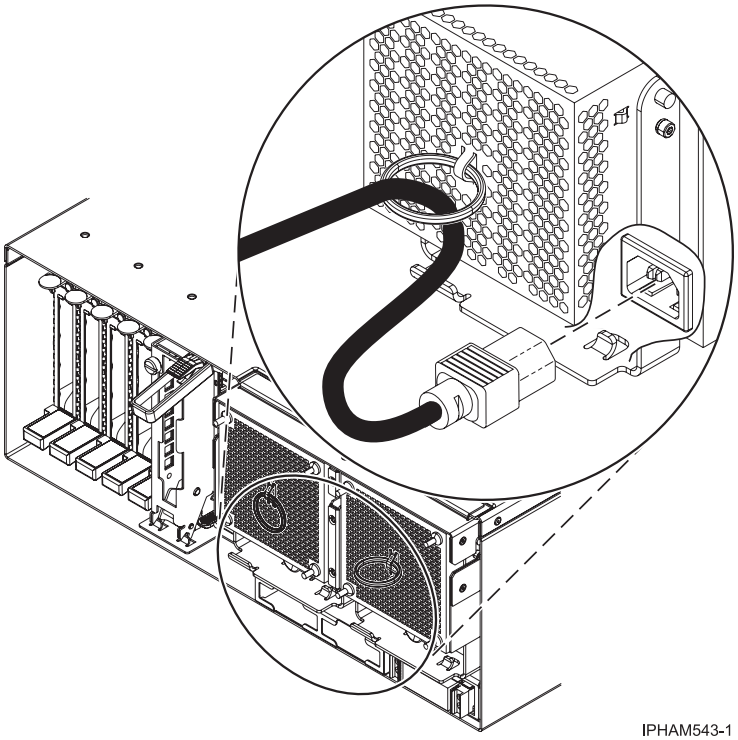
1. Any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

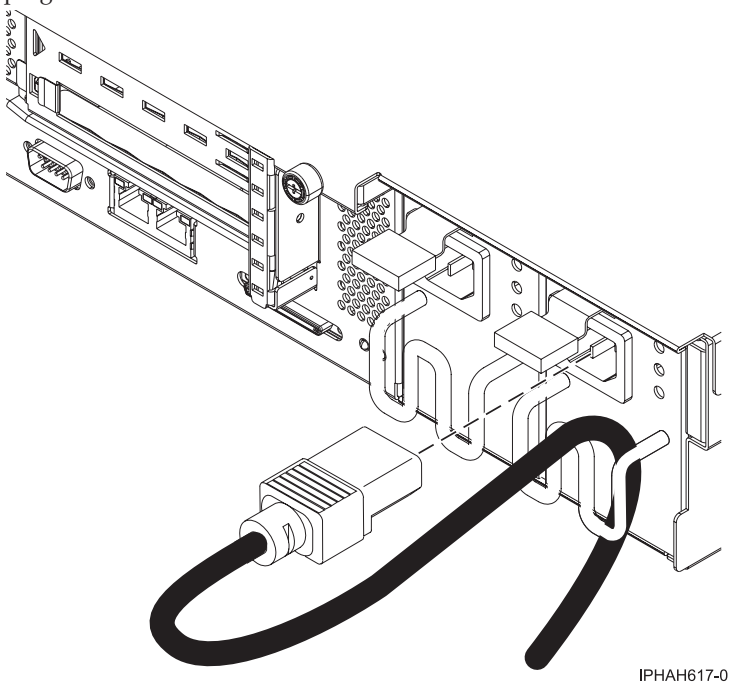
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

Connecting the power cords

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

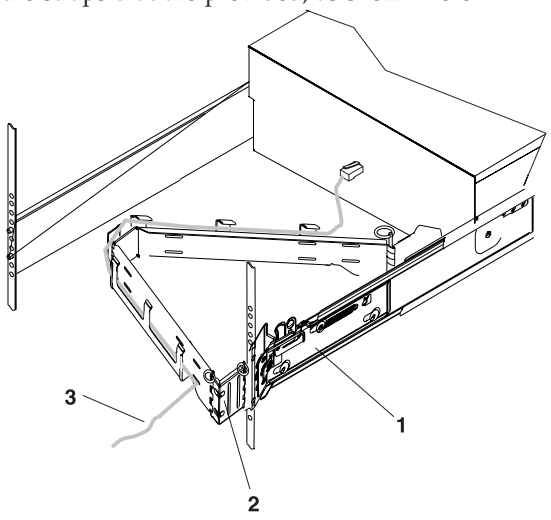
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

__ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

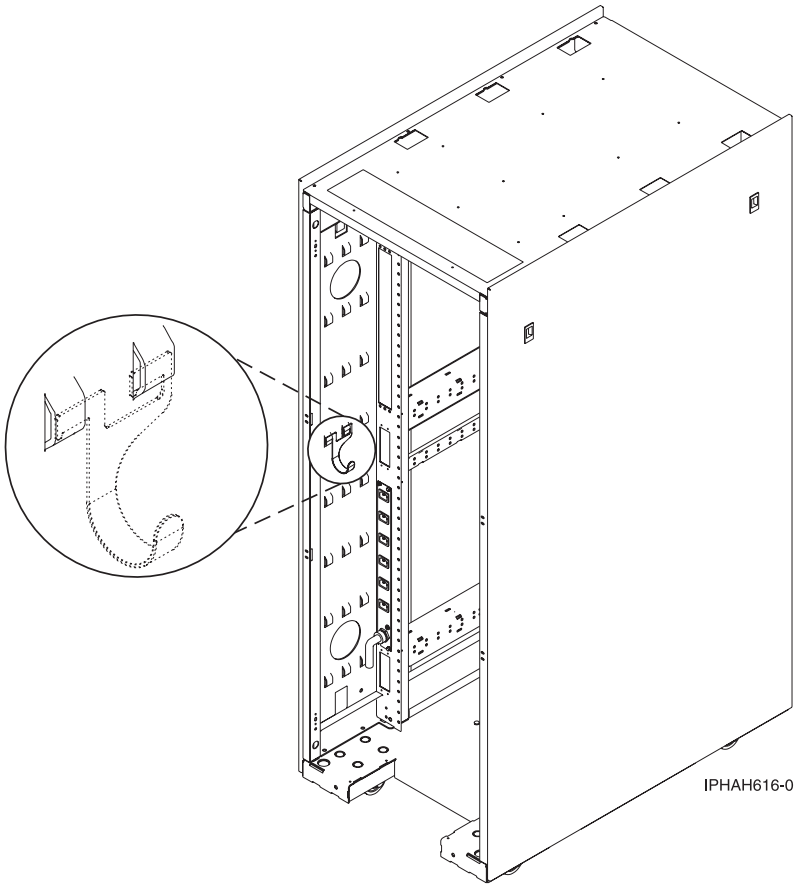
__ Power the system on.

Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Place the model 51x or 710 in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling the OpenPower 710 and the Hardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

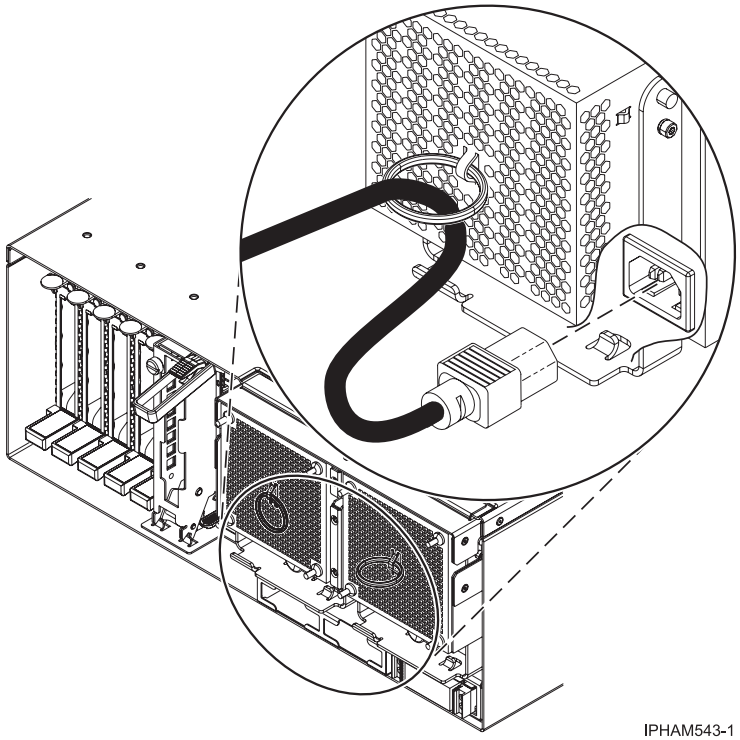
__ Each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

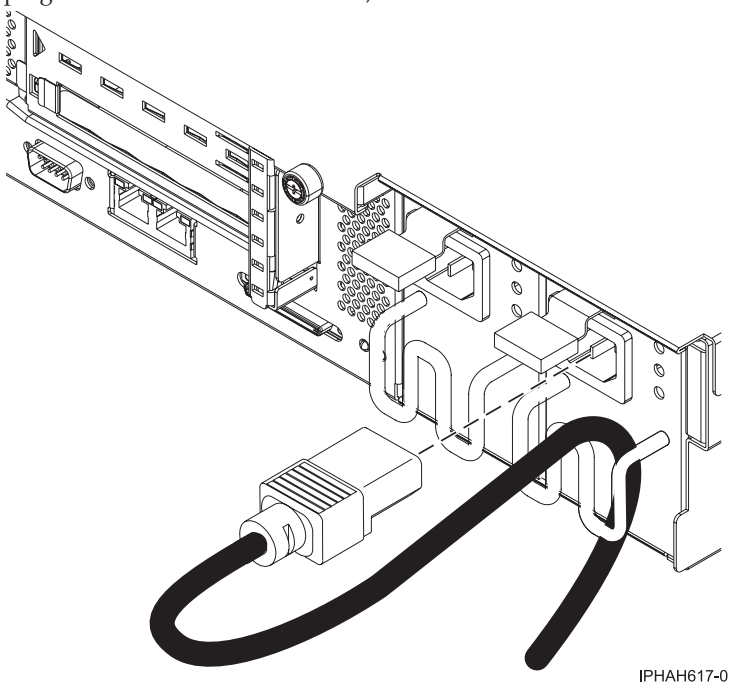
__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

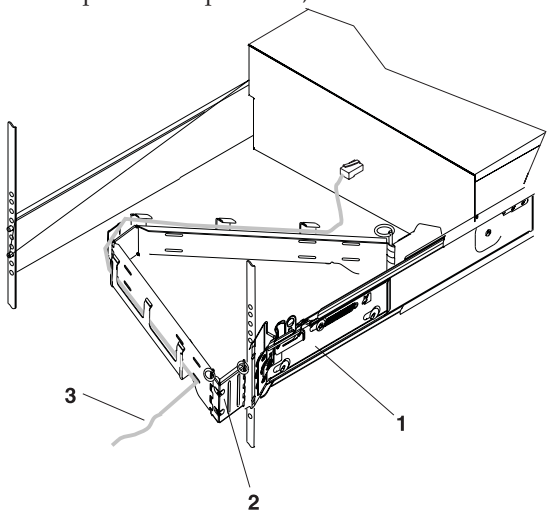
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

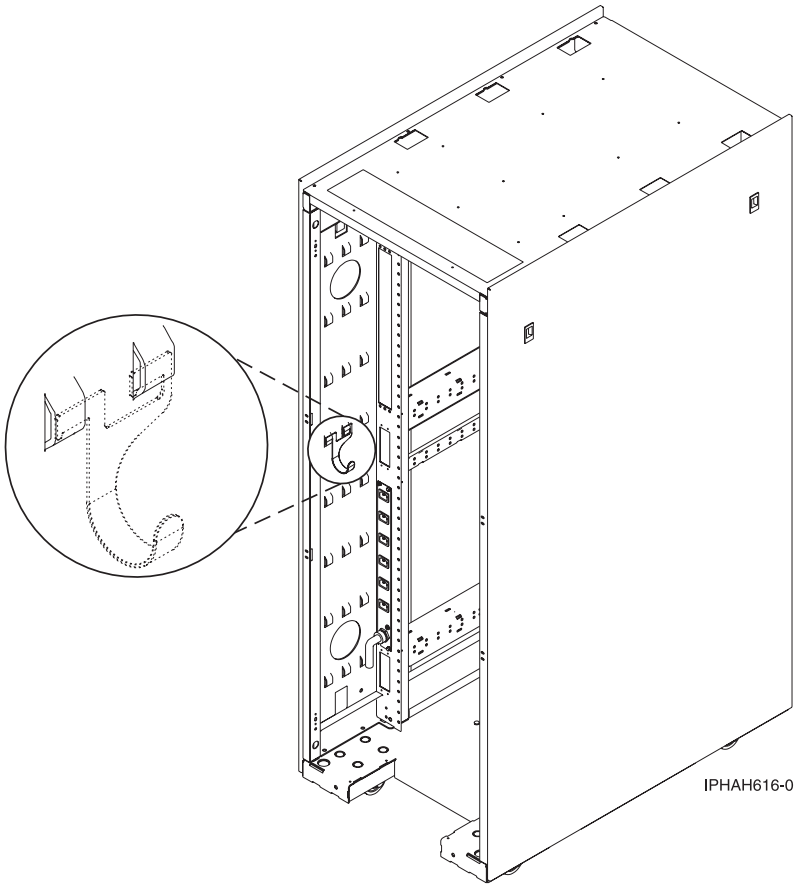
IPHAH615-0

__ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Cabling the HMC

Place the model 51x or 710 in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model OpenPower 710 to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

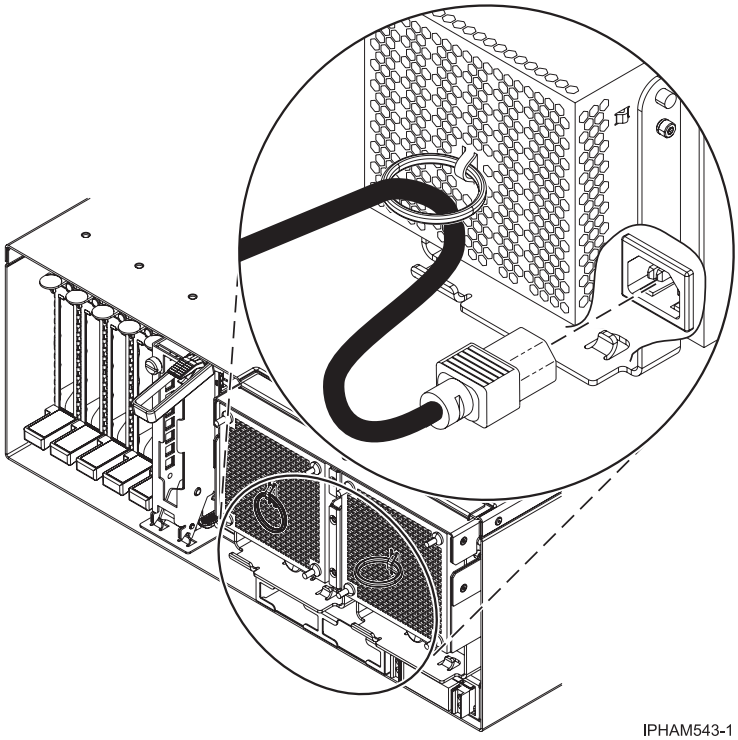
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

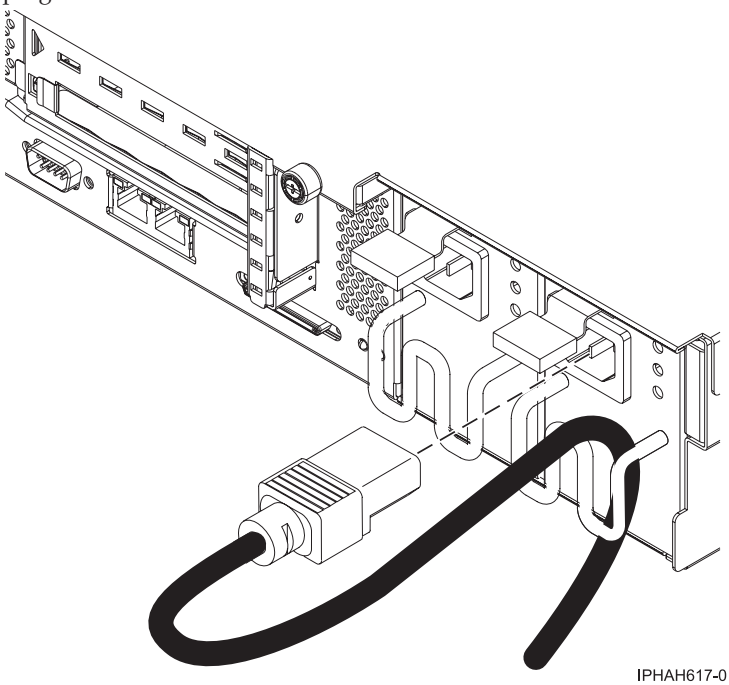
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you are connecting your server to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. Any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

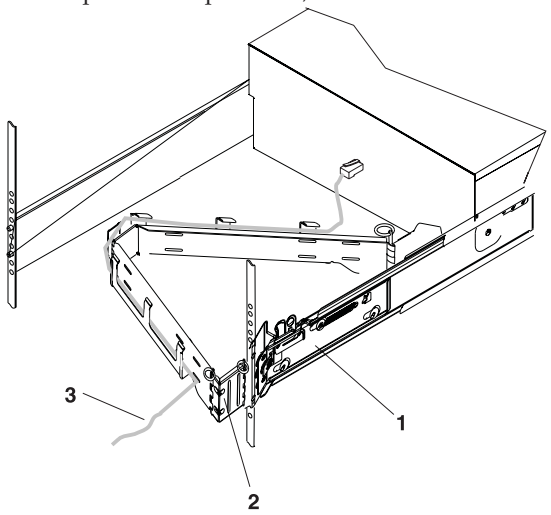
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the system into the service position. For instructions, see Place the model 51*x* or 710 in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

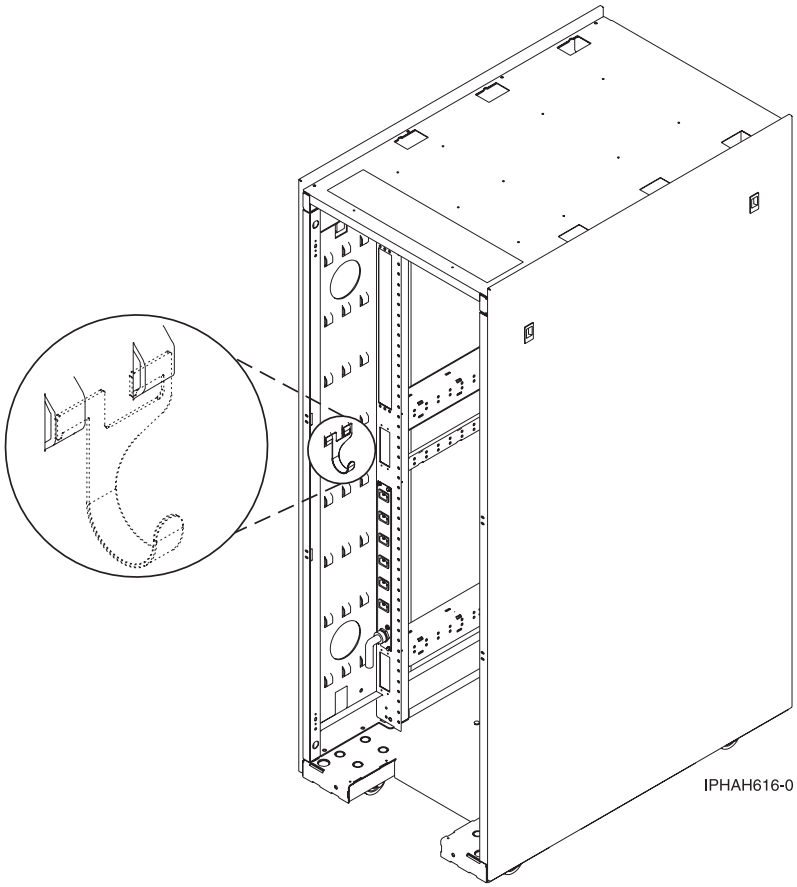
IPHAH615-0

  __ After you attach the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the model 51x or 710 in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling your OpenPower 720 with a console or interface

For a graphical representation of the slots and connectors, see the back views of the model.

Related reference

Back views of the OpenPower 720 server

Cabling the OpenPower 720 to access the Advanced System Management Interface (ASMI)

Learn how to access the ASMI, connect external cables and power cords, cable the expansion units, attach devices, route the cables, and start your server after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Accessing the Advanced System Management Interface (ASMI)

__ If you plan to connect a PC (with a browser) to the server to access the ASMI, see Accessing the ASMI using a Web browser for instructions.

__ If you plan to use the ASCII terminal to access the ASMI, see Accessing the ASMI using an ASCII terminal for instructions.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

__ If you want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you are connecting your server to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

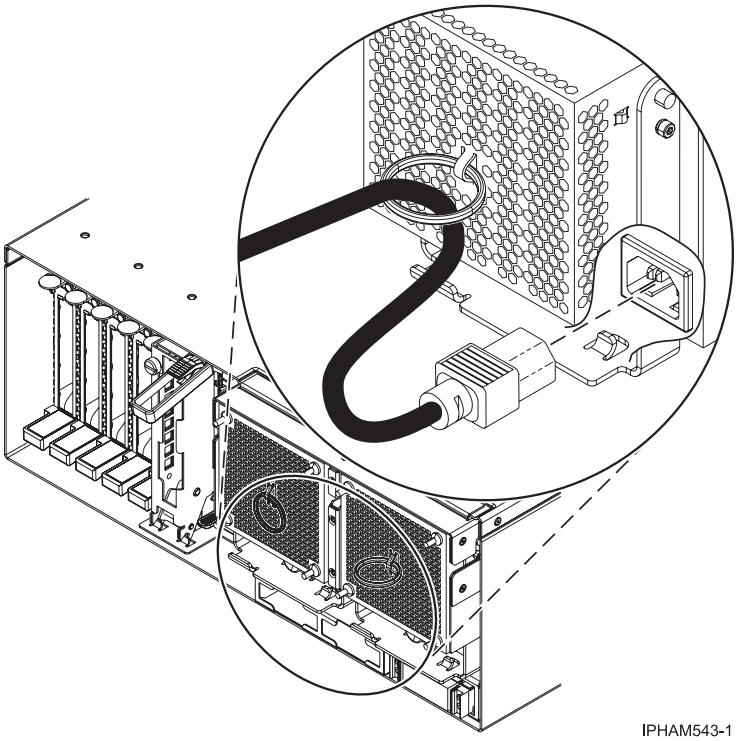
Notes:

1. Any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ You should route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

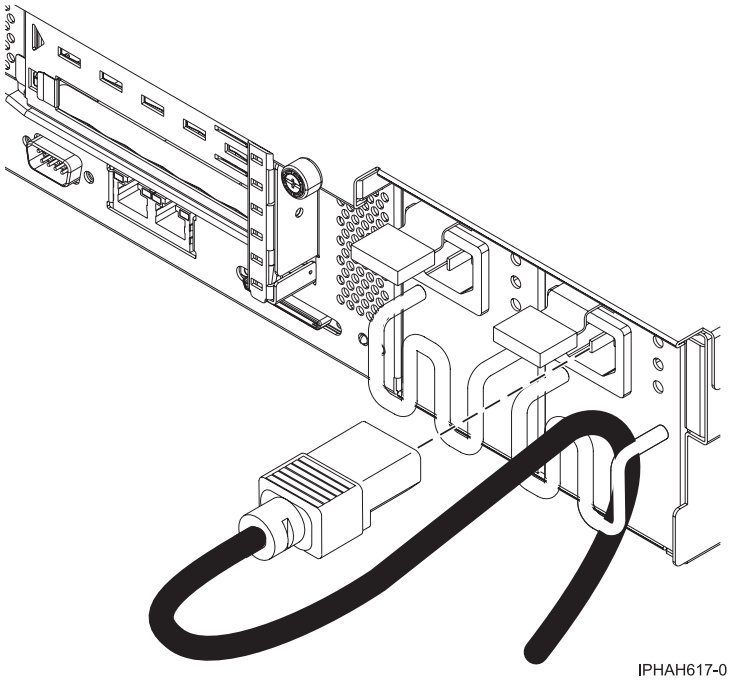
__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



__ Plug the power cords into the system, display, and attached devices.

Routing the cables through the cable-management arm

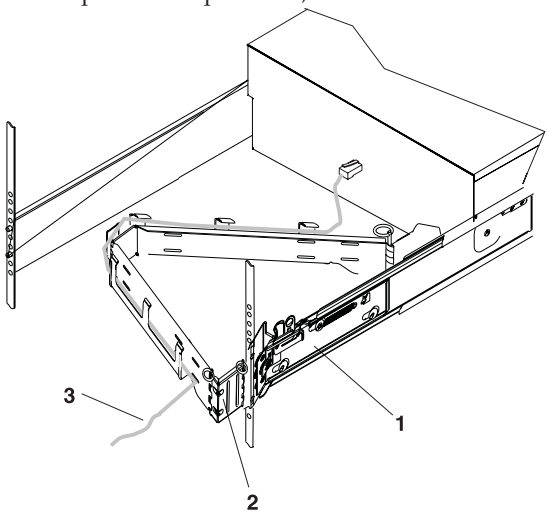
__ Is your server installed in a rack?

- **No.** Proceed to the next section, Starting your server.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

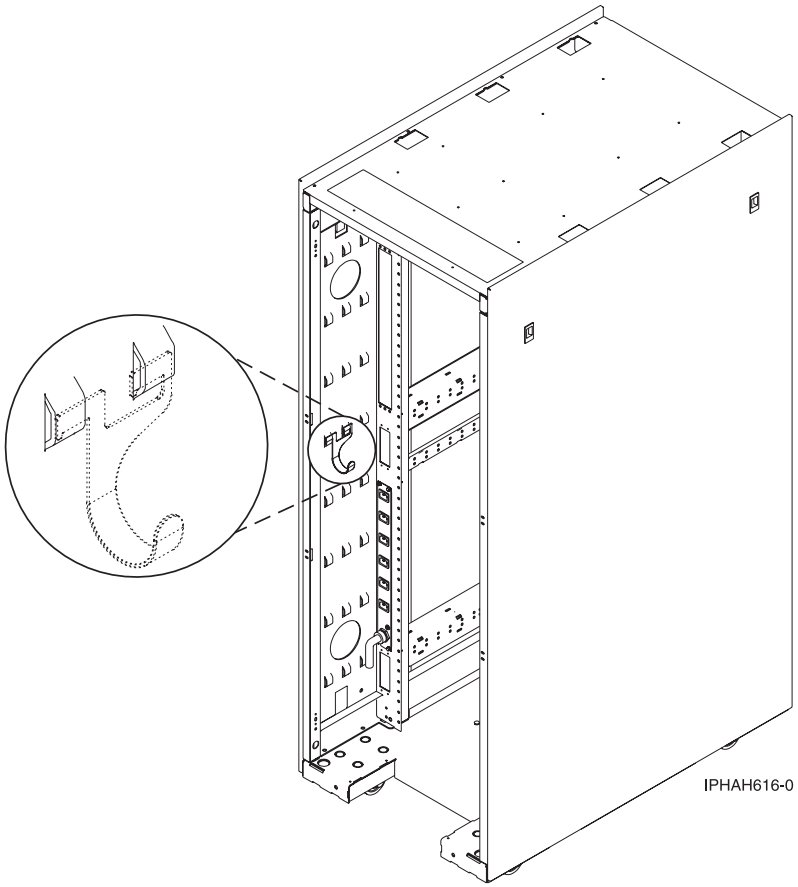
Starting your server

__ Power the system on.
Note: Expect a delay between the time that the power is applied to the server or workstation and the time that an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and leaves the control panel blank for up to two minutes. You must wait until the `C1XX XXXX` progress codes are complete and the control panel displays `01` before you perform an IPL or change the control panel functions.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Place the rack-mounted system or expansion unit in the service position

Powering the system on and off

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling the OpenPower 720 and theHardware Management Console (HMC)

Learn how to cable the expansion units, connect the external cables, power cords, and HMC cables, attach devices, and route the cables after you install all of your hardware features or replace parts.

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 IBM provided power cord. Do not use the IBM 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.**

  (D005)

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Attaching devices by using a system port

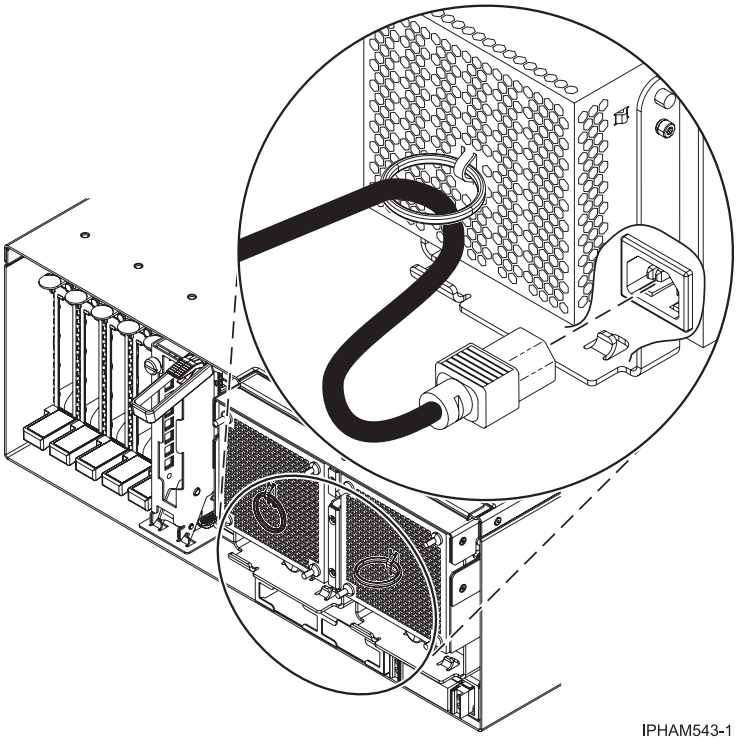
__ Each system port on the back of the server is disabled when your server is connected to the HMC.

Note: The attachment of high availability cluster multiprocessing (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

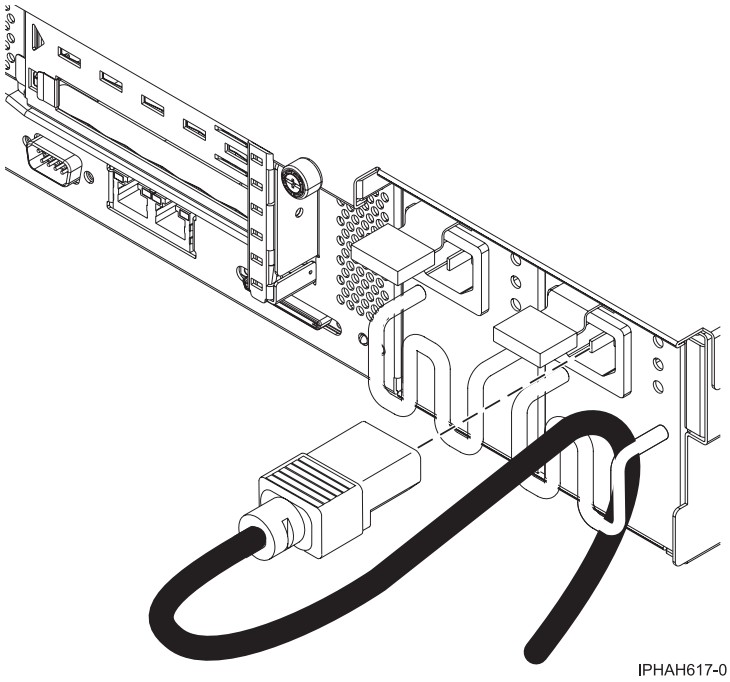
__ You can route the power cords through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



Connecting the power cords

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server, as shown here:



__ Plug the power cords into the system, display, and attached devices. **Do not connect the power cords to a power source until instructed to do so.**
Note: If you connect your server to a power source before the HMC is configured as the DHCP server, the server will initialize by using the default IP address values (HMC1 as 192.168.2.147 and HMC2 as 192.168.3.147) instead of waiting for an address value from the HMC. If you inadvertently connect your server to a power source, the IP address value will be corrected in the HMC configuration portion of the installation.

Connecting the HMC cables

__ Cable the HMC.

Routing the cables through the cable-management arm

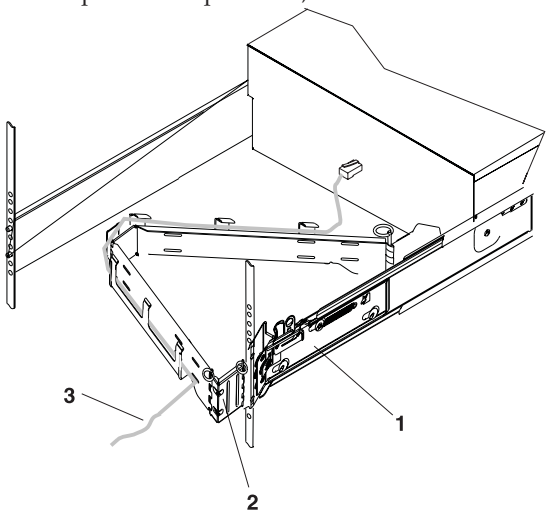
__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

Routing the cables through the cable-management arm

__ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

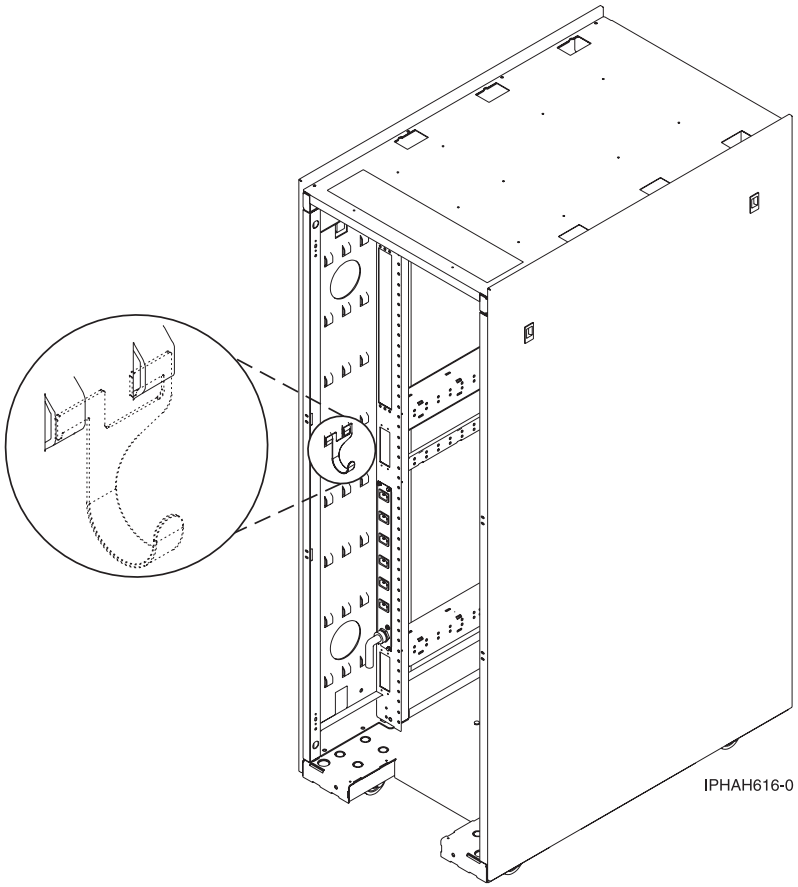
IPHAH615-0

__ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Cabling the HMC

Place the rack-mounted system or expansion unit in the service position

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Cabling a model OpenPower 720 to access the Integrated Virtualization Manager

Learn how to access the Integrated Virtualization Manager, connect external cables and power cords, route the cables, and attach devices after you install all of your hardware features or replace parts.

To cable your server:

Before you begin

__ If you have hardware features that are not installed, install them now. For instructions, see Installing features and replacing parts.

Connecting the serial cable

__ Connect one end of a null modem cable to a system port on the back of your server, and the other end to a serial port on a PC that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed. See References for a back view of the model.

Cabling the expansion units

__ Do you have an expansion unit?

- **Yes.** See Expansion units for instructions on the following tasks:
  - Setting up an expansion unit
  - Creating a new RIO/HSL or SPCN loop
  - Adding a system or expansion unit into an existing RIO/HSL or SPCN loop

  Note: Do not plug the expansion-unit power cord into the power outlet, as directed by the instructions in Expansion units, until later in this checklist.
- **No.** Proceed to the next section, Connecting the external cables.

Connecting the external cables

__ If you are using any optional adapters (such as token ring or 8-port EIA-232), connect the cables to the appropriate adapter connectors in the PCI slots of your machine.

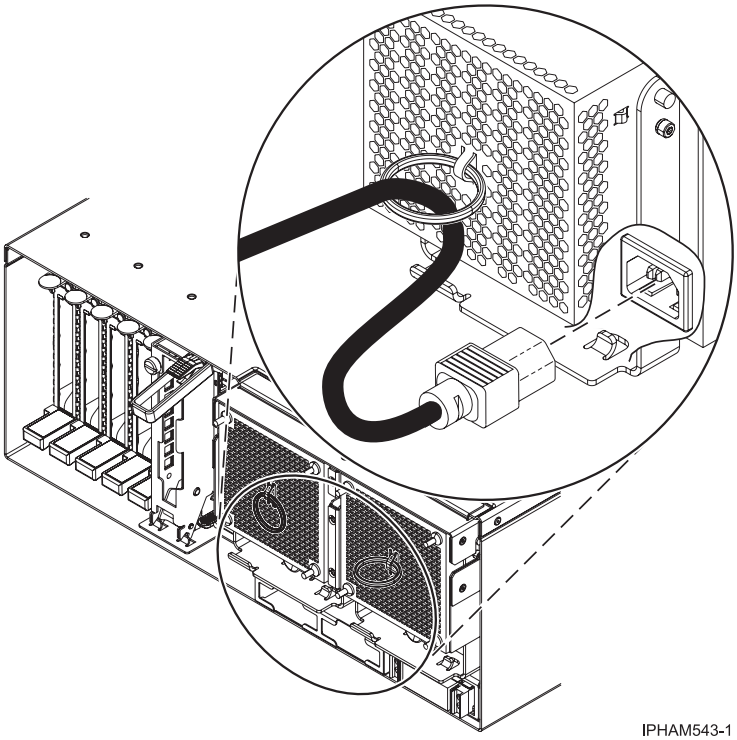
See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your server.
Note: If the cable did not come with your server, you will have to supply it.

Connecting the server's power cord

__ You should route the server's power cord through the retention ring or under the retention bracket that is provided to prevent the power cord from becoming unplugged unexpectedly.

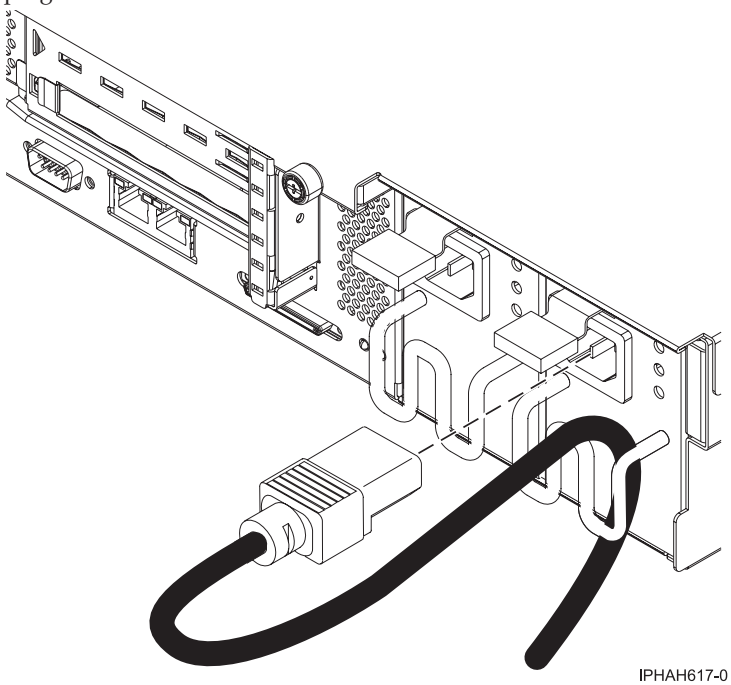
Connecting the server's power cord

__ If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server, as shown here:



IPHAM543-1

__ If your server is equipped with a retention bracket, route the power cord under the bracket before you plug it into the back of the server as shown here:



IPHAH617-0

__ Plug the power cord into the system.

Accessing the Advanced System Management Interface (ASMI)

__ Connect the server to the same PC that you connected the null modem cable to for access to the ASMI. For instructions, see Accessing the ASMI using a Web browser.

Attaching devices by using a system port

__ If you want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see References.

__ If you want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the back of the server. For views of the back of each server, see References.

__ If you are connecting your server to an uninterruptible power supply, see the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Notes:

1. Any other application that uses a system port requires a system port adapter to be installed into a PCI slot.
2. The attachment of high availability cluster multiprocessing IBM (HACMP) cables to a system port on the back of the server is not supported.

Connecting the power cords

__ Connect the power cords from the display and attached devices to a power source.

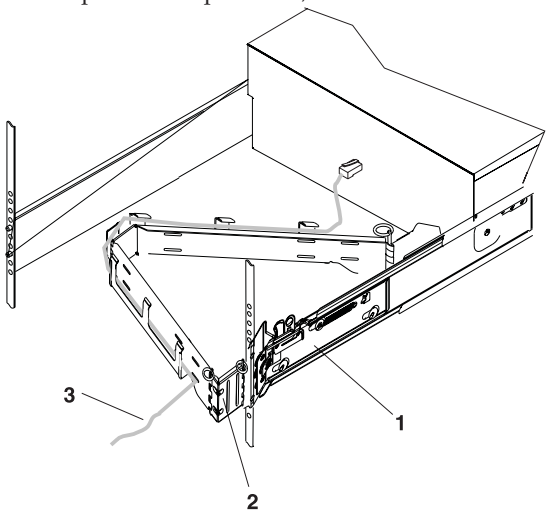
Routing the cables through the cable-management arm

__ Is your server installed in a rack?

- **No.** Proceed to the next section, After you finish.
- **Yes.** Do the following:

  __ Place the rack-mounted system in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.

  __ Route the cables through the hooks that are located along the cable-management arm and secure them with the straps that are provided, as shown here:



1 System rail
2 Cable management arm
3 Cable

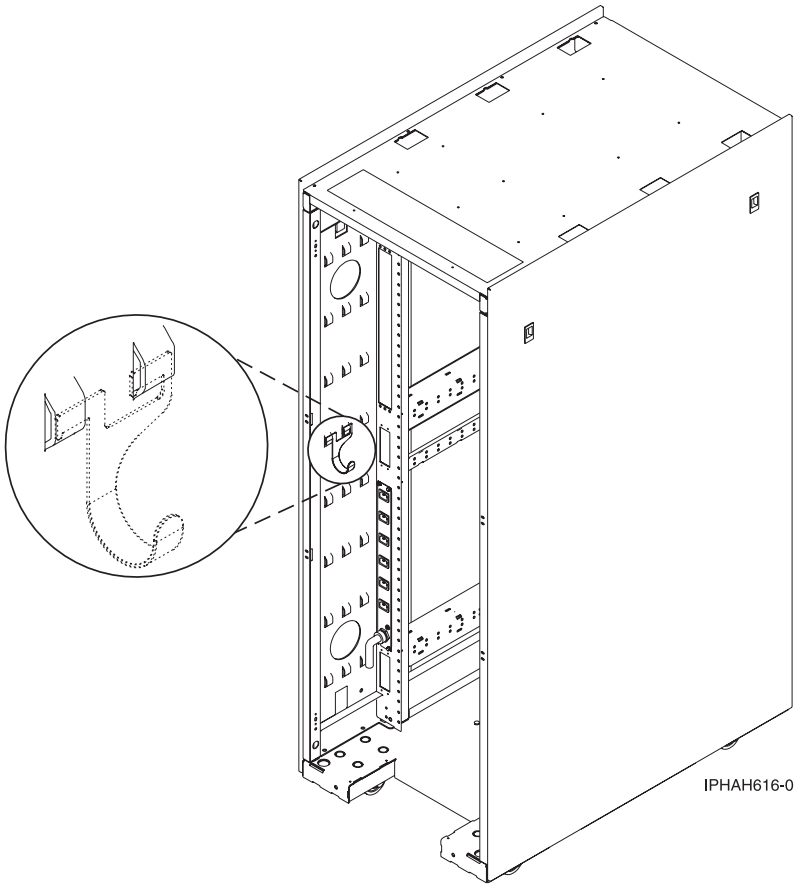
IPHAH615-0

  __ After attaching the cables to the cable-management arm, go to the front of the rack and move the system drawer in and out. Observe the cables and cable-management-arm movement to verify that the cables are not binding.

After you finish

__ Did you receive a cable hook with your rack shipment?

- **No.** Proceed to the next item.
- **Yes.** The cable hook manages the server cables in the back of the rack. To install the cable hook, slide it into the slots that are located on the back of the rack as shown here:



__ Return to your initial server setup checklist and complete the next step.

Related concepts

Installing features and replacing parts

Expansion units

Related tasks

Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Serial uninterruptible power supply conversion cable

Place the rack-mounted system or expansion unit in the service position

Related reference

References

Related information

 Adapters, Devices, and Cable Information for Multiple Bus Systems

Serial uninterruptible power supply conversion cable

The serial uninterruptible power supply conversion cable changes signals to serial for use with the IBM System i5 or eServer i5 model or logical partition. This cable is required if you are connecting the server to an uninterruptible power supply.

Before you use this feature (feature code 1827), ensure that you have applied any prerequisite software. For more information, see the IBM Prerequisite Web site.

To connect the serial uninterruptible power supply conversion cable, do the following:

1. Connect side B (see the following figure) of the serial uninterruptible power supply conversion cable (with the external threads) to system port 2 (P1-T2) on the back of your system.For back views of the 520, 525, and 515 models, see References.
2. Connect side A of the serial uninterruptible power supply conversion cable (with the internal threads) to the vendor-supplied uninterruptible power supply cable.

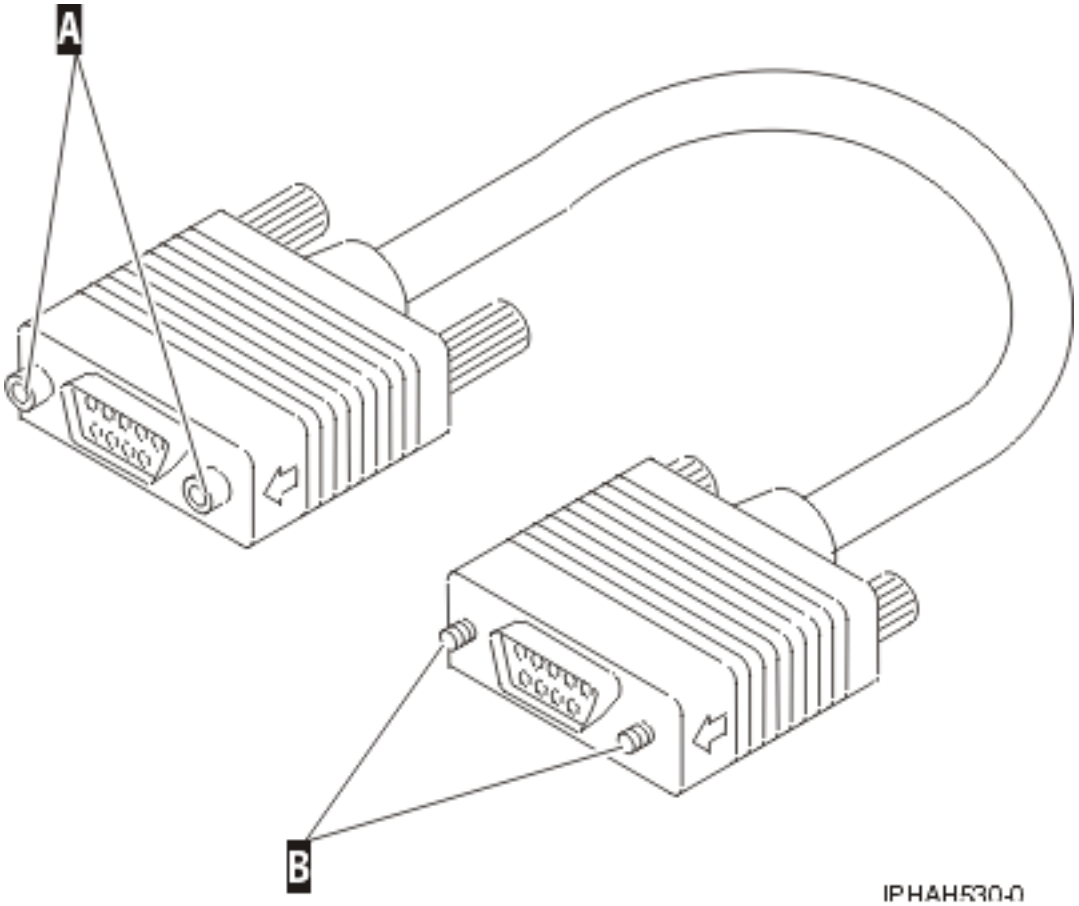


Figure 7. Serial uninterruptible power supply conversion cable

Note: The IBM System p5 or eServer p5 server local serial ports (tty0 and tty1) and the RJ45 port on the operator panel do not support uninterruptible power supply communications. The 2-Port Asynchronous EIA-232 PCI Adapter (feature code 5723) is required as part of the server configuration to allow serial communications to an uninterruptible power supply. IBM System p5 or eServer p5 servers with logical partitions must use Web/SNMP communications (a card or an adapter) to attach to an uninterruptible power supply.

Related reference

References

Related information

IBM Prerequisite Web site

References

Find helpful information that supports how to cable your system.

Cables and adapters

Learn about the cables, connectors, and adapters that might be installed on your model.

See Adapters, Devices, and Cable Information for Multiple Bus Systems for a description of cables and adapters that might be installed on your IBM System p5 or eServer p5 server.

This table shows some of the cables and adapters that might be installed on your IBM System i5 or eServer i5 model:

Table 1. Cables and adapters for your IBM System i5 or eServer i5 server

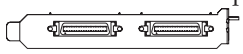
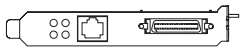
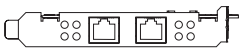
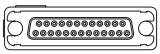
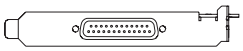
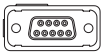
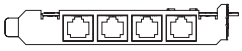
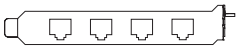
Cables and connectors	Adapter card type numbers	Adapter cards (located on the back of the server)
PCI two-line WAN		
44H7*xxx* or 97H73*xx* 	4745/2745/2742	PCI two-line WAN input/output adapter 
44H7*xxx*, 97H73*xx*, or 44H748*x*  **Integrated modem** 87G62*xx*, 21H49*xx*, or 75G38*xx*	2793/2794/2771	PCI two-line WAN with modem input/output adapter 
PCI dual WAN		
Integrated modem 87G62*xx*, 21H49*xx*, or 75G38*xx* 	2772/2773	PCI dual WAN with modem input/output adapter 
PCI twinaxial		
Part number 12F5093 	4746/9746/2746	PCI twinaxial workstation controller input/output adapter 
PCI token-ring		
RJ45 token-ring  Filter P75G5958 or 75G2865  6339098 	2744/4959	PCI 4/16/100 Mbps token-ring input/output adapter 
PCI Quad		
	2805/2806	PCI Quad modem input/output adapter 
	6312	PCI Quad digital trunk adapter 
Ethernet		

Table 1. Cables and adapters for your IBM System i5 or eServer i5 server (continued)

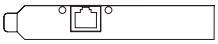
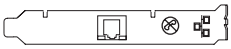
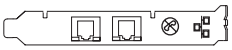
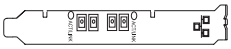
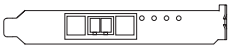
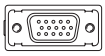
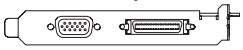
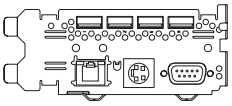
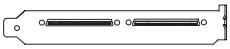
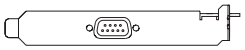
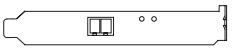
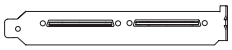
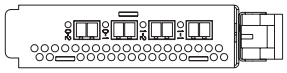
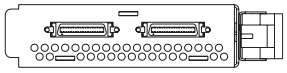
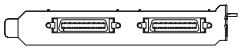
Cables and connectors	Adapter card type numbers	Adapter cards (located on the back of the server)
RJ45 Ethernet 	2838/2849	PCI 100/10 Mbps Ethernet input/output adapter 
	5700	PCI 1 Gbps Ethernet input/output adapter 
	5701	PCI 1 Gbps Ethernet UTP input/output adapter 
	5706	PCI 1 Gbps Ethernet TX input/output adapter 
	5707	PCI 1 Gbps Ethernet SX input/output adapter 
	5718	PCI 10 Gbps Ethernet input/output adapter 
Server cards		
Part number 45H2433 44H8677 connects to cable 45H2433  Video extension cable, 44H8676 	2891/2892	IBM Netfinity® Server Card 
	4810/9710	Integrated IBM xSeries® server card 
	4821/9712	Integrated xSeries server card
RAID disk unit controllers		
	2757	PCI Ultra RAID disk unit controller
	2780	PCI-X Ultra4 RAID disk unit controller
	5703/4778	PCI-X RAID disk unit controller 
	5709	RAID enabler card
Fibre channel disk unit controllers		
	2787	PCI-X Fibre channel disk unit controller
PCI cryptography		

Table 1. Cables and adapters for your IBM System i5 or eServer i5 server (continued)

Cables and connectors	Adapter card type numbers	Adapter cards (located on the back of the server)
	4801/4758–023	PCI cryptographic coprocessor 
	4805/2058	PCI cryptographic accelerator
PCI-X tape unit controllers		
	5704	PCI-X fibre channel tape unit controller 
	5702/5712/5715	PCI-X U320 tape/disk unit controller 
Bus adapters		
	2886	Optical bus adapter 
	2887	HSL-2 bus adapter 
	6417/28E7	HSL-2/RIO-G bus adapter 

Related information

Adapters, Devices, and Cable Information for Multiple Bus Systems

Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515

View the ports and connections on the model 9405-520, 9406-520, 9406-525, or 9407-515.

Connections and ports are labeled to facilitate the setup process. For more details, see Locations — model 515, 52*x*, and 285.

Note: If you are connecting the server to an uninterruptible power supply, use system port 2 (P1-T2).

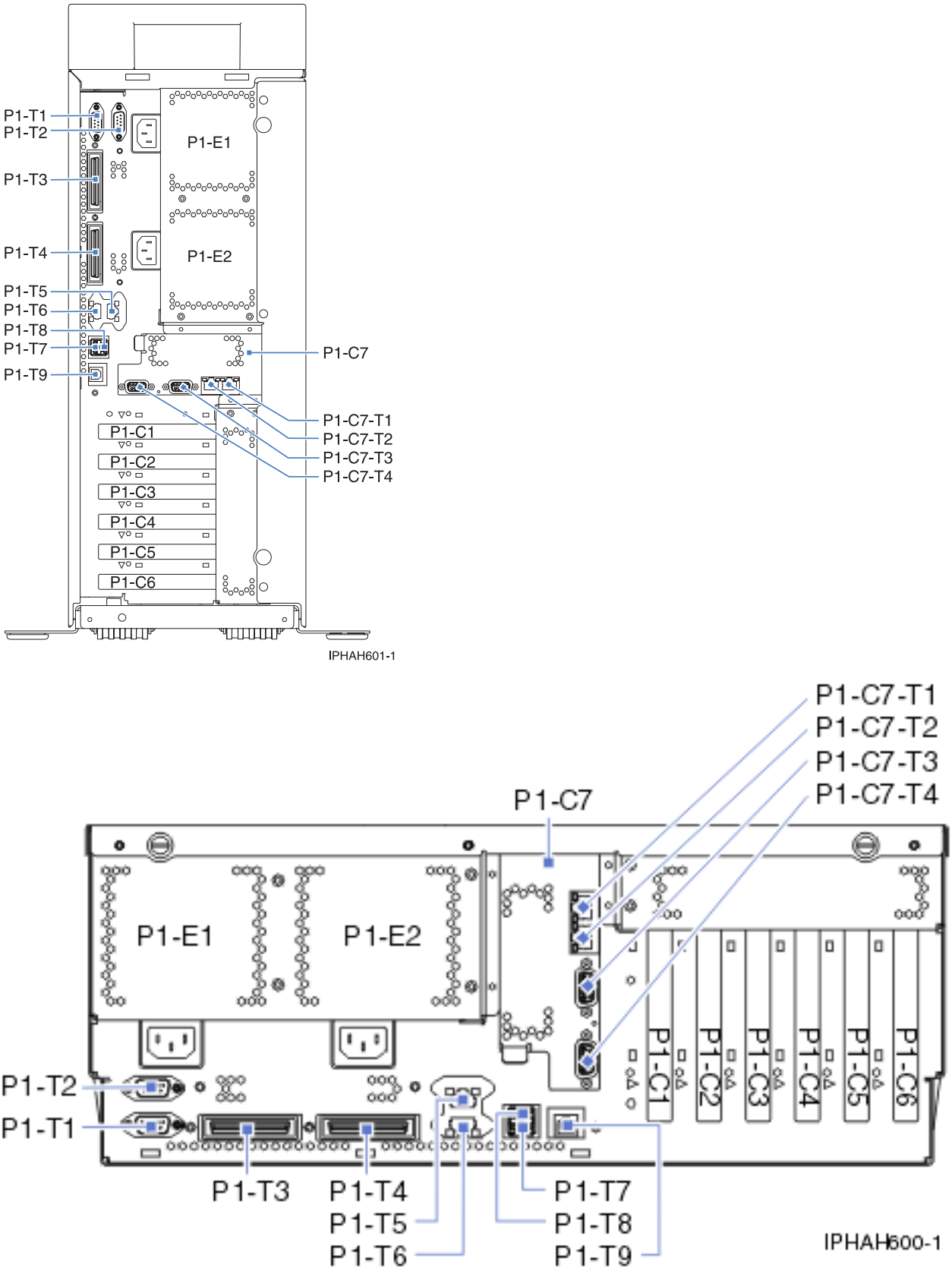


Figure 8. Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515 with the integrated HSL/RIO ports (T3/T4)

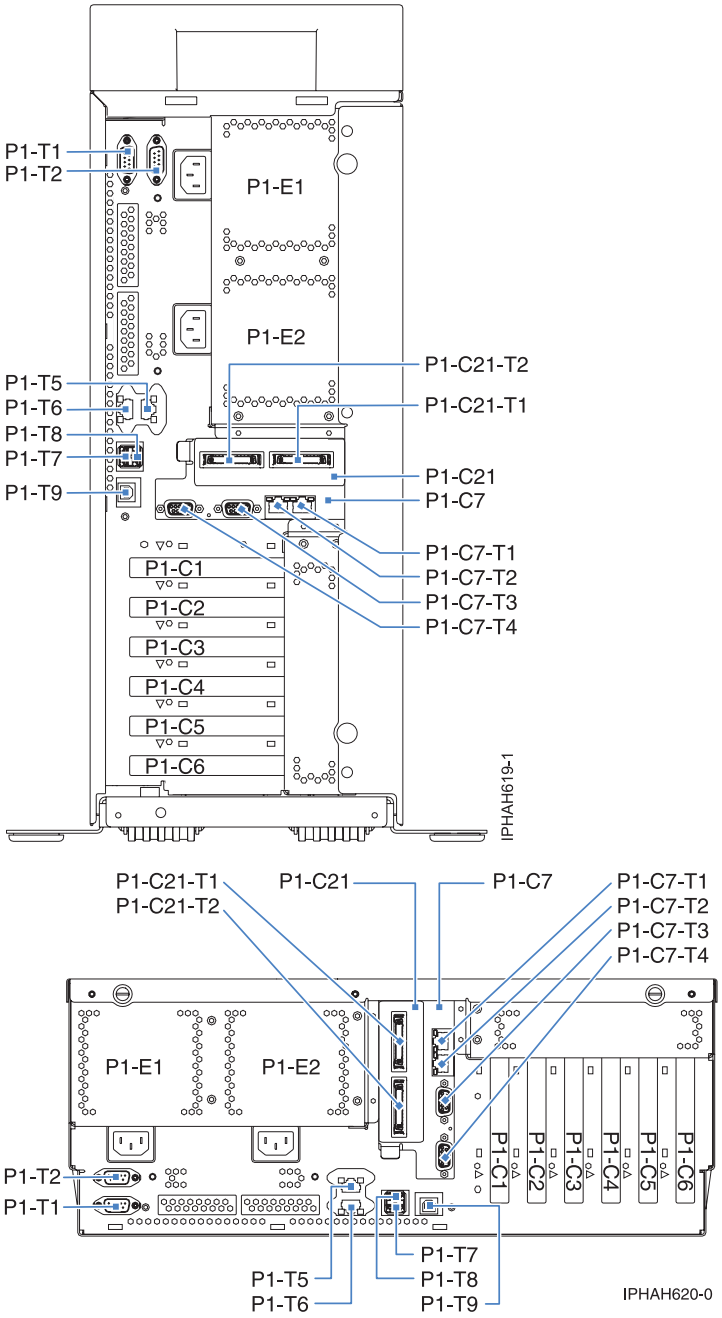


Figure 9. Back views of a model 9405-520, 9406-520, 9406-525, or 9407-515 without the integrated HSL ports (T3/T4)

Related reference

Locations — model 515, 52x, and 285

Back view of a model 7037-A50 server

View the ports and connections on the 7037-A50 server.

This diagram shows you the back view of a 7037-A50 server. Connections and ports are labeled to facilitate the setup process.

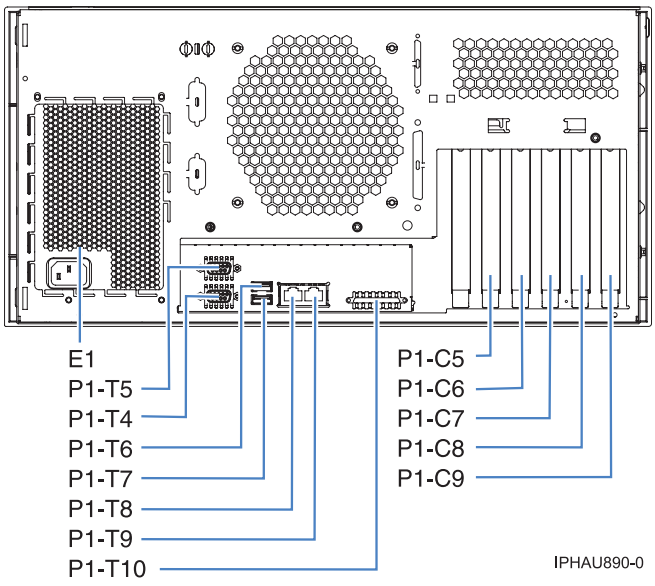


Figure 10. Back view of a 7037-A50 server

Back view of a model 9110-51A server

View the ports and connections on the model 9110-51A server.

This diagram shows you the back view of a 9110-51A server. Connections and ports are labeled to facilitate the setup process.

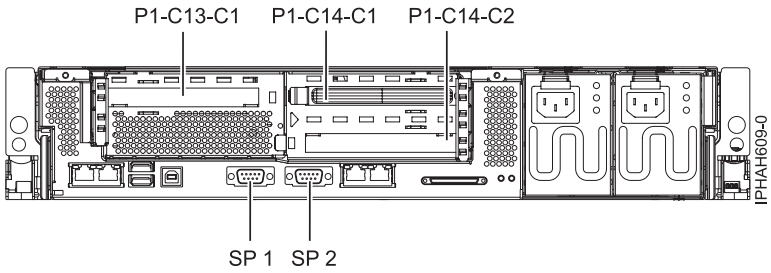


Figure 11. Back view of a model 9110-51A server

Back view of a model 9115-505

View the ports and connections on the model 9115-505.

This diagram shows you the back view of a 9115-505. Connections and ports are labeled to facilitate the setup process.

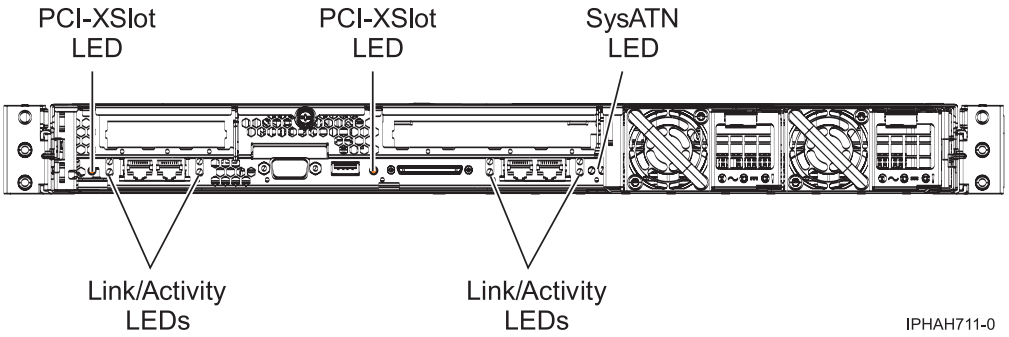


Figure 12. Back view of a model 9115-505

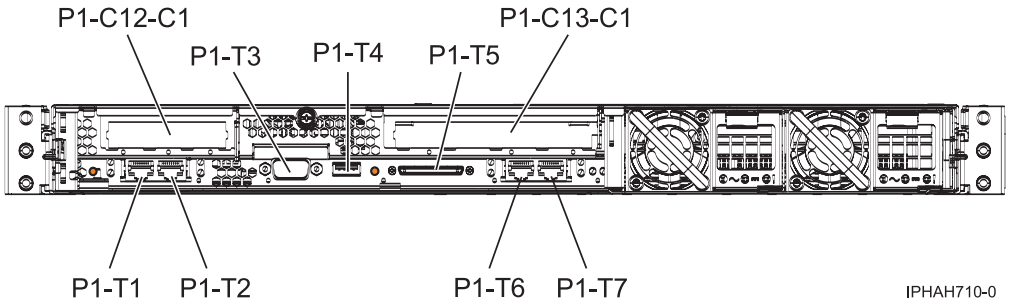


Figure 13. Back view of a model 9115-505

Back views of a model 9131-52A server

View the ports and connections on the model 9131-52A server.

This diagram shows you the back view of a 9131-52A server. Connections and ports are labeled to facilitate the setup process.

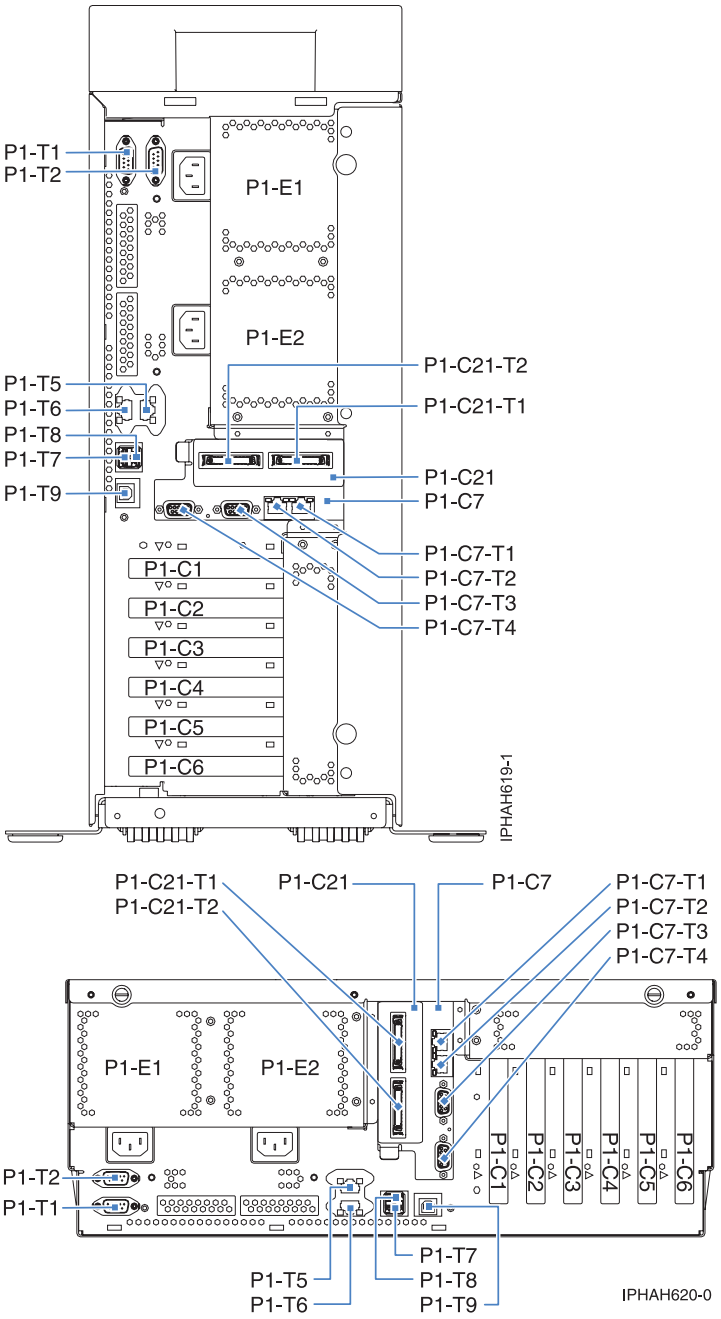


Figure 14. Back views of a model 9131-52A server

Back views of a model 9133-55A server

View the ports and connections on the model 9133-55A server.

This diagram shows you the back view of a 9133-55A server. Connections and ports are labeled to facilitate the setup process.

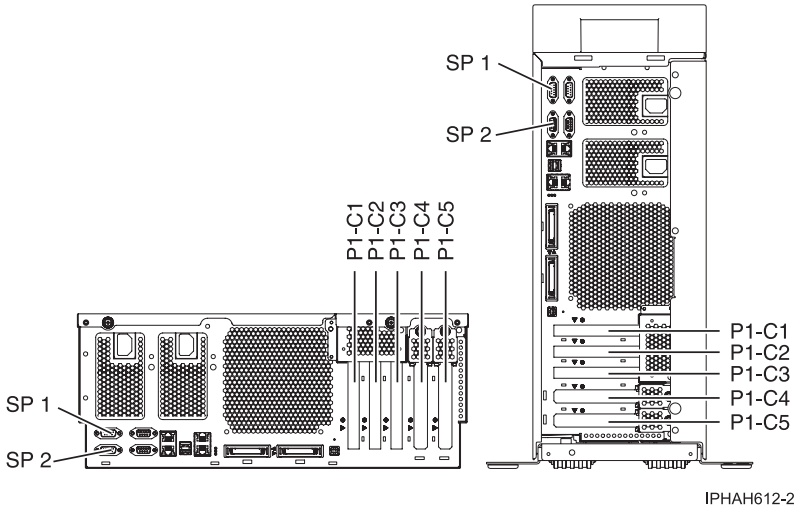


Figure 15. Back views of a model 9133-55A server

Back view of a 7047-185 workstation

View the ports and connections on the 7047-185 workstation.

This diagram shows you the back view of a 7047-185 workstation. Connections and ports are labeled to facilitate the setup process.

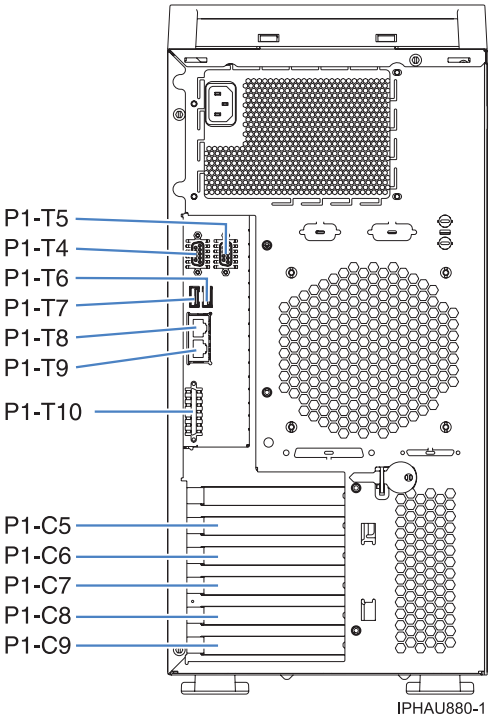


Figure 16. Back view of a 7047-185 workstation

Back views of a model 9111-285 workstation

View the ports and connections on the model 9111-285 workstation.

This diagram shows you the back view of a 9111-285 workstation. Connections and ports are labeled to facilitate the setup process.

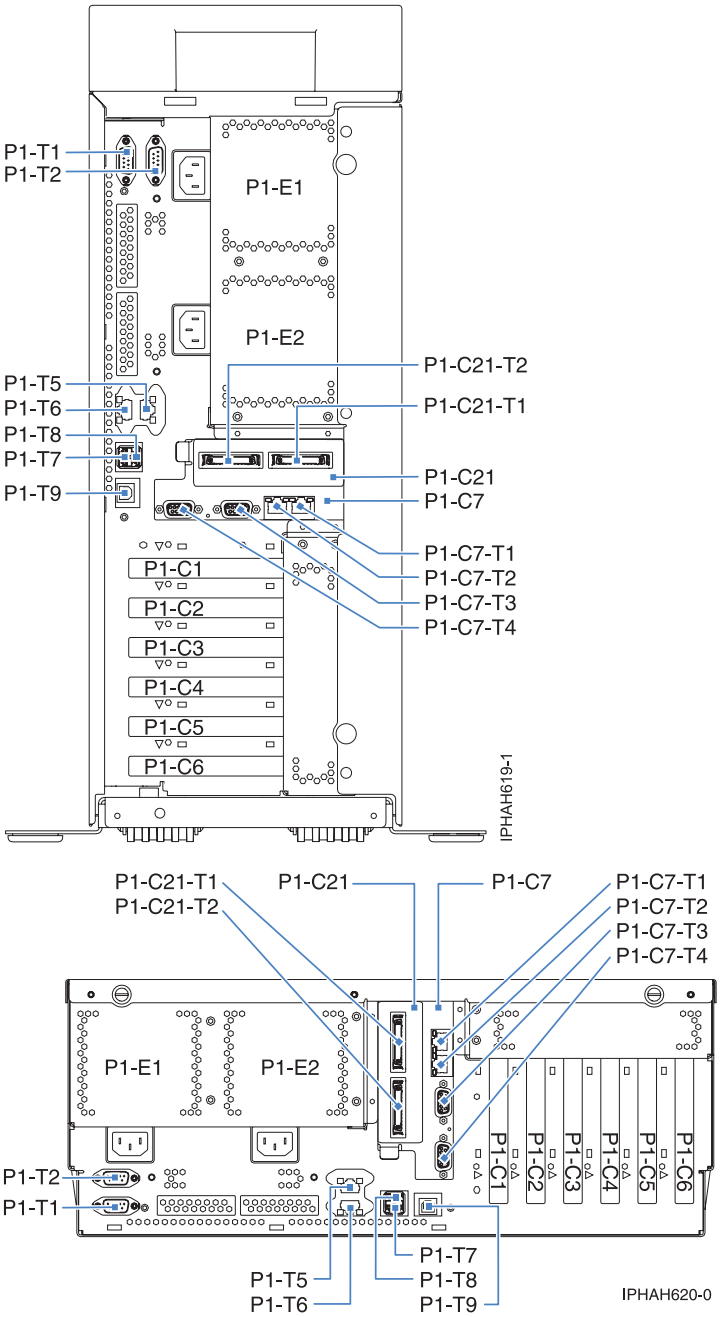


Figure 17. Back views of a model 9111-285 workstation

Back view of a model 9110-510 server

View the ports and connections on the model 9110-510 server.

This diagram shows you the back view of a 9110-510 server. Connections and ports are labeled to facilitate the setup process.

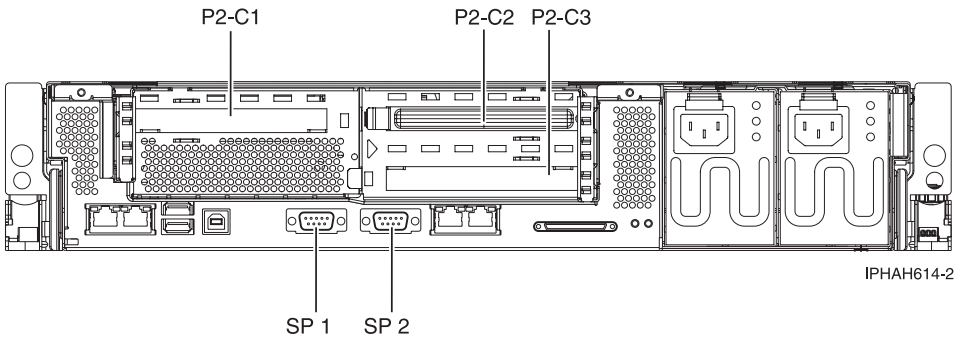


Figure 18. Back view of a model 9110-510 server

Back views of a model 9111-520 server

View the ports and connections on the model 9111-520 server.

This diagram shows you the back view of a 9111-520 server. Connections and ports are labeled to facilitate the setup process.

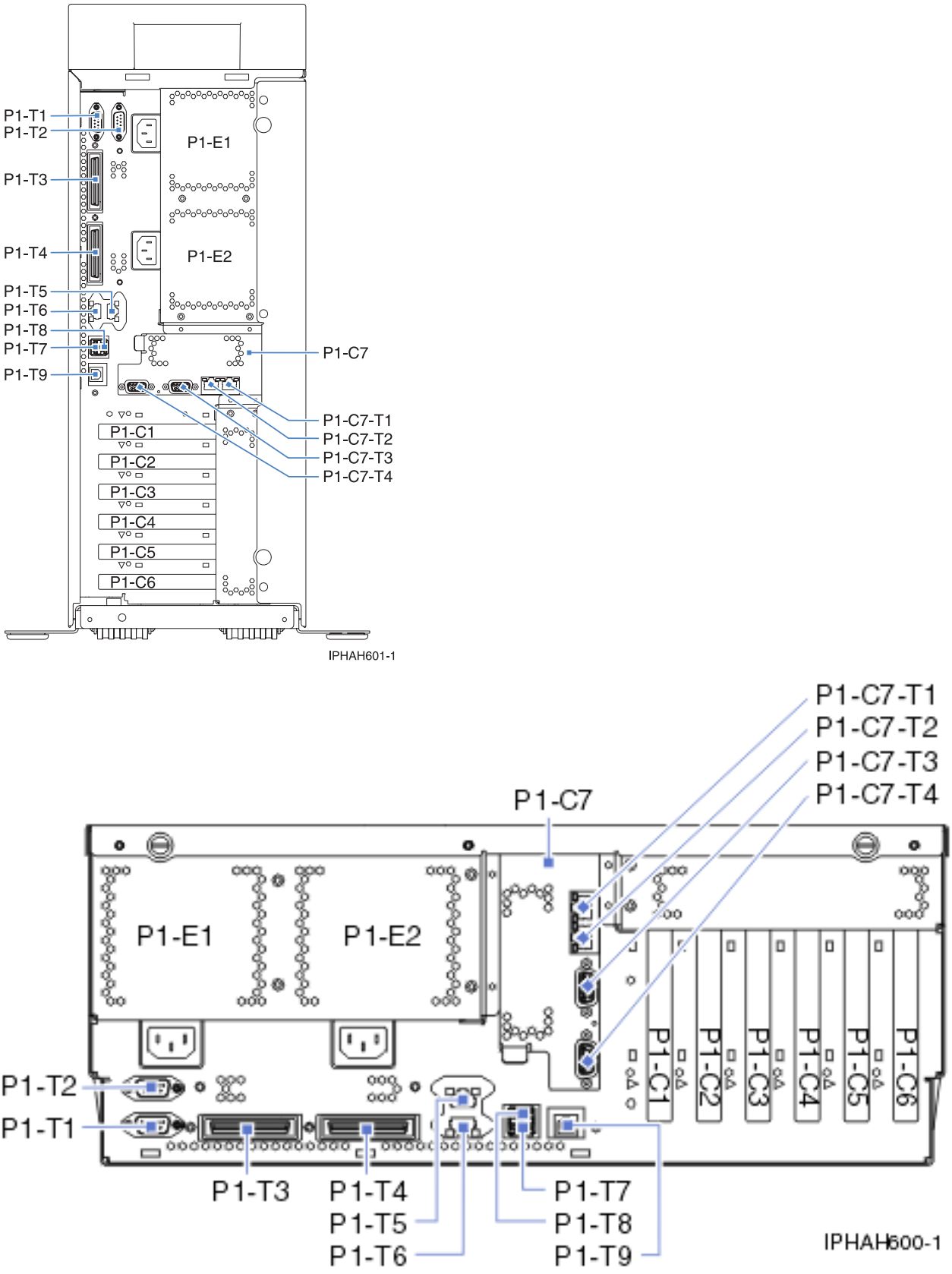


Figure 19. Back views of a model 9111-520 server with the integrated HSL/RIO ports (T3/T4)

Back views of a model 9113-550 server

View the ports and connections on the model 9113-550 server.

This diagram shows you the back view of a 9113-550 server. Connections and ports are labeled to facilitate the setup process.

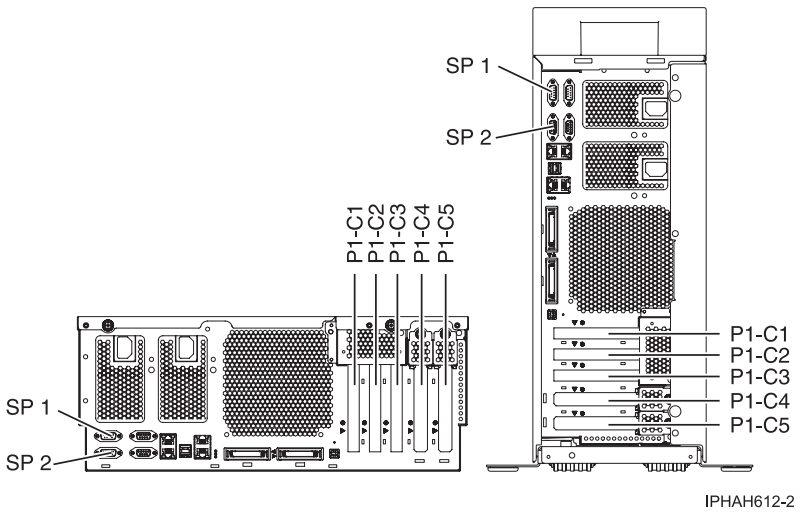


Figure 20. Back views of a model 9113-550 server

Back view of the OpenPower 710 server

View the ports and connections on the OpenPower 710 server.

This diagram shows you the back view of a OpenPower 710 server. Connections and ports are labeled to facilitate the setup process.

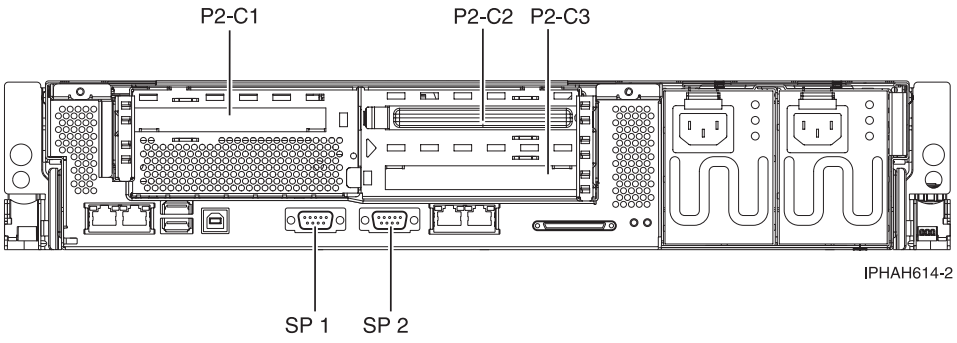


Figure 21. Back view of the OpenPower 710 server

Back views of the OpenPower 720 server

View the ports and connections on the OpenPower 720 server.

This diagram shows you the back view of a OpenPower 720 server. Connections and ports are labeled to facilitate the setup process.

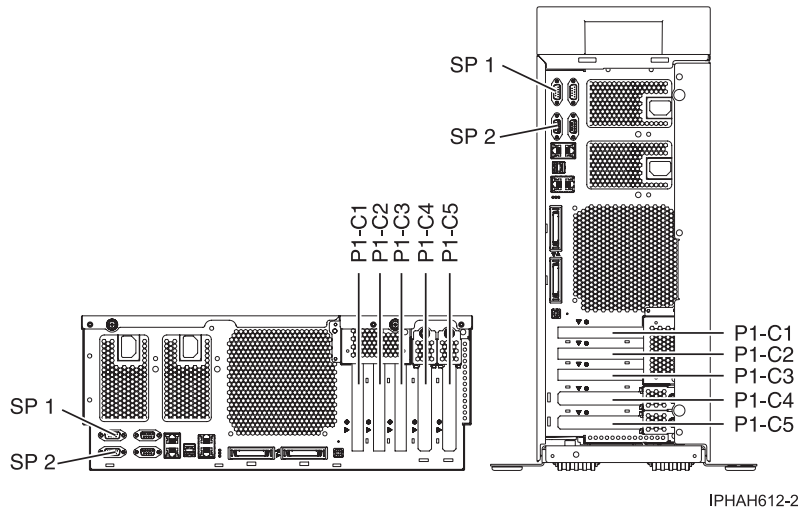


Figure 22. Back views of the OpenPower 720 server

Models cabled by your service provider

Learn about the models that must be cabled by your service provider, and then learn how to find instructions on cabling your console.

These models must be cabled by your service provider:

- 9406-550
- 9406-570
- 9406-595
- 9116-561
- 9117-570
- 9118-575
- 9119-590
- 9119-595

After your server is cabled, you are ready to cable or set up your console.

- For instructions about cabling the HMC, see Cabling the HMC.
- For instructions about cabling the Thin Console, see Cabling the Thin Console for System i5.
- For instructions about setting up Operations Console, see Setting up Operations Console.
- For instructions about setting up a twinaxial console, see Setting up a twinaxial console.

Note: If you are an IBM System Services Representative installing other features, see the Worldwide Customized Installation Instructions (WCII) Web site.

This site is intended for the exclusive use of IBM System Services Representatives (SSRs, also known as service providers), offers instructions for SSRs to install new SSR-installed systems and features.

Related concepts

Setting up Operations Console

Related tasks

Cabling the HMC

Cabling the Thin Console for System i5

Setting up a twinaxial console

Related information

Worldwide Customized Installation Instructions (WCII) Web site

Documentation for POWER6 servers

You can find user documentation for your POWER6® server by going to the Support for IBM Systems Web site at http://www.ibm.com/systems/support/.

Cabling the Thin Console for System i5

Learn how to connect the Thin Console to your server.

To cable your Thin Console:

1. Complete the setup instructions that are provided with the Thin Console, such as:
   - Connect the keyboard, mouse, power cable, and Ethernet cable to the ports on the Thin Console.
   - Plug in the monitor, and power it on.
   - Plug in the Thin Console, which automatically powers on.
2. Select the keyboard language, and then press Enter.
3. Connect the other end of the Ethernet cable directly to the Hardware Management Console (HMC) port (either HMC 1 or HMC 2) on the server. Connections and ports are labeled in the following diagram.

   Restrictions:

   - Do not attach another Thin Console or an HMC to the remaining HMC port.
   - The Thin Console is not available on an Ethernet network, even if the server is already connected.

   Note: If you are connecting the Thin Console to an existing server, the DST Sign-on window might display.

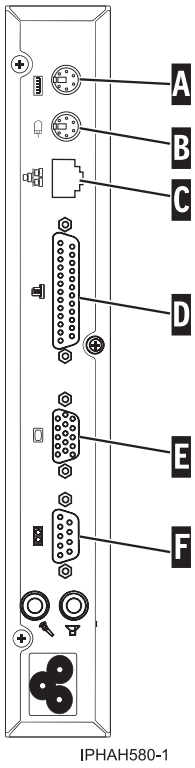


Figure 23. Back view of a Thin Console for System i5

Letter	Description
A	Keyboard port
B	Mouse port
C	10/100 BaseT Ethernet port
D	Parallel port
E	Monitor port
F	Serial port

Note: If you are connecting the Thin Console to an existing server, the DST Sign-on window might display.

Appendix. Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products successfully.

The following list includes the major accessibility features:

- Keyboard-only operation
- Interfaces that are commonly used by screen readers
- Keys that are tactilely discernible and do not activate just by touching them
- Industry-standard devices for ports and connectors
- The attachment of alternative input and output devices

IBM and accessibility

See the IBM Accessibility Center at http://www.ibm.com/able/ for more information about the commitment that IBM has to accessibility.

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Electronic emission notices

Class A Notices

The following Class A statements apply to the IBM System i models and IBM System p servers with the exception of those that are specifically identified as Class B.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A respecte est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

European Community contact:
IBM Technical Regulations
Pascalstr. 100, Stuttgart, Germany 70569
Tele: 0049 (0)711 785 1176
Fax: 0049 (0)711 785 1283
E-mail: tjahn@de.ibm.com

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

VCCI Statement - Japan

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This product is a Class A Information Technology Equipment and conforms to the standards set by the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Electromagnetic Interference (EMI) Statement - People's Republic of China

声　明

此为Ａ级产品，在生活环境中，
该产品可能会造成无线电干扰。
在这种情况下，可能需要用户对其
干扰采取切实可行的措施。

Declaration: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may need to perform practical action.

Electromagnetic Interference (EMI) Statement - Taiwan

警告使用者：
這是甲類的資訊產品，在
居住的環境中使用時，可
能會造成射頻干擾，在這
種情況下，使用者會被要
求採取某些適當的對策。

The following is a summary of the EMI Taiwan statement above.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user will be required to take adequate measures.

IBM Taiwan Contact Information:

台灣IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

Electromagnetic Interference (EMI) Statement - Korea

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Please note that this equipment has obtained EMC registration for commercial use. In the event that it has been mistakenly sold or purchased, please exchange it for equipment certified for home use.

Germany Compliance Statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

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"Warnung: Dieses ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funk-Störungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen zu ergreifen und dafür aufzukommen."

Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG)". Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG in der Bundesrepublik Deutschland.

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Verantwortlich für die Konformitätserklärung nach des EMVG ist die IBM Deutschland GmbH, 70548 Stuttgart.

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse A.

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дополнительные меры

Class B Notices

The following Class B statements apply to model 9111-520 (stand-alone version), 9131-52A (stand-alone version), 7047-185 and the 9111-285.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an IBM authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables or connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interferences, and (2) this device must accept any interferences received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe B respecte est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement

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This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

Properly shielded and grounded cables and connectors must be used in order to reduce the potential for causing interference to radio and TV communications and to other electrical or electronic equipment. Such cables and connectors are available from IBM authorized dealers. IBM cannot accept responsibility for an interference caused by using other than recommended cables and connectors.

European Community contact:
IBM Technical Regulations
Pascalstr. 100, Stuttgart, Germany 70569
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E-mail: tjahn@de.ibm.com

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IBM Taiwan Product Service Contact Information

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台灣國際商業機器股份有限公司
台北市松仁路7號3樓
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Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG)". Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC EG Richtlinie 2004/108/EG) für Geräte der Klasse B.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Konformitätserklärung nach des EMVG ist die IBM Deutschland GmbH, 70548 Stuttgart.

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse B.

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