

Hardware Information

Cabling your server

ESCALA POWER5



REFERENCE
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ESCALA POWER5

Hardware Information

Cabling your server

Hardware

July 2006

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FRANCE

REFERENCE

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Cabling your server

Learn how to cable your server or workstation.

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 is intended to ensure 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 consoles available for your server, see the following 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 may also be referred to as the service processor menus. Set up access to the ASMI if you plan to manage the AIX or Linux 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.

To start cabling your server, go to [Select by model](#) first, and then use the other links listed below for supplemental information.

- [Printable PDF](#)
Use this to view and print a PDF of this information.
 - [Select by model](#)
Select the model that you want to cable.
 - [References](#)
Find helpful information that supports the instructions for cabling your system.
 - [Models cabled by your service provider](#)
-

Models cabled by your service provider

For instructions about cabling the HMC, see [Cabling the HMC](#).

The following models must be cabled by your service provider:

- ESCALA PL 1650R-L+
- ESCALA PL 850R/PL 1650R/R+
- 185/75
- ESCALA PL 3250R
- ESCALA PL 6450R

For instructions about cabling the HMC, see [Cabling the HMC](#).

Printable PDF

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

To view or download the PDF version of this document, select [Cabling your server](#) (about 11,955 KB).

Saving PDF files

To save a PDF on your workstation for viewing or printing:

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

Downloading Adobe Reader

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

Parent topic: [Cabling your server](#)

Select by model

Select the model that you want to cable.

- [ESCALA PL 245T/R](#)
- [ESCALA PL 250R-L+ or ESCALA PL 450R-VL+](#)
- [ESCALA PL 250R-L](#)
- [ESCALA PL 250T/R](#)
- [ESCALA PL 450T/R](#)
- [ESCALA PL 250R-VL or ESCALA PL 450R-XS](#)
- [ESCALA PL 1650R-L+](#)
- [ESCALA PL 850R/PL 1650R/R+](#)
- [185/75](#)
- [ESCALA PL 3250R](#)
- [ESCALA PL 6450R](#)
- [ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+](#)
- [ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+](#)

- [471/85](#)
- [112/85](#)

- [7/10](#)
- [7/20](#)

Parent topic: [Cabling your server](#)

Cabling your model ESCALA PL 245T/R server

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back view of the model](#).

Attention: This product is equipped with a three-wire power cable and plug for the user's safety. Use this power cable with a properly grounded electrical outlet to avoid electrical shock.

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting the power cords

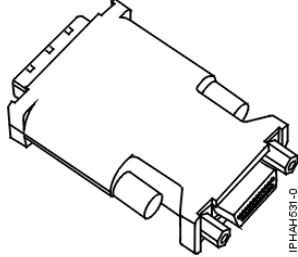
- Connect the system's power supply to a power source.

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 1. 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 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 provided.

After you finish

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

Parent topic: [Cabling your server](#)

Cabling your model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back view of the model](#).

- [Cabling a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ and an ASMI console](#)
- [Cabling a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ and an ASMI console

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

- Do you have an expansion unit?
 - Yes. For instructions on how

to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

— If you have a model ESCALA PL 250R-L,

ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ 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 a
model ESCALA
PL 250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ 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](#).

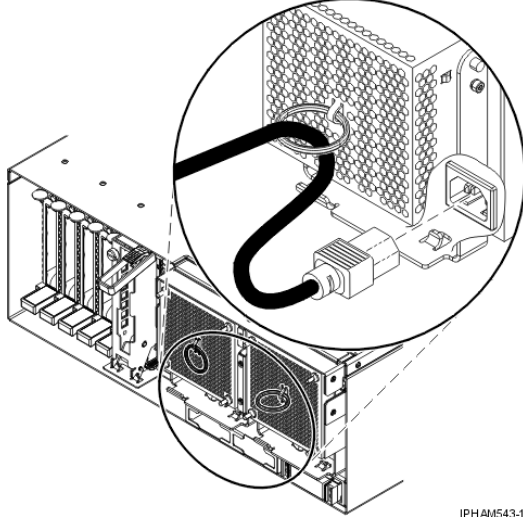
— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ server and are connecting it to an uninterruptible power supply, refer to the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Note: For the model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

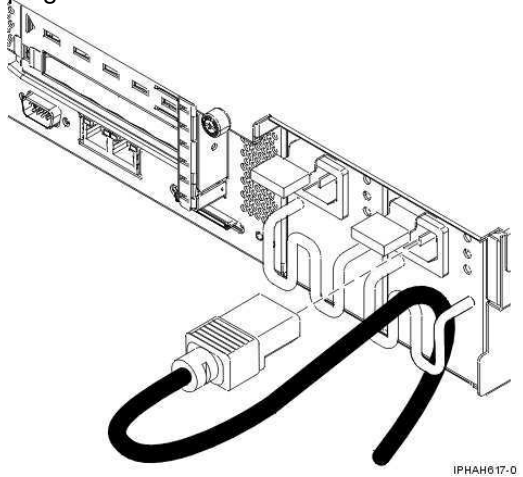
Connecting the power cords

— 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:



___ 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.

Routing the cables through the cable-management arm

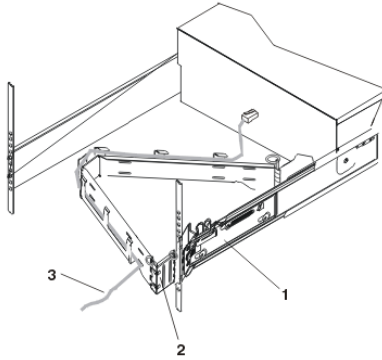
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

IPHAH6 15-0

- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

- Power the system on (see [Powering the system on and off](#)).

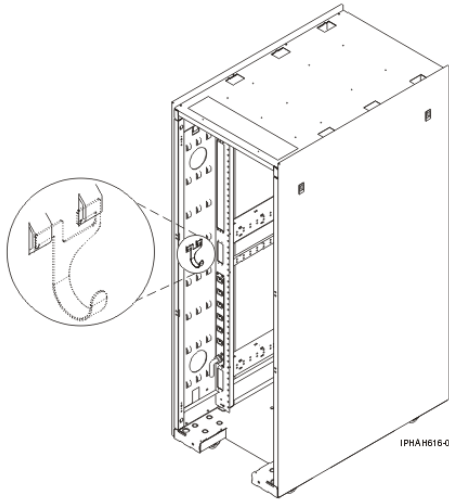
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is

displayed on the control panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server with a console](#)

Cabling a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages,

disconnect all power cords.

- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

— If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following

link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

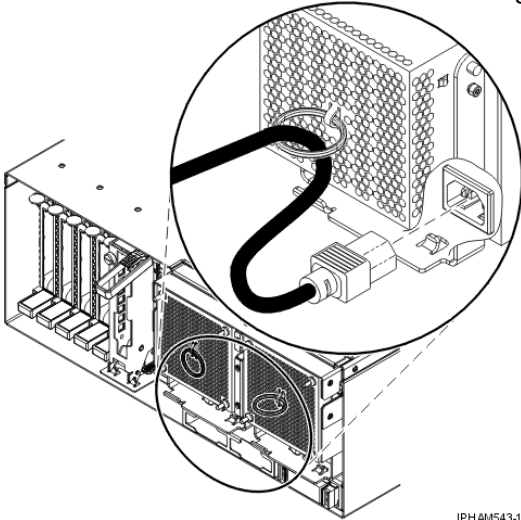
- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or

ESCALA PL
850R/PL
1650R/R+
server, the
system ports
on the back
of the server
are disabled
when your
server is
connected to
an HMC.

Connecting the power cords

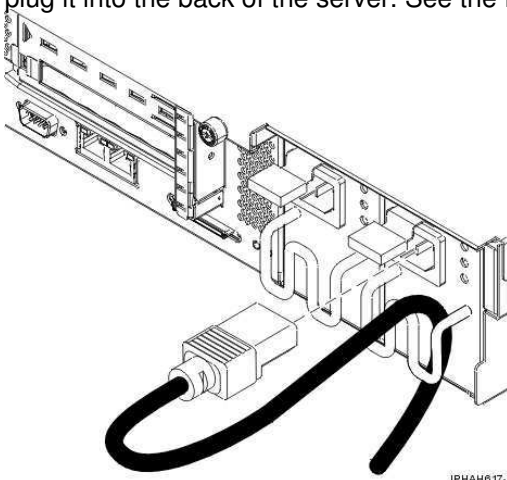
___ Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

___ 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:



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. See the following figure as an example:



IPHAH017-0

___ 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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

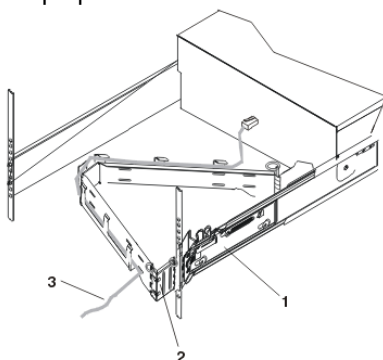
- ___ Is your server installed in a rack?

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

- ___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- ___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

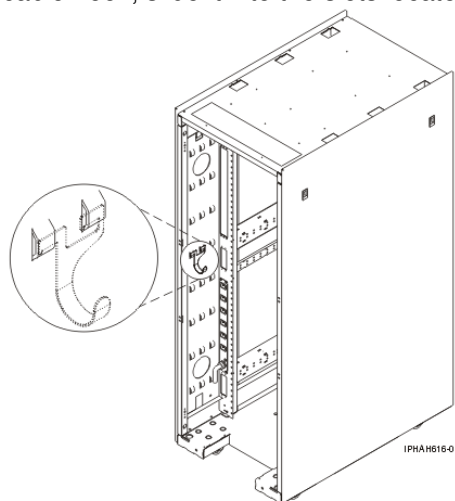
IPHAH615-0

- ___ 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 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.

Parent topic: [Cabling your model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server with a console](#)

Cabling your model ESCALA PL 250R-L server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back view of the model](#).

- [Cabling a model ESCALA PL 250R-L and an ASMI console](#)
- [Cabling a model ESCALA PL 250R-L and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a model ESCALA PL 250R-L and an ASMI console

Complete the following tasks to cable your server:

Before you begin

___ If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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 a model ESCALA PL 250R-L,

ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ 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](#).

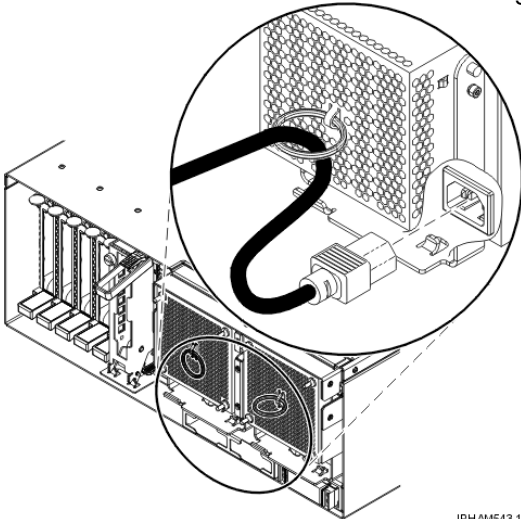
— If you have a
model ESCALA
PL 250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ server
and are
connecting it to
an uninterruptible
power supply,
refer to the
documentation
that is included
with your
uninterruptible
power supply.
You might need
additional
hardware.

Note: For the model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

Connecting the power cords

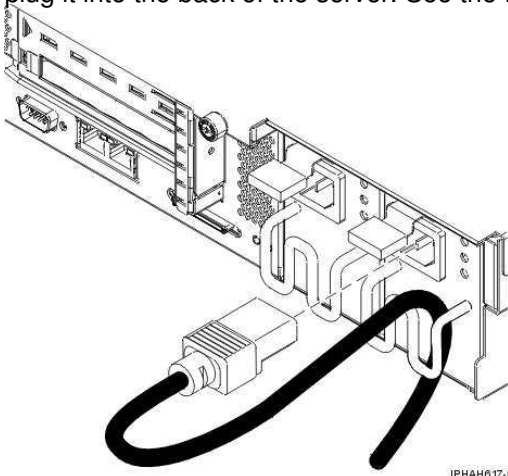
___ Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

___ 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:



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. See the following figure as an example:



IPHAH617-0

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

Routing the cables through the cable-management arm

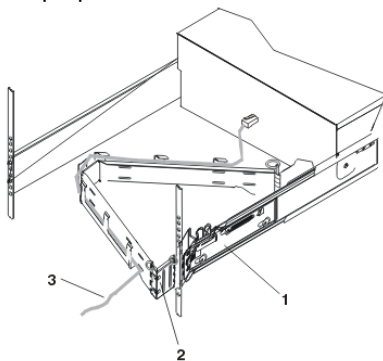
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

___ Power the system on (see [Powering the system on and off](#)).

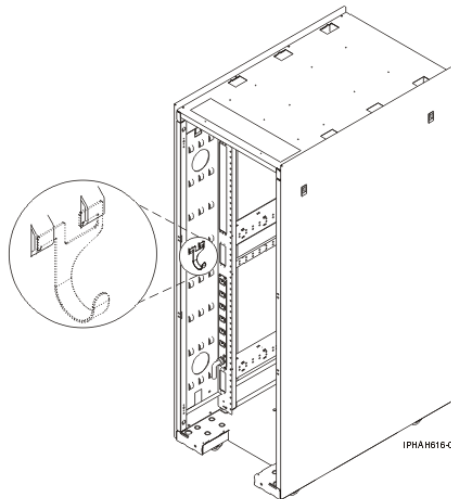
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power

is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 250R-L server with a console](#)

Cabling a model ESCALA PL 250R-L and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

- Do you have an expansion unit?

- Yes. For instructions

on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

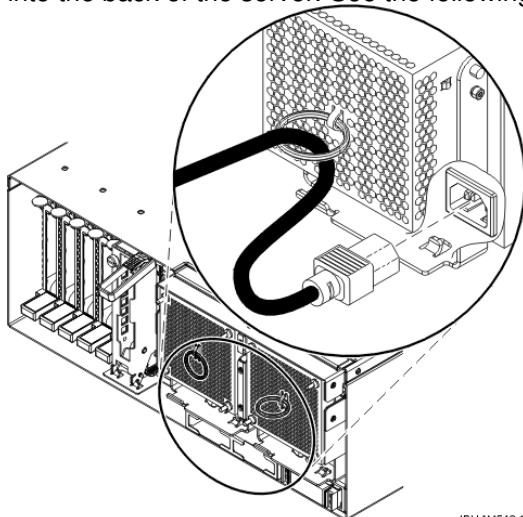
— If you have a model

ESCALA PL
250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+,
5/60, or
ESCALA PL
850R/PL
1650R/R+
server, the
system ports
on the back
of the server
are disabled
when your
server is
connected to
an HMC.

Connecting the power cords

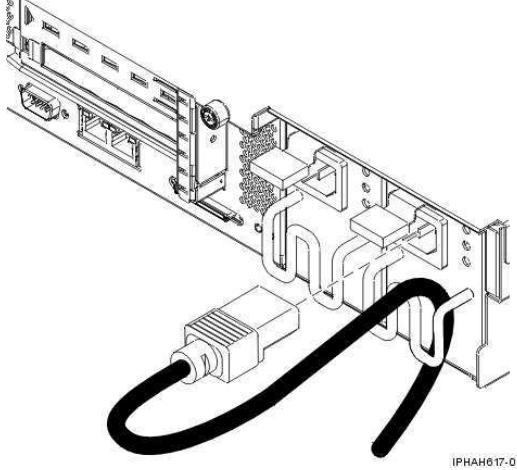
— Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

— 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:



IPH4M543-1

___ 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. 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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

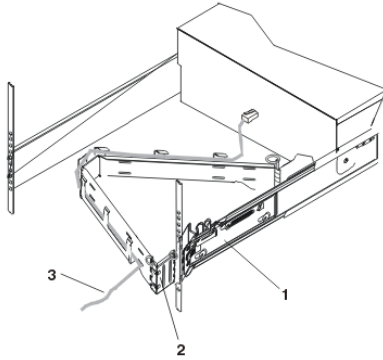
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- ___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

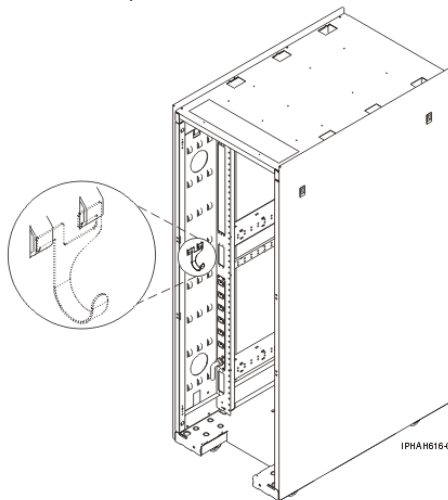
IPHAH615-0

- ___ 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 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:



IPHAH616-0

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

Parent topic: [Cabling your model ESCALA PL 250R-L server with a console](#)

Cabling your model ESCALA PL 250T/R server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back views of the model](#).

- [Cabling a model ESCALA PL 250T/R and an ASMI console](#)
- [Cabling a model ESCALA PL 250T/R and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a model ESCALA PL 250T/R and an ASMI console

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

- Do you have an expansion unit?
 - Yes. For instructions on how to set up your expansion unit, click the following link. Do

not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL

250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ 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 a
model ESCALA
PL 250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ 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 a
model ESCALA
PL 250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,

ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ server
and are
connecting it to
an uninterruptible
power supply,
refer to the
documentation
that is included
with your
uninterruptible
power supply.
You might need
additional
hardware.

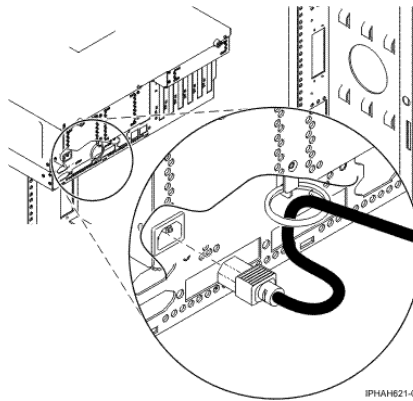
Note: For the model ESCALA
PL 250R-L, ESCALA PL
250R-L+ or ESCALA PL
450R-VL+, ESCALA PL
250T/R, ESCALA PL 250T/R+
or ESCALA PL 450T/R-L+,
ESCALA PL 450T/R, ESCALA
PL 450T/R+ or ESCALA PL
850T/R-L+, 5/60, or ESCALA
PL 850R/PL 1650R/R+
servers, any other application
that uses a system port
requires a system port adapter
to be installed in a PCI slot.

Connecting the power cords

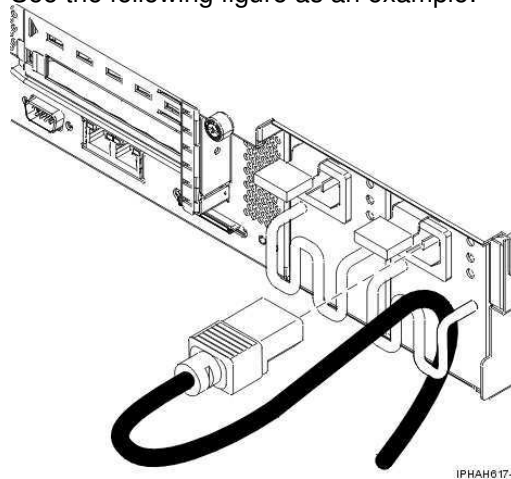
— Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

— 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:

Cabling your server



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.

Routing the cables through the cable-management arm

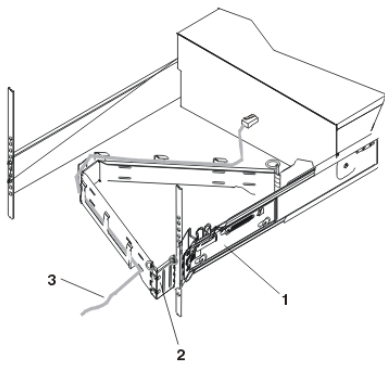
Is your server installed in a rack?

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

Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

- Power the system on (see [Powering the system on and off](#)).

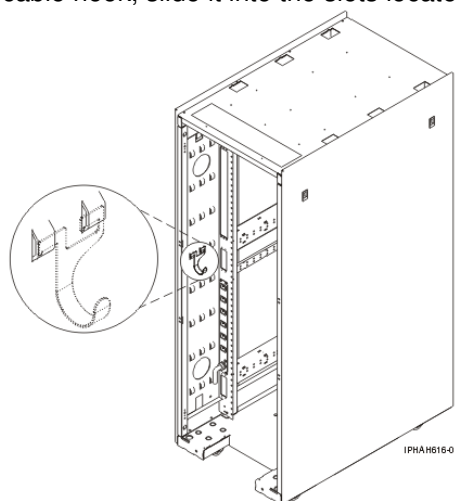
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control

panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 250T/R server with a console](#)

Cabling a model ESCALA PL 250T/R and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet

supplies proper voltage and phase rotation according to the system rating plate.

- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

- Do you have an expansion unit?
 - Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in

the
checklist.

**Expansion
units**

- 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.

**Attaching devices
using the system ports**

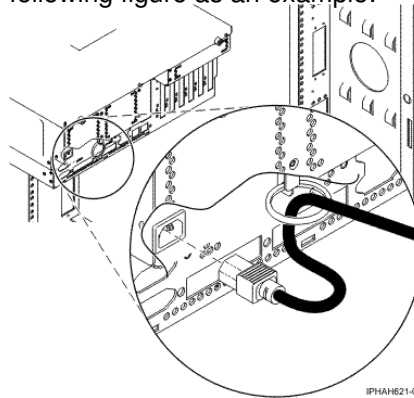
— If you have a
model
ESCALA PL
250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+,
5/60, or
ESCALA PL
850R/PL

1650R/R+ server, the system ports on the back of the server are disabled when your server is connected to an HMC.

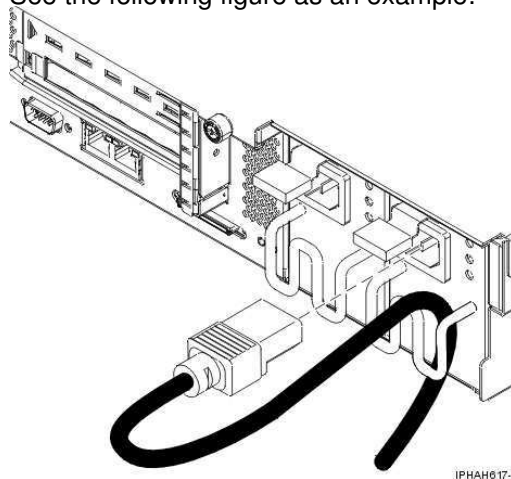
Connecting the power cords

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:



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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

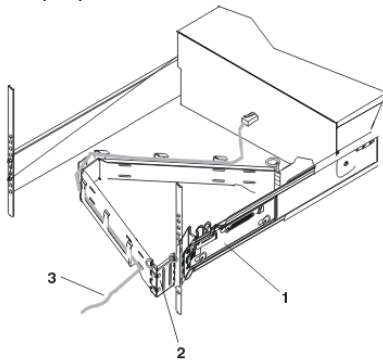
- Is your server installed in a rack?

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

- Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

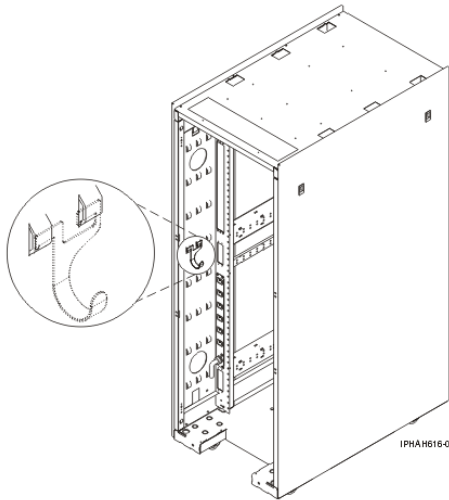
IPHAH615-0

- 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 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.

Parent topic: [Cabling your model ESCALA PL 250T/R server with a console](#)

Cabling your model ESCALA PL 450T/R server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back views of the model](#).

- [Cabling a model ESCALA PL 450T/R and an ASMI console](#)
- [Cabling a model ESCALA PL 450T/R and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a model ESCALA PL 450T/R and an ASMI console

Complete the following tasks to cable your server:

Before you begin

___ If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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 a model ESCALA PL 250R-L,

ESCALA PL
 250R-L+ or
 ESCALA PL
 450R-VL+,
 ESCALA PL
 250T/R,
 ESCALA PL
 250T/R+ or
 ESCALA PL
 450T/R-L+,
 ESCALA PL
 450T/R,
 ESCALA PL
 450T/R+ or
 ESCALA PL
 850T/R-L+, 5/60,
 or ESCALA PL
 850R/PL
 1650R/R+ 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](#).

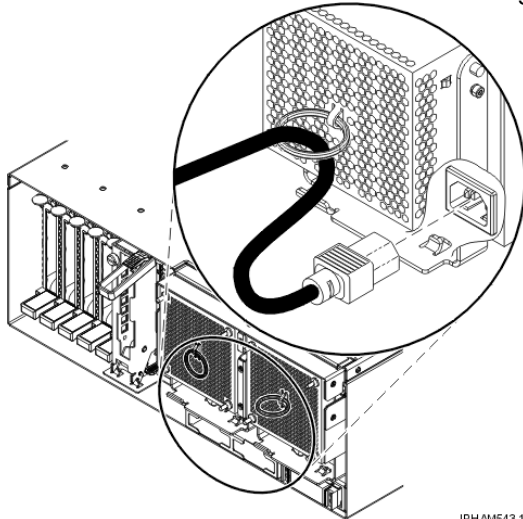
If you have a
 model ESCALA
 PL 250R-L,
 ESCALA PL
 250R-L+ or
 ESCALA PL
 450R-VL+,
 ESCALA PL
 250T/R,
 ESCALA PL
 250T/R+ or
 ESCALA PL
 450T/R-L+,
 ESCALA PL
 450T/R,
 ESCALA PL
 450T/R+ or
 ESCALA PL
 850T/R-L+, 5/60,
 or ESCALA PL
 850R/PL
 1650R/R+ server
 and are
 connecting it to
 an uninterruptible
 power supply,
 refer to the
 documentation
 that is included
 with your
 uninterruptible
 power supply.
 You might need
 additional
 hardware.

Note: For the model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

Connecting the power cords

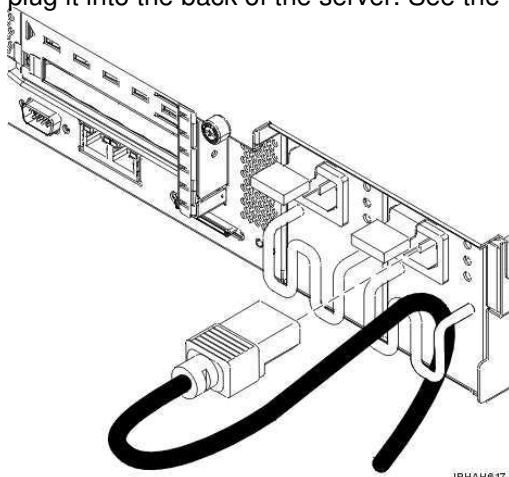
___ Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

___ 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:



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. See the following figure as an example:



IPHAH017-0

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

Routing the cables through the cable-management arm

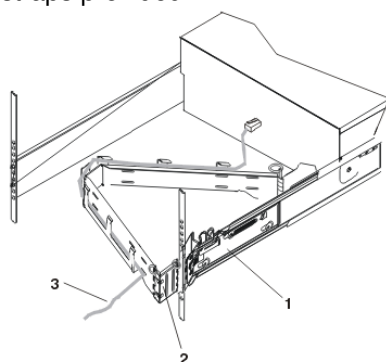
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

___ Power the system on (see [Powering the system on and off](#)).

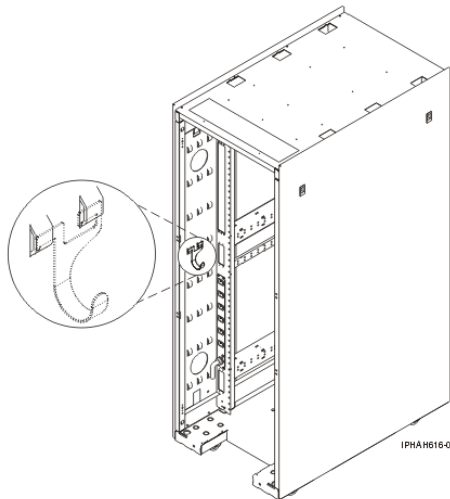
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power

is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 450T/R server with a console](#)

Cabling a model ESCALA PL 450T/R and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

— If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions

on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

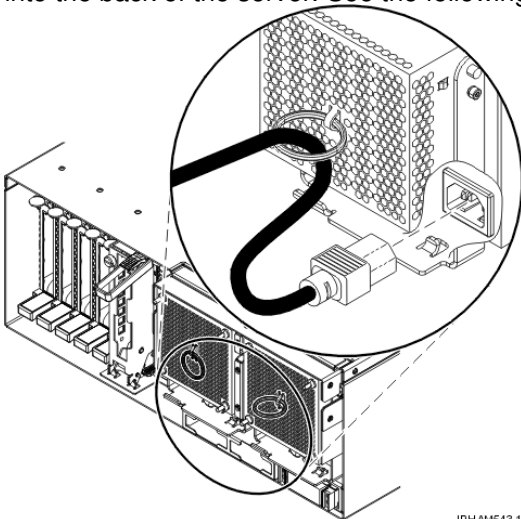
— If you have a model

ESCALA PL
250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+,
5/60, or
ESCALA PL
850R/PL
1650R/R+
server, the
system ports
on the back
of the server
are disabled
when your
server is
connected to
an HMC.

Connecting the power cords

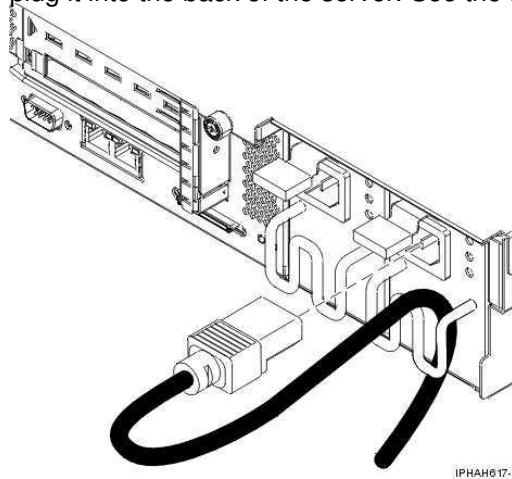
— Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

— 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:



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. 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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

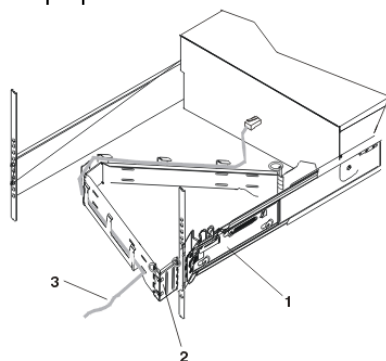
- ___ Is your server installed in a rack?

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

- ___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- ___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

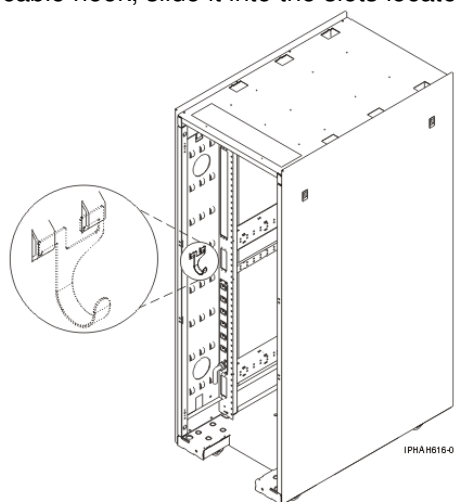
IPHAH615-0

- ___ 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 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:



IPHAH616-0

- ___ Return to your Initial server setup checklist and complete the next step.

Parent topic: [Cabling your model ESCALA PL 450T/R server with a console](#)

Cabling your model ESCALA PL 250R-VL or ESCALA PL 450R-XS with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back view of the model](#).

- [Cabling an ESCALA PL 250R-VL or an ESCALA PL 450R-XS and an ASMI console](#)
- [Cabling an ESCALA PL 250R-VL or an ESCALA PL 450R-XS and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling an ESCALA PL 250R-VL or an ESCALA PL 450R-XS and an ASMI console

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) 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.

Note: If the cable did not come with your server, you will have to supply it.

Attaching devices using the system ports

- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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 a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL

450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ 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](#).

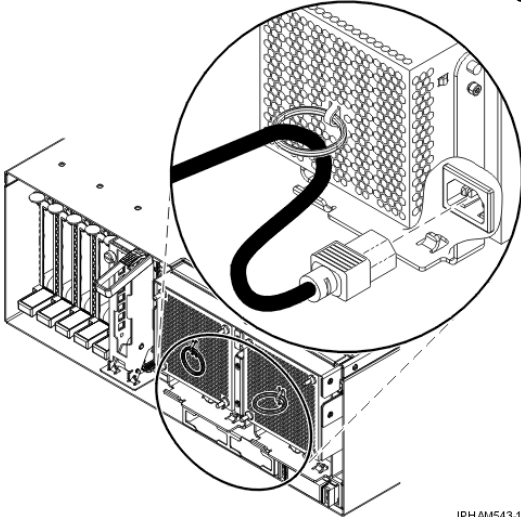
— If you have a
model ESCALA
PL 250R-L,
ESCALA PL
250R-L+ or
ESCALA PL
450R-VL+,
ESCALA PL
250T/R,
ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+, 5/60,
or ESCALA PL
850R/PL
1650R/R+ server
and are
connecting it to
an uninterruptible
power supply,
refer to the
documentation
that is included
with your
uninterruptible
power supply.
You might need
additional
hardware.

Note: For the model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

Connecting the power cords

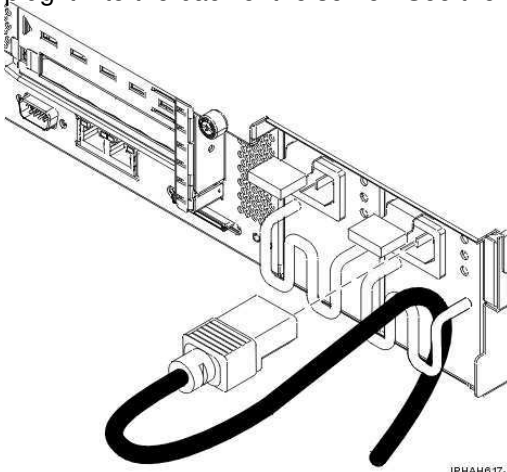
___ Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

___ 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:



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. See the following figure as an example:



IPHAH617-0

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

Routing the cables through the cable-management arm

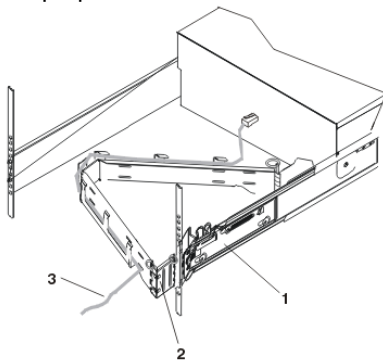
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

IPAH615-0

___ 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

___ Power the system on (see [Powering the system on and off](#)).

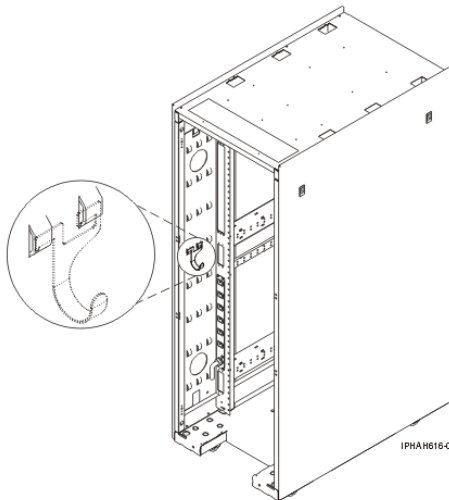
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the

server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 250R-VL or ESCALA PL 450R-XS with a console](#)

Cabling an ESCALA PL 250R-VL or an ESCALA PL 450R-XS and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) 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.

Note: If the cable did not come with your server, you will have to supply it.

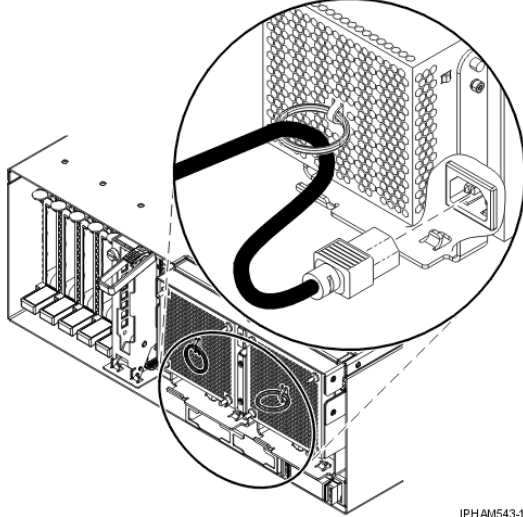
Attaching devices using the system ports

— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ server, the system ports on the back of the server are disabled when your server is connected to an HMC.

Connecting the power cords

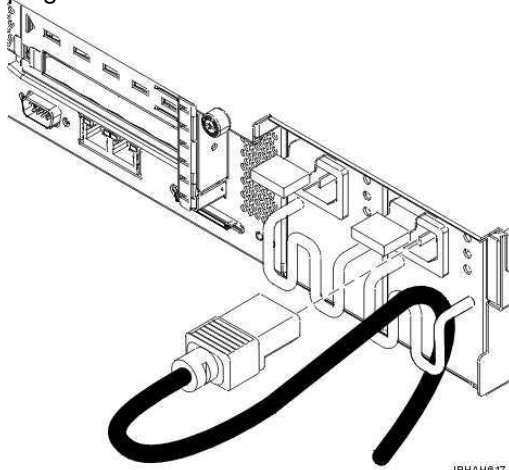
— Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

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:



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. See the following figure as an example:



IPHAH017-0

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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

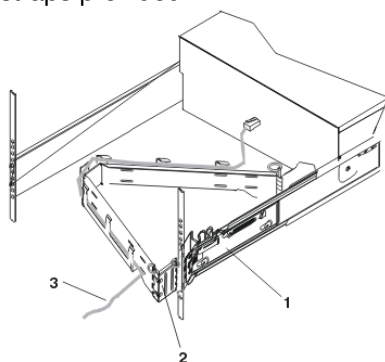
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

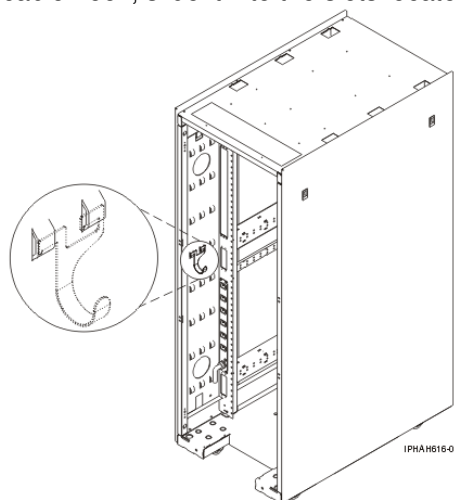
IPHAH615-0

___ 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 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:



IPHAH616-0

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

Parent topic: [Cabling your model ESCALA PL 250R-VL or ESCALA PL 450R-XS with a console](#)

Cabling your model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back views of the model](#).

- [Cabling a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ and an ASMI console](#)
- [Cabling a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ and an ASMI console

Complete the following tasks to cable your server:

Before you begin

— If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#)

for
instructions.

Cabling the expansion units

— Do you have an
expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Note: If the cable did not come with your server, you will have to supply it.

Attaching devices using the system ports

- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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 a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL

250T/R+ or
 ESCALA PL
 450T/R-L+,
 ESCALA PL
 450T/R,
 ESCALA PL
 450T/R+ or
 ESCALA PL
 850T/R-L+, 5/60,
 or ESCALA PL
 850R/PL
 1650R/R+ 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 a
 model ESCALA
 PL 250R-L,
 ESCALA PL
 250R-L+ or
 ESCALA PL
 450R-VL+,
 ESCALA PL
 250T/R,
 ESCALA PL
 250T/R+ or
 ESCALA PL
 450T/R-L+,
 ESCALA PL
 450T/R,
 ESCALA PL
 450T/R+ or
 ESCALA PL
 850T/R-L+, 5/60,
 or ESCALA PL
 850R/PL
 1650R/R+ server
 and are
 connecting it to
 an uninterruptible
 power supply,
 refer to the
 documentation
 that is included
 with your
 uninterruptible
 power supply.
 You might need
 additional
 hardware.

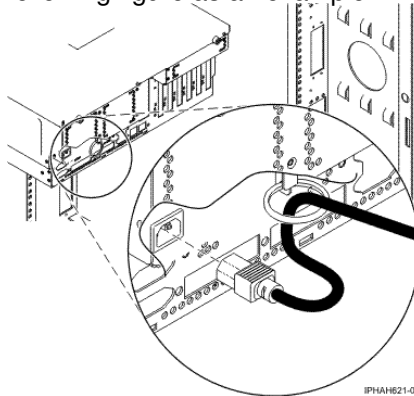
Note: For the model ESCALA
 PL 250R-L, ESCALA PL
 250R-L+ or ESCALA PL
 450R-VL+, ESCALA PL

250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

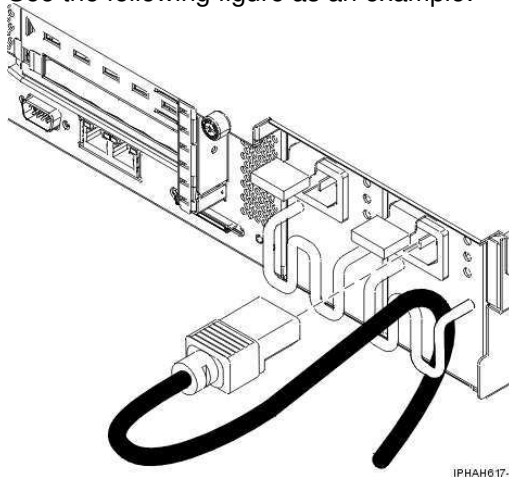
Connecting the power cords

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:



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.

Routing the cables through the cable-management arm

Is your server installed in a rack?

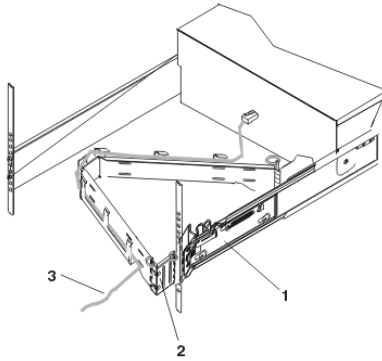
- No. Proceed to the next section, Starting your server.

- Yes. Do the following:

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

___ Power the system on (see [Powering the system on and off](#)).

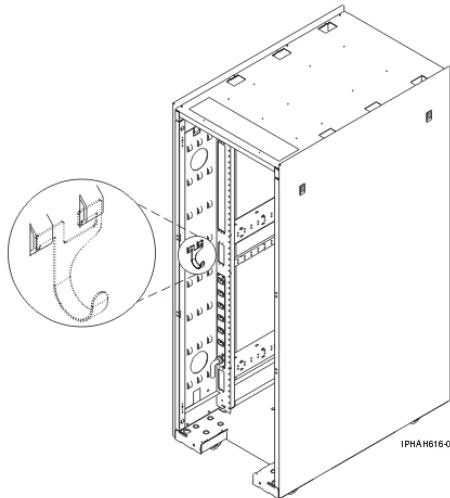
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and

will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server with a console](#)

Cabling a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ and a Hardware Management Console (HMC)

DANGER When working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

— If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the

expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

Note: If the cable did not come with your server, you will have to supply it.

Attaching devices using the system ports

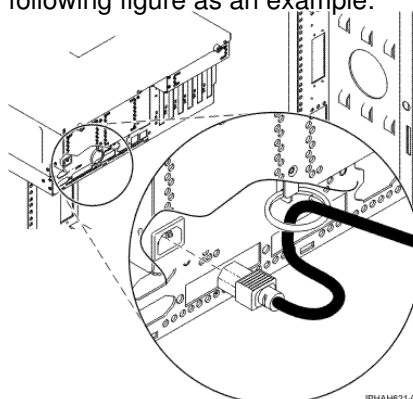
—

If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ server, the system ports on the back of the server are disabled when your server is connected to an HMC.

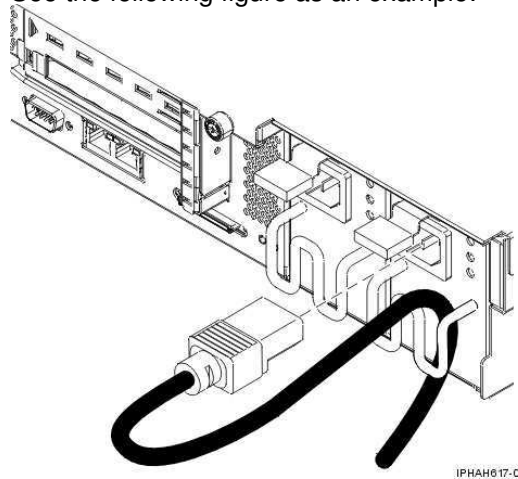
Connecting the power cords

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:



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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

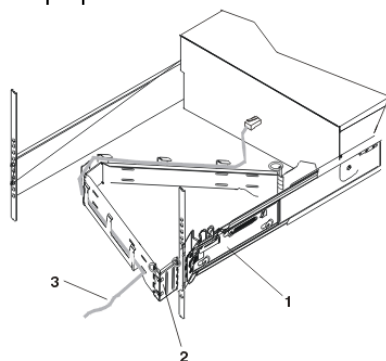
Is your server installed in a rack?

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

Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- ___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

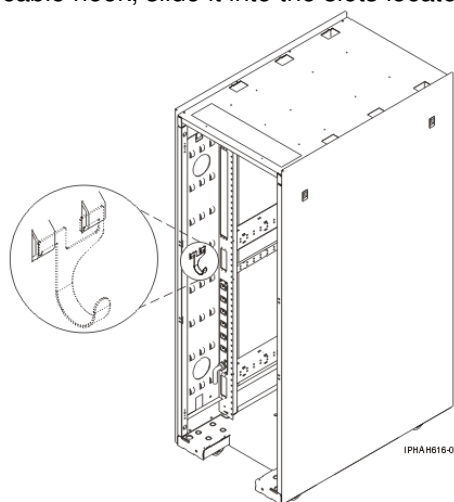
IPHAH615-0

- ___ 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 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:



IPHAH616-0

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

Parent topic: [Cabling your model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server with a console](#)

Cabling your model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back views of the model](#).

- [Cabling a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ and an ASMI console](#)
- [Cabling a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ and a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ and an ASMI console

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

- Do you have an expansion unit?
 - Yes. For instructions on how to set up your expansion

unit,
click the
following
link. Do
not plug
the
expansion-unit
power
cord into
the
power
outlet, as
directed
by the
following
link, until
later in
the
checklist.

[Expansion
units](#)

- 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.

Note: If the
cable did not
come with
your server,
you will have
to supply it.

Attaching devices using the system ports

- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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 a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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](#).

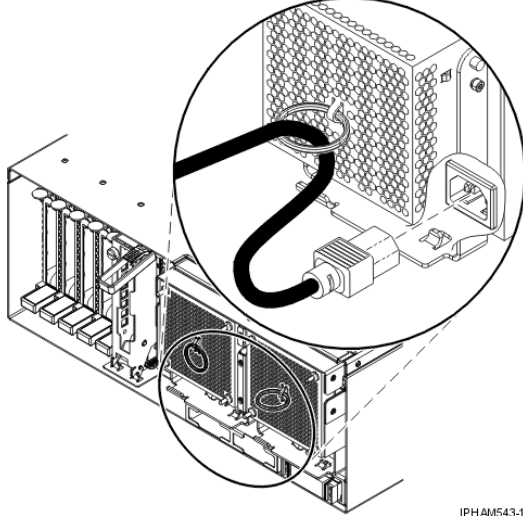
— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ server and are connecting it to an uninterruptible power supply, refer to the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Note: For the model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

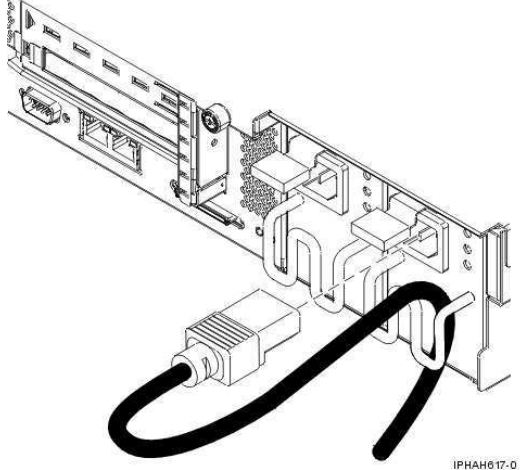
Connecting the power cords

___ 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:



___ 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.

Routing the cables through the cable-management arm

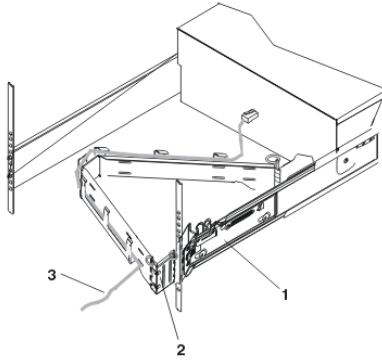
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
- For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

- Power the system on (see [Powering the system on and off](#)).

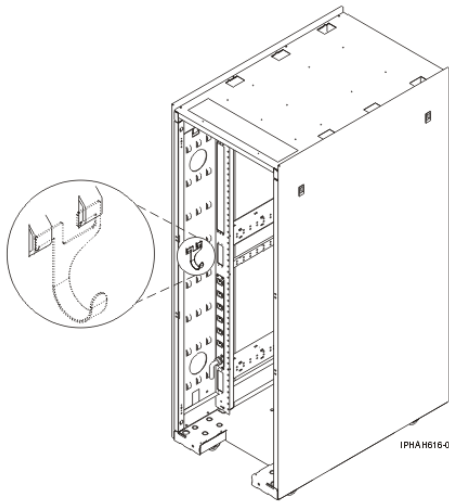
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is

displayed on the control panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server with a console](#)

Cabling a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages,

disconnect all power cords.

- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

— If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following

link, until later in the checklist.

[Expansion units](#)

- 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.

Note: If the cable did not come with your server, you will have to supply it.

Attaching devices using the system ports

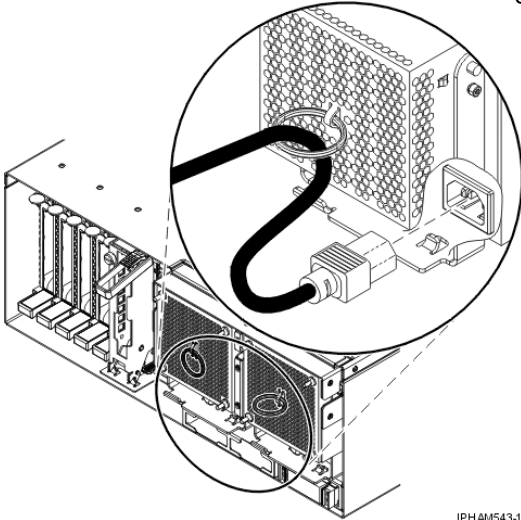
— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R,

ESCALA PL
250T/R+ or
ESCALA PL
450T/R-L+,
ESCALA PL
450T/R,
ESCALA PL
450T/R+ or
ESCALA PL
850T/R-L+,
5/60, or
ESCALA PL
850R/PL
1650R/R+
server, the
system ports
on the back
of the server
are disabled
when your
server is
connected to
an HMC.

Connecting the power cords

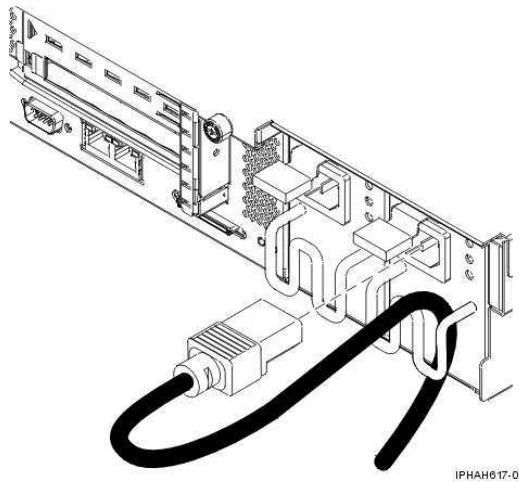
— Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

— 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:



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. 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 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.

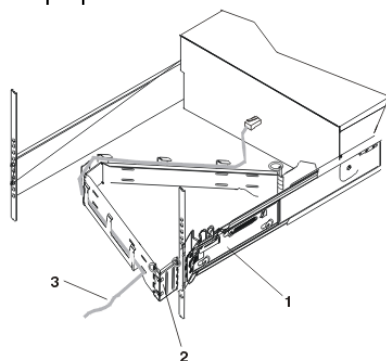
Connecting the Hardware Management Console cables

- ___ Cable the HMC (see [Cabling 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:
 - ___ Put the system into the service position.
 - For the models ESCALA PL 250R-L and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, see [Place the model ESCALA PL 250R-L in the service position](#).
 - For the models ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, and ESCALA PL 850R/PL 1650R/R+, see [Place the rack-mounted system or expansion unit in the service position](#).

- ___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

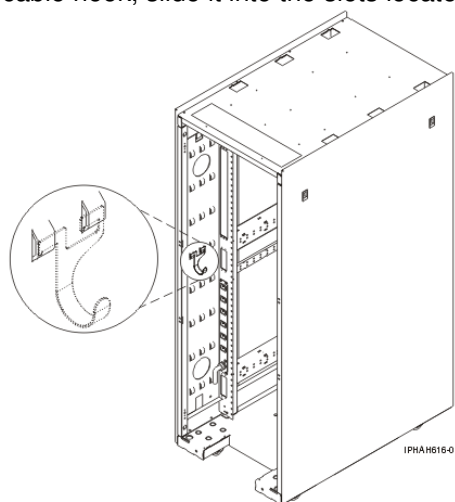
IPHAH615-0

- ___ 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 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:



IPHAH616-0

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

Parent topic: [Cabling your model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server with a console](#)

Cabling your kstation

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back view of the model](#).

Attention: This product is equipped with a three-wire power cable and plug for the user's safety. Use this power cable with a properly grounded electrical outlet to avoid electrical shock.

Complete the following tasks to cable your system unit:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting the power cords

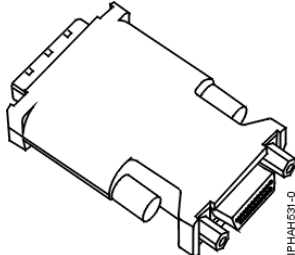
- Connect the system's power supply to a power source.

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 1. 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.

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.

Parent topic: [Cabling your server](#)

Cabling your 112/85 workstation with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back views of the model](#).

- [Cabling a an ASMI console](#)
- [Cabling a a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling a an ASMI console

Complete the following tasks to cable your workstation:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting the Advanced System Management Interface (ASMI)

- If you plan to connect a PC (with a browser) to the workstation to access the ASMI, see [Accessing the ASMI using a Web browser](#) for instructions.
- If you plan to access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) 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.

Note: If the cable did not come with your workstation, you will have to supply it.

Attaching devices using the system ports

— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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 a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ 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](#).

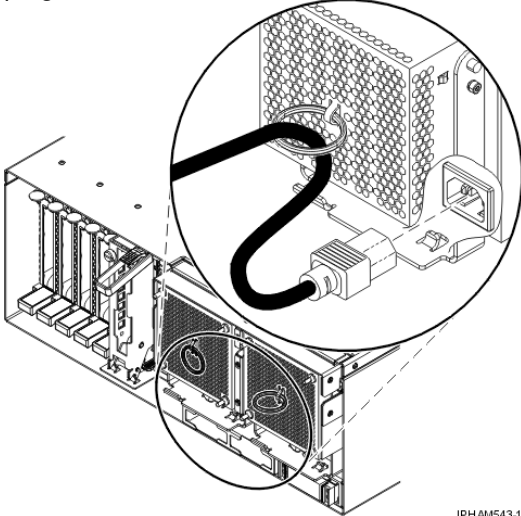
— If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ server and are connecting it to an uninterruptible power supply, refer to the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Note: For the model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ servers, any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

Connecting the power cords

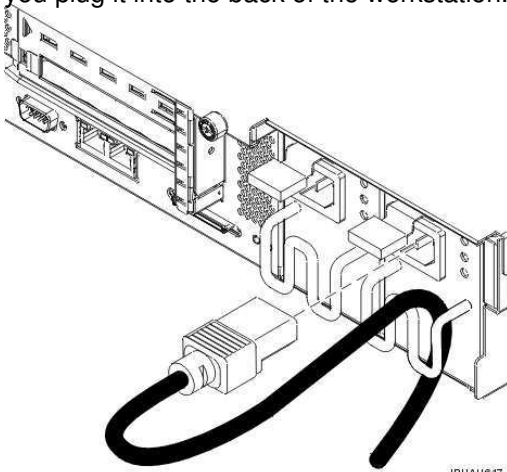
___ Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

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



IPHAM543-1

___ 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. See the following figure as an example:



IPHAH017-0

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

Starting your workstation

___ Power the system on (see [Powering the system on and off](#)).

Note: Expect a delay between the time when power is applied to the server or workstation and when 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 will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control panel before you perform an IPL or change control panel functions.

After you finish

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

Parent topic: [Cabling your 112/85 workstation with a console](#)

Cabling a a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.

- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your workstation:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) 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.

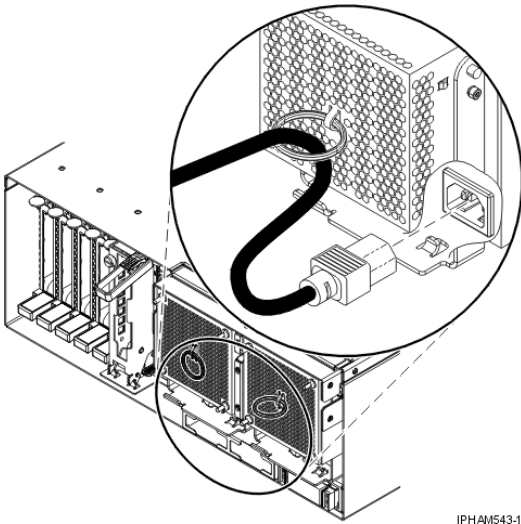
Note: If the cable did not come with your workstation, you will have to supply it.

**Attaching devices
using the system ports**

- If you have a model ESCALA PL 250R-L, ESCALA PL 250R-L+ or ESCALA PL 450R-VL+, ESCALA PL 250T/R, ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+, ESCALA PL 450T/R, ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+, 5/60, or ESCALA PL 850R/PL 1650R/R+ server, the system ports on the back of the server are disabled when your server is connected to an HMC.

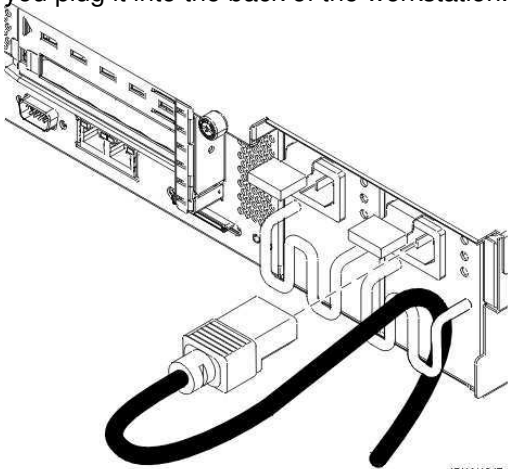
Connecting the power cords

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



IPHAM543-1

— 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. See the following figure as an example:



IPHAH617-0

— 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 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 Hardware Management Console cables

- Cable the HMC (see [Cabling the HMC](#)).

After you finish

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

Parent topic: [Cabling your 112/85 workstation with a console](#)

Cabling your 7/10 server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back view of the model](#).

- [Cabling the an ASMI console](#)
- [Cabling the a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling the 7/10 and an ASMI console

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

— Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed in the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

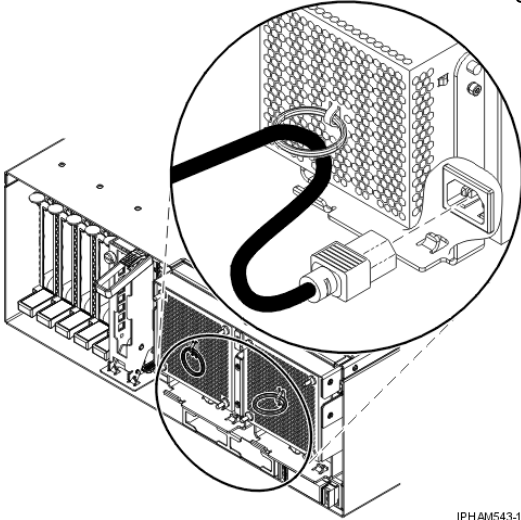
- If you want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see [References](#).
- If you want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the 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, refer to the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Note: Any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

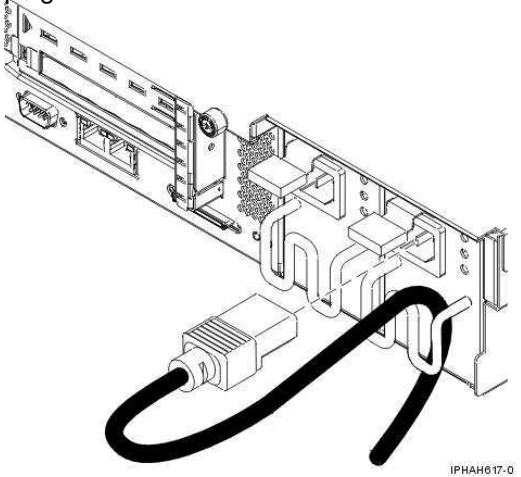
Connecting the power cords

- 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:



___ 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.

Routing the cables through the cable-management arm

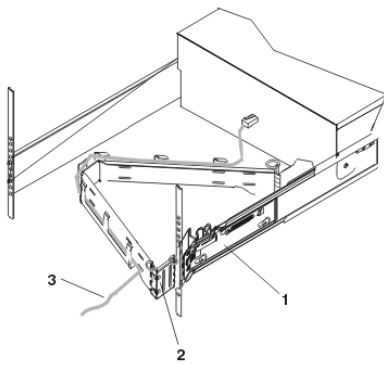
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the 7/10, see [Place the model ESCALA PL 250R-L in the service position.](#)
- For the 7/20, see [Place the rack-mounted system or expansion unit in the service position.](#)

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

- Power the system on (see [Powering the system on and off](#)).

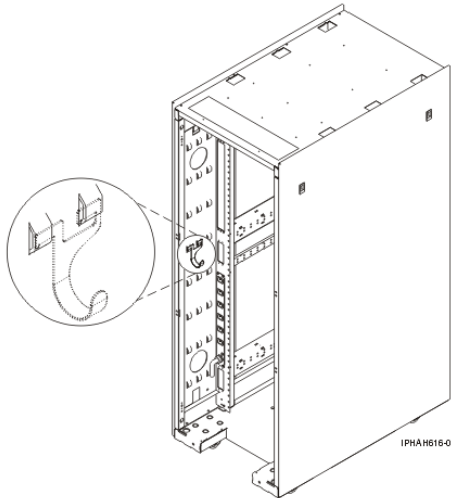
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control

panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your 7/10 server with a console](#)

Cabling the 7/10 and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.

- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

- ___ If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

- ___ Do you have an expansion unit?
- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

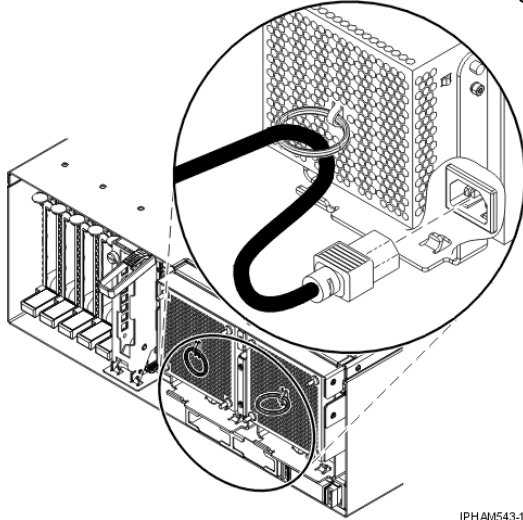
Attaching devices using the system ports

- The system ports on the back of the server are disabled when your server is connected to an HMC.

Connecting the power cords

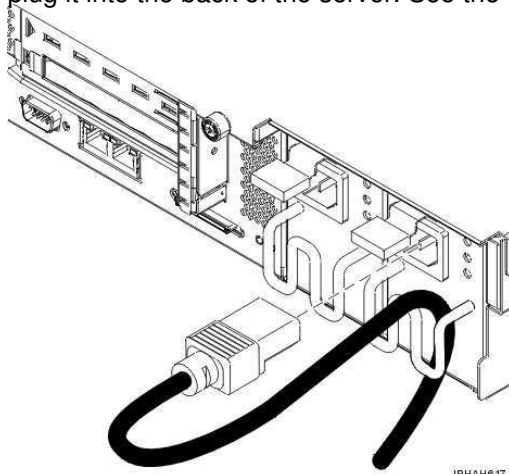
- Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

— 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:



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. See the following figure as an example:



IPHAH017-0

— 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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

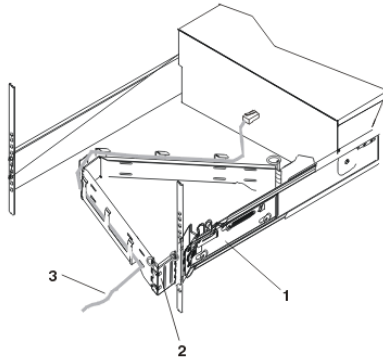
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the 7/10, see [Place the model ESCALA PL 250R-L in the service position.](#)
- For the 7/20, see [Place the rack-mounted system or expansion unit in the service position.](#)

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

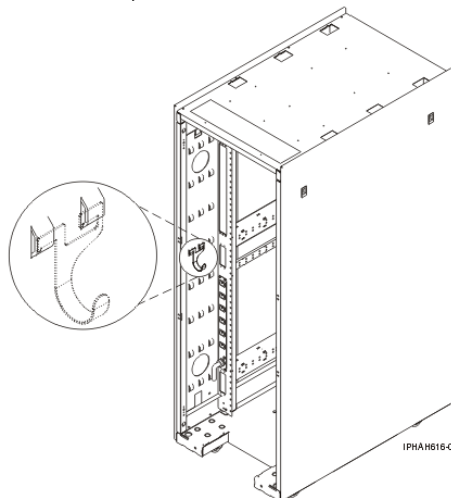
IPHAH615-0

___ 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 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:



IPHAH616-0

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

Parent topic: [Cabling your 7/10 server with a console](#)

Cabling your 7/20 server with a console

For a graphical representation of the slots and connectors that are referred to in this topic, see the [back views of the model](#).

- [Cabling the an ASMI console](#)
- [Cabling the a Hardware Management Console \(HMC\)](#)

Parent topic: [Cabling your server](#)

Cabling the 7/20 and an ASMI console

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Connecting 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 access the ASMI using the ASCII terminal, see [Accessing the ASMI using an ASCII console](#) for instructions.

Cabling the expansion units

—

Do you have an expansion unit?

- Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed in the following link, until later in the checklist.

[Expansion units](#)

- 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.

Attaching devices using the system ports

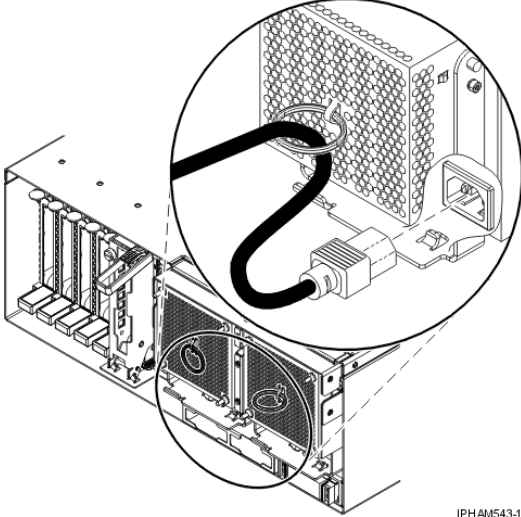
- If you want to access the ASMI when the system is in standby, attach an ASCII terminal to a system port on the back of the server. For views of the back of each server, see [References](#).
- If you want to access the ASMI remotely when the system is in standby, attach a modem to a system port on the 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, refer to the documentation that is included with your uninterruptible power supply. You might need additional hardware.

Note: Any other application that uses a system port requires a system port adapter to be installed in a PCI slot.

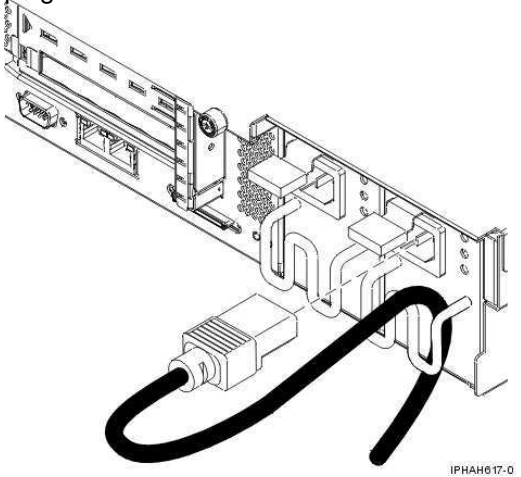
Connecting the power cords

- 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:



___ 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.

Routing the cables through the cable-management arm

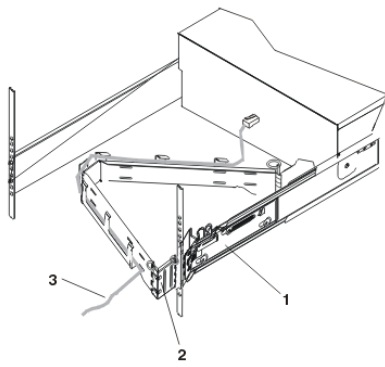
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the 7/10, see [Place the model ESCALA PL 250R-L in the service position.](#)
- For the 7/20, see [Place the rack-mounted system or expansion unit in the service position.](#)

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 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 cables and cable-management-arm movement to verify that the cables are not binding.

Starting your server

- Power the system on (see [Powering the system on and off](#)).

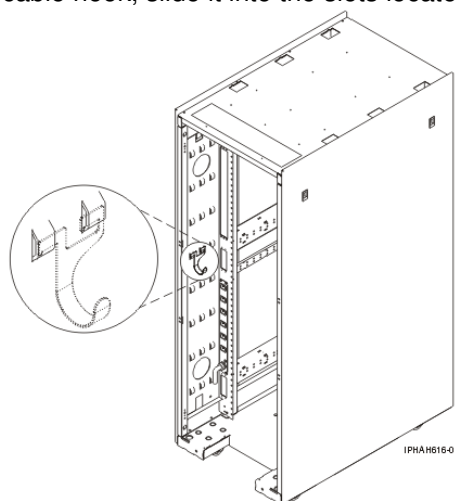
Note: Expect a delay between the time when power is applied to the server or workstation and when an initial program load (IPL) can be performed. When power is initially applied to the server or workstation, the service processor performs a self-check and will leave the control panel blank for up to two minutes. Wait until the C1XX XXXX progress codes are completed and 01 is displayed on the control

panel before you perform an IPL or change 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 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.

Parent topic: [Cabling your 7/20 server with a console](#)

Cabling the 7/20 and a Hardware Management Console (HMC)

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.

- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005)

Complete the following tasks to cable your server:

Before you begin

- If you have hardware features that are not installed, install them now. See [Installing features and replacing parts](#) for instructions.

Cabling the expansion units

- Do you have an expansion unit?
 - Yes. For instructions on how to set up your expansion unit, click the following link. Do not plug the expansion-unit power cord into the power outlet, as directed by the following link, until later in the checklist.

[Expansion units](#)

- 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.

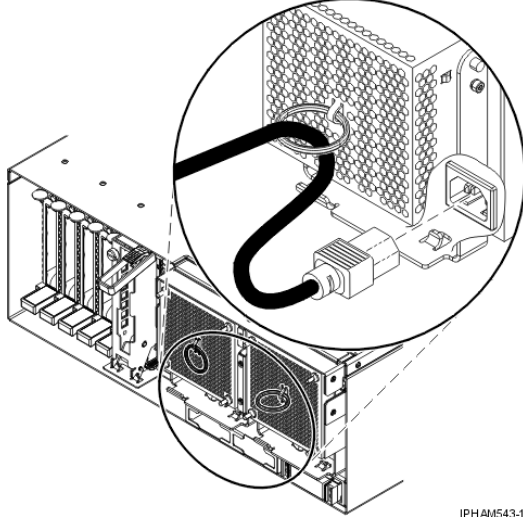
Attaching devices using the system ports

- The system ports on the back of the server are disabled when your server is connected to an HMC.

Connecting the power cords

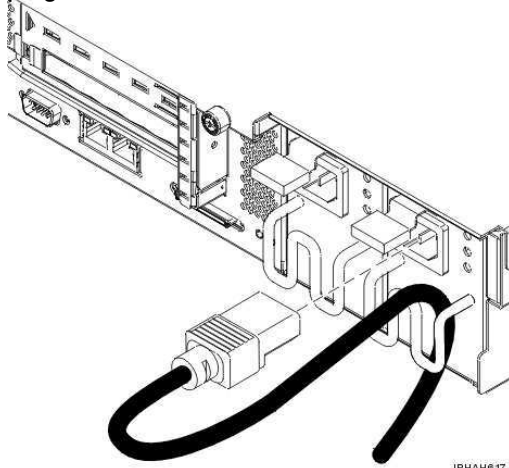
- Power cords should be routed through the retention rings or under the retention brackets that are provided to prevent the power cords from becoming unplugged unexpectedly.

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:



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. See the following figure as an example:



IPHAH017-0

- 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 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 (see [Cabling the HMC](#)).

Routing the cables through the cable-management arm

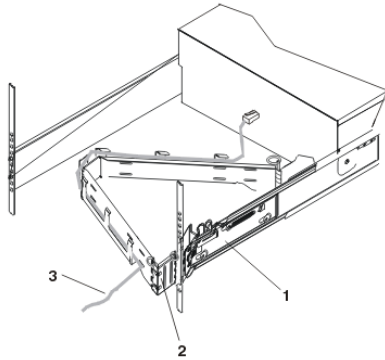
___ Is your server installed in a rack?

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

___ Put the system into the service position.

- For the 7/10, see [Place the model ESCALA PL 250R-L in the service position.](#)
- For the 7/20, see [Place the rack-mounted system or expansion unit in the service position.](#)

___ Route the cables through the hooks along the cable-management arm and secure them with the straps provided.



- 1 System rail
- 2 Cable management arm
- 3 Cable

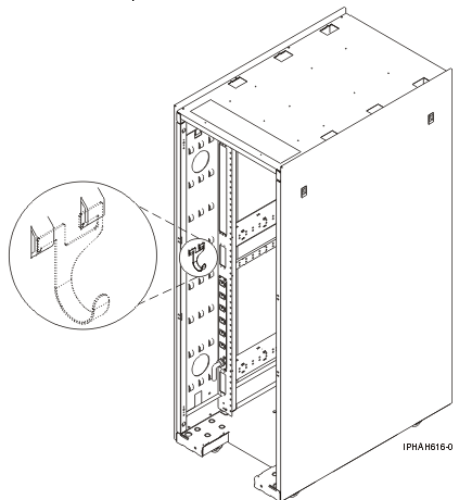
IPHAH615-0

___ 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 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:



IPHAH616-0

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

Parent topic: [Cabling your 7/20 server with a console](#)

References

Find helpful information that supports the instructions for cabling your system.

- **Back view of a model ESCALA PL 245T/R server**
View the ports and connections on the ESCALA PL 245T/R server.
- **Back view of a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server**
View the ports and connections on the model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server.
- **Back view of a model ESCALA PL 250R-VL or ESCALA PL 450R-XS**
View the ports and connections on the model ESCALA PL 250R-VL or ESCALA PL 450R-XS.
- **Back views of a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server**
View the ports and connections on the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server.
- **Back views of a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server**
View the ports and connections on the model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server.
- **Back view of a kstation**
View the ports and connections on the kstation.
- **Back views of a model 112/85 workstation**
View the ports and connections on the model 112/85 workstation.
- **Back view of a model ESCALA PL 250R-L server**
View the ports and connections on the model ESCALA PL 250R-L server.
- **Back views of a model ESCALA PL 250T/R server**
View the ports and connections on the model ESCALA PL 250T/R server.
- **Back views of a model ESCALA PL 450T/R server**
View the ports and connections on the model ESCALA PL 450T/R server.
- **Back view of the 7/10 server**
View the ports and connections on the 7/10 server.
- **Back views of the 7/20 server**
View the ports and connections on the 7/20 server.

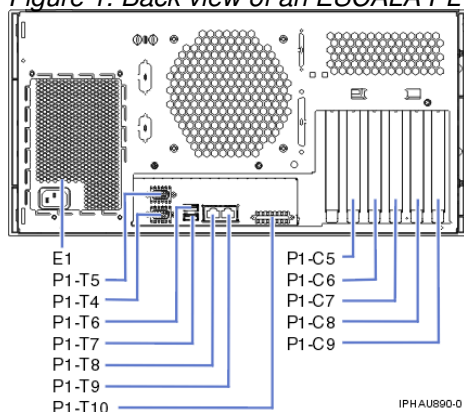
Parent topic: [Cabling your server](#)

Back view of a model ESCALA PL 245T/R server

View the ports and connections on the ESCALA PL 245T/R server.

Use the following diagram to help you cable an ESCALA PL 245T/R server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back view of an ESCALA PL 245T/R server



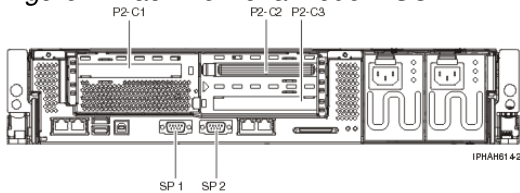
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Back view of a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server

View the ports and connections on the model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server.

Use the following diagram to help you cable a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back view of a model ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ server



Parent topic: [References](#)

Back view of a model ESCALA PL 250R-VL or ESCALA PL 450R-XS

View the ports and connections on the model ESCALA PL 250R-VL or ESCALA PL 450R-XS.

Use the following diagram to help you cable a model ESCALA PL 250R-VL or ESCALA PL 450R-XS. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back view of a model ESCALA PL 250R-VL or ESCALA PL

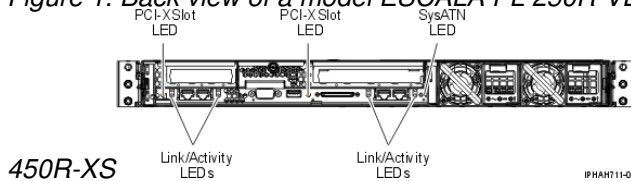
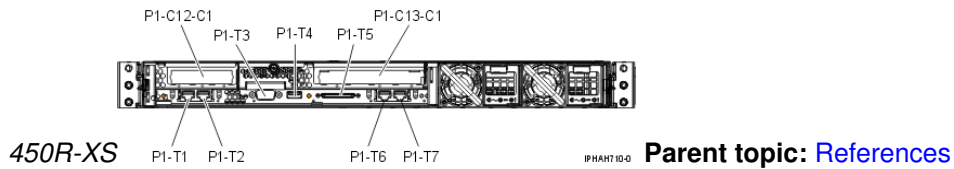


Figure 2. Back view of a model ESCALA PL 250R-VL or ESCALA PL

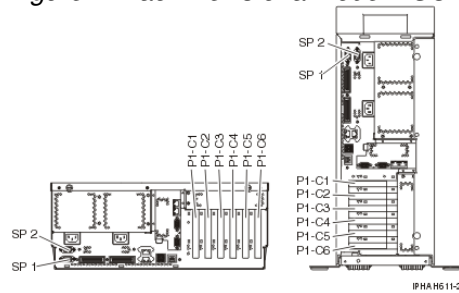


Back views of a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server

View the ports and connections on the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server.

Use the following diagram to help you cable a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back views of a model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ server



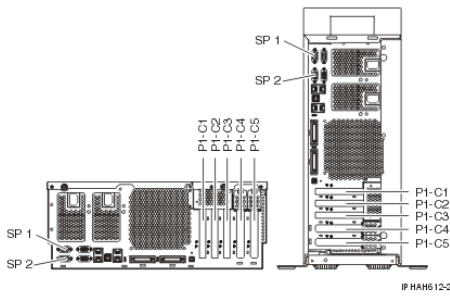
Parent topic: [References](#)

Back views of a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server

View the ports and connections on the model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server.

Use the following diagram to help you cable a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back views of a model ESCALA PL 450T/R+ or ESCALA PL 850T/R-L+ server



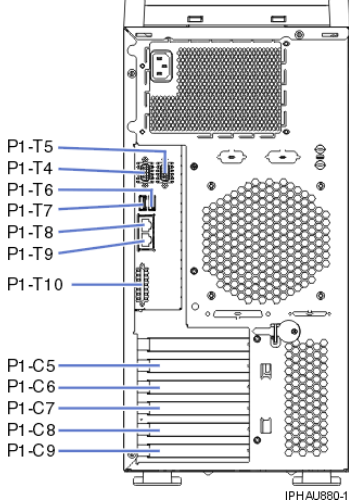
Parent topic: [References](#)

Back view of a kstation

View the ports and connections on the kstation.

Use the following diagram to help you cable a kstation. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back view of a kstation



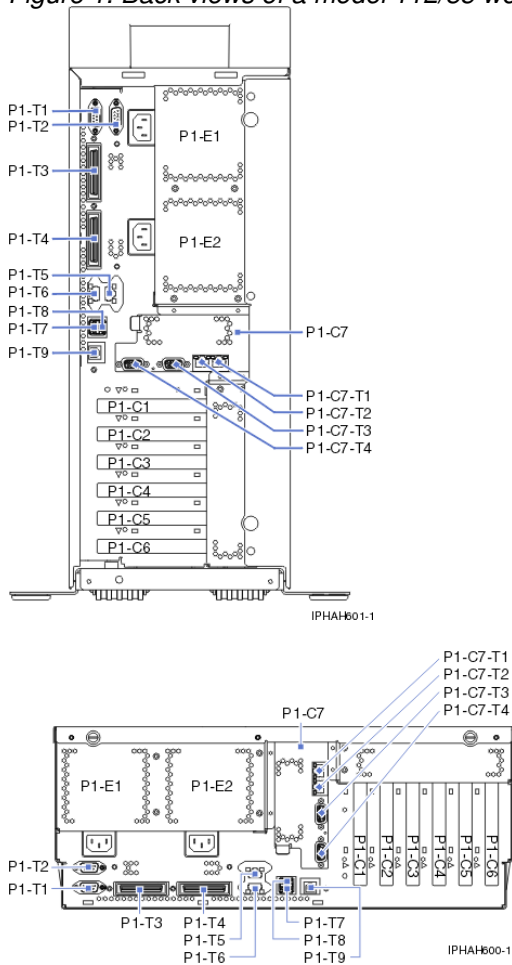
Parent topic: [References](#)

Back views of a model 112/85 workstation

View the ports and connections on the model 112/85 workstation.

Use the following diagram to help you cable a model 112/85 workstation. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back views of a model 112/85 workstation



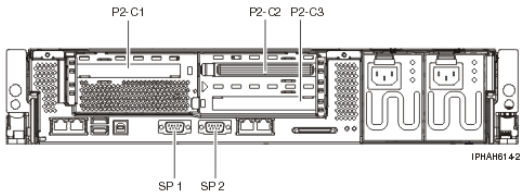
Parent topic: [References](#)

Back view of a model ESCALA PL 250R-L server

View the ports and connections on the model ESCALA PL 250R-L server.

Use the following diagram to help you cable a model ESCALA PL 250R-L server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back view of a model ESCALA PL 250R-L server



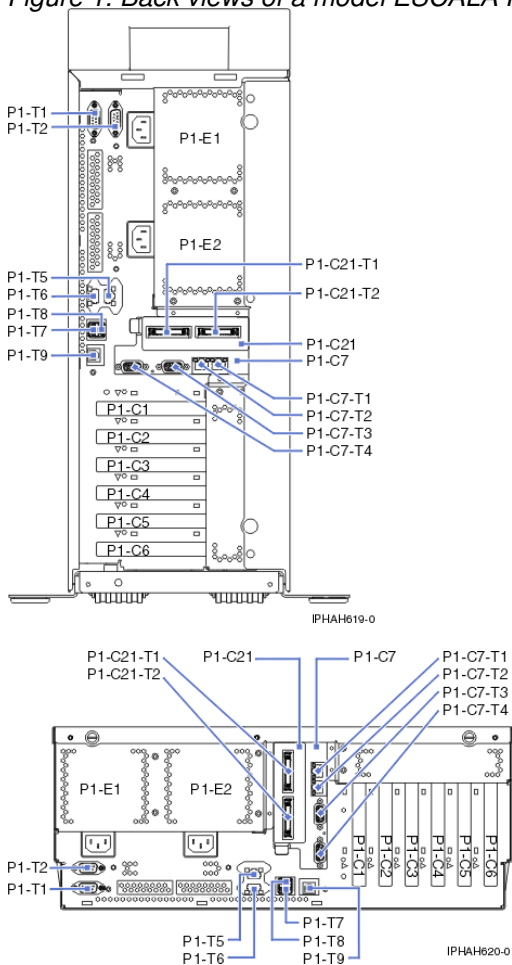
Parent topic: [References](#)

Back views of a model ESCALA PL 250T/R server

View the ports and connections on the model ESCALA PL 250T/R server.

Use the following diagram to help you cable a model ESCALA PL 250T/R server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back views of a model ESCALA PL 250T/R server



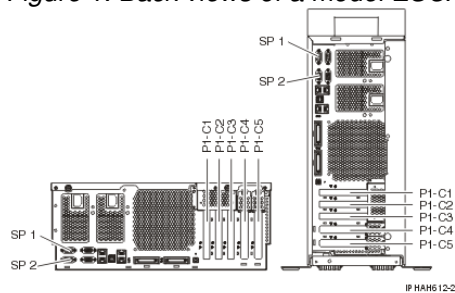
Parent topic: [References](#)

Back views of a model ESCALA PL 450T/R server

View the ports and connections on the model ESCALA PL 450T/R server.

Use the following diagram to help you cable a model ESCALA PL 450T/R server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back views of a model ESCALA PL 450T/R server



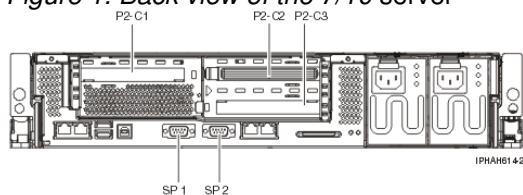
Parent topic: [References](#)

Back view of the 7/10 server

View the ports and connections on the 7/10 server.

Use the following diagram to help you cable the 7/10 server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back view of the 7/10 server



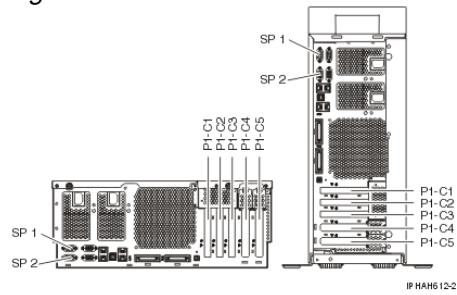
Parent topic: [References](#)

Back views of the 7/20 server

View the ports and connections on the 7/20 server.

Use the following diagram to help you cable the 7/20 server. Connections and ports are labeled to facilitate the setup process.

Figure 1. Back views of the 7/20 server



Parent topic: [References](#)

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