Hardware Information

Managing the Advanced System Management Interface (ASMI)

ESCALA POWER5

ESCALA POWER5

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Managing the Advanced System Management Interface (ASMI)

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Managing the Advanced System Management Interface (ASMI)

Understand how to manage the Advanced System Management Interface (ASMI).

The Advanced System Management Interface (ASMI) is the interface to the service processor that is required 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.

Use the following information to help you manage the ASMI:

- **Printable PDF**
  Use this to view and print a PDF of this information.
- **Concepts**
  Read this section to learn about the general ASMI concepts. These concepts include ASMI requirements, authority levels, and login restrictions.
- **Accessing the ASMI**
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Parent topic: Managing the Advanced System Management Interface (ASMI)

Concepts

Read this section to learn about the general ASMI concepts. These concepts include ASMI requirements, authority levels, and login restrictions.

The ASMI allows you to perform a variety of tasks associated with managing your server. The purpose of this information is to familiarize you with the ASMI concepts before you use the ASMI:

- **ASMI requirements**
  Learn about ASMI setup and functionality requirements.
- **ASMI authority levels**
  Learn about various ASMI authority levels.
- **ASMI login restrictions**
  Learn about ASMI login restrictions, including the maximum number of user logins allowed.

Parent topic: Managing the Advanced System Management Interface (ASMI)

ASMI requirements

Learn about ASMI setup and functionality requirements.

To successfully access and use the ASMI, read the following requirements:

- The ASMI requires password authentication.
- The ASMI provides a Secure Sockets Layer (SSL) Web connection to the service processor. To establish an SSL connection, open your browser using https://.
- Supported browsers are Netscape (version 7.1), Internet Explorer (version 6.0), and Opera (version 7.23). Later versions of these browsers cannot be used to access ASMI. JavaScript and cookies must be enabled.
- Clicking Back in the browser might display outdated data. To display the most up-to-date data, select the desired item from the navigation pane.
- The browser-based ASMI is available during all phases of the system operation, including initial program load (IPL) and run time. Some menu options are not available during the system IPL or run time to prevent usage or ownership conflicts if corresponding resources are in use during that phase.
- The ASMI that is accessed on a terminal is available only if the system is powered off.
- All requested input must be provided in English-language characters regardless of the language selected to view the interface.

Parent topic: Concepts

Related concepts

Accessing the ASMI

ASMI authority levels

Learn about various ASMI authority levels.

There are several authority levels for accessing the service processor menus using the ASMI. The following levels of access are supported:

General user
    The menu options presented to the general user are a subset of the options available to the administrator and authorized service provider. Users with general authority can view settings in the ASMI menus. The login ID is `general` and the default password is `general`.
Administrator

The menu options presented to the administrator are a subset of the options available to the authorized service provider. Users with administrator authority can write to persistent storage, and view and change settings that affect the server's behavior. The first time a user logs into the ASMI after the server is installed, a new password must be selected. The login ID is `admin` and the default password is `admin`.

Authorized service provider

This login gives the authorized service provider access to all functions that could be used to gather additional debug information from a failing system, such as viewing persistent storage, clearing all deconfiguration errors, and using extended services. The login ID is `celogin`. The password is dynamically generated and must be obtained by calling technical support.

During the initial administrator and general user logins, the only menu option available is Change Password. In order to gain access to additional ASMI menus, you must change the administrator and general user default passwords. If you are an authorized service provider, you cannot change your password. For information about how to change your password, see Changing ASMI passwords. **Parent topic:** Concepts

ASMI login restrictions

Learn about ASMI login restrictions, including the maximum number of user logins allowed.

Only three users can log in at the same time. For example, if three people are logged-in to the ASMI and a person with a higher authority level than one of the current logged in users attempts to log in, the ASMI forces one of the lowest privileged users to log out. In addition, if you are logged in and not active for 15 minutes, your session expires. You receive no immediate notification when your session expires. However, when you select anything on the current page, you are returned to the ASMI Welcome pane.

To see who is logged in to the ASMI, view Current users on the ASMI Welcome pane after you log in.

If you make five login attempts that are not valid, your user account is locked out for five minutes and none of the other accounts are affected. For example, if the administrator account is locked, the general user can still log in using the correct password. This login restriction applies to the general user, administrator, and authorized service provider IDs. This login restriction also applies to the managed system HMC access ID, which is set using the HMC.

For information about HMC-access passwords for a managed system, see Overview of passwords.

Related conceptASMI authority levels

Parent topic: Concepts

Accessing the ASMI

You can access the ASMI through a Web browser, an ASCII console, or the Hardware Management Console (HMC).

Use the following information to help you set up access to the ASMI:

- **Accessing the ASMI using a Web browser**
  Connect a PC or mobile computer to the server to access the ASMI. The Web interface to the ASMI is available during all phases of system operation including the initial program load (IPL) and run time.
- **Accessing the ASMI using an ASCII terminal**
  Connect the ASCII console to the server to access the ASMI.
- **Accessing the ASMI using the HMC**
  Access the ASMI through the HMC interface.

Parent topic: Managing the Advanced System Management Interface (ASMI)

Related concepts

Accessing the ASMI using a Web browser

Connect a PC or mobile computer to the server to access the ASMI. The Web interface to the ASMI is available during all phases of system operation including the initial program load (IPL) and run time.

The Web interface to the Advanced System Management Interface (ASMI) is accessible through Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 running on a PC or mobile computer connected to the service processor. The Web interface is available during all phases of system operation including the initial program load (IPL) and run time. However, some of the menu options in the Web interface are unavailable during IPL or run time to prevent usage or ownership conflicts if the system resources are in use during that phase.

Note: Users that have systems that do not use the Hardware Management Consolemust set up the ASMI. 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, you must set up the ASMI.

The following instructions apply to systems that are not connected to an HMC. If you are managing the server using an HMC, Access the ASMI using the HMC.

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

1. Connect the power cord from the server to a power source, and wait for the control panel to display 01.
2. Select a PC or mobile computer that has Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 to connect to your server.

   If you do not plan to connect your server to your network, this PC or mobile computer will be your ASMI console.

   If you plan to connect your server to your network, this PC or mobile computer will be temporarily connected directly to the server for setup purposes only. After setup, you can use any PC or mobile computer on your network that is running Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 as your ASMI console.
3. Connect an Ethernet cable from the PC or mobile computer to the Ethernet port labeled HMC1 on the back of the managed system. If HMC1 is occupied, connect an Ethernet cable from the PC or mobile computer to the Ethernet port labeled HMC2 on the back of the managed system.
4. Configure the Ethernet interface on the PC or mobile computer to an IP address and subnet mask within the same subnet as the server so that your PC or mobile computer can communicate with the server. For instructions, see Setting the IP address on your PC or mobile computer. Use the following table to help you determine these values:

Table 1. PC or mobile computer network configuration information

Server connector	Subnet mask	IP address
HMC1	255.255.255.0	192.168.2.147
HMC2	255.255.255.0	192.168.3.147

For example, if you connected your PC or mobile computer to HMC1, the IP address for your PC or mobile computer could be 192.168.2.1 and the subnet mask would be 255.255.255.0. Set the gateway IP address to the same IP address as the PC or mobile computer.

5. Use Table 1 to determine the IP address of the Ethernet port that your PC or mobile computer is connected to, and type the IP address in the Address field of your PC's or mobile computer's Web browser. For example, if you connected your PC or mobile computer to HMC1, type `https://192.168.2.147` in your PC's or mobile computer's Web browser.

6. When the login display appears, enter one of the following default user IDs and passwords:

Table 2. Default user IDs and passwords for the Web interface

User ID	Password
general	general
admin	admin

7. Change the default password when prompted. For information, see ASMI authority levels.
8. If you plan to connect your PC or mobile computer to your network, complete the following steps:
   a. From the navigation area, expand Network Services.
   b. Click Network Configuration.
   c. If your PC or mobile computer is connected to HMC1, fill in the section labeled Network interface eth0.

   If your PC or mobile computer is connected to HMC2, fill in the section labeled Network interface eth1.

   Ensure that the following fields are filled in correctly.

Table 3. Fields and values for network configuration

Field	Value
Configure this interface?	Selected
Type of IP address	Static
IP address	This is the same address that you used in step 5.
Subnet mask	255.255.255.0

   Note: For information about the other fields and values, refer to Configuring network interfaces.

   d. Click Save Settings.
   e. Disconnect your PC or mobile computer from the server.
   f. Connect the server to your company network.
   g. Go to any PC or mobile computer on your company network that is running Microsoft Internet Explorer 6.0, Netscape 7.1, or Opera 7.23, and type the following in the Address field of your browser:

   `https://host name.domain name`

   where host name and domain name are the host name and domain name you entered when completing step 8.c.
   h. Log in to the ASMI.
9. Set the time of day on the server.

For information about how to use the ASMI, see Managing your server using the Advanced System Management Interface.

- **Setting the IP address on your PC or mobile computer**
  To access the ASMI through a Web browser you first need to set the IP address on your PC or mobile computer. The following procedures describe setting the IP address on PC and mobile computers running Windows and Linux.

Parent topic: Accessing the ASMI

Setting the IP address on your PC or mobile computer

To access the ASMI through a Web browser you first need to set the IP address on your PC or mobile computer. The following procedures describe setting the IP address on PC and mobile computers running Windows and Linux.

Setting the IP address in Windows XP and Windows 2000

To set the IP address within Windows XP and Windows 2000, complete these steps.

1. Click Start >Settings >Control Panel.
2. On the control panel, double-click Network and Dial-Up Connections.
3. Right-click Local Area Connection.
4. Click Properties.

   Attention: Record the current settings before making any changes. This will allow you to restore these settings if you disconnect the PC or mobile computer after setting up the ASMI Web interface.

   Note: If Internet Protocol (TCP/IP) does not appear in the list, do the following:

   a. Click Install.
   b. Select Protocol, and then click Add.
   c. Select Internet Protocol (TCP/IP).
   d. Click OK to return to the Local Area Connection Properties window.

5. Select Internet Protocol (TCP/IP), and then click Properties.
6. Select Using the Following IP Address.
7. Complete the IP address, Subnet mask, and Default gateway fields by using the values in step 4 from Accessing the ASMI using a Web Browser.
8. Click OK on the Local Area Connection Properties window. It is not necessary to restart your PC.

Setting the IP address in Linux

To set the IP address in Linux, complete these steps. You will need the information from step 4 in Accessing the ASMI using a Web Browser to complete step 4 in the following procedure.

1. Make sure you are logged on as a root user.
2. Start a terminal session.
3. Type `ifconfig` at the command prompt.

> **Attention:** Record or print the current settings before making any changes. This allows you to restore these settings if you disconnect the PC or mobile computer after setting up the ASMI Web interface.

4. Type `ifconfig eth0 xxx.xxx.xxx.xxx netmask xxx.xxx.xxx.xxx`, where the *xxx.xxx.xxx.xxx* values are the values from step 4 for IP address and Subnet mask.
5. Press Enter.

Parent topic: Accessing the ASMI using a Web browser

Accessing the ASMI using an ASCII terminal

Connect the ASCII console to the server to access the ASMI.

The ASCII interface to the ASMI provides a subset of the Web interface functions. The ASCII console is available only when the system is in platform standby state. It is not available during the initial program load (IPL) or run time. The ASMI on an ASCII console is not available during some phases of system operation, such as the initial program load (IPL) and run time.

To set up the ASCII console for direct or remote access to the ASMI, complete the following tasks:

1. Complete the following steps to cable an ASCII console or equivalent to the server:

   Using a cable equipped with a null modem, connect the ASCII console to system connector S1 1 on the back of the server or to system port FS1 on the control panel using an RJ-45 connector.

   Note: Both system port 1 connections are not available simultaneously; when one is connected, the other is deactivated.

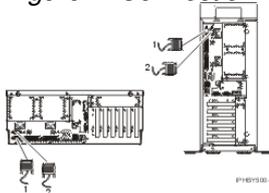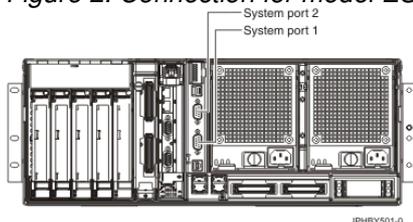*Figure 1. Connection for model ESCALA PL 250T/R and ESCALA PL 450T/R*

Figure 2. Connection for model ESCALA PL 850R/PL 1650R/R+

2. Connect the power cord from the server to a power source.
3. Wait for the control panel to display `01`.

4. Ensure that your ASCII console is set to the following general attributes.

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

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

5. Press a key on the ASCII console to allow the service processor to confirm the presence of the ASCII console.
6. When the login display appears, enter one of the following default user IDs and passwords:

   Table 1. Default user IDs and passwords for the Web interface

User ID	Password
general	general
admin	admin

7. Change the default password when you are prompted. For information see ASMI authority levels.
8. Set the time of day on the server.

For information about using the ASMI, see Managing your server using the Advanced System Management Interface.

Parent topic: Accessing the ASMI

Accessing the ASMI using the HMC

Access the ASMI through the HMC interface.

To access the Advanced System Management Interface (ASMI) using the Hardware Management Console (HMC), complete the following steps:

1. Ensure that the HMC is set up and configured. For instructions, see Setting up the Hardware Management Console.
2. In the navigation area, expand the managed system you want to work with.
3. Expand Service Applications and click Service Focal Point.

4. In the content area, click Service Utilities.
5. From the Service Utilities window, select the managed system you want to work with.
6. From the Selected menu on the Service Utilities window, select Launch ASM menu.

For more information on using the ASMI, see Managing your server using the Advanced System Management Interface.

Parent topic: Accessing the ASMI

Setting up an ASMI login profile

Change passwords, view login audits, and change the default language.

You can change your password, view login audits, and change the default language:

- **Changing ASMI passwords**
  Change the general user, administrator, and HMC access passwords.
- **Retrieving ASMI login audits**
  View the login history.
- **Changing the default language for the ASMI**
  Select the language that will be used to display the ASMI Web and TTY menus.
- **Updating installed languages**
  Select additional languages to install on the service processor.

Parent topic: Managing the Advanced System Management Interface (ASMI)

Changing ASMI passwords

Change the general user, administrator, and HMC access passwords.

You can change the general user, administrator, and HMC access passwords. If you are a general user, you can change only your own password. If you are an administrator, you can change your password and the passwords for general user accounts. If you are an authorized service provider, you can change your password, the passwords for general and administrator user accounts, and the HMC access password.

Passwords can be any combination of up to 64 alphanumeric characters. The default password for the general user ID is `general`, and the default password for the administrator ID is `admin`. After your initial login to the ASMI and after the reset toggle jumpers are moved, the general user and administrator passwords must be changed. For information about how to reset the administrator password, see Resetting the ASMI administrator password.

The HMC access password is usually set from the HMC during initial login. If you change this password using the ASMI, the change takes effect immediately.

To change a password, follow these steps:

Note: As a security measure, you are required to enter the current user's password into the Current password for current user field. This password is not the password for the user ID you want to change.

1. On the ASMI Welcome pane, specify your user ID and password, and click Log In.
2. In the navigation area, expand Login Profile.

3. Select Change Password.
4. Specify the required information, and click Continue.

- **Resetting the ASMI administrator password**
  You can reset the administrator password by either of the following methods:

Parent topic: Setting up an ASMI login profile

Resetting the ASMI administrator password

You can reset the administrator password by either of the following methods:

- Contact an authorized service provider
- Use the reset toggle jumpers on the service processor

To reset the toggle jumper on the service processor, move both service processor reset toggle switches from their current position to the opposite position. For information about how to use the reset toggle jumpers, refer to the remove and replace procedure for your system model in the Service processor assembly, service processor cable, and time-of-day-battery topic.

Parent topic: Changing ASMI passwords

Retrieving ASMI login audits

View the login history.

You can view the login history for the ASMI to see the last 20 successful logins and the last 20 logins that failed.

To perform this operation, your authority level must be one of the following:

- Administrator
- Authorized service provider

To retrieve login audits, follow these steps:

1. On the ASMI Welcome pane, specify your user ID and password, and click Log In.
2. In the navigation area, expand Login Profile.
3. Select Retrieve Login Audits. The right pane displays the login history.

Parent topic: Setting up an ASMI login profile

Changing the default language for the ASMI

Select the language that will be used to display the ASMI Web and TTY menus.

You can select the language that is displayed on the ASMI welcome screen prior to login and during your ASMI session if you do not choose an alternative language at the time of login. You must provide all requested input in English-language characters regardless of the language selected to view the interface.

Note: You can change the language for each ASMI session by selecting the desired language from the drop-down menu found on the ASMI Welcome pane prior to logging in to the ASMI.

To perform this operation, your authority level must be one of the following:

- General
- Administrator
- Authorized service provider

To change the default language, follow these steps:

1. On the ASMI Welcome pane, specify your user ID and password, and click Log In.
2. In the navigation area, expand Login Profile.
3. Select Change Default Language.
4. In the right pane, select the desired default language and click Save setting.

Parent topic: Setting up an ASMI login profile

Updating installed languages

Select additional languages to install on the service processor.

A maximum of five languages can be supported on the service processor at any given time. By default, English is always resident. Languages installation changes take effect when the firmware is updated.

Note: You must provide all requested input in English-language characters regardless of the language selected to view the interface.

To perform this operation, your authority level must be one of the following:

- General
- Administrator
- Authorized service provider

To update the installed language, do the following:

1. On the ASMI Welcome pane, specify your user ID and password, and click Log In.
2. In the navigation area, expand Login Profile.
3. Select Update Installed Languages.
4. In the right pane, select the desired languages and click Save setting.

Parent topic: Setting up an ASMI login profile

Troubleshooting problems in accessing the ASMI

Troubleshoot common problems associated with setting up access to the ASMI.

The following table contains information about common problems that might occur while you are trying to access the Advanced System Management Interface (ASMI) through a Web browser. The table also provides common resolutions to those problems.

Problem	Resolution
After you enter the server's IP address in the Web browser, you receive a security alert.	Usually this means that your PC or mobile computer does not accept the server as a secure site. To resolve this problem, complete the following steps: 1. In the Client Authentication window, select the certificate you want to use when connecting and click OK. 2. If you receive the error that this page cannot be found, your PC or mobile computer does not trust the server as a secure site. If you have a firewall on your PC or mobile computer, modify the firewall settings to trust the server's IP address. Then, type the IP address in the Address field of your PC's or mobile computer's Web browser. 3. On the Security Alert window, Click Yes.
After you enter the server's IP address in the Web browser, the browser displays an error message stating that it cannot find the IP address that you entered.	1. Ensure that you entered `https://<IP address of server>` in the Address field of your Web browser. 2. Ensure that you entered the correct IP address for the server. See Table 1 for a list of IP addresses for the server. 3. Add a routing entry to the PC or mobile computer so that the PC or mobile computer can locate the server on the network. For example, if you are using a PC installed with Windows, open a command line prompt and type `route add <server IP address> mask 255.255.255.0 <PC or mobile computer IP address> metric 1.`
You are using Microsoft Internet Explorer 6.0 running on Windows XP, you have correctly cabled the PC or mobile computer to the server, and you cannot access the ASMI.	Usually this means that the Use TLS 1.0 option in Microsoft Internet Explorer is enabled. To connect to the ASMI, this option must be disabled. To resolve this problem, complete the following steps: 1. From the Tools menu in Microsoft Internet Explorer, select Internet Options. 2. From the Internet Options window, click the Advanced tab. 3. Clear the Use TLS 1.0 check box (in the Security category) and click OK.
You are locked out of the ASMI after you enter the default user ID and password either incorrectly or more than five times.	Reset the default password and network settings to the default settings using one of the following methods: • Ask your authorized service provider to obtain a new login password. • Use the service processor reset toggle switches to reset the default password and network settings; refer to Table 1. This task requires removing the service processor card from the server. For instructions, see Service processor assembly, service processor cable, and time-of-day battery.

Parent topic: Managing the Advanced System Management Interface (ASMI)

Related information

View and print information related to the Managing the ASMI topic collection.

Listed below are the ESCALA Power5 Hardware Information topics that relate to the Managing the Advanced System Management Interface (ASMI) topic:

- Managing the Hardware Management Console (HMC)
- Managing your server using the Advanced System Management Interface (ASMI)
- Managing your server using the Hardware Management Console (HMC)
- Service processor

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