ESCALA

Managing the System Management Services

BULL

ESCALA

Managing the System Management Services

Hardware

May 2009

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Contents

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(C026)

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

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

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

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

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

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

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

Managing system management services

Use the menus within system management services (SMS) to view information about your system or partition and to perform tasks such as changing the boot list and setting the network parameters. These menus can be used for AIX® or Linux® logical partitions.

Starting system management services

Learn how to start system management services (SMS) from a partitioned or nonpartitioned server.

Related concepts

"Power-on self-test keys" on page 13
The power-on self-test (POST) keys can start services or initiate service mode boots used for configuring the system and diagnosing problems.

Starting system management services from a partitioned server

Learn how to start system management services (SMS) from a partitioned server using a Hardware Management Console (HMC).

If you have a logically partitioned system, complete one of the following tasks:

Requirement: The logical partition must be shut down.
- Using the HMC, activate the logical partition. (If a VTERM on the HMC is the firmware console for the partition that is being restarted, open the VTERM.)
- Using the HMC, change the logical partition profile properties.
    1. In the navigation area, select **Systems Management** → **Servers**.
    2. In the navigation area, select the managed system that you want to work with.
    3. In the contents area, select the logical partition that you want to work with.
    4. Select **Tasks** → **Operations** → **Activate**.
    5. Click **Advanced** on the Activate Logical Partition window.
    6. Select **Normal** in the Keylock position field and select **SMS** in the **Boot mode** field.
    7. Click **OK**.
    8. If you want a console for this session, select **Open a terminal window or console session**, and the click **OK**.

The system will reboot to the SMS menus.

Starting system management services from a nonpartitioned server

Learn how to start system management services (SMS) using the Advanced System Management Interface (ASMI), the control panel, or from the AIX operating system.

If you have a nonpartitioned system, complete one of the following tasks:
- If the ASMI is available on a network-attached console and the system is in standby, complete the following steps:
    1. On the ASMI Welcome window, specify your user ID and password, and click **Log In**.
    2. In the navigation area, expand **Power/Restart Control** and select **Power On/Off System**.
    3. Click **Save settings** and continue system server firmware boot.

4. Look for the POST indicators **memory, keyboard, network, scsi, speaker**, which display across the bottom of the firmware console. For details, see "Power-on self-test keys" on page 13.

5. Press the numeric 1 key after the word **keyboard** is displayed and before the word **speaker** is displayed.

- If the ASMI is not available and the system is in standby, complete the following steps:

1. Press the power button on the control panel.

2. Look for the POST indicators **memory, keyboard, network, scsi, speaker**, which display across the bottom of the firmware console. For details, see Power-on self-test keys.

3. Press the numeric 1 key after the word **keyboard** is displayed and before the word **speaker** is displayed.

- If the ASMI is not available and the system has already booted the AIX operating system, complete the following steps:

1. Reboot the operating system.

2. Look for the POST indicators **memory, keyboard, network, scsi, speaker**, which display across the bottom of the firmware console. For details, see Power-on self-test keys.

3. Press the numeric 1 key after the word **keyboard** is displayed and before the word **speaker** is displayed.

Using system management services

Learn how the system management services (SMS) menus can help you manage your system.

Related tasks

Starting the system management services

Menus and descriptions

There are many tasks that you can access using the system management services (SMS) menus.

If you have not performed the steps to start the system management services, see "Starting system management services" on page 1.

Notes:

- If the firmware console is a graphics terminal, you might need to enter the password for the service processor's admin user that was set using the Advanced System Management Interface (ASMI).

- In some of the following example menus, U*n* is used in place of U*feature_code.model.serial number* for legibility.

The following table contains the titles of the menus or tasks that can be accessed using the SMS menus. Use it to access and review the specific task that you want.

Table 1. SMS menus and descriptions

Menu or task	Description
Main menu	Describes the opening menu when first starting SMS.
Select language	You can change the language used by the SMS menus.
Setup remote IPL	You can enable and set up the remote startup capability of your server.
Adapter configuration	You can set the network speed, enable or disable spanning tree, and set the protocol.
Speed, duplex	You can set the interface speed at which the adapter runs and select half or full duplex.
Spanning tree enabled	You can enable or disable the spanning tree option.
Protocol	You can set the appropriate protocol for your network.

Table 1. SMS menus and descriptions (continued)

Menu or task	Description
Ping test	You can test an adapter's network connection to a remote system.
Advanced setup: BOOTP	You can view and modify the BOOTP values.
Change SCSI settings	You can view and change the addresses of the SCSI controllers attached to your system.
Select console	You can select which console to use to display the SMS menus.
Select boot options	You can view and set various options regarding the installation devices and boot devices. The Select boot options menu gives you the following options: Select Install or Boot Device, Select Boot Devices, or Multiboot Startup.
Normal mode boot or service mode boot	You can have your system perform a boot in the normal or service mode.
Hard drive	Displays a menu identifying the different types of hard drives installed on your system, for example, SCSI or SSA.
Set boot sequence	You can set the location of the device in the boot list. Options include: display current settings, restore default settings, multiboot startup, and exiting system management services.

Selecting the language in system management services

You can choose from among 20 language options in the system management services.

When you select the **Select Language** option, you can change the language used by the SMS menus. Some of the languages that are available are shown in the example below.

Note: If you are using an ASCII terminal, it must support the ISO-8859 character set to correctly display languages other than English.

```
 SELECT LANGUAGE

  1. ISO8859-1 English (United States)
  2. ISO8859-1 French
  3. ISO8859-1 German
  4. ISO8859-1 Italian
  5. ISO8859-1 Spanish




 ------------------------------------------------------------------------------
 Navigation keys:
 M = return to main menu
 ESC key = return to previous screen           X = eXit System Management Services
 ------------------------------------------------------------------------------
 Type the number of the menu item and press Enter or Select a Navigation key: _
```

Setting up a remote IPL

Learn how to set up a remote initial program load (IPL) using the (SMS) menus.

When you select the **Setup Remote IPL** option you can enable and set up the remote startup capability of your server. A list of network interface card (NIC) adapters in the server is displayed. An example of this menu follows:

```
NIC Adapters

        Device                    Slot                Hardware Address
  1. Port 1 - 2 PORT Gigabit Et    Un-P1-T9                00096bff616b
  2. Port 2 - 2 PORT Gigabit Et    Un-P1-T10               00096bff616a
  3. 10/100/1000 Base-TX PCI-X     Un-CB1-C03-T1           000295e3814f




  -------------------------------------------------------------------------------
  Navigation keys:
  M = return to main menu
  ESC key = return to previous screen       X = eXit System Management Services
  -------------------------------------------------------------------------------
  Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select an adapter, the Select Network Service menu is displayed.

```
Select Network Service
No alias   : Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

  1. BOOTP
  2. ISCSI




  -------------------------------------------------------------------------------
  Navigation keys:
  M = return to main menu
  ESC key = return to previous screen       X = eXit System Management Services
  -------------------------------------------------------------------------------
  Type menu item number and press Enter or select Navigation key: _
```

When you select this option, you can select the type of boot this adapter performs:

BOOTP
> TCP/IP network boot.

ISCSI You can boot from a remote hard drive by setting up an iSCSI network connection.

If you select **BOOTP**, the adapter is set up (and the network parameters are entered) as usual. The Network Parameters menu is displayed.

If you select **ISCSI**, you can select which iSCSI alias to set up with network parameters. You also have the boot once option, in which the iSCSI parameters are not saved. When you finish using the iSCSI menus, you can choose any of the other menus or tasks that are listed in Using system management services..

```
ISCSI Alias Selection

No alias    : Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

  1. ISCSI_DISK1
  2. ISCSI_DISK2


  -------------------------------------------------------------------------------
  Navigation keys:
  M = return to main menu
  ESC key = return to previous screen       X = eXit System Management Services
  -------------------------------------------------------------------------------
  Type menu item number and press Enter or select Navigation key: _
```

If you choose either of the first two options, the following menu is displayed. **Automatic discovery** saves only the default iSCSI parameters and **Enter Static Parameters** saves the user parameters.

```
ISCSI Discovery Selection

iscsi_disk1: Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

 1. Enter Static Parameters.




 --------------------------------------------------------------------------------
 Navigation keys:
 M = return to main menu
 ESC key = return to previous screen          X = eXit System Management Services
 --------------------------------------------------------------------------------
 Type menu item number and press Enter or select Navigation key: _
```

When you choose **Enter Static Parameters**, the following menu is displayed. Use this menu to set the initiator parameters. Select **Enter Target Parameters** to set the target parameters.

```
ISCSI Initiator Parameters

iscsi_disk1: Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

 1. Client IP Address  [ ]
 2. Gateway IP Address [ ]
 3. Subnet Mask        [ ]
 4. Initiator Name.
 5. Enter Target Parameters.


 --------------------------------------------------------------------------------
 Navigation keys:
 M = return to main menu
 ESC key = return to previous screen          X = eXit System Management Services
 --------------------------------------------------------------------------------
 Type menu item number and press Enter or select Navigation key: _
```

Use the ISCSI Target Parameters menu to set the target parameters. Select **Target Name** to set the target's name.

```
ISCSI Target Parameters

iscsi_disk1: Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

 1. Target IP Address  [ ]
 2. ISCSI PORT         [3260]
 3. Target lun         [0]
 4. Set ISCSI Target Name



 --------------------------------------------------------------------------------
 Navigation keys:
 M = return to main menu
 ESC key = return to previous screen          X = eXit System Management Services
 --------------------------------------------------------------------------------
 Type menu item number and press Enter or select Navigation key: _
```

If you select **Target Name** on the ISCSI Target Parameters menu, the following menu is displayed.

```
Enter Target Name

iscsi_disk1: Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

 Must be at least 4 characters.
 Press Backspace key to delete.
 Press Enter     key to save.
 Press Esc       key to exit without saving name.

1.  Clear Current Name.
2.  Edit  Current Name.
[ ]



 -------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 -------------------------------------------------------------------------------
Type menu item number and press Enter or select Navigation key: _
```

The initiator name is required if the adapter that you selected on the NIC Adapters menu for the iSCSI network is a network adapter (for example, Ethernet). If the selected adapter is a TCP/IP over Ethernet or TCP/IP offload engine adapter, then the initiator name is in the microcode on the adapter and does not have to be set by the user. Select **Initiator Name** on the ISCSI Initiator Parameters menu to set the initiator name. The following menu is displayed.

```
Enter Initiator Name
iscsi_disk1: Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: Un-P1-T7

 Must be at least 4 characters.
 Press Backspace key to delete.
 Press Enter     key to save.
 Press Esc       key to exit without saving name.

1.  Clear Current Name.
2.  Edit  Current Name.
[ ]



 -------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 -------------------------------------------------------------------------------
Type menu item number and press Enter or select Navigation key: _
```

After you select **BOOTP** on the Select Network Service menu, the Network Parameters menu is displayed.

```
Network Parameters

Port 1 - 2 PORT Gigabit Et    Un-P1-T9     00096bff616b
 1. IP Parameters
 2. Adapter Parameters
 3. Ping Test
 4. Advanced Setup: BOOTP



 -------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 -------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Selecting the IP (Internet Protocol) parameters option displays the following menu.

```
IP Parameters

Port 1 - 2 PORT Gigabit Et    Un-P1-T9      00096bff616b
 1. Client IP Address    [9.8.38.50]
 2. Server IP Address    [9.8.38.51]
 3. Gateway IP Address   [9.8.38.1]
 4. Subnet Mask          [255.255.255.000]



 -------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 -------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

To change IP parameters, type the number of the parameters for which you want to change the value. Entering IP parameters on this menu automatically updates the parameters on the ping test menu.

Configuring adapters

You can set the network speed, enable or disable spanning tree, and set the protocol.

When you select the **Adapter Configuration** option, you can set the network speed, enable or disable spanning tree, and set the protocol as shown in the following menu.

```
Adapter Configuration

Port 1 - 2 PORT Gigabit Et    Un-P1-T9      00096bff616b
1.  Speed, Duplex
2.  Spanning Tree Enabled
3.  Protocol


 -------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 -------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select the **Speed, Duplex** option, the next Adapter Configuration menu is displayed. An example of the Adapter Configuration menu follows. The only option on this menu is **auto, auto**, which allows the adapter to set its network parameters for optimum performance.

You can set the interface speed at which the adapter runs.

```
Adapter Configuration

Port 1 - 2 PORT Gigabit Et    Un-P1-T9      00096bff616b

1.  auto, auto


 -------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 -------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select the **Spanning Tree Enabled** option, you can enable or disable the spanning tree. If this option is enabled, because the network to which the system is being attached supports spanning trees, the firmware imposes a waiting period of up to 60 seconds before the adapter is allowed to communicate with the network. If this option is disabled, the network adapter can access the network immediately after the system is connected.

The spanning tree protocol is a link-management protocol that provides path redundancy while preventing duplicate loops in a network. The spanning tree option is enabled or disabled on the network switch. If the LAN adapter port being configured with the SMS adapter menus is attached to a network switch that has the spanning tree protocol enabled, the spanning tree option on the **Adapter Configuration** menu remains enabled, which is the default. If the network switch does not support the spanning tree protocol, or it is disabled, the spanning tree option on the **Adapter Configuration** menu can be disabled. Leaving this option enabled does not affect the adapter's operation. This setting potentially affects the ping test and NIM installation. If the port's spanning tree setting is disabled, but it is enabled on the network switch to which it is attached, the ping test and NIM installation might fail even though the network and the adapter are operational.

When you select the **Protocol** option, you can set the appropriate protocol for your network as shown in the following.

```
Protocol

Port 1 - 2 PORT Gigabit Et    Un-P1-T9      00096bff616b

 1. Standard  <===
 2. IEEE802.3



-------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
-------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Select the **Ping Test** option from the Network Parameters menu to test an adapter's network connection to a remote system. After you select the ping test option, the same series of menus takes you through setting up the IP parameters and the adapter configuration before attempting the ping test.

Notes:
- After the ping test is initiated, it might take 60 seconds or longer to return a result.
- When the ping test passes or fails, the firmware stops and waits for a key to be pressed before continuing.

Select the **Advanced Setup: BOOTP** option from the Network Parameters menu to view and modify the BOOTP values. The following values (5, 512, and 5) are the default values.

```
Advanced Setup: BOOTP

Port 1-IBM 2 PORT 1000 Base-SX PCI-X Adapter: U788D.001.23A0034-P1-T7

 1. Bootp Retries   5
 2. Bootp Blocksize  512
 3. TFTP Retries    5



 --------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
 --------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Changing SCSI settings

You can view and change the addresses of the SCSI controllers attached to your system.

When you select the **Change SCSI Settings** option, you can view and change the addresses of the SCSI controllers attached to your system.

```
SCSI Utilities

  1. Hardware Spin Up Delay
  2. Change SCSI Id



 --------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
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 --------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Selecting the console

Yyou can select which console to use to display the SMS menus.

When you select the **Select Console** option, you can select which console to use to display the SMS menus. This selection is only for the SMS menus and does not affect the console used by the operating system.

Follow the instructions that are displayed on the menu. The firmware automatically returns to the menu on which the POST indicators (memory, keyboard, network, SCSI, speaker) display across the bottom of the menu. Press the numeric 1 key after the word **keyboard** is displayed and before the word **speaker** is displayed to return to the SMS main menu.

Note: If you do not change the console to another device before removing the current console, you must reattach the current console to change your console selection.

Selecting boot options

You can select to install or boot a device, configure a boot device order, or select a multiboot startup.

Select the **Select Boot Options** to view and set various options regarding the installation devices and boot devices.

```
   1. Select Install/Boot a Device
   2. Configure Boot Device Order
   3. Multiboot Startup [OFF]



--------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
--------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Selecting boot devices

You can view and change the customized boot list.

To minimize the search time for bootable devices, these menus follow this hierarchy:

`device type -> bus type -> adapter -> devices attached to the adapter`

By selecting **List All Devices** from the Select Device Type menu or the Select Media Type menu, you can view all of the potentially bootable devices at one time. Only bootable hard disks are listed.

The List All Devices function can take a long time on a large system with many I/O adapters and devices, such as large disk arrays.

Select the **Select Boot Devices** option to view and change the customized boot list, which is the sequence of devices read at startup.

```
   Configure Boot Device Order

   1.  Select 1st Boot Device
   2.  Select 2nd Boot Device
   3.  Select 3rd Boot Device
   4.  Select 4th Boot Device
   5.  Select 5th Boot Device
   6.  Display Current Setting
   7.  Restore Default Setting



--------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
--------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select any of the options 1-5, the Select Device Type menu is displayed.

```
Select Device Type

1.  Diskette
2.  Tape
3.  CD/DVD
4.  IDE
5.  Hard Drive
6.  Network
7.  None
8.  List All Devices


--------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
--------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select a device type, such as option 5, a Select Media Type menu is displayed. The following is an example of that menu.

```
Select Media Type

 1.  SCSI
 2.  SSA
 3.  SAN
 4.  SAS
 5.  SATA
 6.  USB
 7.  IDE
 8.  ISA
 9.  None
10.  List All Devices


--------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
--------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select the media type, all adapters of that type are displayed on the Select Media Adapter menu. The following is an example of that menu for a SCSI media type.

```
Version EM310_024
SMS 1.6 (c)  Copyright IBM Corp. 2000, 2005 All rights reserved.
--------------------------------------------------------------------------------

Select Media Adapter

1.  Un-P1-T14 /pci@80000002000000d/pci@2/pci1069,b166@1/scsi@0
2.  Un-P1-T12 /pci@80000002000000f/pci@2,2/pci1069,b166@1/scsi@0
3.  Un-P1-T13 /pci@80000002000000f/pci@2,2/pci1069,b166@1/scsi@1
4.  None
5.  List all devices


--------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen          X = eXit System Management Services
--------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Then, you must select each adapter individually to see the bootable devices that are attached to it. If no bootable device is attached to the adapter, an error message is displayed. The following is an example of this menu for the first adapter in the previous example.

```
Version EM310_024
SMS 1.6 (c)  Copyright IBM Corp. 2000, 2005 All rights reserved.
-------------------------------------------------------------------------------
Select    Device
Device    Current   Device
Number    Position  Name

1         1         SCSI 73407 MB Harddisk Un-P1-T14 /pci@80000002000000d/pci@2/
                    pci1069,b166@1/scsi@0
2.        None



-------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen         X = eXit System Management Services
-------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select a device type, you can view detailed information about the device or set the device location in the boot list from the Select Task menu. (Note that only bootable disks are listed.) The following is an example of the menu for a hard disk.

```
 Select Task

SCSI 36401 MB Harddisk Un-P1-T14 /pci@80000002000000d/pci@2/pci1069,b166@1/scsi@0
 1.  Information
 2.  Set Boot Sequence: Configure as 1st Boot Device



-------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen         X = eXit System Management Services
-------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

Selecting **Information** displays a menu similar to the following for a hard disk.

```
 Device Information
    /pci@8000000200000dd/pci@2/pci1069,b166@1/scsi@1/sd@5,0
                 : (Bootable)
DEVICE           : SCSI 73407 MB Harddisk Un-P1-T14 /pci@80000002000000d/pci@2/
                   pci1069,b166@1/scsi@0
NAME             : sd
DEVICE-TYPE      : block

Parent Information
IBM,FW-ADAPTER-NAME: Ultra-320
NAME               : scsi
DEVICE-TYPE        : scsi-2



-------------------------------------------------------------------------------
Navigation keys:
M = return to main menu
ESC key = return to previous screen         X = eXit System Management Services
-------------------------------------------------------------------------------
Type the number of the menu item and press Enter or Select a Navigation key: _
```

When you select the **Configure Boot Device Order** option, you can set the location of the device in the boot list.

Working with settings

You can display the current setting of the customized boot list, and restore the default setting.

Select the **Display Current Settings** to display the current setting of the customized boot list.

An example of this menu, with one device in the boot list, follows.

```
 Current Boot Sequence

 1. SCSI 73407 MB Harddisk Un-P1-T14 /pci@80000002000000d/pci@2/pci1069,b166@1/scsi@0
 2. None
 3. None
 4. None
 5. None


 --------------------------------------------------------------------------------
 Navigation keys:
 M = return to main menu
 ESC key = return to previous screen            X = eXit System Management Services
 --------------------------------------------------------------------------------
 Type the number of the menu item and press Enter or Select a Navigation key: _
```

Select the **Restore Default Settings** option to restore the boot list to the default boot list.

The default boot list varies depending on the devices that are installed in the system. The default boot list is as follows:

1. Primary diskette drive (if installed)
2. Optical drive (if installed)
3. Tape drive (if installed)
4. Hard disk drive (if installed)
5. Network adapter

Multiboot startup

Multiboot startup toggles the multiboot startup flag, which controls whether the multiboot menu is called automatically on startup.

Exiting system management services

After you finish using the SMS menus, type **x** (for exit) to boot your system.

Power-on self-test keys

The power-on self-test (POST) keys can start services or initiate service mode boots used for configuring the system and diagnosing problems.

After power is turned on and before the operating system is loaded, the system does a power-on self-test (POST). This test performs checks to ensure that the hardware is functioning correctly before the operating system is loaded. During the POST, a POST screen is displayed, and POST indicators appear on the firmware console (if one is connected).

The POST keys, if pressed after the keyboard POST indicator is displayed and before the last POST indicator speaker is displayed, cause the system to start services or to initiate service mode boots used for configuring the system and diagnosing problems.

Note: The program function keys (F1-F12) on a keyboard attached to the service processor are not used and are ignored. After the keyboard POST indicator is displayed, you must use the numeric number keys.

Numeric 1 key

The numeric 1 key, when pressed during POST, starts the system management services interface.

Numeric 5 key

The numeric 5 key, when pressed during POST, initiates a system boot in service mode using the default service mode boot list.

This mode attempts to boot from the first device of each type found in the list. It does not search for other bootable devices of that type if the first device is not bootable. Instead, it continues to the next device type in the list. The firmware supports up to five entries in the boot list.

Note: This is the preferred method of loading standalone AIX diagnostics from CD-ROM.

The default boot sequence is:
1. Diskette (if installed)
2. CD-ROM (if installed)
3. Hard file
4. Tape drive (if installed)
5. Network
   a. Token ring
   b. Ethernet

Numeric 6 key

The numeric 6 key works like the numeric 5 key, except that firmware uses the customized service mode boot list that was set up in AIX when AIX was first booted, or manually using the AIX service aids.

Note: This is the preferred method of loading online AIX diagnostics from the boot hard disk.

Related tasks

"Starting system management services" on page 1
Learn how to start system management services (SMS) from a partitioned or nonpartitioned server.

Appendix. Notices

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