



System i

Managing the Thin Console





System i

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Note

Before using this information and the product it supports, read the information in “Notices” on page 7 and the *IBM Systems Safety Information* manual, G229-9054.

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Safety notices may be printed throughout this guide:

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

World Trade safety information

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

Laser safety information

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

Laser compliance

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

CAUTION:

This product might contain one or more of the following devices: CD-ROM drive, DVD-ROM drive, DVD-RAM drive, or laser module, which are Class 1 laser products. Note the following information:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of the controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

(C026)

CAUTION:

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

CAUTION:

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

CAUTION:

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

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

The following comments apply to the IBM System i models 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 metalically 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 metalically to OSP wiring.

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

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

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

Product recycling and disposal

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

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

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

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

Battery return program

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

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

For Taiwan: Please recycle batteries.



For the European Union:



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

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

IBM Cryptographic Coprocessor Card Return Program

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

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

About this publication

This topic provides users with cabling and connection information, as well as instructions for troubleshooting Thin Console problems.

For information about the accessibility features of this product, for users who have a physical disability, see "Accessibility features," on page 5.

Managing the Thin Console

Learn how to manage the Thin Console, which provides a 5250 system console for the IBM i5/OS® environment on select System i models that are not managed by a Hardware Management Console (HMC).

Use the Thin Console on the following models: 9405-520, 9406-520, 9406-525, 9406-550, and 9407-515. These models must be running i5/OS V5R3 or later and a firmware level of SF240 or later.

Related concepts

Changing consoles, interfaces, and terminals

PDF file for Managing the Thin Console

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To view or download the PDF version of this document, select Managing the Thin Console  (about 300 KB).

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4. Click **Save**.

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Cabling and connecting the Thin Console

Learn how the Thin Console connects to the server.

Use an Ethernet cable to connect this console device directly to an HMC port (either HMC 1 or HMC 2) on the back of the server.

Restrictions:

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

For instructions to cable your server and the Thin Console, see *Cabling your server*.

Related concepts

Cabling your server

Troubleshooting problems when using the Thin Console

Learn how to solve some hardware and connection problems that might occur while using the Thin Console.

For problems concerning the Thin Console, your server, and the connection between the two, choose from the following options:

- “Troubleshooting hardware problems”
- “Troubleshooting, using the status codes”

Troubleshooting hardware problems

Review the following table for hints and tips on how to resolve common problems that might occur when using the Thin Console. You can also refer to the documentation that came with your console device or see <http://www.neoware.com/>.

Table 1. Troubleshooting hardware problems

Symptom	Problem and recovery tasks
The display of the Thin Console is completely blank.	There might be a hardware problem with the Thin Console or monitor, or there might be a setup problem. Follow these steps to resolve the problem: 1. Verify that the cabling is secure and accurate. 2. Verify that the Thin Console and monitor are powered on. 3. Reset the default monitor resolution setting. Refer to the documentation that came with the console device or see http://www.neoware.com/.
The keyboard is not working correctly.	This might be a hardware problem or it might be that the keyboard is set to a location that does not match the current keyboard setting. Refer to the documentation that came with your console device or see http://www.neoware.com/ .
You cannot view wide displays (such as spool files) using the 5250 console.	Set the resolution of the Thin Console to 1024 x 768.

Troubleshooting, using the status codes

Review the following table for hints and tips on how to resolve common problems that might occur while the Thin Console is becoming active.

Table 2. Thin Console status codes

Symptom	Recovery tasks
The status screen does not continue to display system status after you see 00.xx.	The Thin Console is not able to find an active service processor. Complete these steps to resolve the problem: 1. Verify that the Ethernet cable is plugged into either the HMC 1 or HMC 2 port on the back of the server. 2. Verify that the Ethernet ports on both the server and the Thin Console are showing link-active and activity lights. 3. Verify that the HMC port on the server is configured with either the 192.168.3.147 or the 192.168.2.147 IP address (manufacturing defaults). If the port is not configured using one of these IP addresses, see Restoring your server to factory settings. 4. Verify that the service processor is powered on by noting whether the control panel display is active. 5. Restart the Thin Console to see if the problem is reproducible. 6. Isolate faulty hardware problems by using the other HMC port at the back of the server, using another Ethernet cable, or by using another Thin Console.
The status screen displays status code 10.xx, and then prompts you for the HMC access password. After entering the password, the user ID and password cannot be authenticated.	Complete these steps to resolve the problem: 1. Verify that the keyboard is set to a location that matches the current keyboard setting. 2. Verify that the Caps Lock, Num Lock, Scroll Lock keys are off. 3. Change the HMC access password to a new value by logging into ASMI as the administrator. See Changing ASMI passwords. 4. Use a password with only uppercase English alphabetic characters. If this resolves the problem, contact Neoware customer support at http://www.neoware.com/support/support_request.html
The status screen does not continue to display system status after you see 10.xx or 20.xx.	Complete these steps to resolve the problem: 1. Verify that another Thin Console or an HMC is not connected alongside this Thin Console. 2. Restart the Thin Console to see if the problem is reproducible.
The status screen does not continue to display system status after you see 30.xx.	The Thin Console displays status code 30.xx until the console device is powered on and PHYP standby is reached. If the Thin Console remains in state 30.xx, then try restarting the console device. If the state is 0x0F and the status does not display system status after you see 30.xx, see Contacting IBM service and support.
The status screen does not continue to display system status after you see 40.xx.	Verify that another Thin Console or an HMC is not connected alongside this Thin Console. If so, disconnect the other console device or use it as the system console.
The status screen does not continue to display system status after you see 50.xx.	Remaining in this state means that the Thin Console has completed initialization of the firmware communication and has not successfully started communication with the Licensed Internal Code in i5/OS.

Table 2. Thin Console status codes (continued)

Symptom	Recovery tasks
Connection progress stops at 60.00 (of 100) .	The connection progress stops because console access is denied. This is normal when the console type value is not set to a 4. For instructions about how to change the console type value, see Changing consoles, interfaces, and terminals.

Related concepts

Contacting IBM service and support

Changing consoles, interfaces, and terminals

Related tasks

Restoring your server to factory settings

Changing ASMI passwords

Related information for Managing the Thin Console

Web sites and information center topics contain information related to the Thin Console topic.

Web sites

- <http://www.neoware.com/> 
- http://www.neoware.com/support/support_request.html 

Refer to this site for more information on hardware problems that might occur when using a Thin Console.

Other information

- Cabling your server
 - Cabling a model 9405-520, 9406-520, 9406-525, or 9407-515 and a Thin Console
 - Cabling the Thin Console
- Restoring your server to factory settings
- Changing ASMI passwords
- Contacting IBM service and support
- Changing consoles, interfaces, and terminals

Appendix. Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products successfully.

The following list includes the major accessibility features:

- Keyboard-only operation
- Interfaces that are commonly used by screen readers
- Keys that are tactilely discernible and do not activate just by touching them
- Industry-standard devices for ports and connectors
- The attachment of alternative input and output devices

IBM and accessibility

See the IBM Accessibility Center at <http://www.ibm.com/able/> for more information about the commitment that IBM has to accessibility.

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Electronic emission notices

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Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

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Avis de conformité à la réglementation d'Industrie Canada

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European Community contact:
IBM Technical Regulations
Pascalstr. 100, Stuttgart, Germany 70569
Tele: 0049 (0)711 785 1176
Fax: 0049 (0)711 785 1283
E-mail: tjahn@de.ibm.com

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

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Electromagnetic Interference (EMI) Statement - People's Republic of China

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台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

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Verantwortlich für die Konformitätserklärung nach des EMVG ist die IBM Deutschland GmbH, 70548 Stuttgart.

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