

IBM TotalStorage™ IP Storage 200i



# Release Notes

*Release 1.1 PTF 1*



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## Release notes

This document contains the release notes for the IBM TotalStorage IP Storage 200i.

Refer to [www.ibm.com/storage/support/nas](http://www.ibm.com/storage/support/nas) for possible updates to these release notes and copies of the documents.

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## Summary of changes

Technical changes are indicated throughout this book by a vertical bar on the left margin of the page. Changes in this PTF include:

- **SNMP traps for Service Processor events**

The Service Processor now sends critical-event notifications to an SNMP management station.

- **Status monitor**

The Status monitor on the Administrative Console displays the critical events to warn you of problems as they occur.

- **Updating the system image using CD**

The `cdrom` command enables you to update the system image from CD in addition to the anonymous FTP server.

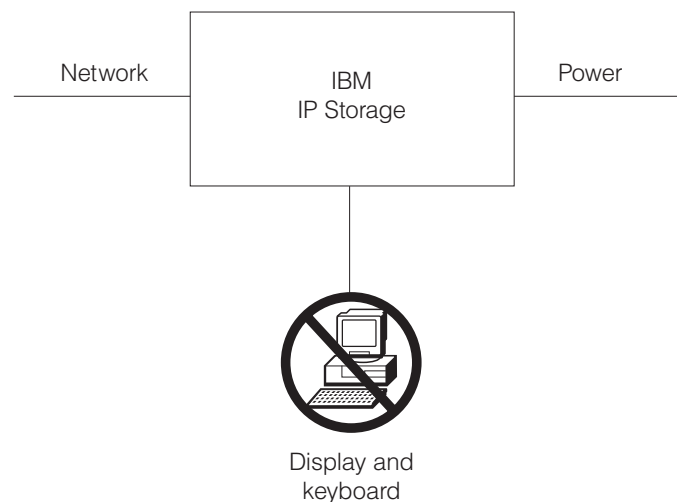
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## Functional notes

The following sections contain information about the IBM IP Storage.

### A headless appliance

The IBM IP Storage is a *headless* appliance. Do not attach a monitor or keyboard during installation or normal operation.



### SNMP traps

The Service Processor now sends event notifications, using SNMP traps, to an SNMP-management station. You can use SNMP management applications (such as Tivoli NetView) to monitor these events. You can also view these events through the Status monitor on the Administrative Console. (Refer to the IBM TotalStorage IP Storage 200i Administrator's Guide for information about configuring SNMP traps.)

The following table describes the Service Processor events.

Table 1. Service processor events

Event	Severity	Status	Description and recommended actions
IBM iSCSI 200i—Internal Fan Malfunction	Major	Down	<p>A Fan Warning trap signifies that at least one of the internal fans is not functioning correctly.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Verify that the fans are working properly.</li> <li>• Contact your IBM service representative.</li> </ul>
IBM iSCSI 200i—PFA event	Major	Marginal	<p>A Predictive Failure Analysis (PFA) event is triggered when some system component is not working properly, but has not yet failed.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Contact your IBM service representative.</li> </ul>
IBM iSCSI 200i—Power Supply failed	Critical	Down	<p>A Power Supply Failure indicates that at least one power supply is not functional.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Verify the power cords are properly plugged into the power supplies and power source.</li> <li>• If the AC Power and DC Power LEDs on the power supply are off, replace the failed power supply.</li> </ul>
IBM iSCSI 200i—Temperature above normal	Warning	Marginal	<p>A Thermal Warning trap signifies that the temperature of the IBM IP Storage is found to be above normal. It indicates an overheating condition.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Verify that the fans are working properly.</li> <li>• Verify the appliance is in a well ventilated room.</li> <li>• Verify the room's temperature is within the acceptable operating range for this appliance (see <i>IBM TotalStorage IP Storage 200i Models 100 and 200 Installation Guide</i> for temperature ranges).</li> <li>• Contact your IBM service representative.</li> </ul>
IBM iSCSI 200i—Voltage abnormal	Warning	Marginal	<p>A Volage Warning trap indicates that the power supply voltage has been found to be above or below the normal voltage threshold range for the node. This is typically caused by a power surge.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Verify that your power supplies are working properly.</li> <li>• Contact your IBM service representative.</li> </ul>

## iSCSI clients

The iSCSI client allows Microsoft® Windows® NT, and Microsoft Windows 2000, and Linux computers to access storage over an IP network. The iSCSI client (as an iSCSI initiator) issues SCSI commands to the IBM IP Storage (an iSCSI target) according to the IETF-defined protocol for IP storage.

When the iSCSI client is successfully connected to an iSCSI target device, any disks assigned to the iSCSI client appear as a physical disk. (Operations normally



performed on a physical SCSI disk can be performed on an iSCSI disk.) Currently, you cannot boot from an iSCSI disk; instead, the iSCSI disk is used for storage after the computer is booted.

You can download the iSCSI client code from the following web site:

[www.ibm.com/storage/support/nas](http://www.ibm.com/storage/support/nas)

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## Installation notes

The following sections contain information about installing the IBM IP Storage.

**Attention:** Before installing your IBM IP Storage appliance, read carefully the installation procedures in the *IBM TotalStorage IP Storage 200i Models 100 and 200 Installation Guide*.

## Prerequisites

The IBM TotalStorage IP Storage 200i requires a web browser to access the Administrative Console. The supported web browsers are the Microsoft Internet Explorer 5.x (and later) and Netscape 4.5 (and later) running on Windows 98, Windows Millennium, Windows NT, and Windows 2000. An Internet connection is recommended.

**Note:** The IBM IP Storage requires a direct connection from the browser, not through a proxy server. If a proxy server is used for the Internet, the IBM IP Storage must be excluded.

The Administrative Console requires the Sun Java Plug-in 1.3, which is available online at [java.sun.com](http://java.sun.com).

**Note:** The Sun Java™ Plug-in 1.3 is a product of Sun Microsystems, Inc. IBM does not distribute, support or maintain the Sun Java Plug-in 1.3 and your use of this product is subject to license terms and conditions imposed by Sun Microsystems, Inc. Contact Sun Microsystems, Inc. directly if you have any questions about this product.

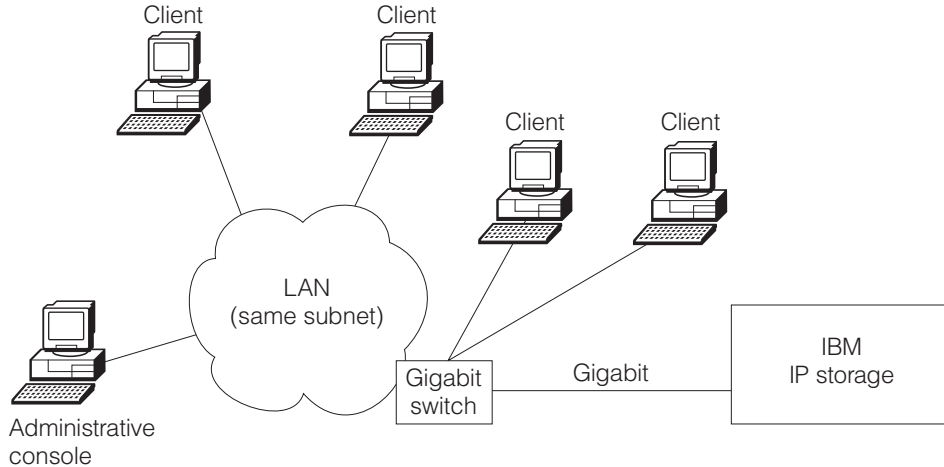
## Configuring the IBM IP Storage for the first time

Before the IBM IP Storage can be fully functional as an iSCSI server, you must obtain an initial IP address and complete a set of required configuration tasks using the Administrative Console. The Administrative Console allows you to configure and manage the IBM IP Storage through a web browser. Because the appliance is headless, configuration must be completed from another machine, known as the *management workstation*.

You can access the Administrative Console through the Service Ethernet (control port) or Gigabit Ethernet (data port).

## Accessing the Administrative Console through the Gigabit port

The Gigabit port is not preconfigured with an IP address. To obtain the initial IP address, point the browser on the Administrative Console to URL **http://xxx.xxx.xxx.xxx:3939/IBM200i**, where *xxx.xxx.xxx.xxx* is the IP address you want to assign to the appliance. (Note that this URL is case-sensitive.) This address *must not* be used by other systems in the network.



- Windows 98, NT, Millenium, 2000
- Internet Explorer or Netscape (direct connection, not proxy)
- Java Plug-in 1.3 (see [java.sun.com](http://java.sun.com))
- <http://xxx.xxxx.xxx.xxx:3939/IBM200i>

If the browser times out, the IP-address assignment was not successful. Go to a command line in the management workstation. Type **arp -a [n]** (where *n* is the desired IP address) and press **Enter**. If the corresponding MAC address does not match the appliance's MAC address, then the IP address is used by another host; repeat this procedure using another IP address. If the ARP entry is resolved to the correct appliance, delete the resolved entry by typing **arp -d IP\_address** and pressing **Enter**, and repeat this procedure. If multiple appliances are being set up simultaneously, retry with a different address after deleting the resolved entry.

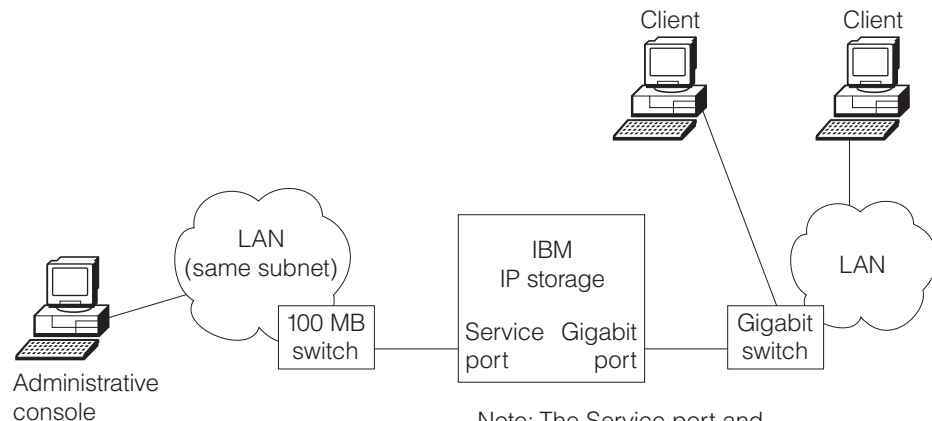
When the workstation connects successfully to the appliance, a pop-up window appears for login and password. Refer to the *IBM TotalStorage IP Storage 200i Models 100 and 200 Installation Guide* and *IBM TotalStorage IP Storage 200i Administrator's Guide* for instructions on logging into the Administrative Console and configuring the IBM IP Storage.

## Accessing the Administrative Console through the Service port

The Service Ethernet is preconfigured with IP address 192.9.200.1. The Administrative Console must be configured on the 192.9.200 subnet to use the preconfigured IP address.

It is recommended that you use the default IP address of the Service Ethernet; however, you can change the default IP address from the serial console by typing **enet** and pressing **Enter** at the **svc>** prompt and following the instructions on the screen. (See "Recovering the appliance" on page 7 for instructions on setting up the serial console.)

To connect to the IBM IP Storage through the Service Ethernet, point your browser to URL <http://192.9.200.1:1959/IBM200i>. (Note that this URL is case-sensitive.)



- Administrative console
- Windows 98, NT, Millenium, 2000
  - Internet Explorer or Netscape  
(direct connection, not proxy)
  - Java Plug-in 1.3 (see [java.sun.com](http://java.sun.com))
  - <http://192.9.200.1:1959/IBM200i>

Note: The Service port and Gigabit port must be on different subnets.

When the workstation connects successfully to the appliance, a pop-up window appears for login and password. Refer to the *IBM TotalStorage IP Storage 200i Models 100 and 200 Installation Guide* and *IBM TotalStorage IP Storage 200i Administrator's Guide* for instructions on logging into the Administrative Console and configuring the IBM IP Storage.

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## Administration notes

The following sections contain information about administering the IBM IP Storage.

### Status monitor

The Status monitor displays the critical events that occurred in the IBM IP Storage. This log is a subset of events in the System Messages log.

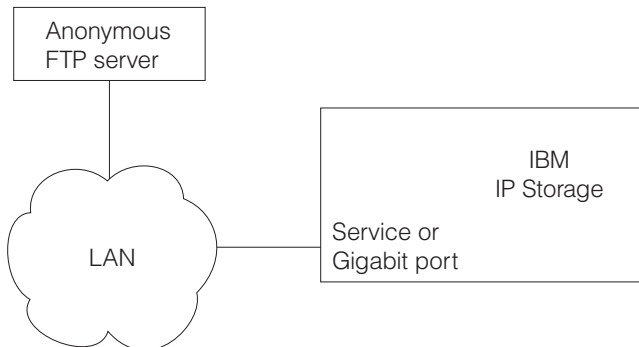
To display the Status monitor from the Administrative Console, click **Logs** → **Status monitor**.

The Status monitor displays critical-event messages that are logged in the System Messages log. This window is independent of the Administrative Console, which can be moved for your convenience. It displays only those critical events that occurred either since the appliance was started or since the log was last cleared. The time stamp on the left of the **Clear** button is the time of the oldest event in this list. The time stamp on the right is the time when the list was last refreshed. The event list is refreshed every minute.

To clear the event list in the Status monitor window, click **Clear**. The time stamp on the left changes to the current time.

## Updating the code

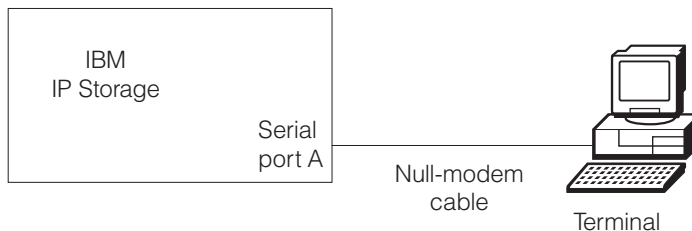
Code updates are installed from a local FTP server connected to the appliance. This FTP server must support anonymous FTP.



You can also update the code on a local engine from a CD using the **cdrom** command from the Service Console (svc>) prompt. To use this command, you must burn the latest system image onto a CD. You can obtain the latest system image from [www.ibm.com/storage/support/nas](http://www.ibm.com/storage/support/nas).

To update code from a CD:

1. Connect a workstation to serial port A on the rear of the appliance.



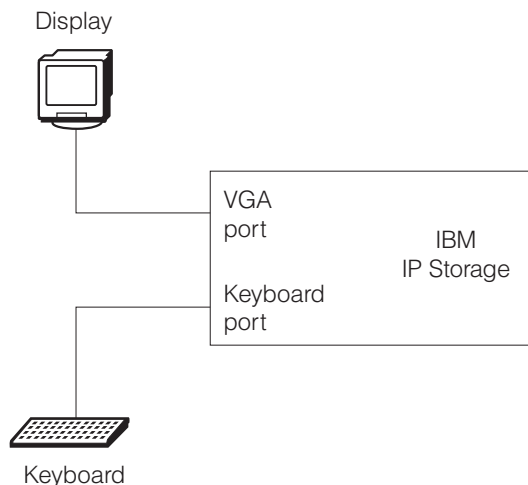
Use the following settings for the serial port setup:

<b>Baud rate</b>	19200
<b>Parity</b>	None
<b>Stop bits</b>	1
<b>Data bits</b>	8
<b>Flow control</b>	rts/cts

2. Place the code image CD in the CD-ROM drive of the appliance.
3. From the svc> prompt, type **cdrom** and press **Enter**.
4. Type the letter associated with the inactive bank, and press **Enter**.
5. When the update is complete, remove the code image CD from the CD-ROM drive.
6. Replace the Recovery CD in the CD-ROM drive.
7. Type **set** and press **Enter** to set the code image to pending status.
8. Type the letter associated with the inactive bank, and press **Enter**.
9. Type **reboot** and press Enter to activate, the code image.

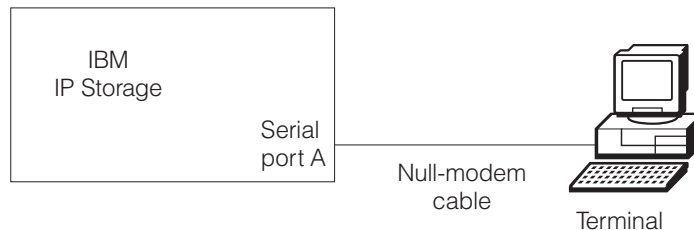
## Servicing the appliance

When you are servicing or troubleshooting the IBM IP Storage, you might need to attach a keyboard and monitor to the appliance. Attach the monitor to the VGA port, and attach the keyboard to the keyboard port located on the back of the appliance.



## Recovering the appliance

The Recovery CD (in conjunction with the Recovery Boot diskette) enables you to load the system image from an anonymous FTP server. Before attempting to recover the appliance, attach a serial console or equivalent device to serial port A of the appliance using a null-modem cable.



Use the following communication settings to configure the serial console:

- 19200 baud
- 8 data bits
- No parity
- 1 stop bit

Refer to the *IBM TotalStorage IP Storage 200i Administrator's Guide* for complete procedures on recovering the appliance.

## Virtual logical units

After you create a virtual logical unit (VLUN), you cannot change its size.

You cannot delete individual VLUNs; however, you can remove *all* VLUNs in a logical disk. VLUNs are removed in order from the last VLUN to the first VLUN created in the logical drive. Note that all data is lost when you delete the VLUNs.

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## Known issues and limitations

The following are known issues and limitations for the IBM IP Storage. Refer to [www.ibm.com/storage/support/nas](http://www.ibm.com/storage/support/nas) for the latest issues and limitations.

- It is important to log off from the Administrative Console when you are no longer using it. Leaving a panel idle for extended periods of time can cause unpredictable results.
- In rare instances, the Administrative Console may become unavailable. Contact your IBM customer service representative for recovery procedures.





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