Quick Start User's Guide
Intel® Storage System SSR212PPi / SSR212PP2i

The Resource CD you received with your Intel® Storage System SSR212PP-series storage system contains detailed information about planning, installing, and operating the system. For the latest detailed information about your system and its components, including supported components and configurations, planning, installation, and trouble-shooting, visit the Intel support website at http://support.intel.com/support/motherboards/server.

1 Prepare your site

Plan your configuration with your network administrator. Determine whether you want to
- set up a dedicated iSCSI LAN for the storage system and its iSCSI initiators (a recommended, simple configuration).
  OR
- include the storage system in a shared configuration that requires more network expertise and potentially complex Challenge Handshake Authentication Protocol (CHAP) security.

☐ With your network administrator, fill out the *Administration Worksheet* that accompanied the planning guide.

☐ Make sure you received the following system components:
- A rail kit box with adjustable slide rails and hardware for mounting the storage system in a standard 19" NEMA cabinet.
- A storage-system accessory box with a serial cable you might need for future service, documentation and a software CD.

☐ Before you begin, make sure the site where you intend to set up and use your storage system has the following:
- Standard AC power, from an independent source or a cabinet/rack power distribution unit.
- CAT 6, CAT 5E, or CAT 5 LAN cables for iSCSI connections.
- An active network with available LAN cables and connections.

The server (or workstation) you will use for initializing the storage system must have an active LAN connection on the same subnet as the storage-system 10/100 management port(s).

2 Prepare your server

The Intel® Storage System SSR212PPi/SSR212PP2i supports Microsoft Windows 2000* or Microsoft Windows Server 2003* servers with:
- Any standard 1-Gbit Network Interface Card (NIC) and Microsoft iSCSI Software Initiator* (if you use a 10/100 NIC, you should connect to the storage system from a 1-Gbit switch.)
  OR
- A supported iSCSI host bus adapter (HBA) with the latest EMC-supported BIOS and driver.

The terms "host" and "server" refer to any computer that acts as the source of input data to your storage system.

Follow the directions that came with your NIC/HBA to:

☐ Install the card and its appropriate driver(s). Install any required updates, such as service packs, hot fixes, or patches, and reboot the server when the installation is complete.

☐ Install the latest supported version of the appropriate iSCSI Software Initiator. A list of supported versions is in the *Tested Hardware and Operating System List* located on the Intel support website.

The Microsoft Initiator* is available free of charge from http://www.microsoft.com/downloads. Search the site for an iSCSI initiator download, then select the appropriate version (commonly the ...x86fre.exe file for 32-bit computers). Download the file to your server, then click the executable to launch the Software Update Installation Wizard.

- On *servers that use network interface cards* for iSCSI storage access, install the **Initiator Service** and **Software Initiator** options; **do *not* select Microsoft MPIO Multipathing Support for iSCSI**.
- On *servers with a supported HBA*, install only the **Initiator Service** option.

☐ On servers with a supported HBA, install the application's software.

☐ Configure network settings for each NIC or iSCSI HBA you will use for data input/output with the storage system. Use the values you recorded in section Ⓒ of your *Administration Worksheet*.
- For standard NICs, configure network parameters through Windows. From the list in the **Network Connections** window (available from **Start** > **Settings** on most servers), select the LAN card you need to configure. Then select **Properties**> **Internet Protocol (TCP/IP)** > **Properties** to specify the IP address for the network interface card.
- For supported HBAs, configure the settings with its software.

☐ Install PowerPath* software on each server you plan to connect to the storage system. The PowerPath* software is on the Resource CD.

When installing PowerPath, you must install any updates, patches, and hot fixes available through the Intel support website.*

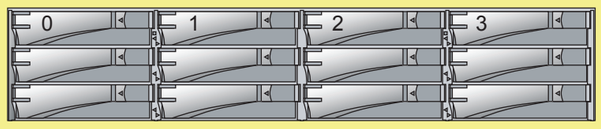
Select **No** when asked if you wish to reboot the system.

☐ Install the Navisphere* Server Utility* (version 6.20 or higher) from the Resource CD on each server you plan to connect (either directly or through a switch) to the storage system.
a. Follow the online instructions to install the utility. Accept all defaults; *do not disable* the **Registration Service** (enabled by default).
b. Reboot your server when finished.

3 Unpack the storage system

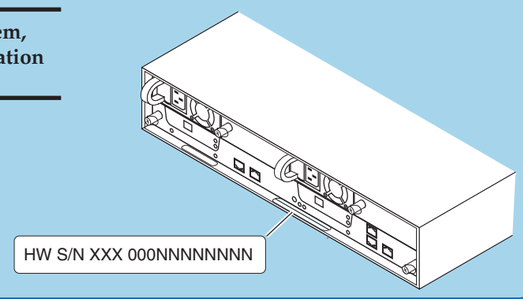
☐ Unpack the system as shown on the shipping carton.

The disk modules marked 0 through 3 contain storage-system software or reserved space according to their slot assignment. *Do not move any disk marked 0 through 3 from its assigned slot to another slot.* Remove it only to replace the disk module.



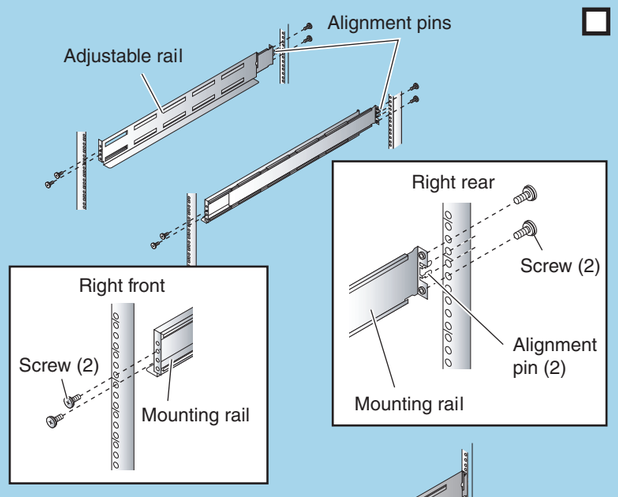
To install additional disks in your storage system, refer to the "Upgrade" section of your documentation or the Intel support website.

☐ In section Ⓓ of your *Administration Worksheet*, record the serial number for your storage system. You will need this number to complete Step 8.

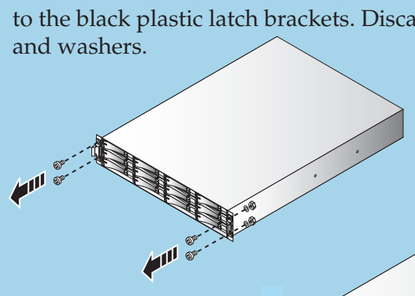


4 Install the storage system and UPS in a standard NEMA cabinet / rack

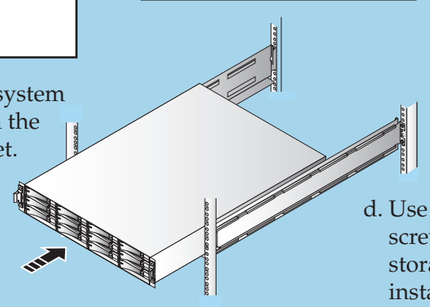
☐ **The uninterruptible power supply (UPS) that ships with the Intel® Storage System SSR212PP2i is a required system component.** Refer to the UPS documentation for instructions on installing a UPS (SSR212PP2i systems only) in the cabinet. Make sure you attach the UPS batteries and power cord as instructed.



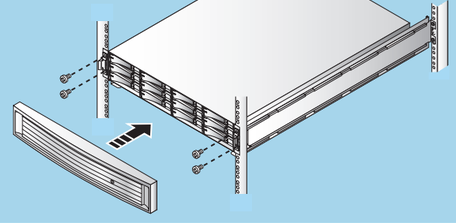
☐ Install the storage system in a cabinet:
a. From the front of your cabinet, insert the rail alignment pins into the rear channels as shown. Pull each adjustable rail forward, and attach it to the *inside* of the front channel in the two *center* holes. Insert front and rear screws as shown; leave the rear screws slightly loose to allow for adjustment later.
b. Remove the front bezel (if attached); then remove the four screws that are secured with washers and nuts to the black plastic latch brackets. Discard the nuts and washers.



c. Slide the storage system into the rails from the front of the cabinet.

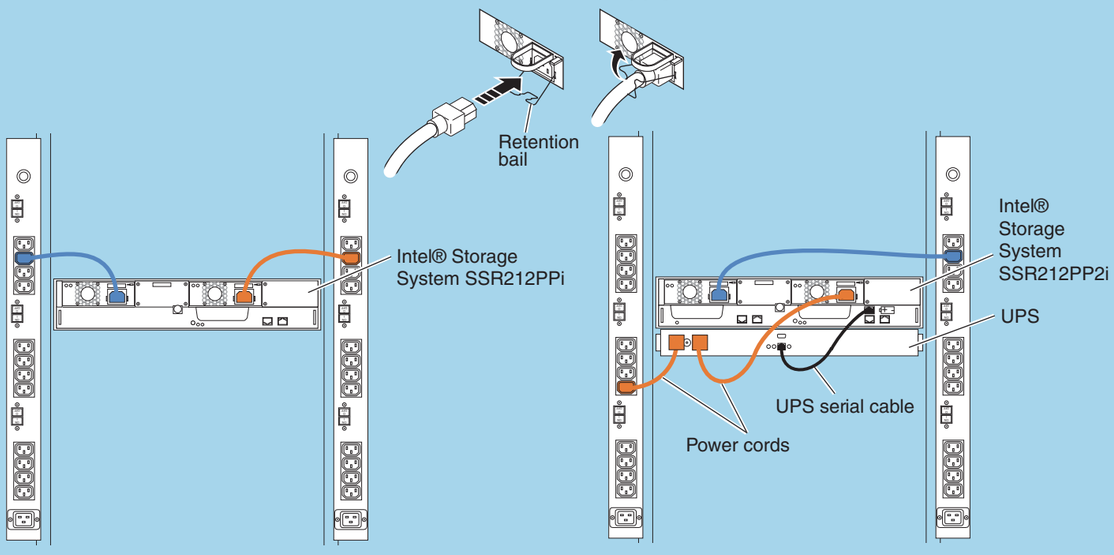


d. Use the latch bracket screws to secure the storage system; then install the front bezel.



5 Connect AC power

☐ Connect AC power. Always secure the power cord at the connector with the retention bail (strain relief). The retention bail prevents the power cord from pulling out of the connection.
Storage systems with two power supplies: Be sure to connect each power supply to a different power source/circuit. Do NOT connect more than one power supply to a UPS.



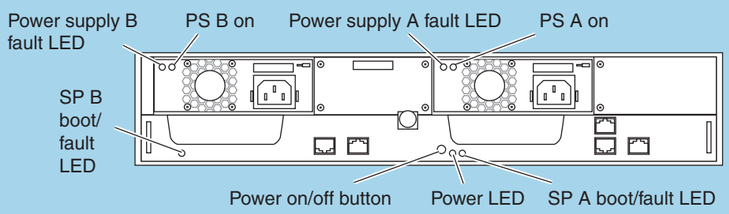
☐ Connect an Intel® Storage System SSR212PP2i (with two storage processors) to the UPS included in your storage system shipment. (The single-processor Intel® Storage System SSR212PPi does not include a UPS.) Make sure you connect the purple UPS (+ -) port to the UPS. This connection is required for write-cache operation, and allows Navisphere* Express software to monitor the UPS. Be sure to use the unique DB9-RJ45 serial cable that accompanied your UPS; a standard null-modem or other service serial cable may look identical but will not work.

6 Power up the storage system and UPS

☐ Refer to your UPS and/or switch documentation for instructions on how to power them up.

☐ The green LED on each power supply, when lit, indicates that the supply has an active UPS or other AC power source; press the storage-system power on/off button to initiate powerup.

Power LEDs on the front and rear of the storage system light and remain on while power is applied.



Disk activity LEDs on the front of the storage system will light intermittently as the disks spin up and disk I/O begins. The amber system fault LED on the front will also light while the system performs hardware powerup tests. It may take 5-6 minutes for the SP boot/fault LED(s) on the rear of the system to go off, indicating that powerup is complete.

If the amber system fault LED on the front of the storage system is lit *after* the system has completed powerup, it indicates a fault condition somewhere in the storage system. An amber LED specific to a power supply, SP, or disk indicates a fault condition on that component.

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