

Read this Setup Guide first

This guide describes the workflow required to proceed from installation to operation of the **ETERNUS DX60/DX80** (iSCSI model).

CAUTION



Do Read and understand the "Safety Precautions" before use.



"Safety Precautions"

Workflow

- | | |
|--------------------|-----------------------------|
| 1 Preparation | 5 Basic Setup |
| 2 Installation | 6 Monitoring Setup |
| 3 Cable Connection | 7 Server Connection |
| 4 Startup | 8 Operation and Maintenance |

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The latest version of this document and the latest information about the ETERNUS DX60/DX80 is released in the following web-site. Access the following address if needed.
<http://www.fujitsu.com/global/services/computing/storage/eternus/products/diskstorage/dx-entry/>

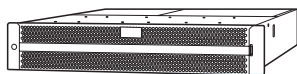
STEP

Preparation

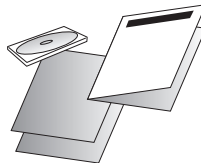
1 Package Contents Check

Refer to the "Package Contents" and check that there are no missing items.

- ETERNUS DX60/DX80



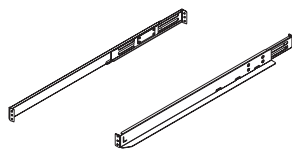
- Misc. documents



Prepare the following manuals:

- Documentation CD
- "Safety Precautions"
- "Package Contents"
- Other related manuals, for example, for a server or networking equipment.

- Rack mount kit



- Misc. cables



When ETERNUS SF Express is used, prepare the following software and User's Guide:

- ETERNUS SF Express Media Pack
- "ETERNUS SF Express User's Guide"



"Package Contents"

2 Installation and Connection Preparation

Installation space

Check that the installation area meets the space requirements of the rack in which the ETERNUS DX60/DX80 is to be installed.

Installation requirements

Check that the installation area satisfies all the requirements described in the "Instructions for installation" section of the "Safety Precautions".

Environmental conditions

Temperature: 5 – 40°C, Humidity: 20 – 80%RH

Power outlets

Check that a sufficient number of suitable wall outlets are available.



- "5.1 Installation Preparation" in the "User Guide"
- "6.1 Connection Preparation" in the "User Guide"
- "Safety Precautions"

3 Setup Preparation

Completing and attaching the Network Settings label

Complete the following information in the Network Settings label and attach it on the ETERNUS DX60/DX80.

- IP address and subnet mask for the ETERNUS DX60/DX80
- IP address for maintenance work

Settings for the PC

- Setup Network Environment
 - IP address: 192.168.1.2
 - Subnet mask: 255.255.255.0
- Set the Web browser
 - Proxy server and Cache : Disable
 - Java Script, style sheets, and cookies : Enable

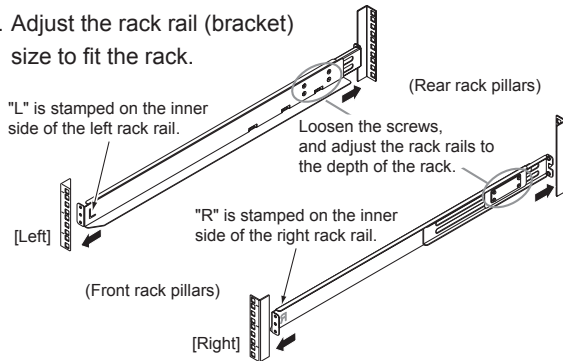


"7.1 Setup Preparation" in the "User Guide"

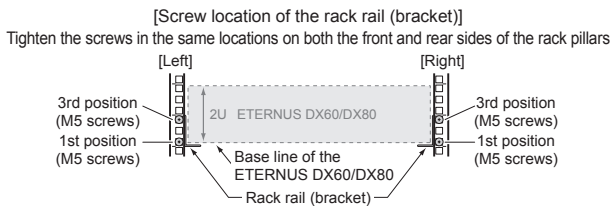
2

The rack rail (bracket) needs to be attached to the rack and the ETERNUS DX60/DX80 mounted.

1. Adjust the rack rail (bracket) size to fit the rack.



2. Attach the rack rails (brackets) to the rack. The size of the ETERNUS DX60/DX80 is 2U.



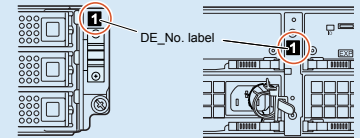
3. Mount the ETERNUS DX60/DX80 in the rack.

IMPORTANT

- Make sure to install or remove the enclosure to or from the rack by two or more people.
- Multiple Drive Enclosures must be connected to the controller enclosure following the order of the "DE_No. label" numbers attached to each Drive Enclosure. The position of the labels are in the positions shown below.

At the right side of the front of the drive enclosure

Between the EXP#0 and EXP#1 expanders at the rear of the drive enclosure



4. Fasten the ETERNUS DX60/DX80 to the rack.



"5.2 Rack Installation" in the "User Guide"

3

Various cables need to be connected to the rear of the ETERNUS DX60/DX80.

Point

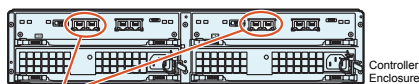
To help with cable management and prevent incorrect connection, attach labels to the cables and make a note of connection origins and destinations.

IMPORTANT

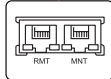
The cables should never be bent, twisted or pulled.

1 LAN Cables (for Operation Management)

Rear view



Cable



The RMT port is on the left side, and MNT port is on the right side.

The MNT port must always be connected. The RMT port only needs to be connected when the remote support connection is to be independent of the customer network.



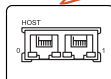
"6.2 LAN Cable Connection (for Operation Management)" in the "User Guide"

2 LAN Cables (for Host Interface)

Rear view



Cable



For each CM, the port numbers are (left to right) 0 and 1. Connect a LAN cable (enhanced Cat-5 twisted-pair type) to each of these ports.



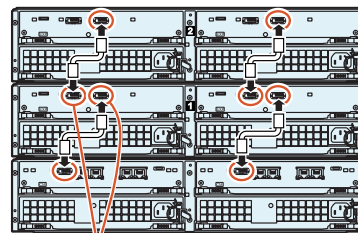
"6.4 LAN Cable Connection (For iSCSI)" in the "User Guide"

3 MiniSAS Cables

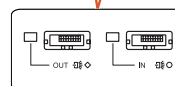
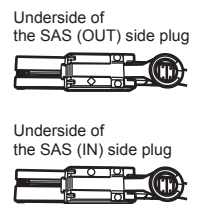
When Drive Enclosures are installed, miniSAS cables are used to connect between the SAS ports of the enclosures. Connect the Controller Enclosure to Drive Enclosure 1, Drive Enclosure 1 to Drive Enclosure 2, Drive Enclosure 2 to Drive Enclosure 3, etc. The number of Drive Enclosure can be checked with the "DE_No." label.

Example for connection of miniSAS cable (when two Drive Enclosures are installed)

Rear view



Cable



The SAS (OUT) port is on the left side, and SAS (IN) port is on the right side.

Insert the connector with a ◊ mark on its underside in the SAS (OUT) port. Insert the connector with a ○ mark on its underside in the SAS (IN) port.

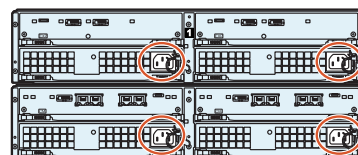


"6.6 MiniSAS Cable Connection (For Drive Enclosures)" in the "User Guide"

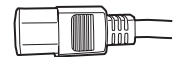
4 Power Cords

Use release ties to hold the power cords in place.

Rear view



Cord



"6.7 Power Cord Connection" in the "User Guide"

4

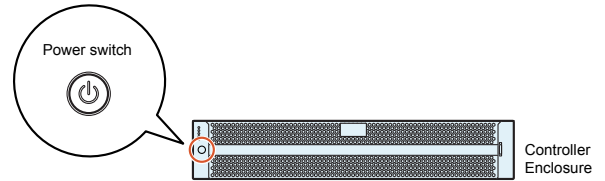
Connect the PC to the ETERNUS DX60/DX80 with a LAN cable (for operation management), and turn on the ETERNUS DX60/DX80.



- "7.1 Setup Preparation" in the "User Guide"
- "7.2 Basic Setup" in the "User Guide"

IMPORTANT

The first time the power is turned on, volume formatting may start according to the factory default settings. This does not affect the setup operation, which may be started immediately.



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Basic ETERNUS DX60/DX80 setup is performed by accessing the "Initial Setup" and "Configuration Wizard" functions with a Web browser.

1. Start the Web browser on the PC and enter either of the following URLs in the address bar of the Web browser.

2. Enter the following user name and password, and click the [Logon] button to logon to the ETERNUS DX60/DX80.

User name: root

Password: root (Default)

3. After logging on, the Storage System Status screen appears.

Point

When ETERNUS SF Express is used, perform the following setup, and then refer to the "ETERNUS SF Express User's Guide" to install the ETERNUS DX Disk storage system.

1 Initial Setup

- Set Date and Time
- Set Storage System Name
- Change Password
- Setup Network Environment

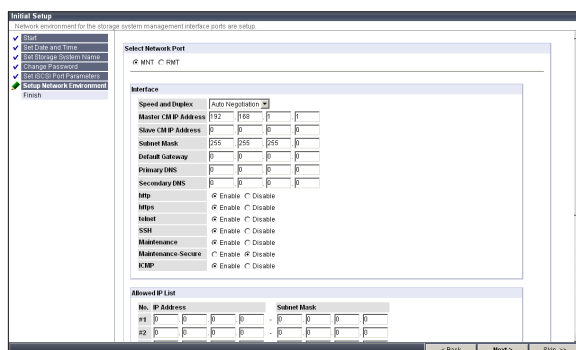
1 Initial Setup

Set the necessary environment for operating the ETERNUS DX60/DX80 with its initial setup.

The [Initial Setup] screen appears by clicking the [Initial Setup] menu on the [Easy Setup] tab.

This screen is used to set the following items:

- Set Date and Time
- Set Storage System Name
- Change Password
- Set iSCSI Port Parameters
- Setup Network Environment



After completing these settings with the Finish step, close the web browser to end the setup session, then detach the direct connection LAN cable (for operation management) from the PC and connect it to the normal network. Then try logging on again via the normal network, using the IP address that has just been set.

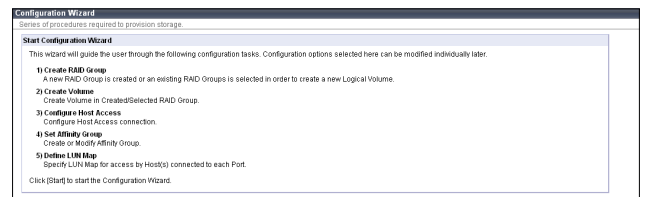


"7.2.1 Initial Setup" in the "User Guide"

2 Configuration Wizard

Perform the necessary settings to operate the ETERNUS DX60/DX80 using the Configuration Wizard.

The [Configuration Wizard] screen appears by clicking the [Configuration Wizard] button on the [Easy Setup] tab.



- Create RAID Group
- Create Volume
- Define Host
- Configure Affinity Group
- Define LUN Mapping



"7.2.2 Configuration Wizard" in the "User Guide"

Point

Default RAID groups, volumes and affinity groups are preset in the factory. Refer to "Web GUI User Guide" if the preset values are to be changed.

3 Assigning Hot Spares

Register hot spares for use in case the regular disks fail.

The [Assign Hot Spare] screen appears by clicking [Assign Hot Spare] under the [RAID Group Management] menu on the [Volume Settings] tab.



"7.2.3 Hot Spare Registration" in the "User Guide"

Point

Check the factory settings and register a hot spare as required.

6

Perform the ETERNUS DX60/DX80 monitoring setup if required.

- Notification of ETERNUS DX60/DX80 problems as they occur is possible if the event notification method and level have been set.
- For e-mail notification of ETERNUS DX60/DX80 problems, a destination e-mail address must be set.
- If "ServerView" is used to monitor the server, the ETERNUS DX60/DX80 must be set to send an SNMP Trap to the server.
- If remote support is required, the ETERNUS DX60/DX80 must be set to notify the remote support center of failures.

Point

Remote support allows prompt detection and resolution of trouble.



"7.4 Monitoring Setup" in the "User Guide"

7

Various tasks need to be performed before the ETERNUS DX60/DX80 can be connected to the server. These include the installation of the appropriate drivers and the setup of switching hub(s).

Check which server OS, LAN cards, iSCSI HBAs, and/or switching hub(s) are to be connected to before starting this step.

For details on the setting, refer to "ETERNUS DX Disk storage systems Server Connection Guide (iSCSI)"(*).

*: Download from the specified web-site in the Documentation CD.



● "7.5 Server Connection Setup" in the "User Guide"

● "ETERNUS DX Disk storage systems Server Connection Guide (iSCSI)"

- for Solaris™ Operating System

- for Windows®

- for HP-UX

- for VMware® ESX

- for Linux (Red Hat Enterprise Linux)

- for Linux (SUSE Linux Enterprise Server)

- ETERNUS DX Disk Storage System Settings for ETERNUS DX60/DX80

All necessary settings are complete, and the ETERNUS DX60/DX80 is now ready for normal operation.

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Status check

The status of the ETERNUS DX60/DX80 should be regularly monitored by checking the LEDs and using the Web browser.

Data backup

Important data should be regularly backed up to a tape drive or similar device as a precaution against system failures.

Maintenance support period

The maintenance support period for the ETERNUS DX60/DX80 is 5 years from the date of purchase.

ETERNUS DX60/DX80 Disk storage system Setup Guide

(iSCSI model)

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