

## 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



Read and understand the "Safety Precautions" before use.



"Safety Precautions"

### Workflow

- |                                   |   |
|-----------------------------------|---|
| 1 Preparation & Installation Area | 6 ETERNUS DX60/DX80 Setup                                 |
| 2 Check the Package Contents      | 7 Setting up the ETERNUS DX60/DX80 to Support Maintenance |
| 3 Installation                    | 8 Server Connection                                       |
| 4 Cable Connection                | 9 Operation and Maintenance                               |
| 5 Pre-Setup Preparation           |   |

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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/dx60-dx80/>

## STEP 1 Preparation & Installation Area

### Prepare the following items

The following items need to be prepared in advance:

- IP addresses and subnet mask (for the ETERNUS DX60/DX80 and maintenance engineer PC)
- Network equipment such as a switching hub
- Web browser (Microsoft® Internet Explorer 6.0 or 7.0, Mozilla Firefox™ 3.0.x)

Make sure that all of the following manuals are handy:

- Documentation CD
- "Safety Precautions"
- "Package Contents"

 "4.1 Prior Preparation" in the "User Guide"

### Secure the Installation Area

#### 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 "Setting" section of the "ETERNUS DX60/DX80 Disk storage system Safety Precautions"

 ● "3.1 Preparation" in the "User Guide"  
● "Safety Precautions"

#### Power outlets

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

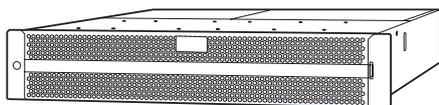
#### Environmental conditions

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

## STEP 2 Check the Package Contents

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

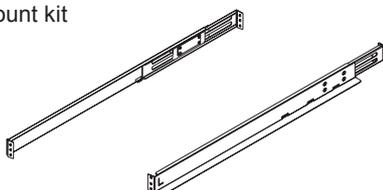
ETERNUS DX60/DX80



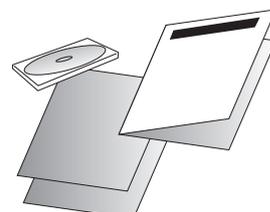
Misc. cables



Rack mount kit



Misc. documents



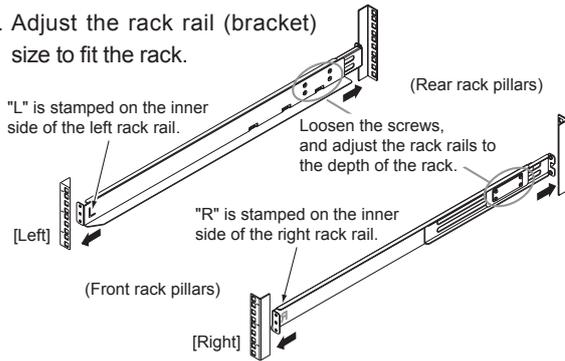
 "Package Contents"

Proceed to  next step

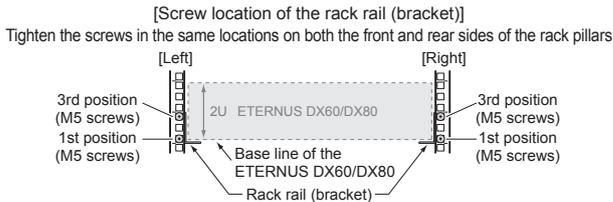
## 3

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.



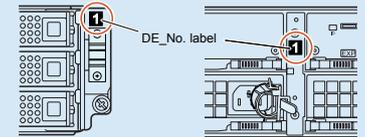
3. Mount the ETERNUS DX60/DX80 in the rack.

## 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.



"3.2 Rack Installation" in the "User Guide"

## 4

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 note where each cable is connected to and from.

## IMPORTANT

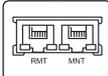
The cables should never be bent, twisted or pulled.

## 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.

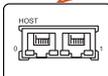
[See](#) "4.2.1 LAN Cable Connection (For Operation Management)" in the "User Guide"

## 2 LAN Cables (For Host Interface)

## Rear view



## Cable



The left port is 0, and right port is 1. Connect a LAN cable (enhanced Cat-5 twisted-pair type) to each CM port.

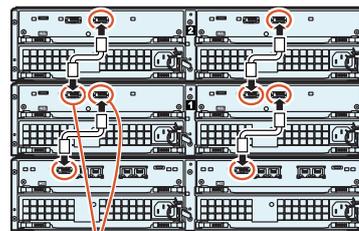
[See](#) "4.2.3 LAN Cable Connection (For iSCSI)" in the "User Guide"

## 3 MiniSAS Cables

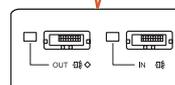
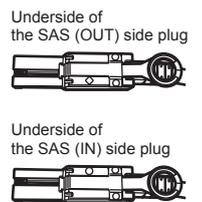
When Drive Enclosures are installed, miniSAS cables are used to connect between the SAS ports of the enclosures. Connect the Controller Enclosure to Drive Enclosure 1, Drive Enclosure 1 to Drive Enclosure 2, Drive Enclosure 2 to Drive Enclosure 3, etc. The number of Drive Enclosure can be checked with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

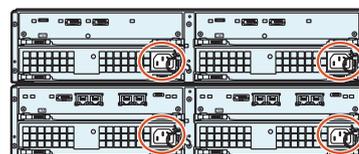
Insert the connector with a ◊ mark on its underside in the SAS (OUT) port. Insert the connector with a ○ mark on its underside in the SAS (IN) port.

[See](#) "4.2.5 MiniSAS Cable Connection (For Drive Enclosures)" in the "User Guide"

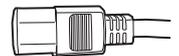
## 4 Power Cords

Use release ties to hold the power cords in place.

## Rear view



## Cord



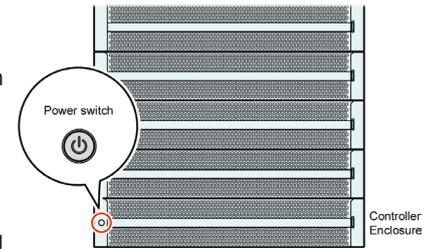
"4.2.6 Power Cord Connection" in the "User Guide"

## 5

The following steps need to be performed before starting the ETERNUS DX60/DX80 setup procedure:

1. Fill in the IP address and subnet mask fields on the Network Setting label.
2. Attach it to the rear upper central label plate.
3. Connect the PC and the ETERNUS DX60/DX80 using a LAN cable (for operation management).
4. Give the PC the following network settings:  
IP address: 192.168.1.2      Subnet mask: 255.255.255.0
5. Set the Web browser not to use a proxy server or web caching.
6. Check that Java Script and style sheets, and cookies are enabled as an operating condition for the Web browser.
7. Turn on the ETERNUS DX60/DX80.

 "4.3 ETERNUS DX60/DX80 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.

## 6

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

1. The connected PC may be used to setup the ETERNUS DX60/DX80. Start the Web browser and enter either of the following URLs in the address bar:

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.

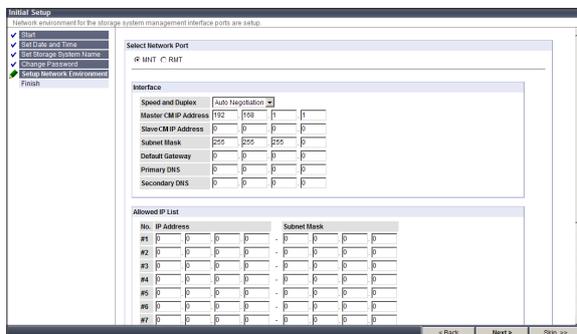
## 1 Initial Setup

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
- Change password
- Change Storage System Name
- Set Network Environment



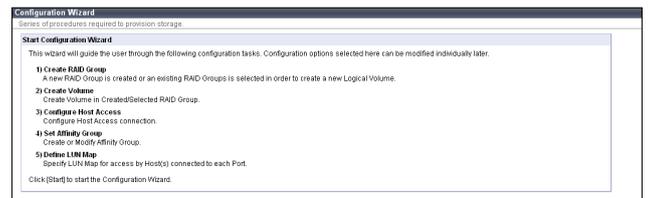
After completing these settings with the Finish step, close the web browser to end the setup session, then detach the direct connection LAN cable (for operation management) from the setup PC and connect it to the normal network. Then try logging on again via the normal network, using the IP address that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

 "4.3.2 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

 "4.3.3 Configuration Wizard" in the "User Guide"

## 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.

 "4.3.4. Hot Spare Registration" in the "User Guide"

## 4 Setting iSCSI Port parameters

Set the connecting information for iSCSI port to connect to the server. The [Set iSCSI Port Parameters] screen appears by clicking [Set iSCSI Port Parameters] under the [Host I/F Management] menu on the [Global Settings] tab.

This screen is used to set the following items:

- TCP/IP Setting
- General Setting
  - Host Affinity
  - Host Response (Required when "Host Affinity" is "Disabled")
- iSCSI Setting
- Security

 "5.4 Host I/F Management" in the "Web GUI User Guide"

## Point

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

## 7

Various settings are needed to make certain post-operation maintenance tasks easier.

- 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 the ETERNUS DX60/DX80 is to be connected to a PRIMERGY and "ServerView" used to monitor the server, the ETERNUS DX60/DX80 needs to be set to send SNMP traps to the server.
- If remote support is required, the ETERNUS DX60/DX80 needs to be set to notify the remote support center of failures.

 "4.4 Maintenance Setup" in the "ETERNUS DX60/DX80 Disk storage system User Guide"

## Point

Remote support allows prompt detection and resolution of trouble.

## 8

Perform the settings required for server connection. After checking the server OS, LAN cards, iSCSI HBAs, and/or switching hub(s) to be used, install any drivers and make any switching hub settings that may be required.

-  "4.5 Setting up the Server Connection" in the "User Guide"
- "ETERNUS Disk storage systems Server Connection Guide (iSCSI)"
    - for Windows®
    - for Linux (Red Hat Enterprise Linux)
    - for HP-UX
    - for Linux (SUSE Linux Enterprise Server)
    - for VMware® ESX
    - ETERNUS Disk Storage System Settings for ETERNUS DX60/DX80

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

## 9

Maintenance after starting operation:

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.

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(iSCSI model)  
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