

FUJITSU Storage

ETERNUS DX200F All Flash Array

Setup Guide

STEP Preparation

1 An installation space and network environment must be prepared in advance.

Prepare the following manuals:

- Manuals for the ETERNUS DX200F All Flash Array
- Related manuals, such as manuals for the server or the networking equipment that is used

■ Installation Space

 Site Planning Guide

Installation space

Check that the installation area meets the space requirements of the rack in which the ETERNUS DX200F All Flash Array (hereafter referred to as "ETERNUS DX") is to be installed.

Environmental considerations for installation

Check if the installation area for the ETERNUS DX meets the environmental conditions and installation environment conditions.

Power outlets

Check the type and the number of power outlets/sockets that are required to install the ETERNUS DX.

■ Network Environment

 • Configuration Guide (Basic)
• Configuration Guide (Web GUI)

Completing and attaching the Network Settings label

Write down the IP address for the ETERNUS DX on the Network Settings label and attach it inside the rack.

Settings for the PC

- Setup Network Environment
 - IP address : 192.168.1.2
 - Subnet mask : 255.255.255.0
- Set the Web browser
 - Refer to "Configuration Guide (Web GUI)" for details on the settings that are required.

2

The rack rail needs to be attached to the rack and the ETERNUS DX (controller enclosure) needs to be installed.

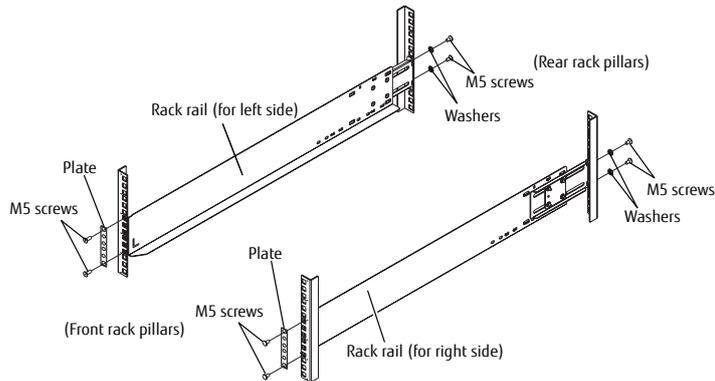
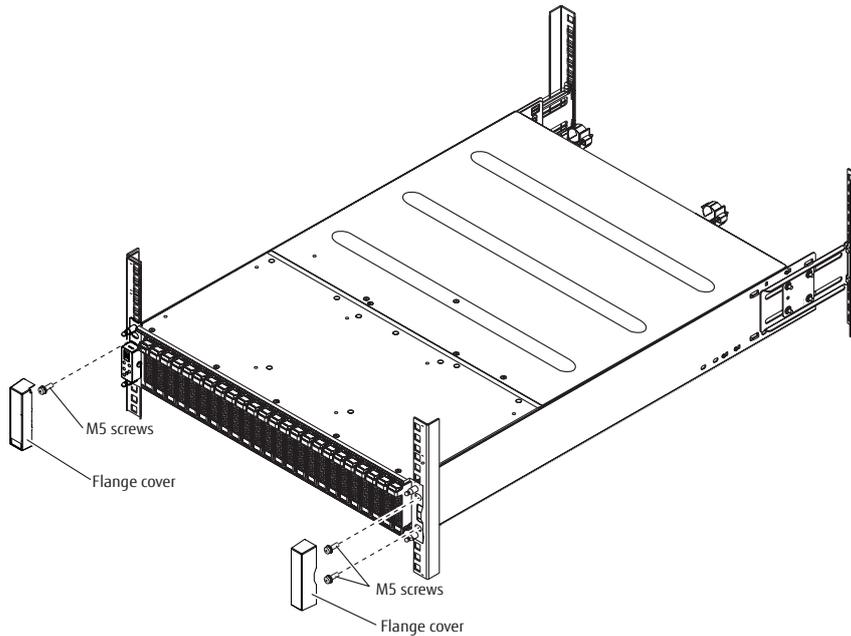
See Configuration Guide (Basic)

IMPORTANT

The center of gravity must be taken into consideration to prevent a rack from toppling over. The controller enclosure should generally be installed from bottom to top to lower the center of gravity and to ensure the safe use of racks.

1. Attach the rack rails to the rack.

The size of the controller enclosure is 2U.

**2.** Install and fasten the controller enclosure in the rack.**IMPORTANT**

Make sure to install or remove the controller enclosure to or from a rack with two or more people.

3

Various cables need to be connected to the rear of the ETERNUS DX.

See  Configuration Guide (Basic)

Point

- To help with cable management and prevent incorrect connection, attach labels to the cables and make a note of connection origins and destinations.
- This step describes dual controller type as an example. Note that there is only controller 0 (CM#0) for single controller type.

IMPORTANT

- The cables should never be bent, twisted or pulled.
- Some cables have static-sensitive electronic components. Wear an anti-static wrist strap or touch a metal part to discharge the static electricity on your body before starting each operation. Failure to discharge static electricity before touching the connectors may cause a device failure.

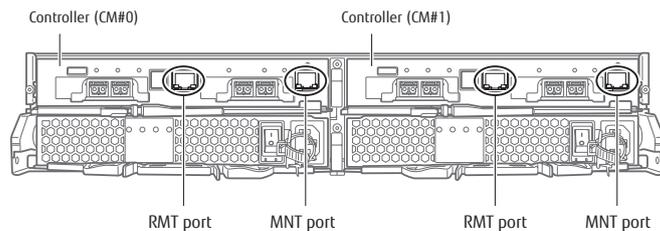
1 LAN Cable

- MNT port

A port that is used to connect to an operation management LAN. Before connecting to the operation management LAN, change the IP address of the MNT port in the Setup Network Environment settings.

- RMT port

A port that is used for initial setup or to connect to the remote support center.

Cable**Rear view****2 Host Interface Cable**

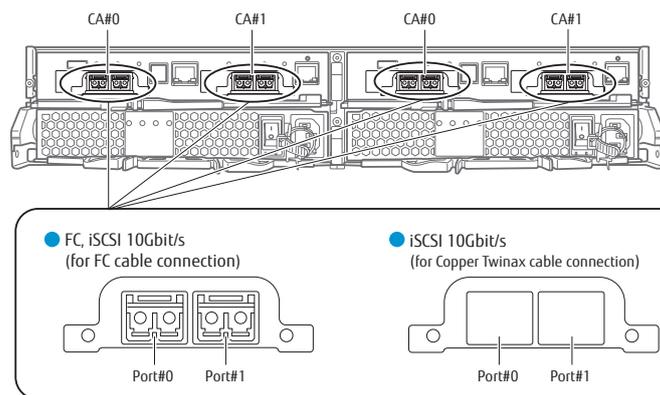
Connect a Host Interface cable to each of these ports.

Cable

- FC, iSCSI 10Gbit/s
(for FC cable connection)

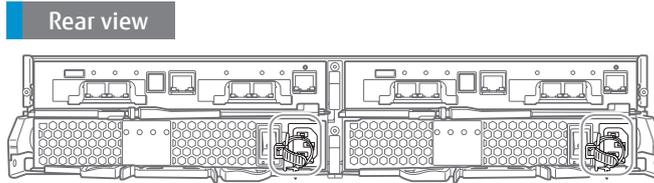
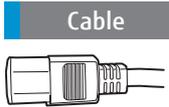


- iSCSI 10Gbit/s
(for Copper Twinax cable connection)

**Rear view**

3 Power Cords

Connect the power cords to the inlets of the power supply unit.
Use release ties to hold the power cords in place.



STEP

Basic Setup

4

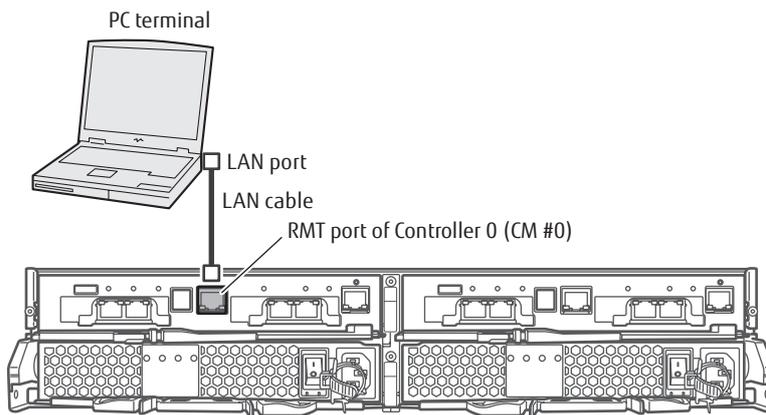
Use ETERNUS Web GUI to perform a basic setup of the ETERNUS DX.

 [Configuration Guide \(Basic\)](#)

1 ETERNUS DX and PC Terminal Connection

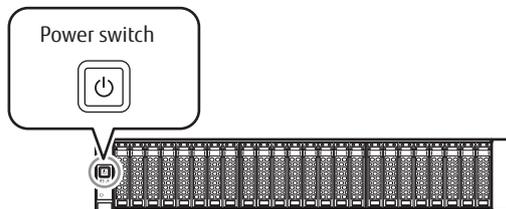
Connect a PC terminal to the ETERNUS DX.

Connect the PC terminal to the RMT port of Controller 0 (CM#0) on the ETERNUS DX directly with the LAN cable.



2 Powering On

Turn on the PC terminal and the ETERNUS DX.



3 ETERNUS Web GUI Startup

1. Open the Web browser on the PC terminal.
2. Enter either of the following URLs in the address bar of the Web browser.
http://192.168.1.1/
The login screen for ETERNUS Web GUI appears.
3. To change the user interface language, click the [Option] button and select "English" or "Japanese" in "Language".
4. Enter the Username and Password.
User name: root
Password: root (by default)

After logging in, the Initial Setup screen of ETERNUS Web GUI appears.

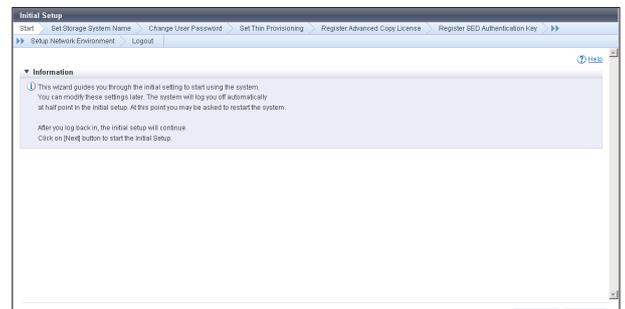
4 Initial Setup

Perform the settings that are required before operation of the ETERNUS DX on the Initial Setup screen.

Perform the following settings according to the wizard screen:

- Set Storage System Name
- Change User Password
- Set Thin Provisioning
- Register SED Authentication Key
- Setup Network Environment
In the Setup Network Environment settings, set the IP address of the MNT port to connect the ETERNUS DX to the operation management LAN.

After the settings are complete, close the Web browser.



5 Establishing a Connection between the ETERNUS DX and the Operation Management LAN

Remove the LAN cable between the RMT port on Controller 0 and the PC terminal.

Connect the LAN cables of the MNT ports on Controller 0 and Controller 1 to the network of the customer.

Then start the web browser from the PC terminal that is connected to the network and log in to ETERNUS Web GUI again with the IP address that is set in "Set Network Environment". After login, the Overview screen appears.

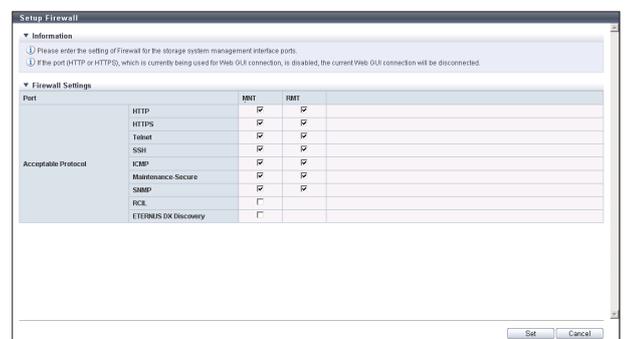
6 Firewall Settings

Set the firewall for each service.

1. Click the [System] tab, click [Network] in [Category], and then click [Setup Firewall] in [Action].
2. Enable or disable each service. Make sure to disable the ETERNUS DX Discovery function.

IMPORTANT

If the network environment is not set up, the ETERNUS DX Discovery function is enabled. Some functions are not available when the ETERNUS DX Discovery function is enabled for the MNT port. Make sure to set up the network environment and disable the ETERNUS DX Discovery function.



7 RAID Configuration Settings

Use ETERNUS Web GUI to set RAID configurations in the ETERNUS DX.

Perform the following settings:

- RAID group creation
- Volume creation
- Hot spare registration

1. RAID group creation

Create RAID groups to create volumes.

To display the screen to create RAID groups:

Click [Create] in [Action] on the [RAID Group] tab.

2. Volume creation

Create volumes in the RAID group.

To display the screen to create volumes:

Click [Create] in [Action] on the [Volume] tab.

3. Hot spare registration

Register the hot spare for the failure of a drive.

To display the screen to register the hot spare:

Click [Drives] in [Category] on the [Component] tab.

- Global Hot Spare registration
Select the drive that is to be registered as the Global Hot Spare and click [Assign Global HS] in [Action]. In the confirmation screen that appears, click the [OK] button.
- Dedicated Hot Spare registration
Select the drive that is to be registered as the Dedicated Hot Spare and click [Assign Dedicated HS] in [Action].

Select the RAID group that is used as the Dedicated Hot Spare and click the [Assign] button. In the confirmation screen that appears, click the [OK] button.

Enclosure	Slot No.	Status	Capacity	Speed	Type	Usage	RAID Group
CE	0	Available	1.60 TB	-	2.5"SSD	Data	0_B0A0
CE	1	Available	1.60 TB	-	2.5"SSD	Data	0_B0A0
CE	2	Available	1.60 TB	-	2.5"SSD	Data	0_B0A0
CE	3	Available	1.60 TB	-	2.5"SSD	Data	2_B001
CE	4	Available	1.60 TB	-	2.5"SSD	Data	2_B001
CE	5	Available	1.60 TB	-	2.5"SSD	Data	2_B011
CE	6	Available	1.60 TB	-	2.5"SSD	Data	2_B001
CE	7	Available	1.60 TB	-	2.5"SSD	Data	2_B001
CE	8	Available	1.60 TB	-	2.5"SSD	Data	1_B000
CE	9	Available	1.60 TB	-	2.5"SSD	Data	1_B000
CE	10	Available	1.60 TB	-	2.5"SSD	Data	1_B000
CE	11	Available	1.60 TB	-	2.5"SSD	Data	1_B000
CE	12	Available	1.60 TB	-	2.5"SSD	Data	-
CE	13	Present	1.60 TB	-	2.5"SSD	Data	-
CE	14	Present	1.60 TB	-	2.5"SSD	Data	-

Enclosure	Slot No.	Drive Type	Capacity	Speed
CE#00	13	2.5"SSD	1.60 TB	-

Name	Status	RAID Level	Capacity	Drive Type	Minimum Drive Capacity
RAID	Available	High Capacity (RAID5)	9.60 TB	Online	1.60 TB
RAID	Available	High Performance (RAID1+0)	6.40 TB	Online	1.60 TB

8 Host Affinity Settings

The host affinity settings ensure security when multiple servers are connected by assigning the host interface ports that the hosts (servers) can access and the volumes that the hosts (servers) can recognize.

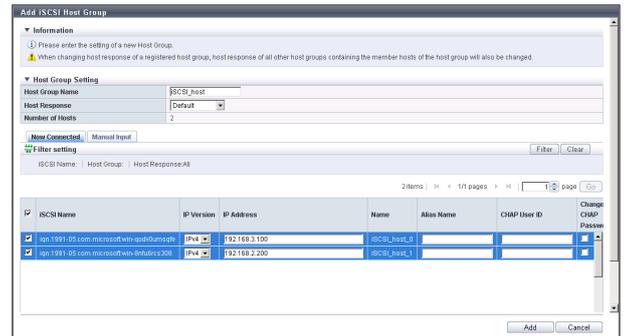
Follow the procedure below to set host affinity by associating a host group, a CA port group and a LUN group.

1. Host group addition

Add the information on the hosts (servers) that access the ETERNUS DX.

To display the screen to add the host groups (example for iSCSI host groups):

Click [Add iSCSI Host Group] in [Action] under [Host Group] in [Category] on the [Connectivity] tab.

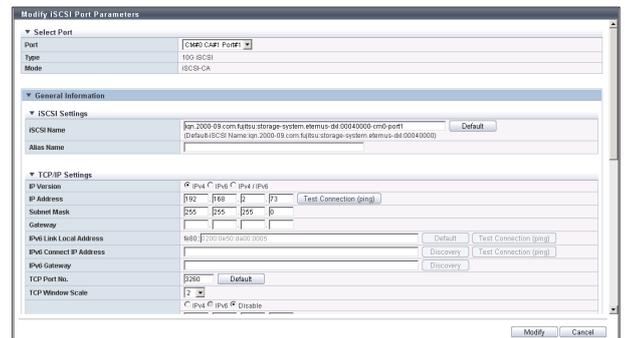


2. Port parameter settings

Set the connection information between the host interface port and the server.

To display the screen to set the port parameters (example for iSCSI Port):

Click [iSCSI] under [Port Group] in [Category] on the [Connectivity] tab. Select the checkbox for the iSCSI port to set the port parameters for on the [iSCSI Port Group] screen and then click [Modify iSCSI Port Parameters] in [Action].

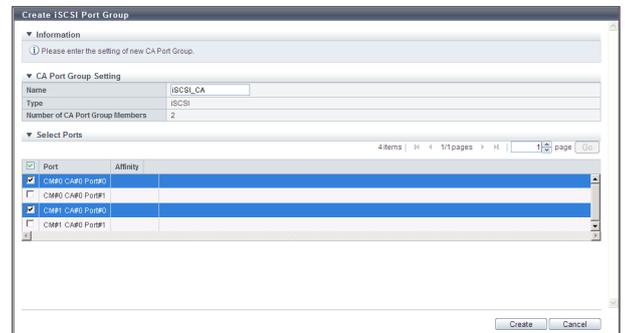


3. Port group creation

Create a port group for a host to access the ETERNUS DX.

To display the screen to create a port group (example for iSCSI Port):

Click [Create iSCSI Port Group] in [Action] under [Port Group] in [Category] on the [Connectivity] tab.

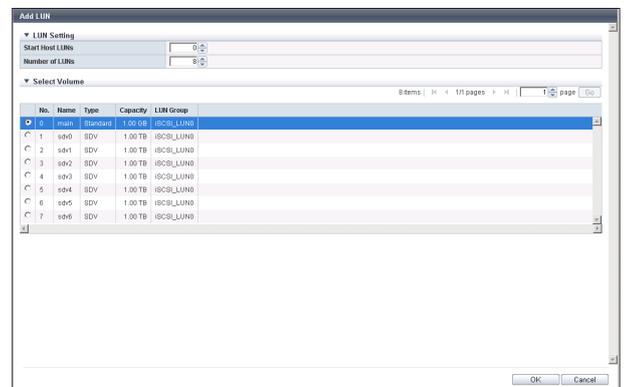


4. LUN group addition

Add a group of volumes that can be recognized by the host (LUN group).

To display the screen to add a LUN group:

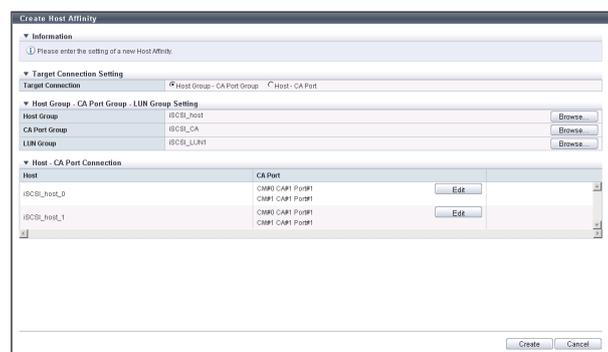
Click [Add LUN Group] in [Action] under [LUN Group] in [Category] on the [Connectivity] tab.



5. Host affinity creation

Create an association between a host group and a port group and an association between a host group and a LUN group.

To display the screen to create a host affinity: Click [Create Host Affinity] in [Action] on the [Connectivity] tab.



STEP 5 Monitoring Setup

Perform the ETERNUS DX monitoring setup if required.

- Notification of the ETERNUS DX problems as they occur is possible if the event notification method and level have been set.
- If remote support is required, the ETERNUS DX needs to be set to notify the remote support center of failures.

Point

Remote support allows prompt detection and resolution of trouble.



Configuration Guide (Basic)

STEP 6 Server Connection

Perform the settings required to connect to the server and install the required drivers. Perform the settings required for network devices connecting the server and the ETERNUS DX.

After the server connection setup, confirm that the volumes in the ETERNUS DX can be recognized by the server.

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



- Configuration Guide (Basic)
- Configuration Guide -Server Connection-

Operation and Maintenance

Status check

The status of the ETERNUS DX should be regularly monitored by checking the LEDs and using ETERNUS Web GUI.

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 standard maintenance support period for ETERNUS DX is five years from the date of purchase, or is defined in your service level agreement (SLA). Contact your sales representative for details if you prefer to extend the period.

 Operation Guide (Basic)

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Setup Guide
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