

# PRIMEQUEST 2000 Series

## Converged Network Adapter

## iSCSI Boot Configuration Manual



## **Introduction**

This document is a guide of configuring iSCSI Boot with Converged Network Adapter.



To configure the server, refer those manuals of the server.

<http://www.fujitsu.com/global/products/computing/servers/mission-critical/primequest/documents/manuals/>

## **About this manual - for safe use -**

This manual contains information to use this product safely. Before use of this product, read and understand this manual well.

We pay attention for users to use our products safely without harming neither users, other people, and their properties. When you use this product, follow the instructions in this manual.

## **About this product**

This product is designed and manufactured as for general use, such as in an office, personal use, household, and normal industry. Not for applications which are required extremely high safety (hereinafter referred to as "high-safety applications"), such as nuclear power control, aircraft flight control, air traffic control, mass transport operation control, life support, and weapons firing control, which involves serious risk against life unless safety is ensured.

Unless adopting measures for ensuring safety, do not use this product in such high-safety applications.

When you use this product in high-safety applications, before use, consult with our sales representatives.

## **Storage of Attached Articles**

Since attached articles are needed to operate server with, keep it in a safe place.

## Notation

### ■ Marks for safe use

In this manual we use some pictorial indications.

They are marks for using this product safely and preventing you and other people from suffering dangers nor damages.

Indication and it's meaning of the marks are as following. Please read and understand them well.

|  |  |
|--|--|
|  <b>Warning</b> | If you ignore this warning and handle incorrect, there is possibility that causes serious injury or death.               |
|  <b>Caution</b> | If you ignore this caution and handle incorrect, there is possibility that causes economic damages and physical damages. |

In order to show type of warning and caution, in addition to the pictorial indicator described above, we use following symbols.

|   |   |
|---|---|
|  | △ symbol is what to tell that it is a warning or caution. Inside or under the symbol, specific action which is prohibited is shown.           |
|  | ⊗ symbol is what to tell that it must not to act (prohibited acts). Inside or under the symbol, specific action which is prohibited is shown. |
|  | ● symbol is what to tell that it must be followed. Inside or under the symbol, specific instruction is shown.                                 |

### ■ Symbols in this manual

The symbols described in this manual has following meanings.

|   |   |
|---|---|
|  <b>Important</b> | Note what you have to take care or what you must not do when you use this product. Be sure to read. |
|  <b>POINT</b>    | Note what is associated with operation. Read if necessary.  |
| <a href="#">(→P.nn)</a>   | It shows reference page. You can move to the page with clicking here.                               |

### ■ Key Operation and it's Representation

Representations of key operation are not explained with all of the characters described in keyboard. They are explained with the characters just required in the description as follows.

Ex.: 【Ctrl】key, 【Enter】Key, 【→】Key, etc.

Also, in case of pressing multiple keys at the same time, it is represented by connecting with as follows:

"+".

Ex.: 【Ctrl】+【F3】key, 【Shift】+【↑】key, etc.

### ■ Representation of Consecutive Operation

In this manual, procedure of consecutive operations are represented as follow by connecting them with "→".

Ex: Click 「Start」button, then, point 「All Programs」, and then, click 「Accessories」

↓

「Start」button → 「All Programs」→「Accessories」

Click on this order.

## ■Notation

In this document, these product names are referred to as shown below.

| Product Name                             | Notation          |
|--|-------------------|
| Host Bus Adapter                         | HBA               |
| Converged Network Adapter                | CNA, This Product |
| Internet Small Computer System Interface | iSCSI             |
| Fibre Channel over Ethernet              | FCoE              |
| Storage Area Network                     | SAN               |
| ServerView Installation Manager          | SVIM              |
| ServerView Suite                         | SVS               |
| Preboot eXecution Environment            | PXE               |
| Unified Extensible Firmware Interface    | UEFI, uEFI        |

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# 1. iSCSI Boot Configuration

To build an iSCSI Boot Environment, you are required to configure the iSCSI Storage (iSCSI Target).

This manual helps you understand for setup of Converged Fabric Switch and storage device.

In this setup, record the following information of your storage to build iSCSI Boot Environment.

- IQN (iSCSI Qualified Name) of iSCSI Target
- IP-address of iSCSI Target
- TCP port number (default: 3260) of iSCSI Target
- Logical Unit Number(LUN)

The hardware components which are required to build iSCSI Boot environment are listed below.

- 1) Use server of disk less model. (OS installed model is already equipped HDD built-in.)  
However, if you use Red Hat Enterprise Linux, it is effective to reduce I/O load by adding internal HDDs.
- 2) Equip with a Converged Network Adapter to the server on which you build the iSCSI Boot Environment.
- 3) Download the latest version of driver and firmware of Converged Network Adapter from the following URL and use them.

<http://support.ts.fujitsu.com/download/Index.asp>

## 2. Steps of Configuring iSCSI Boot

We explain steps to configure iSCSI Boot.

### POINT

In this document, we explain the steps to build iSCSI Boot Environment on PRIMEQUEST 2000 series.

For information for setting and adjustment procedure of storage device, refer to the manuals accompanying to each product.

For information for configuring the server, refer to the manual of the server.

You can get latest version of manual from web site of PRIMEQUEST 2000 series.

## 2.1. Flow of Configuring iSCSI Boot

### 1. Design of iSCSI Boot Configuration

- Creating a network configuration diagram or a zone configuration diagram of the server-storage on which iSCSI Boot is performed.
- Setting RAID (LUN\_R) and creating logical volume (LUN\_V) of storage device (to install OS) on which iSCSI Boot is performed.
- Reading the notes of the product to check limitations and considerations of the product.

### 2. Configuring iSCSI Storage Device / Network Switch

- According to the diagram designed in step 1 above, set installation and connection of storage device / server / network switch.
- Configuring and checking the configuration of the storage device / network switch.

### 3. Configuring Server [See Chapter 2.1. "Configuring Server"]

- Configuring and checking the configuration of the BIOS.

### 4. Configuring CNA [See Chapter 3. "Configuring PXE Boot Parameters"]

- Configuring CNA.

### 5. Configuring iSCSI Boot [See Chapter 4. "Configuring iSCSI Boot"]

- Setting the name of the iSCSI initiator and enabling the boot port.
- Setting the properties of the network.
- Setting the iSCSI target as a boot target.
- Configuring the LUN to boot.
- Reboot of the server.

### 5. Installation of OS [See Chapter 5. "Installation of OS"]

- Installing OS to the target device according to the document created in step 1 above.

 **Important**

- Before power-on of the server, make sure that both the storage device to which installed OS and the network switch are ready.

 **Important**

- If you set a multi-path boot, follow the steps below.
  1. Configure the first path to the boot device using the iSCSI configuration utility.
  2. Complete installation of OS.
  3. Install a multi-path driver.
  4. Set the second pass to the boot device using the iSCSI configuration utility.

## 2.2. Configuring BIOS of Server

If the option ROM of the CNA is disabled (Scanning of expansion BIOS is disabled), you need to enable the option ROM of the CNA. Refer to PRIMEQUEST 2000 Series manuals to set the option ROM.

<http://www.fujitsu.com/global/products/computing/servers/mission-critical/primequest/documents/manuals/>

## 2.3. Configuring PCI Option ROM Priority

Configure your server to start with Legacy BIOS mode.

1. Power on your server, then BIOS is started, and then Boot Manager (The front page of the BIOS) is opened.
2. Open the Device Manager from the front page menu of the Boot Manager.
3. Open the PCI Subsystem Configuration from the Device Manager menu.
4. Select [Legacy ROM] from "PCI ROM Priority" in "PCI Subsystem Configuration" menu.
5. Select the [Commit Changes and Exit] and press <Enter> key to save settings you did.

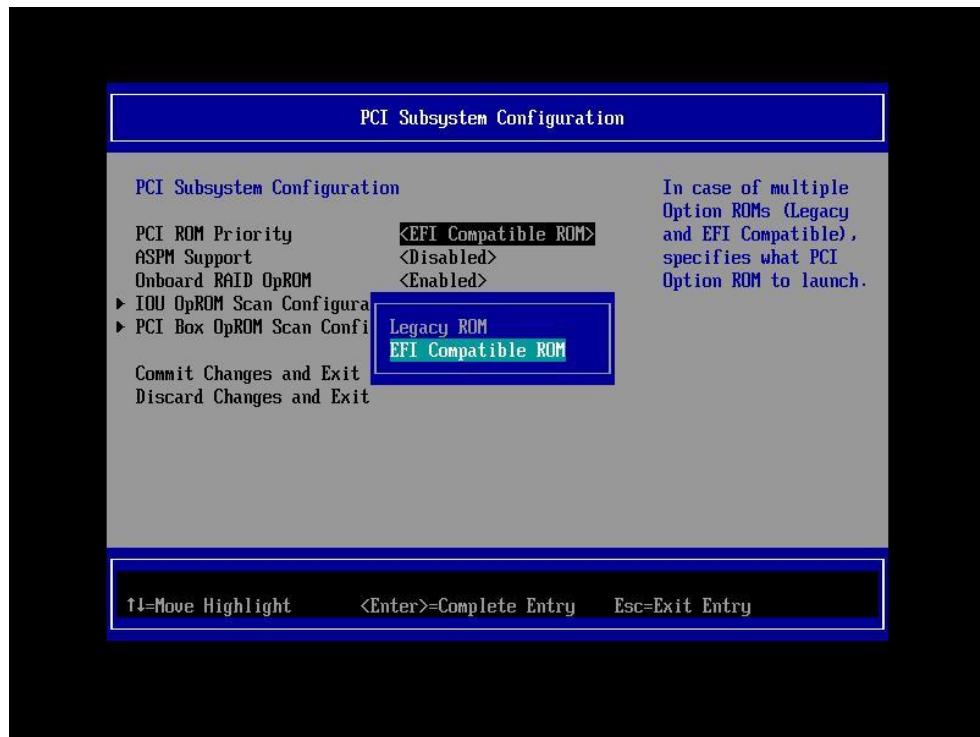


Figure 2-1

### POINT

For more information about operation of UEFI menu, see manual "FUJITSU Server PRIMEQUEST 2000 Series Tool Reference".

The settings that have been set in this menu would become effective after the server reset.

### 3. Configuring CNA Personality

This section describes the modification procedure of CNA Personality setup.

#### POINT

Screen images of the utility might look different with the firmware version of the CNA, although, the items to be set to the utility are the same. Refer the screen images appropriately.

The following example shows Legacy mode.

You can change to Legacy mode from UEFI mode by Boot Maintenance Manager.

#### 3.1. PXESelect Utility (Legacy mode)

During the system is starting up, if prompt of PXESelect Utility is displayed as shown below, press <Ctrl> + <P> key.

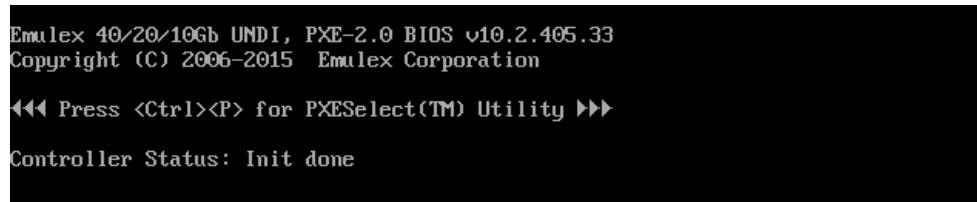


Figure 3-1

As "Controller Configuration" screen appears, set "Personality" to "iSCSI".

Enable "MultiChannel" if necessary, in the same way, enable "SRIOV" if necessary.

To save the settings, press <F7> key.

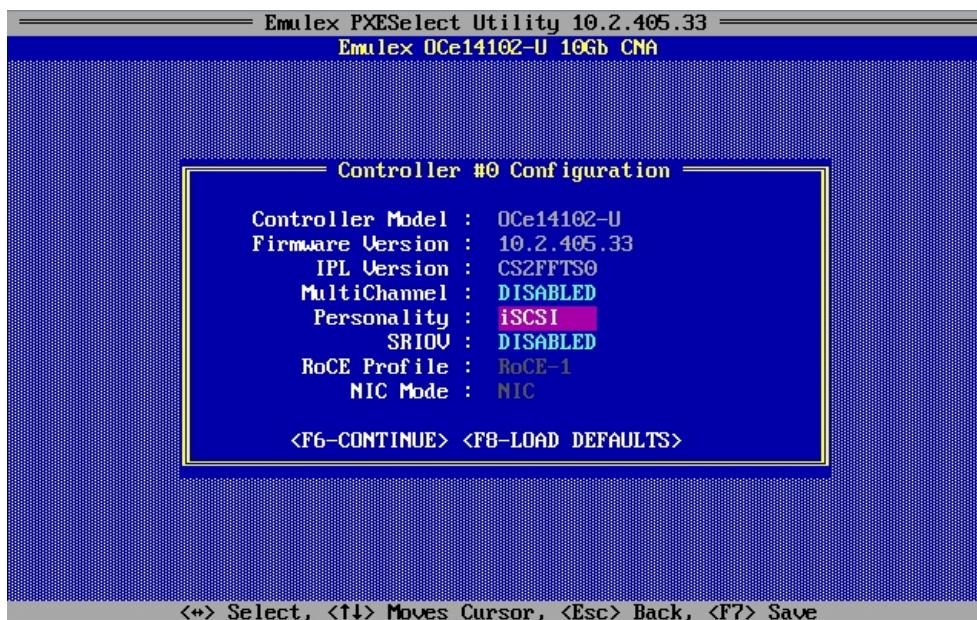


Figure 3-2

If the screen which confirms to save the setting is displayed, press <Esc> key.

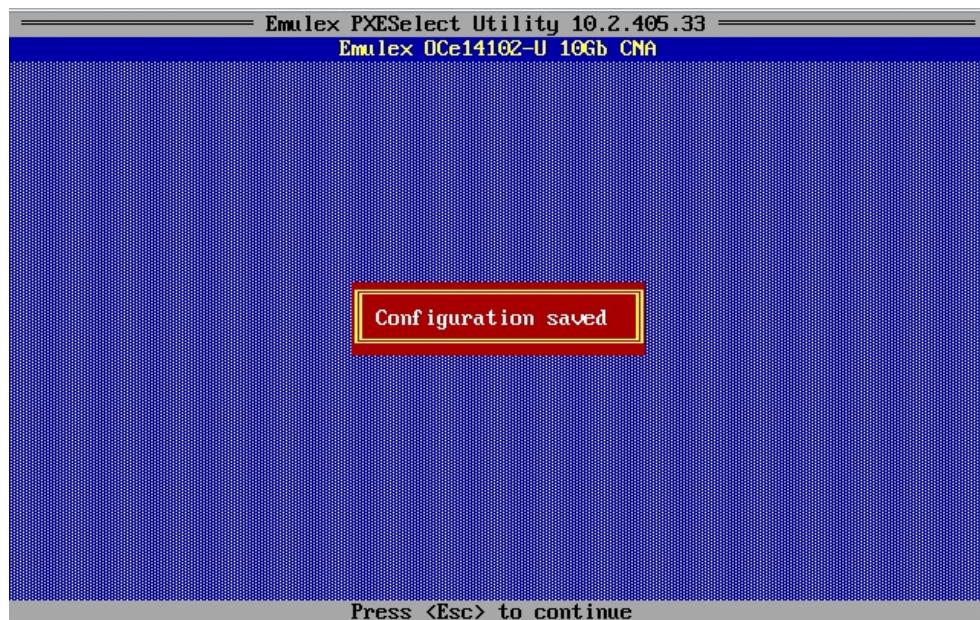


Figure 3-3

For configuring multi-channel and PXE Boot Configuration, press <F6> key.

If "Port Selection Menu" is displayed, select controller to be set, press <Enter> key.

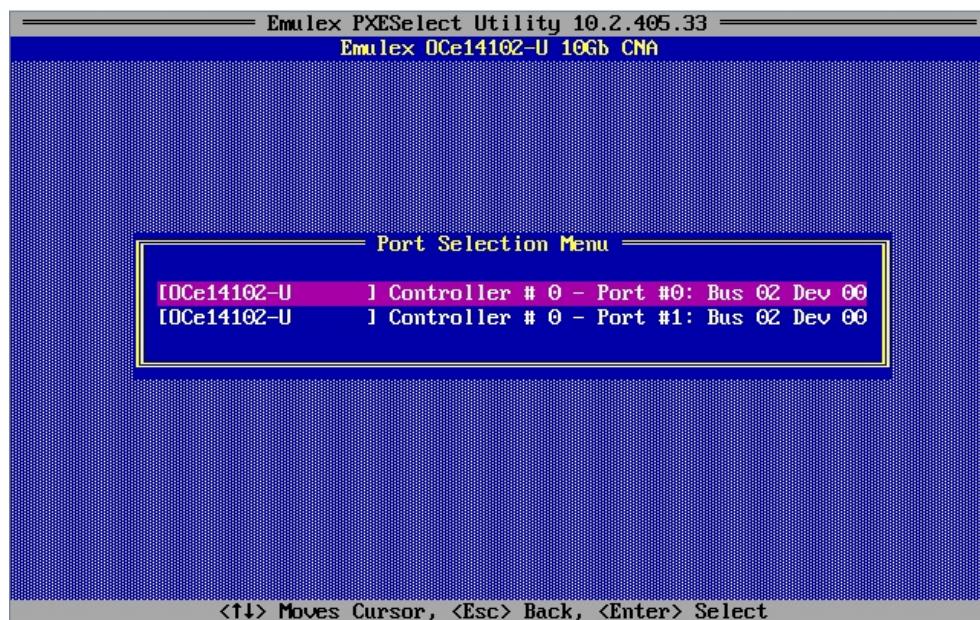


Figure 3-4

"Controller Port Menu" is displayed, then, set parameters on this menu.

**In the case MultiChannel is disabled:**

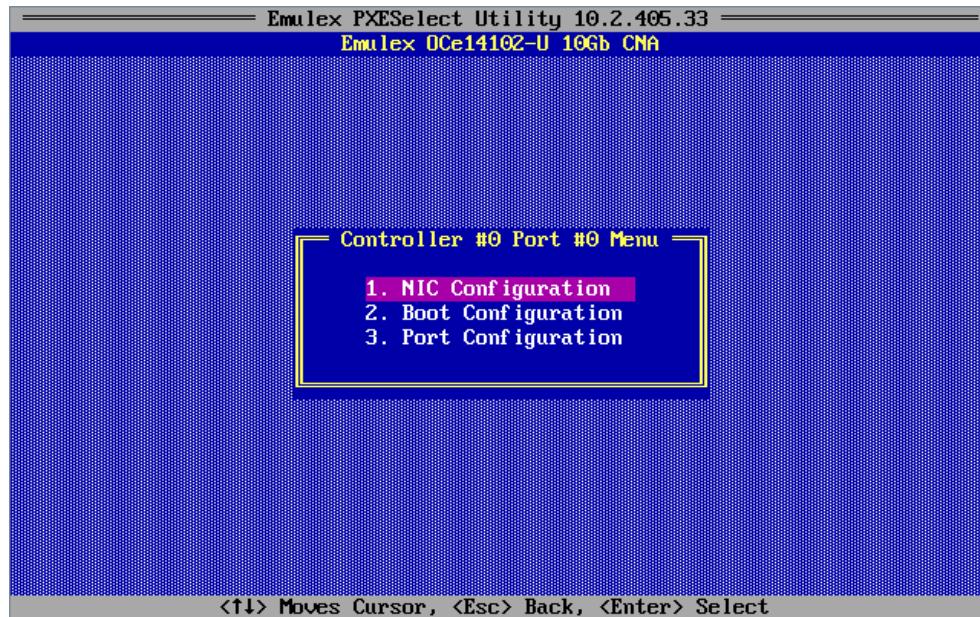


Figure 3-5

**In the case MultiChannel is enabled:**

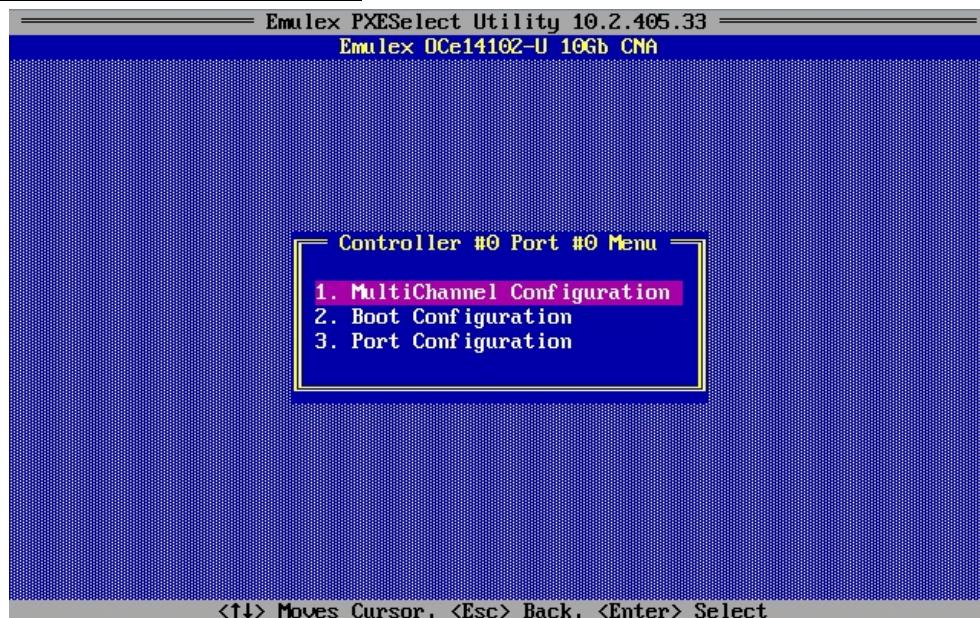


Figure 3-6

If you've set these settings, press <Esc> key to exit this menu.

If you press <Esc> key, then, the screen as shown below is displayed, enter [Y].

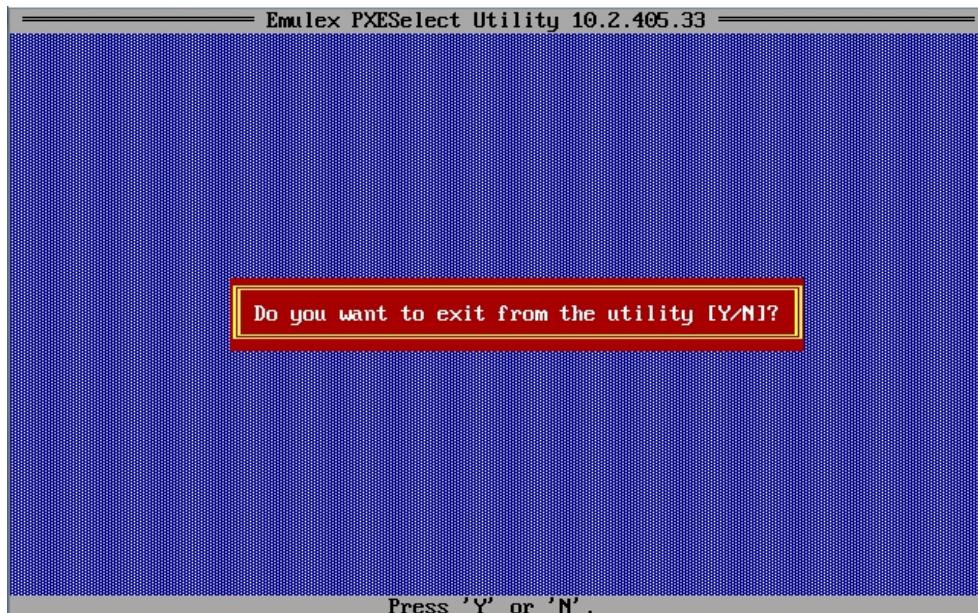


Figure 3-7

### 3.2. Device Manager (UEFI mode)

Check the Bus number of the CNA on Device Manager, and select it.

#### POINT

You can see the Bus number on IOU window in MMB(GUI), corresponding to the PCI-Express Slot on the window. Bus number on IOU window shows as hexadecimal number.



Figure 3-8

Select "Personality" on Emulex NIC Selection menu.

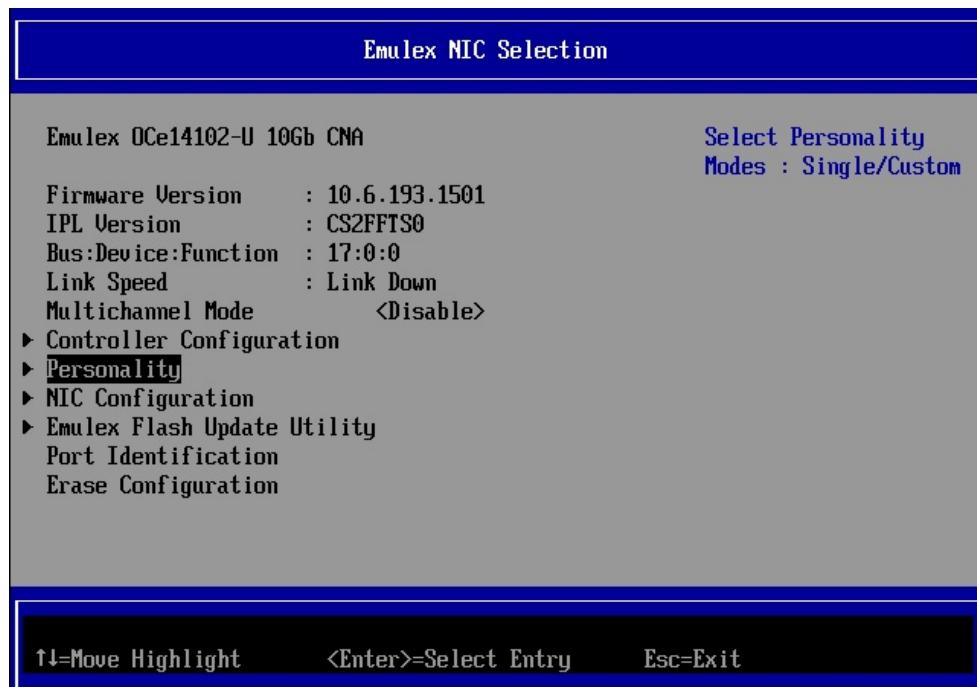


Figure 3-9

Select <iSCSI> on "Personality Selection" in Personality Selection window and then Save it.

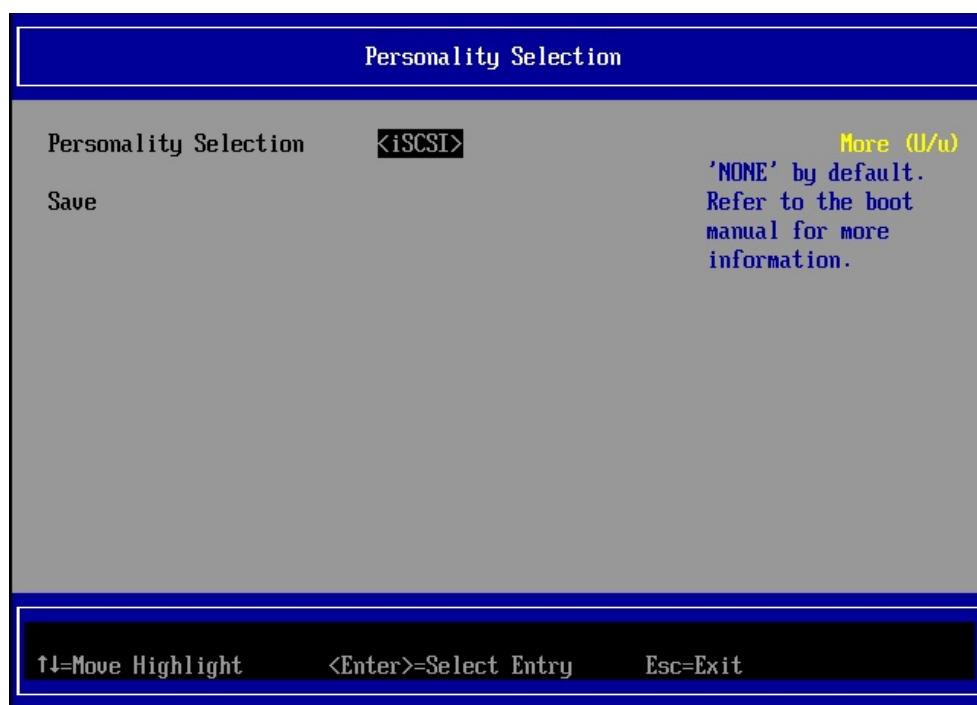


Figure 3-10

If necessary, check the other parameters (MultiChannel, etc.), and save the configurations, and then restart the Partition.

## 4. Configuring iSCSI Boot (Legacy mode)

This chapter describes that procedure of configuring of iSCSI Boot in Legacy BIOS.

### 4.1. Configuring iSCSI Boot in the Legacy BIOS

To configure iSCSI Boot in Legacy BIOS, use BIOS utility.

During the server is starting up, if the message "Press <Ctrl><S> for iSCSISelect(TM) Utility" as shown in the figure below is displayed, press <Ctrl>+<S> key immediately.

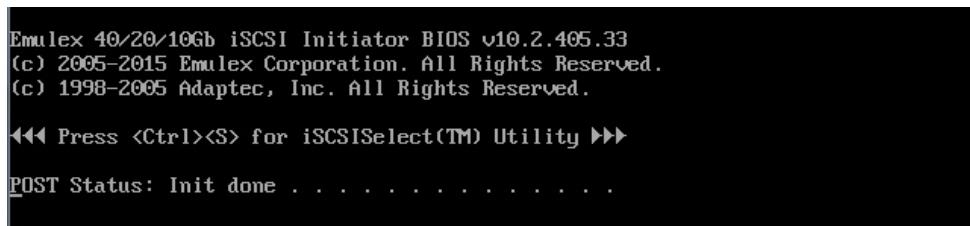


Figure 4-1

## 4.2. Setting iSCSI Initiator Name

After pressing <Ctrl>+<S> key, iSCSI Initiator Configuration menu is displayed as shown below, set iSCSI Initiator Name.

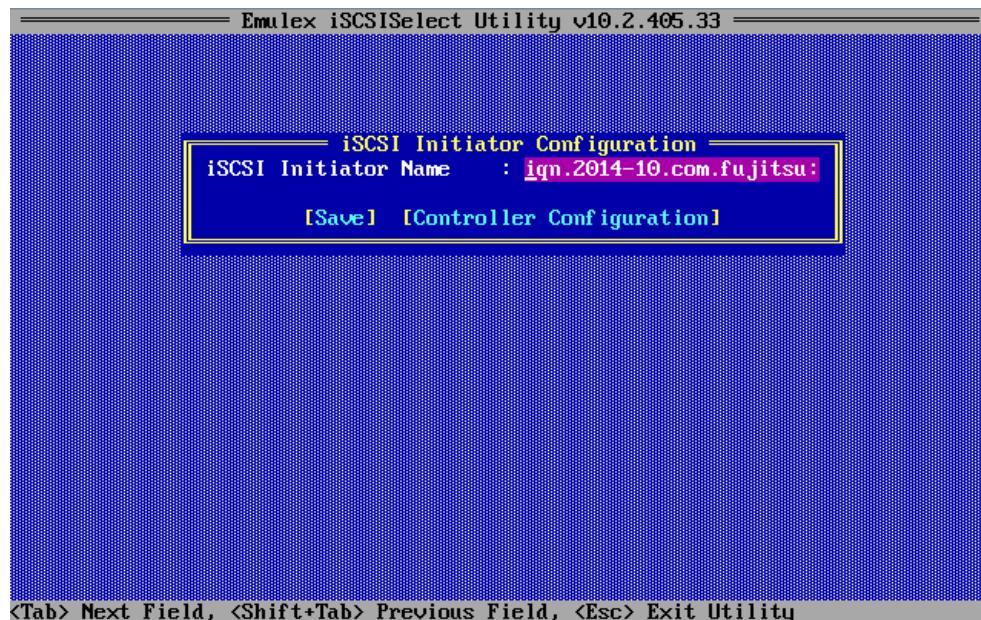


Figure 4-2

Move cursor onto [Save] and press <Enter>key to save the settings.

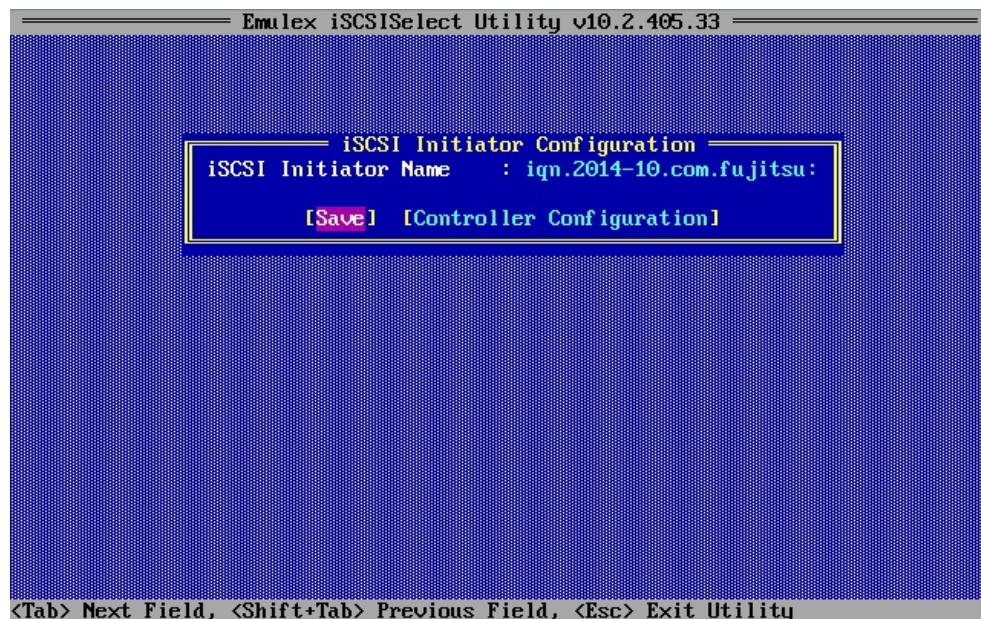


Figure 4-3



"iqn.1990-07.com.emulex: xx-xx-xx-xx-xx-xx" is set to as iSCSI Initiator Name by default.  
Modify it to appropriate name.

## 4.3. Controller Configuration Menu

As shown in the figure below, in "iSCSI Initiator Configuration" window, move cursor onto [Controller Configuration] and press <Enter> key.

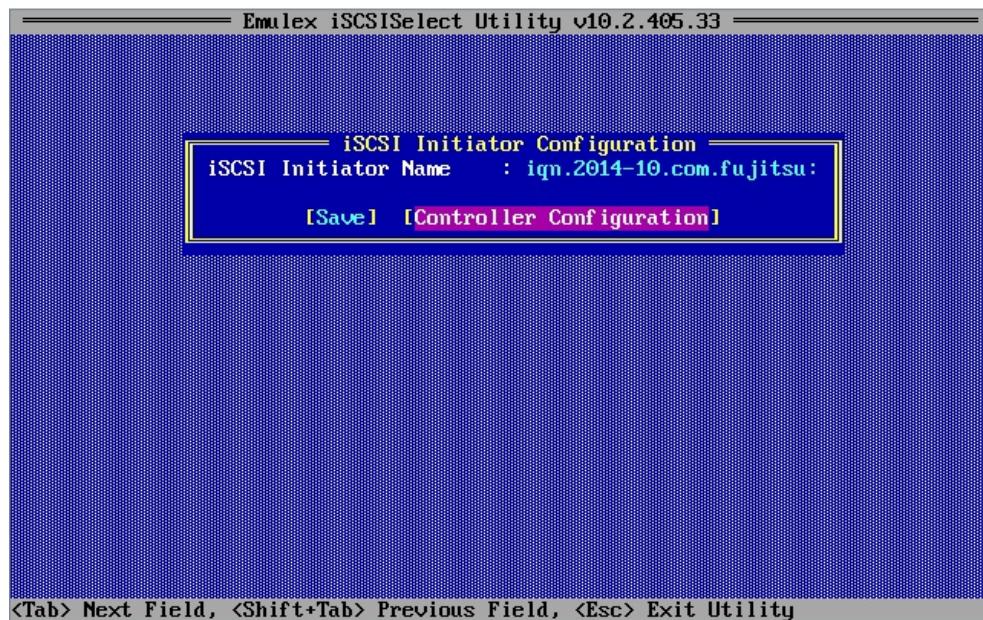


Figure 4-4

Move cursor onto Controller Port to be set, and press <Enter> key.

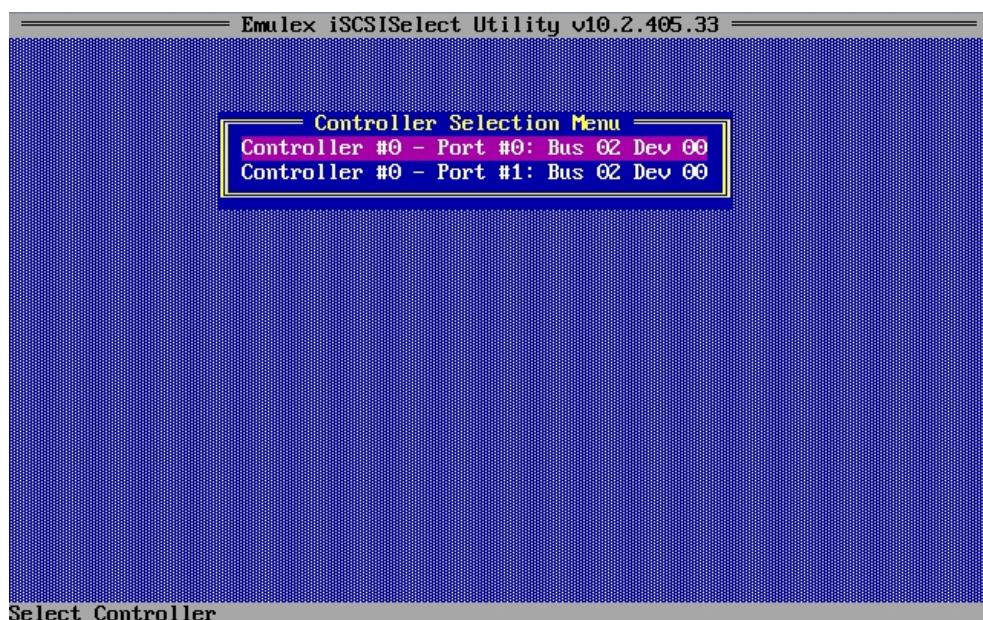


Figure 4-5

As shown in the figure below, "Controller Configuration" menu is displayed.

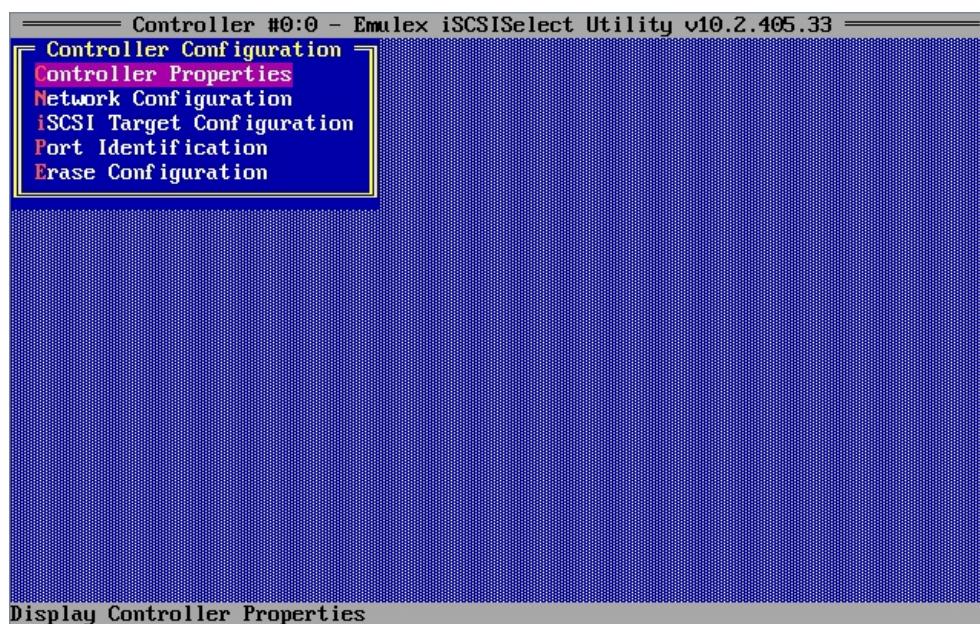


Figure 4-6

## 4.4. Viewing and Setting Controller Properties

In "Controller Configuration" menu, Move cursor onto [Controller Properties], and then press <Enter> key.

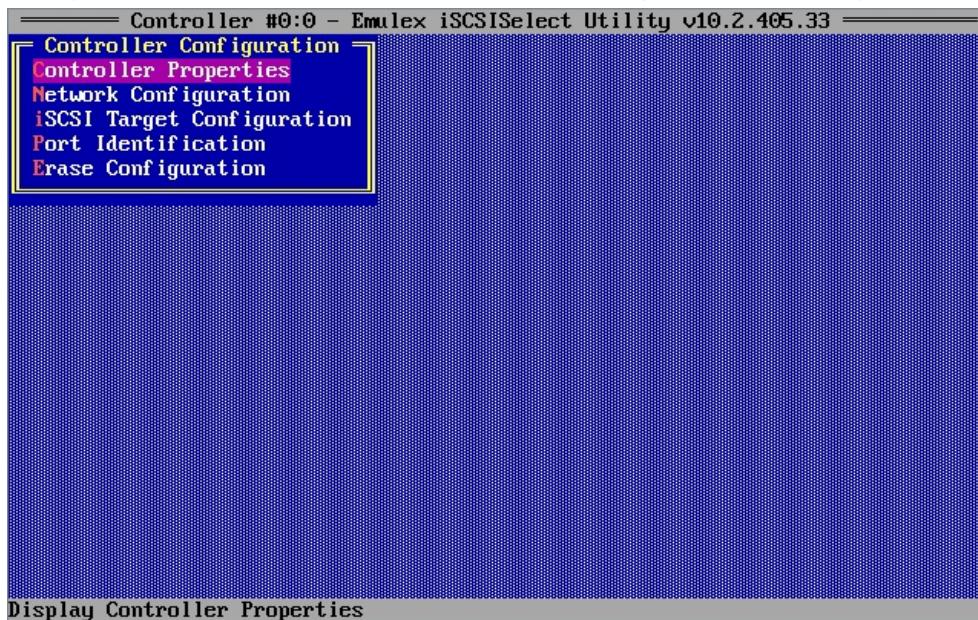


Figure 4-7

Configure Controller Properties in "Controller Properties" menu.

After setting, move cursor onto <Save>, and then press <Enter> key.

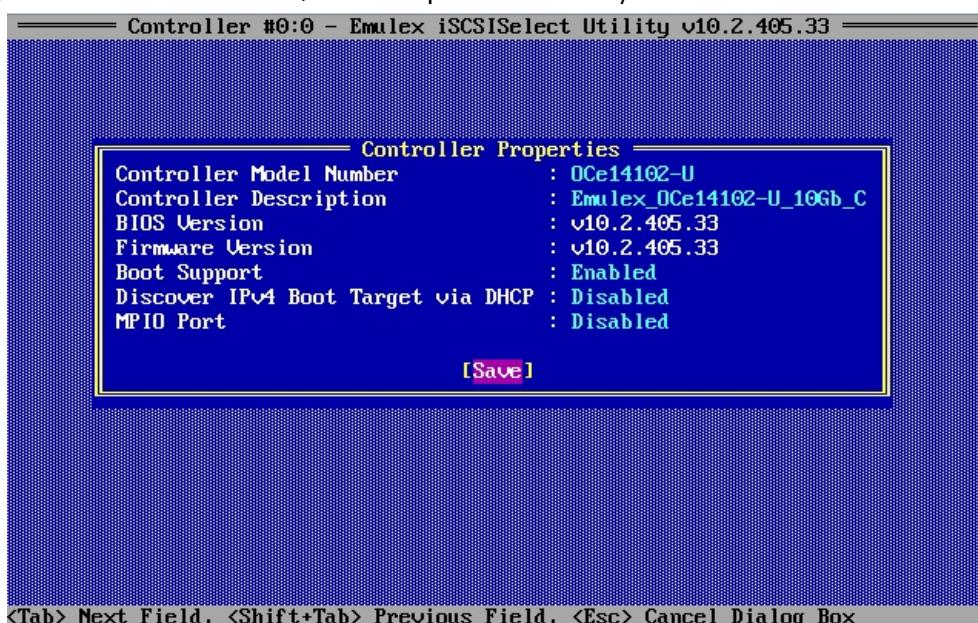


Figure 4-8

| Setting Items                      | Settings  |
|------------------------------------|---|
| Boot Support                       | If this setting is "Enabled", you can boot from the specified port.                                     |
| Discover IPv4 Boot Target via DHCP | If this setting is "Enabled", IPv4 Boot Target Discovery using DHCP is enabled.                         |
| MPIO Port                          | If this setting is "Enabled", it allows the initiator to log into multiple sessions to the same target. |

## 4.5. Configuring Network Configuration

In "Controller Configuration" menu, Move cursor onto [Network Configuration], and press <Enter> key.

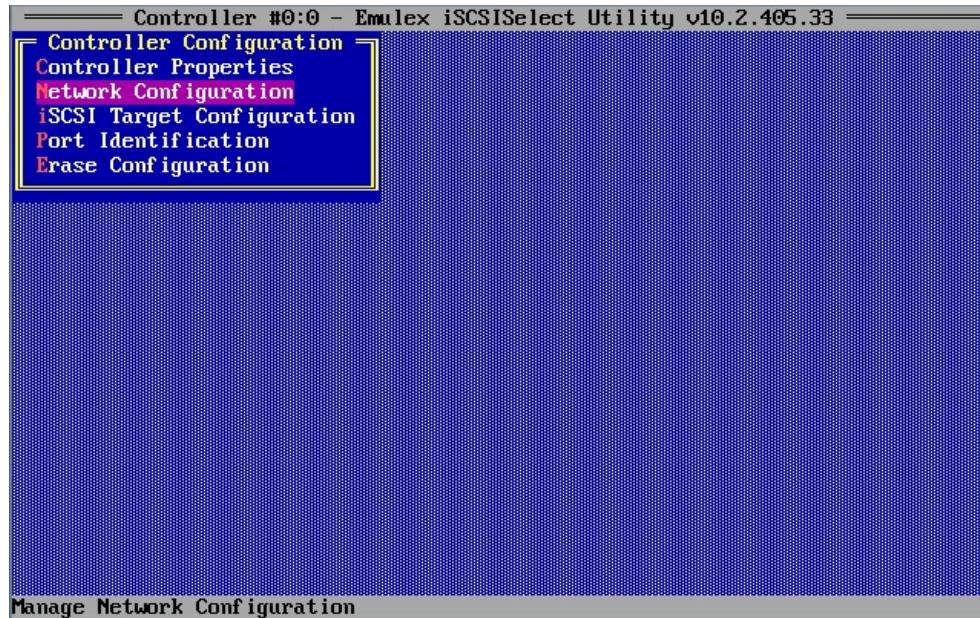


Figure 4-9

Select [IPv4] or [IPv6] in pull-down menu of [IP Version].

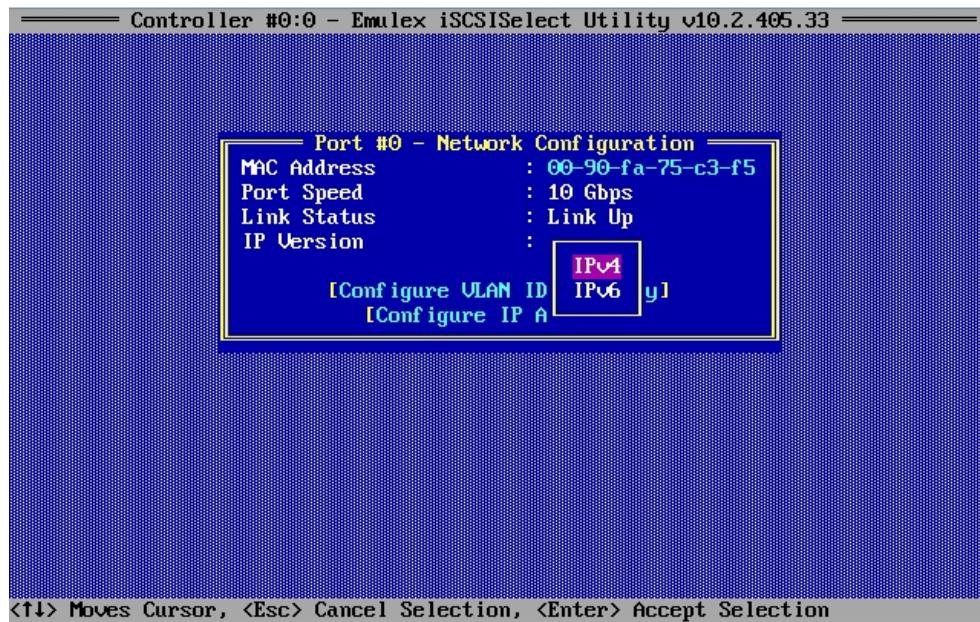


Figure 4-10

#### 4.5.1. Configuring IPv4 address (DHCP)

In Network Configuration menu, set IP Version to IPv4, and move cursor onto [Configure IP Address], and press <Enter> key.

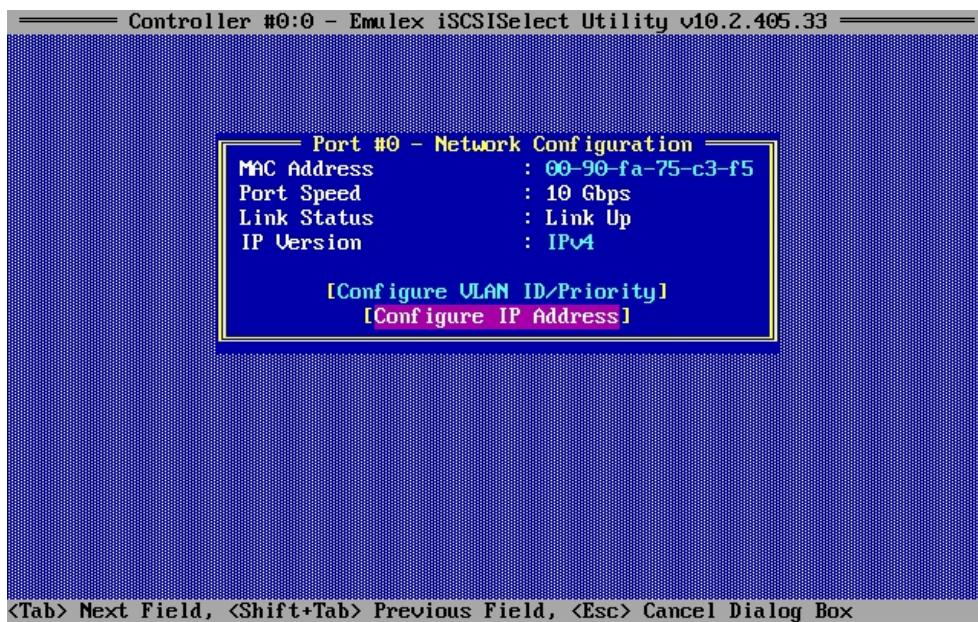


Figure 4-11

Select [Enabled] from pull-down menu as shown below at [DHCP].

Move cursor onto [Save DHCP Setting] and press <Enter>key to save the settings. DHCP IP Address dialog box is displayed.

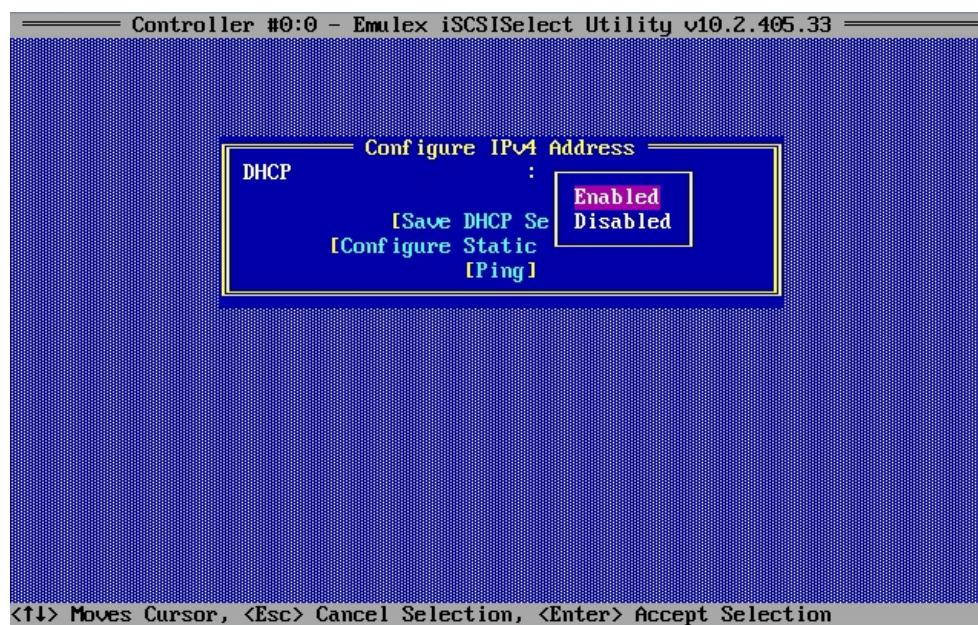


Figure 4-12



When you have set a static IP-address, you should check if a message warning the IP addresses you set is lost.

#### 4.5.2. Setting IPv4 address (Static)

In Network Configuration menu, set IP Version to IPv4, and move cursor onto [Configure IP Address], and press <Enter> key.

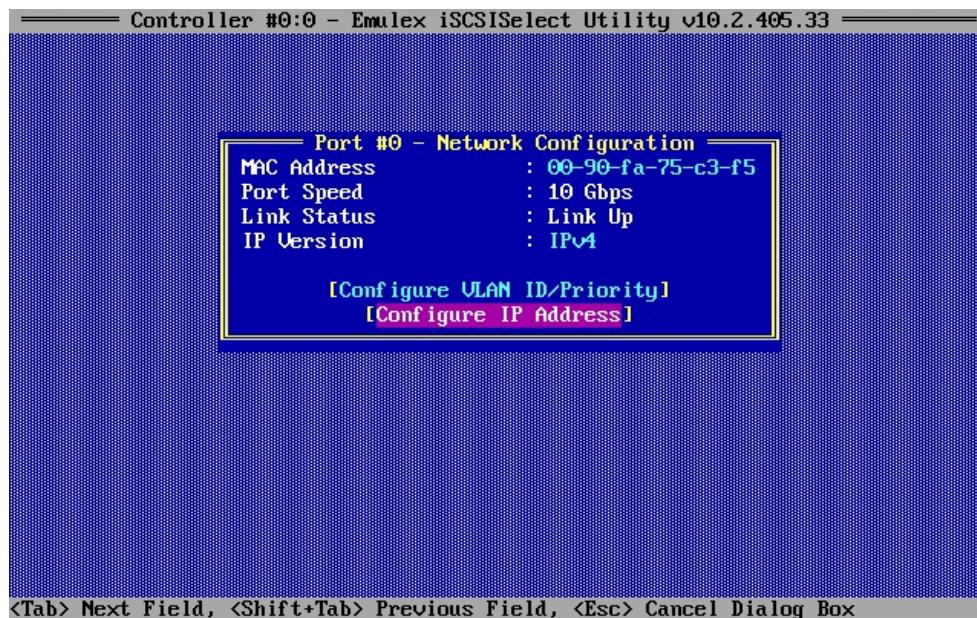


Figure 4-13

Select [Disabled] from pull-down menu at [DHCP] as shown below.

Move cursor onto [Save DHCP Setting] and press <Enter>key to save the settings. DHCP IP Address dialog box is displayed.

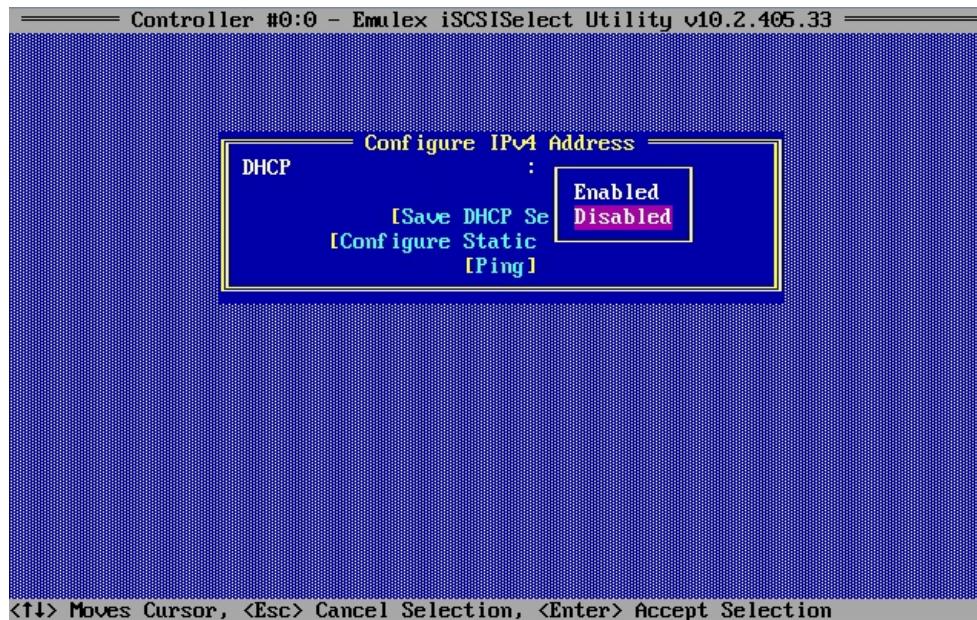


Figure 4-14

Move cursor onto [Configure Static IP Address], and press <Enter> key.

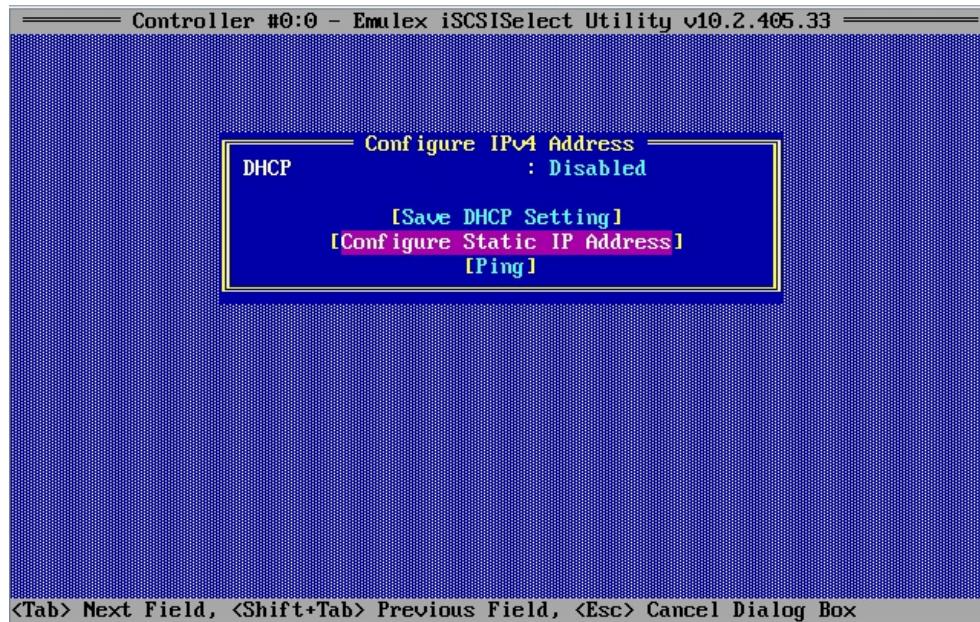


Figure 4-15

Set IP Address, Subnet Mask, and Default Gateway if necessary, and move cursor onto [Save] and press <Enter> key. If it prompts to save the changes, then press <Y> key.

Here you can return to the network configuration window with pressing <ESC> key.

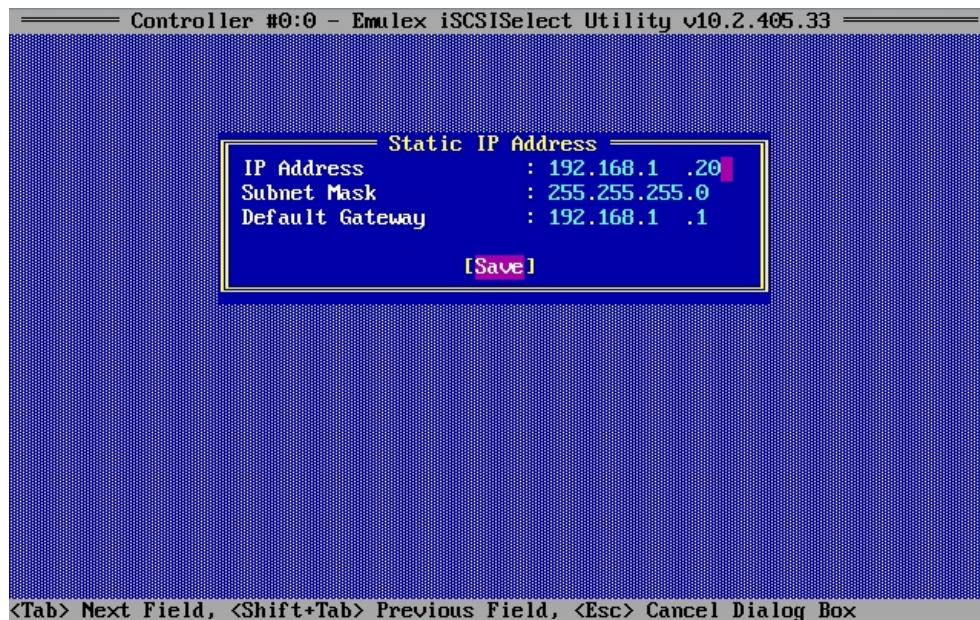


Figure 4-16

#### 4.5.3. Configuring IPv6 address (Automatic Configuration)

In Network Configuration menu, set IP Version to IPv6, and move cursor onto [Configure IP Address], and press <Enter> key.

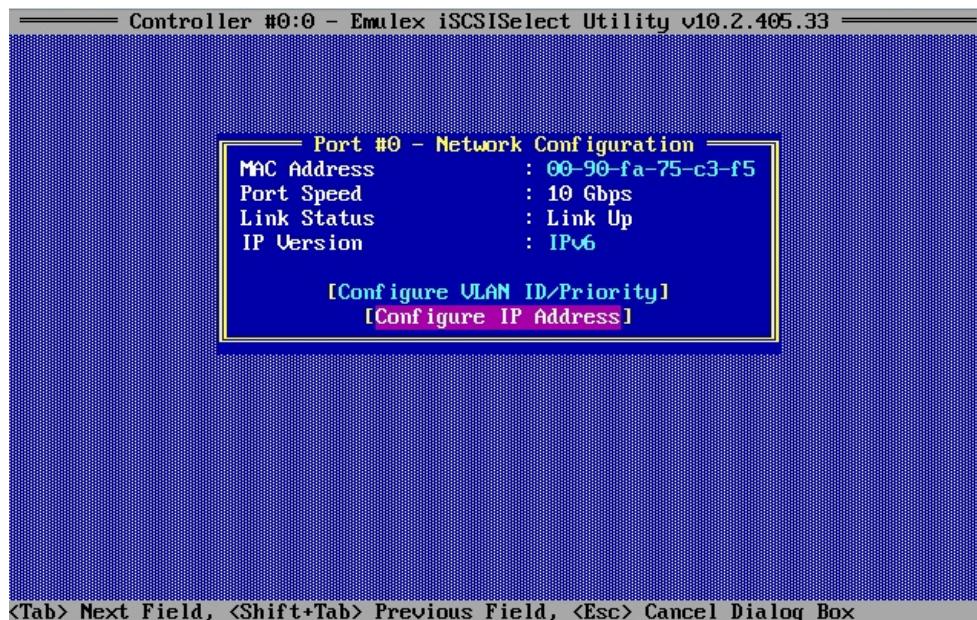


Figure 4-17

Select [Enabled] from pull-down menu at [Auto Configuration] as shown below.

Move cursor onto [Save Auto Configuration Setting] and press <Enter> key to save the settings.

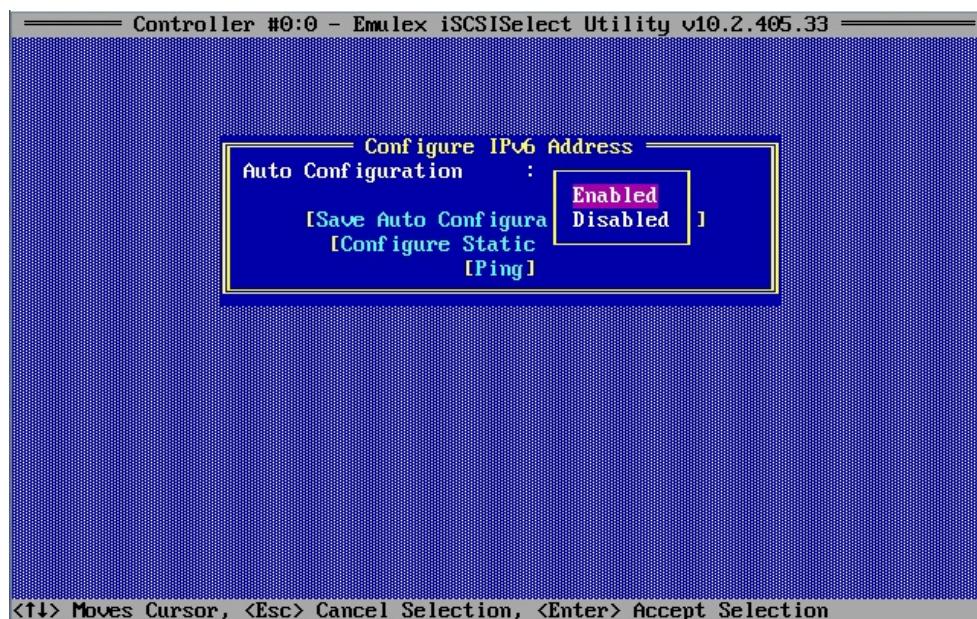


Figure 4-18

#### 4.5.4. Configuring IPv6 address (Static)

In Network Configuration menu, set IP Version to IPv6, and move cursor onto [Configure IP Address], and press <Enter> key.

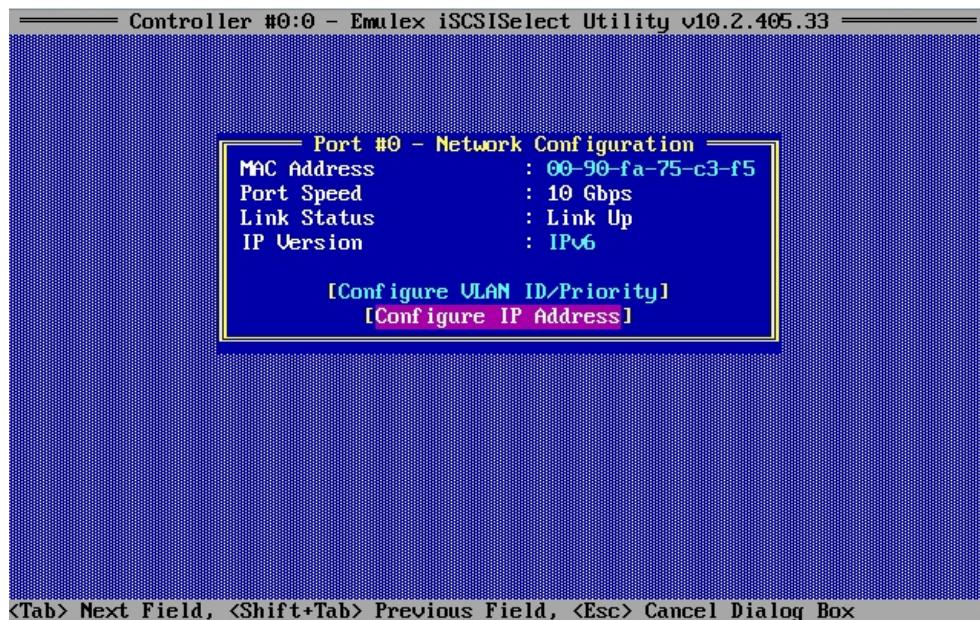


Figure 4-19

Select [Disabled] from pull-down menu at [Auto Configuration] as shown below.

Move cursor onto [Save Auto Configuration Setting] and press <Enter> key to save the settings.

Move cursor onto [Configure Static IP Address], and then press <Enter> key.

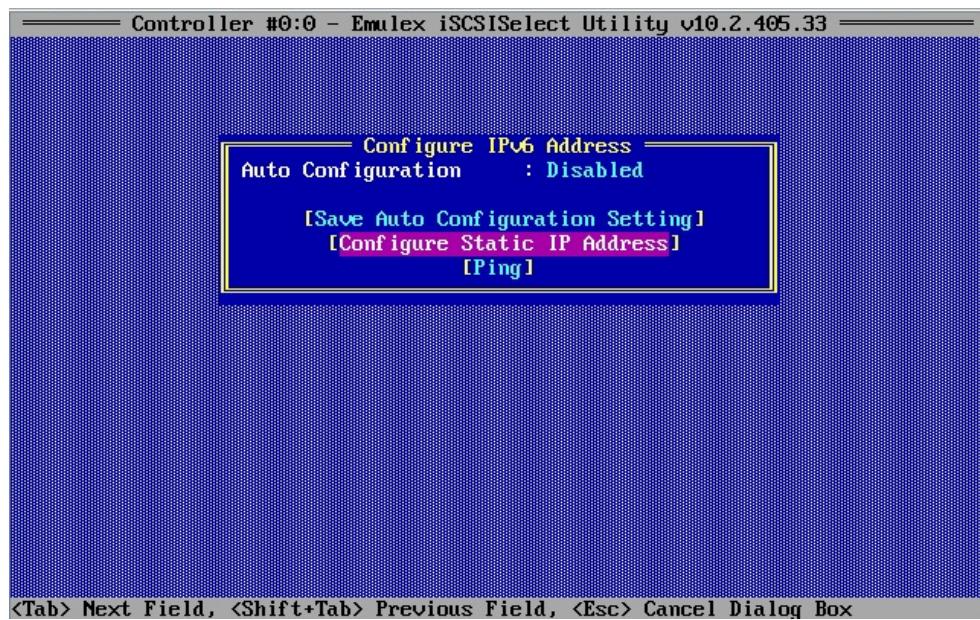


Figure 4-20

Set Link Local Address, Routable Addresses, and Default Gateway address.

Move cursor onto [Save], and press the <Enter> key. If it prompts to save the changes, then type <Y>.

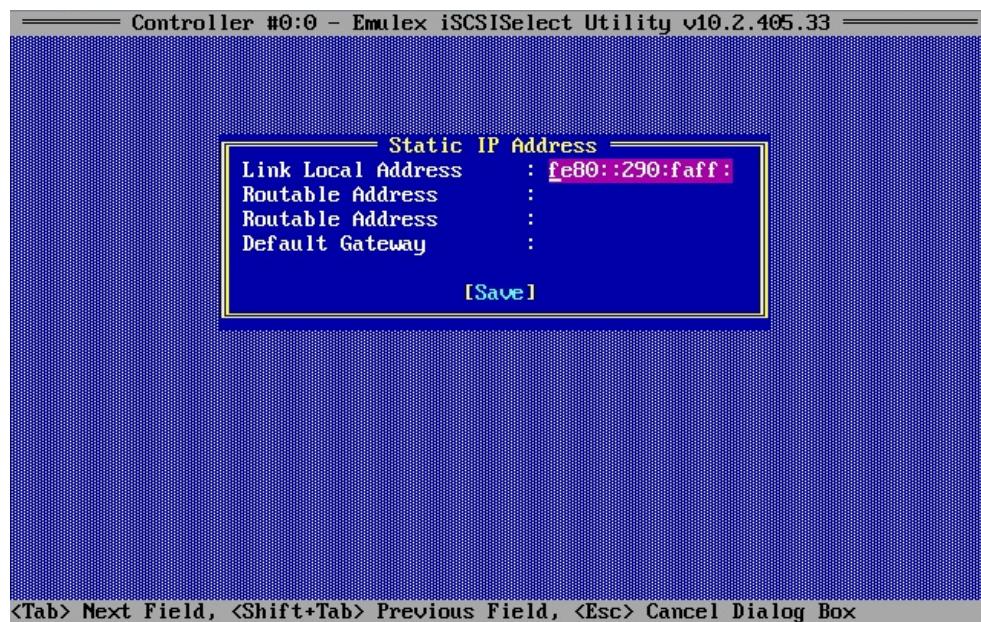


Figure 4-21

#### 4.5.5. Configuring VLAN

In Network Configuration menu, Select [Configure VLAN ID/Priority], and press <Enter> key.

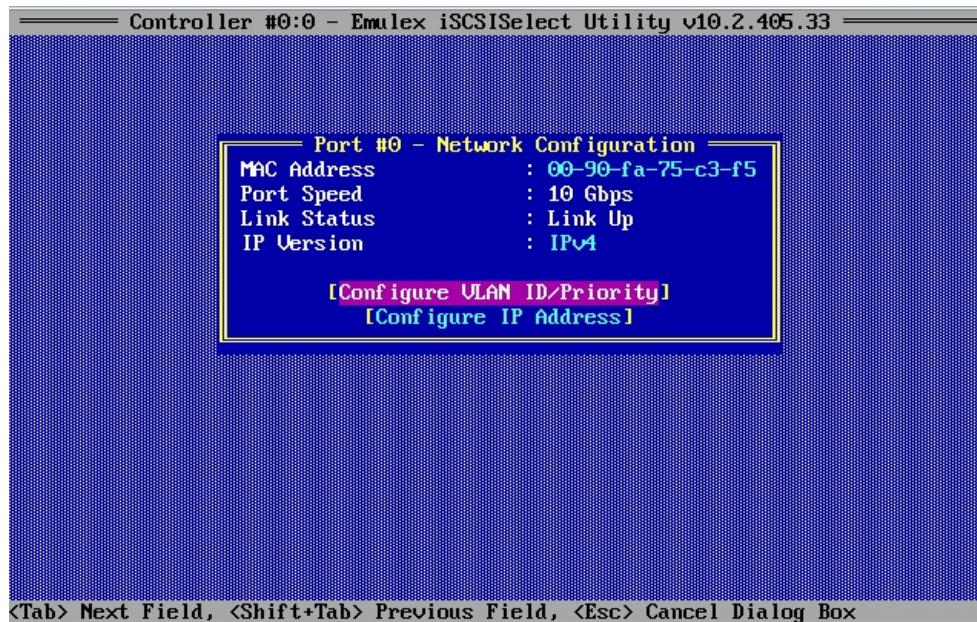


Figure 4-22

If VLAN is supported, select [Enabled] from pull-down menu at VLAN Support, set VLAN ID, and VLAN Priority if necessary. After settings, move cursor onto [Save], and press <Enter> key.

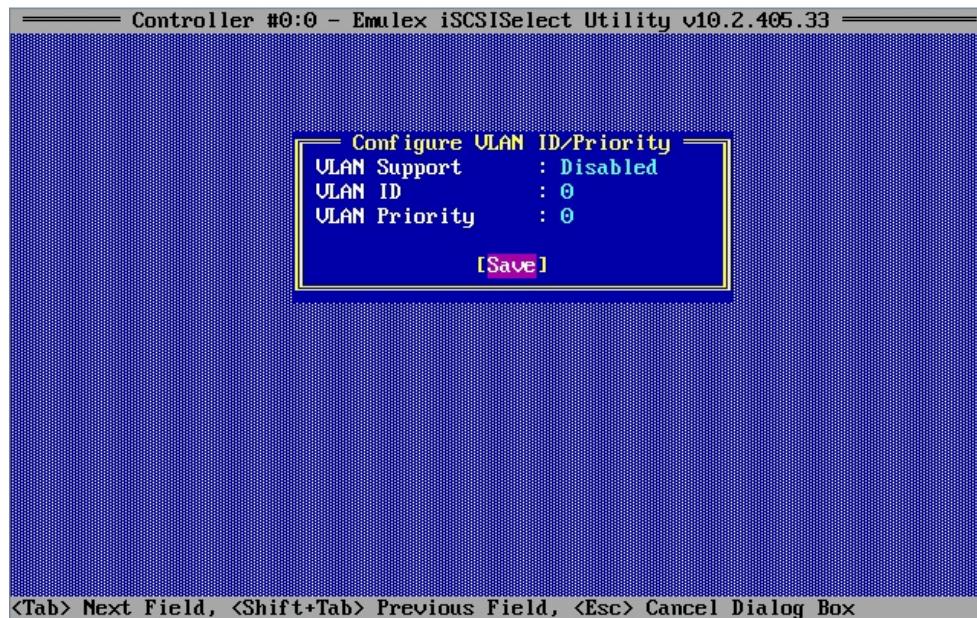


Figure 4-23

| Setting Items | Setting Values        | Settings          |
|---------------|-----------------------|-------------------|
| VLAN ID       | 0~4094                | Set VLAN ID       |
| VLAN Priority | 0(Highest Priority)~7 | Set VLAN Priority |

## 4.6. Configuring iSCSI Target

In Controller Configuration menu, move cursor onto [iSCSI Target Configuration], and press <Enter> key.

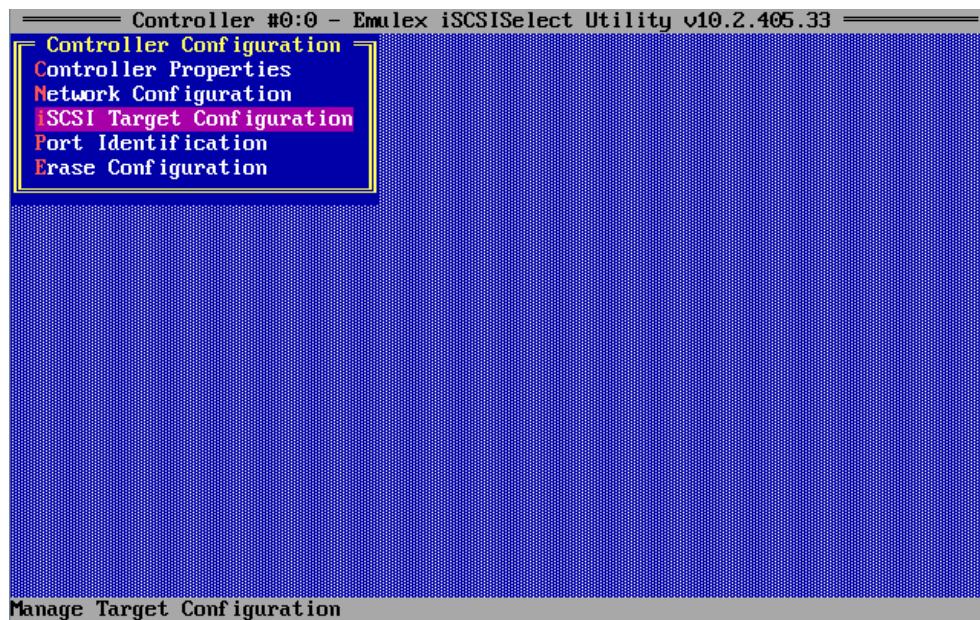


Figure 4-24

Move cursor onto [Add New iSCSI IPv4 Target] or [Add New iSCSI IPv6 Target], and press <Enter> key.

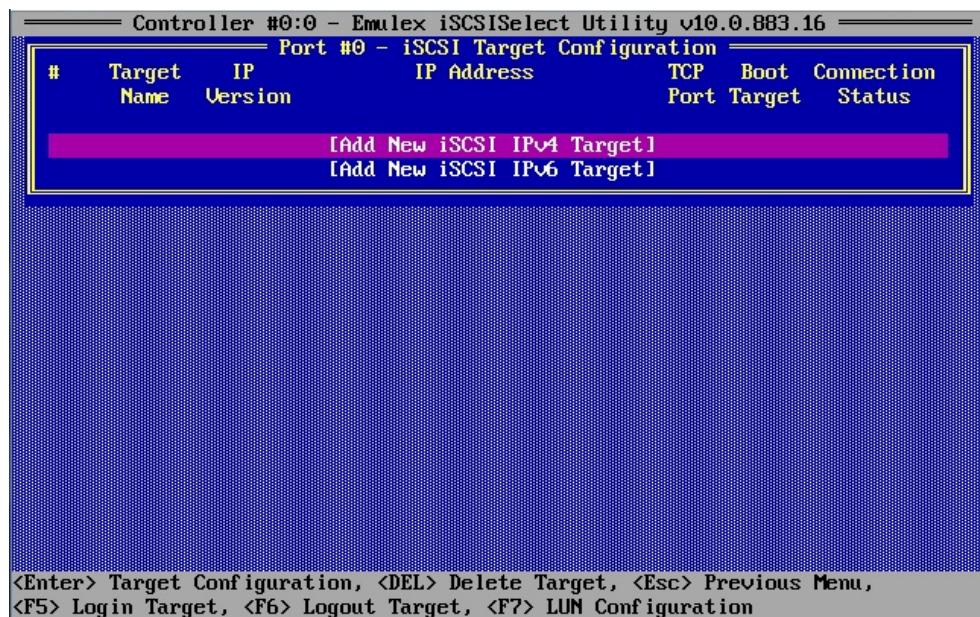


Figure 4-25

Configure iSCSI Target on the following pages.

After settings, move cursor onto [Save/Login], and then press <Enter> key.

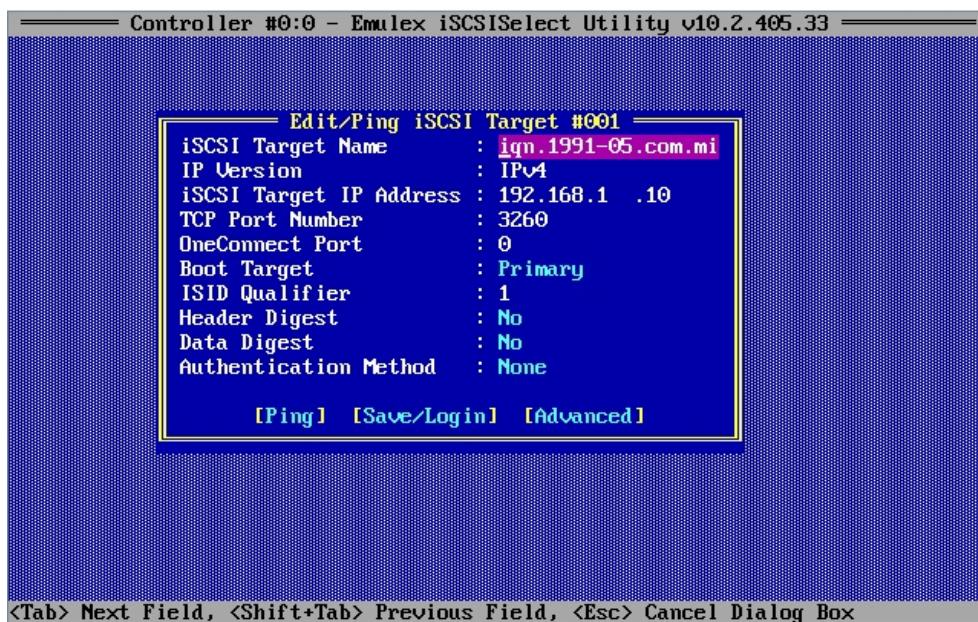


Figure 4-26

## POINT

If you select [Ping] and execute it, you can make a test of communication to the iSCSI target.

| Setting Items           | Setting Values                         | Settings  |
|-------------------------|--|---|
| iSCSI Target Name       | IQN of iSCSI target                    | Set IQN of iSCSI target.  |
| iSCSI Target IP Address | iSCSI target IP-address                | Set IP-address of iSCSI target.   |
| TCP Port Number         | 3260(default)                          | Set TCP port number.  |
| Boot Target             | Primary / Secondary / No               | Set primary path, secondary path.   |
| ISID Qualifier          | 1(default)<br>Any value of up to 65535 | If you connect dual session to target portal group, set a unique ISID value.  |
| Header Digest           | Yes / No(default)                      | The integrity of an iSCSI PDU header segment is protected by CRC32C checksum. |
| Data Digest             | Yes / No(default)                      | The integrity of an iSCSI PDU data segment is protected by CRC32C checksum.   |
| Authentication Method   | Mutual CHAP / One-Way CHAP / None      | Select authentication method.   |

## POINT

If you set blank to iSCSI Target Name and press [Save/Login], initiator detects target names that can be logged in, and you can select iSCSI Target Name from the list.

If a message that the target is discovered using SendTargets mechanism is displayed, press <Y>.

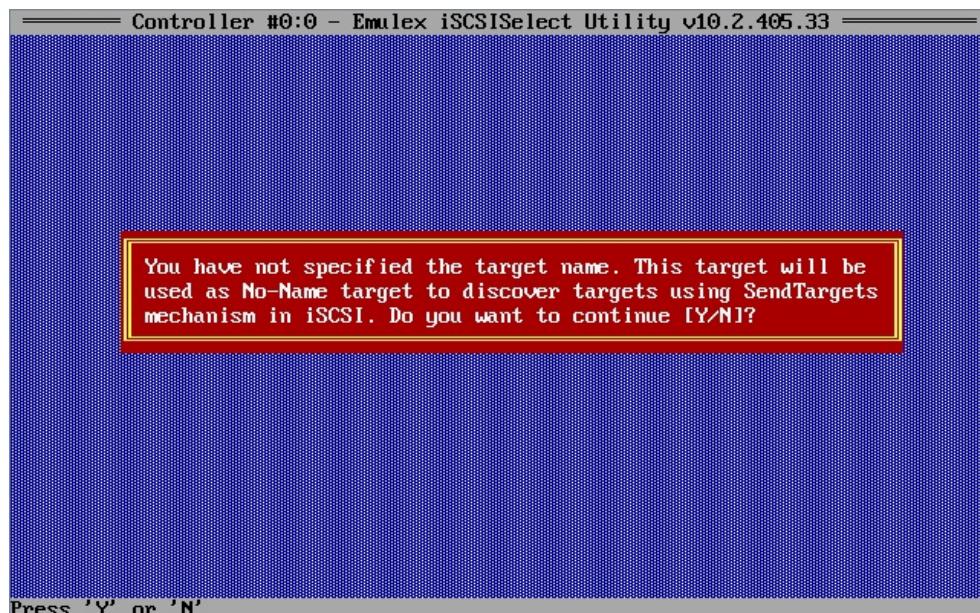


Figure 4-27

Move cursor onto a target to be added, and press <F3> key, then, set [Yes] to [Add Target].

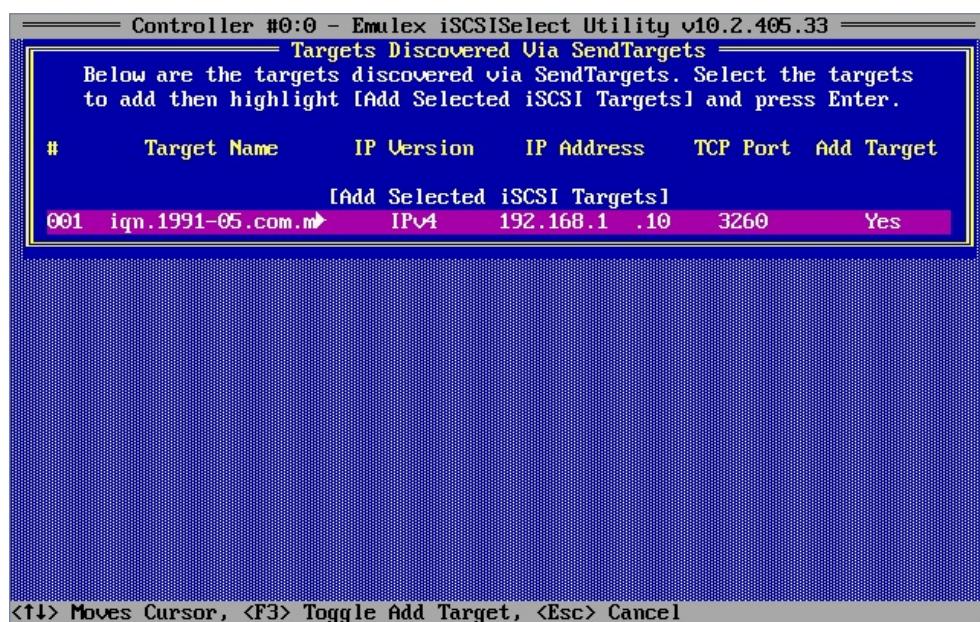


Figure 4-28

Move cursor onto [Add Select iSCSI Targets], and press <Enter> key.

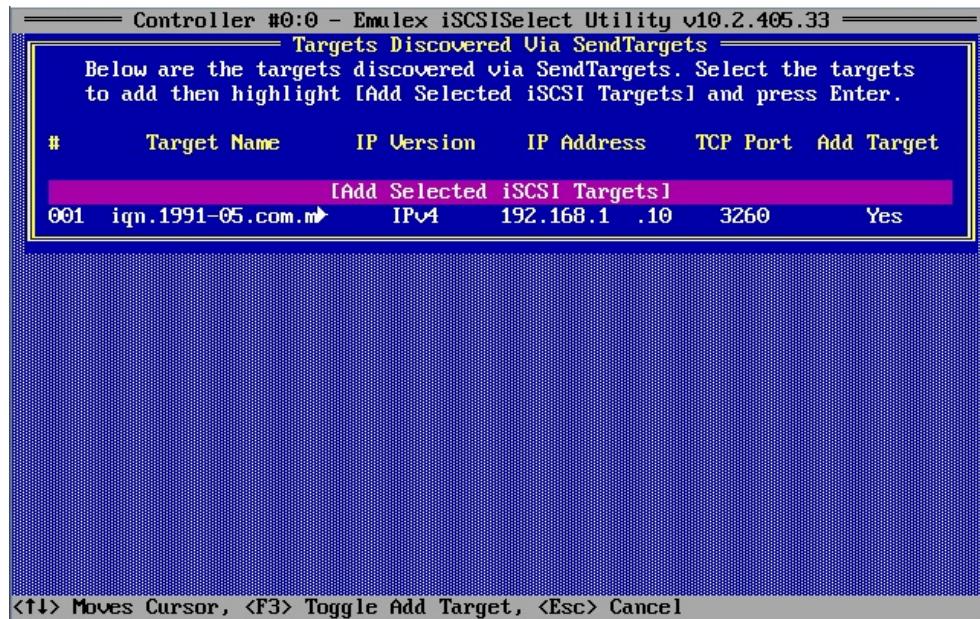


Figure 4-29

## 4.7. Identification of iSCSI Target

In iSCSI Target Configuration menu, you can make management of iSCSI target by pressing function keys. More information of Function keys are displayed at the bottom of the screen.

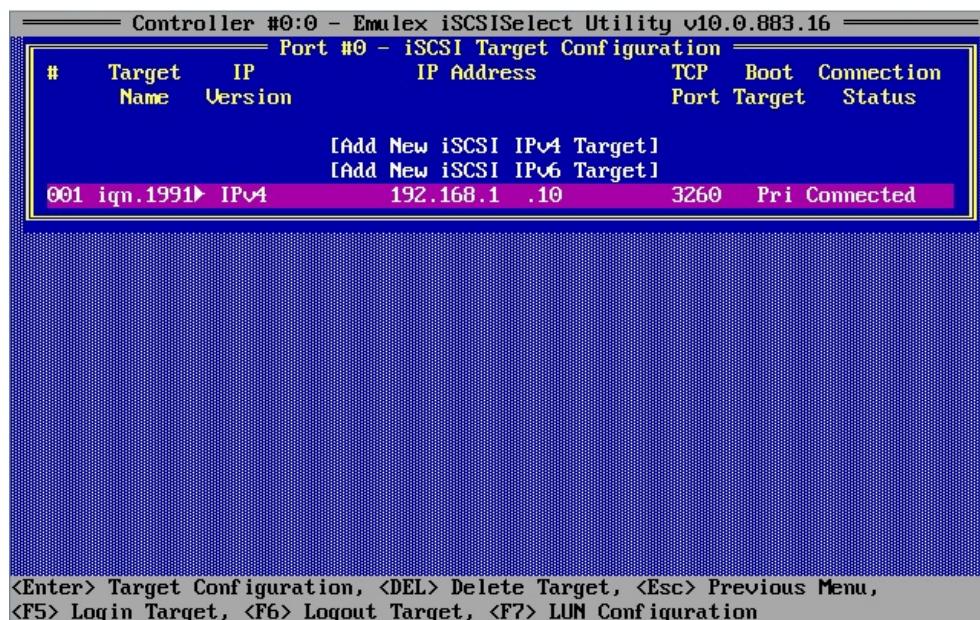


Figure 4-30



If you are able to log in to the target, Connection Status is connected.

## 4.8. Port Identification

In Controller Configuration menu, select [Port Identification] and press <Enter> key. The LEDs on the CNA begin blinking.

In Port Identification screen, press <Done>, then the LEDs will return to normal operation.

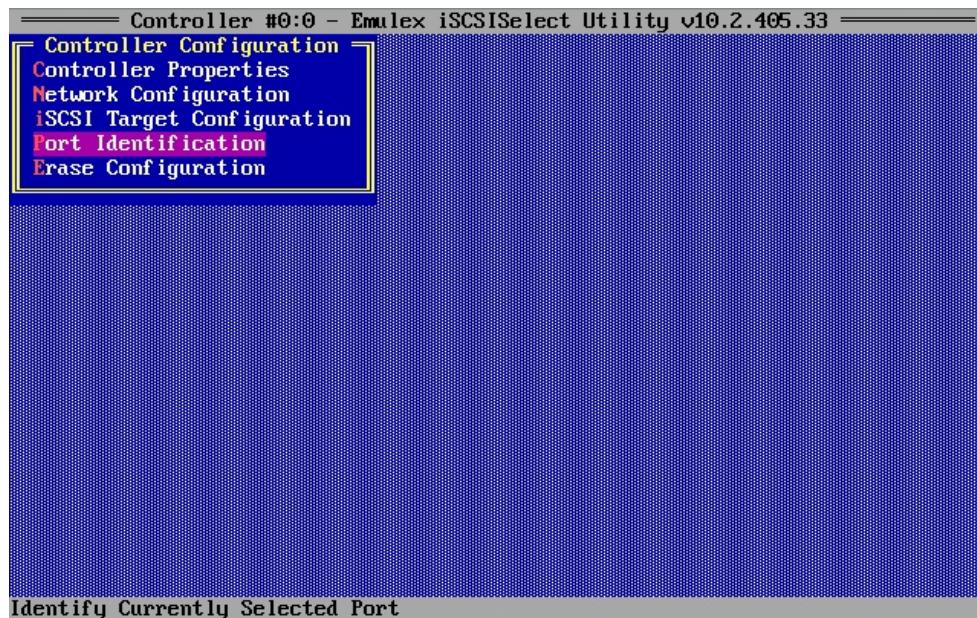


Figure 4-31

## 4.9. Erase Configuration

In Controller Configuration menu, select [Erase Configuration], and press <Enter> key.

All settings of the port which is selected will be erased.

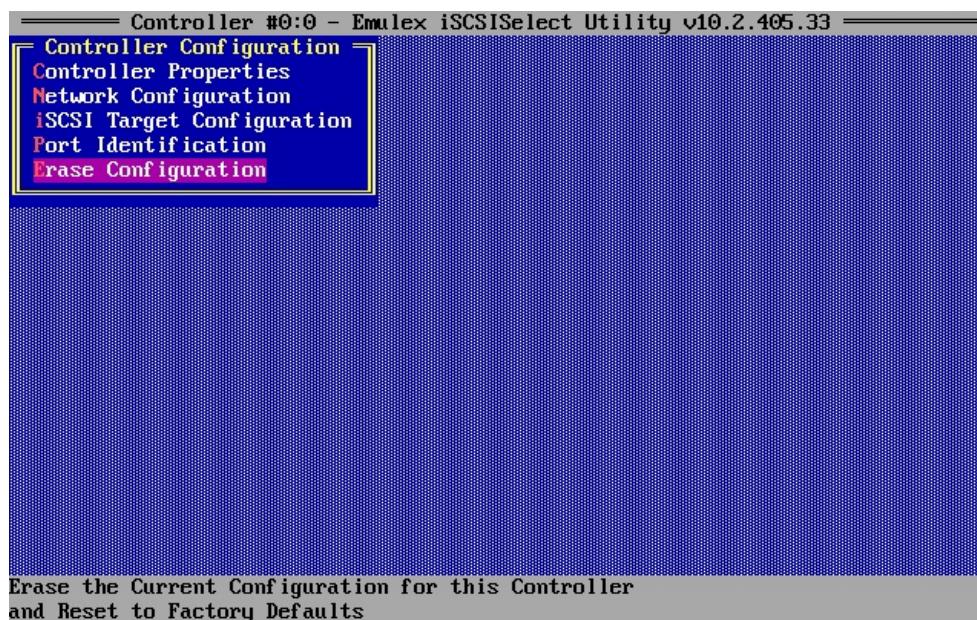


Figure 4-32

## 5. OS Installation

If the settings of iSCSI Boot that is described in previous chapters is properly done, during the server starts up, the iSCSI initiator logins to iSCSI Boot target, and displays information of target LUN in the BIOS messages.

```
Emulex 40/20/10Gb iSCSI Initiator BIOS v10.2.405.33
(c) 2005-2015 Emulex Corporation. All Rights Reserved.
(c) 1998-2005 Adaptec, Inc. All Rights Reserved.

◀◀ Press <Ctrl><S> for iSCSISelect(TM) Utility ▶▶

Controller#0 Port#0 Base 0xFA040000 at Bus:02 Dev:00 Fun:02
Controller#0 Port#1 Base 0xFA000000 at Bus:02 Dev:00 Fun:03

Initiator iSCSI Name: iqn.2014-10.com.fujitsu:00-90-fa-75-c3-f5
Controller #0:0 Initiator IPV4 Address: 192.168.1.20
Controller #0:1 Initiator IPV4 Address: 0.0.0.0

Drive #0 MSFT VirtualHD 0 61440 MB
Device Geometry 3FF 3F FF
BIOS Installed Successfully!
```

Figure 5-1

Using SVIM (SeverView Install Manager), install OS of purpose to your server.

# 6. Constructing iSCSI Boot Environment

## 6.1. Configuring and Checking server BIOS

If Option ROM Scan Configuration corresponding to the CNA (expansion BIOS) is disabled, enable it.

See documentations of PRIMEQUEST 2000 Series, identify the PCI-Express slot to which the CNA is mounted, and set the Option ROM Scan Configuration to be enabled(Enabled).

## 6.2. Configuring PCI Option ROM Priority

Configure operating mode to the UEFI mode (EFI Compatible ROM).

1. Open Boot Manager front page.
2. Open Device Manager from menu of Boot Manager front page.
3. Open PCI Subsystem Configuration from menu of Device Manager.
4. Select [EFI Compatible ROM] from PCI ROM Priority in menu of PCI Subsystem Configuration.
5. Select [Commit Changes and Exit], press <Enter> key to save the settings.

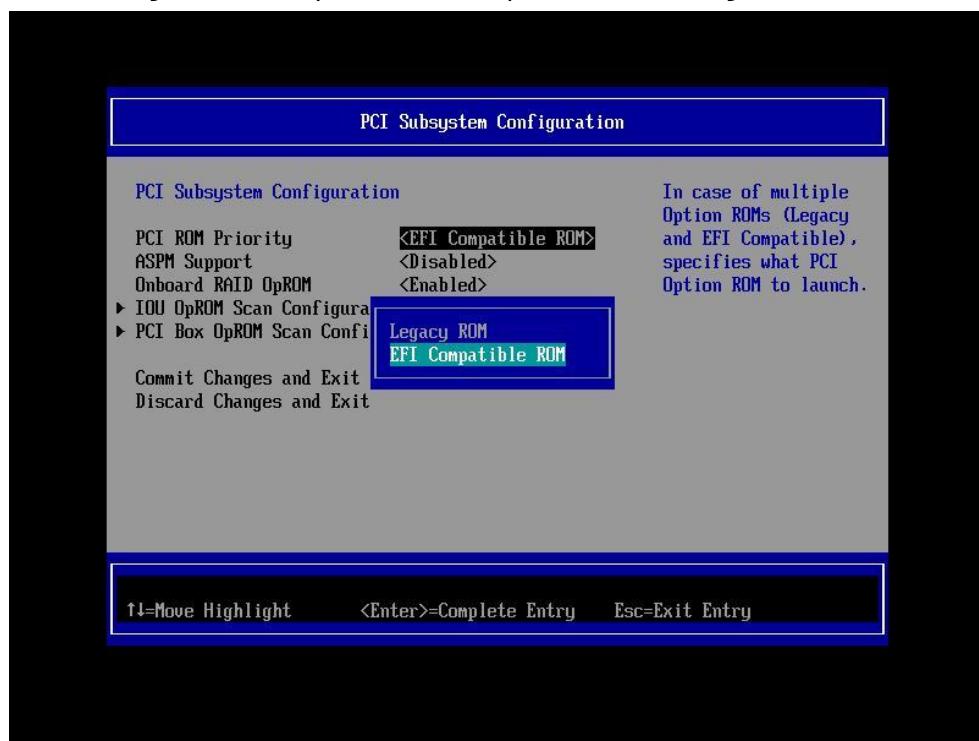


Figure 6-1



For more information about operation of UEFI menu, see manual "FUJITSU Server PRIMEQUEST 2000 Series Tool Reference".

The settings that have been set in this menu would become effective after the server reset.

# 7. Configuring iSCSI Boot with iSCSI Utility (UEFI mode)

Configure iSCSI Boot with iSCSI utility.

## 7.1. Configuring iSCSI Boot in UEFI

To configure iSCSI Boot in UEFI, start iSCSI Utility of the card in Device Manager menu.

1. Open Device Manager from Boot Manager front page menu.
2. Move cursor onto [Emulex iSCSI Utility], and press <Enter> key.



Figure 7-1

## 7.2. Setting iSCSI Initiator Name

Move cursor onto [iSCSI Initiator Name], and press <Enter> key.

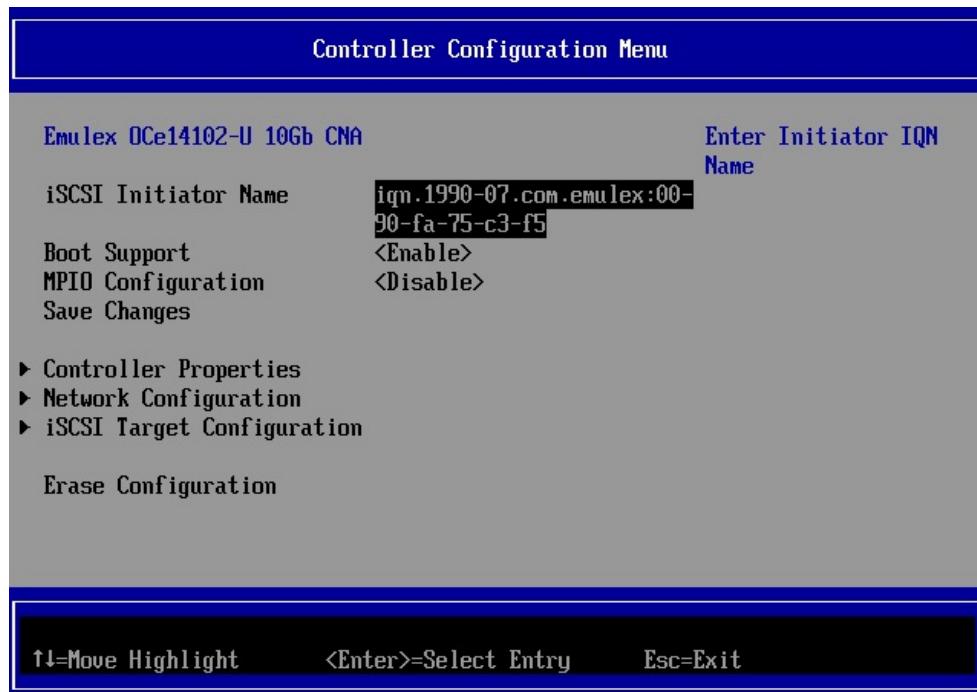


Figure 7-2

Set iSCSI Initiator Name, and press <Enter> key.



Figure 7-3



"iqn.1990-07.com.emulex: xx-xx-xx-xx-xx-xx" is set to as iSCSI Initiator Name by default.  
Modify it to appropriate name.

## 7.3. Configuring Controller Configuration

In Controller Configuration menu, Set <Enable> or <Disable> to Boot Support and MPIO Configuration. After settings, move cursor onto [Save Changes], and press <Enter> key.

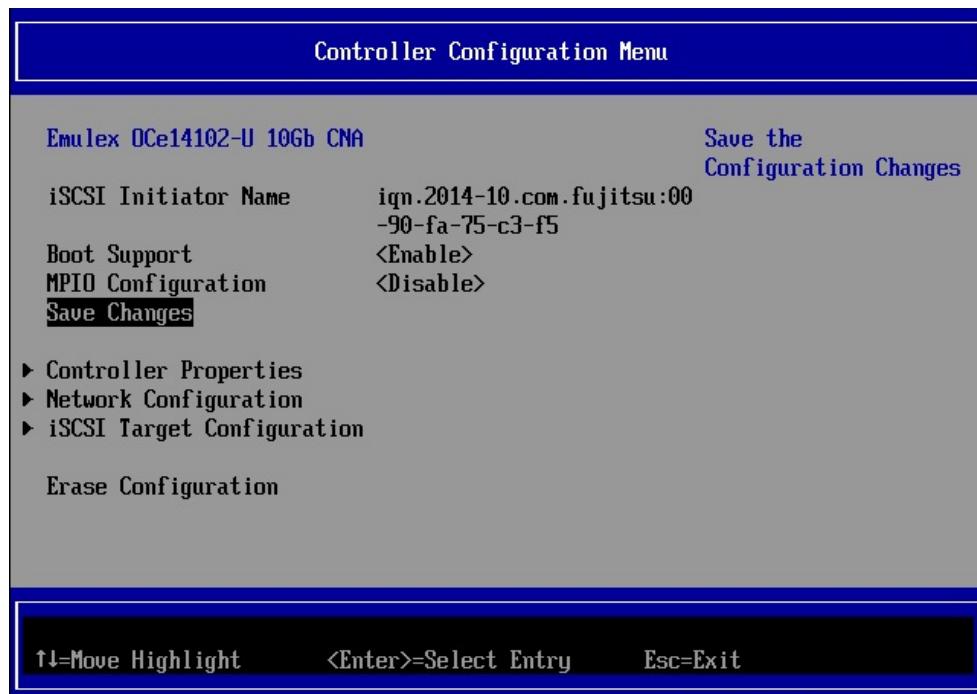


Figure 7-4

| Setting Items      | Settings   |
|--------------------|--|
| Boot Support       | If this setting is "Enabled", you can boot from the specified port.                                    |
| MPIO Configuration | If this setting is "Enable", it allows the initiator to log into multiple sessions to the same target. |

## 7.4. Viewing and Setting Controller Properties

In Controller Configuration Menu, move cursor onto [Controller Properties], and press <Enter> key.

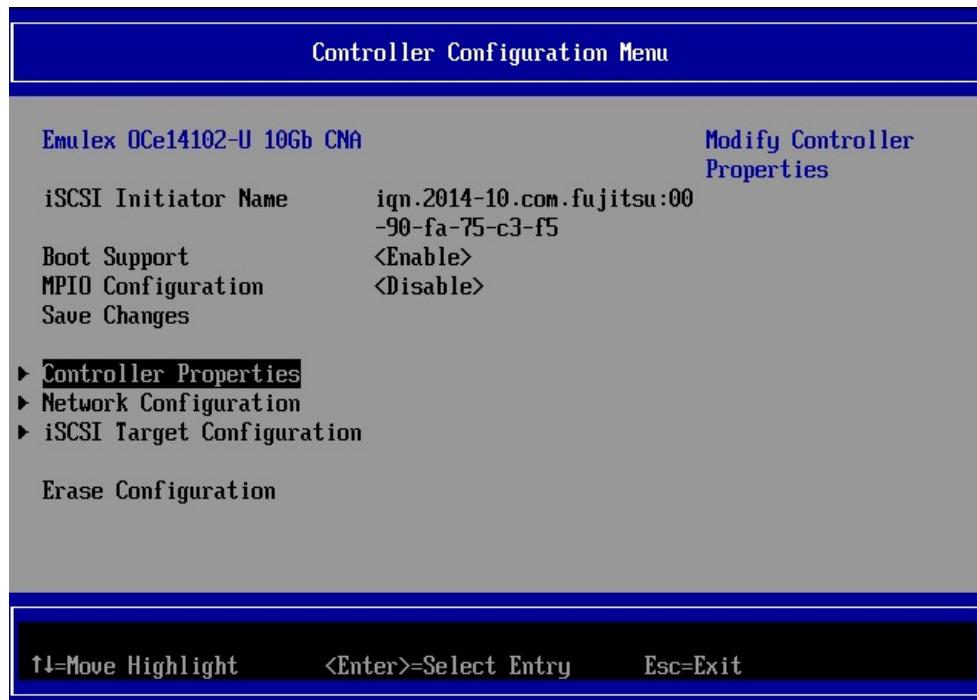


Figure 7-5

Set <Enable> or <Disable> to Discover Boot Target via DHCP. After settings, move cursor onto [Save Changes], and press <Enter> key.

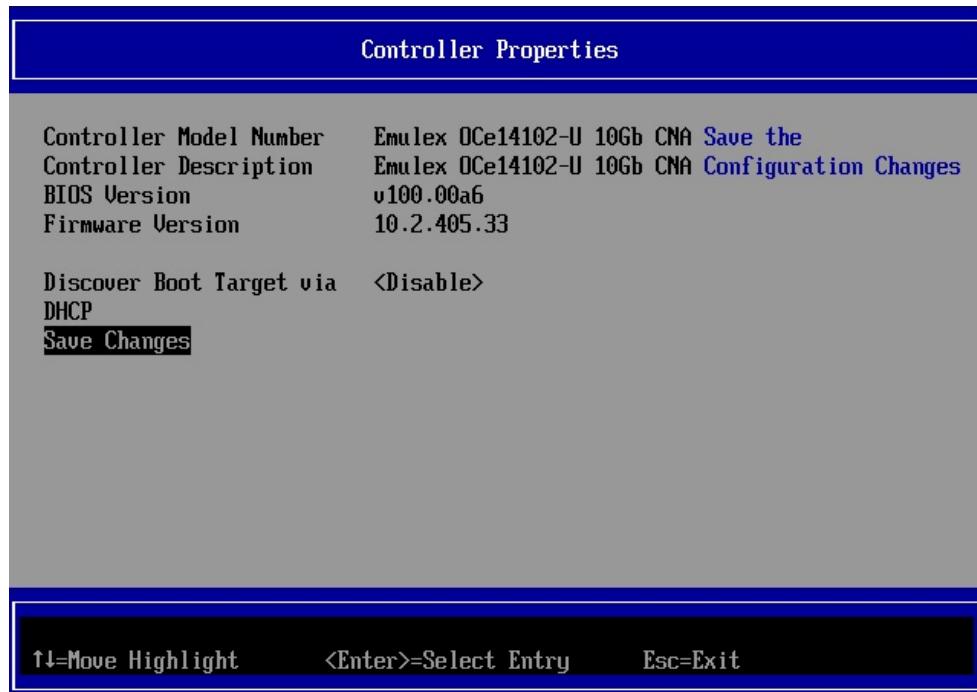


Figure 7-6

| Setting Items                 | Settings  |
|-------------------------------|---|
| Discover Boot Target via DHCP | If this setting is "Enable", Boot Target Discovery using DHCP is enabled. |

## 7.5. Configuring Network Configuration

In Controller Configuration Menu, move cursor onto [Network Configuration], and press <Enter> key.

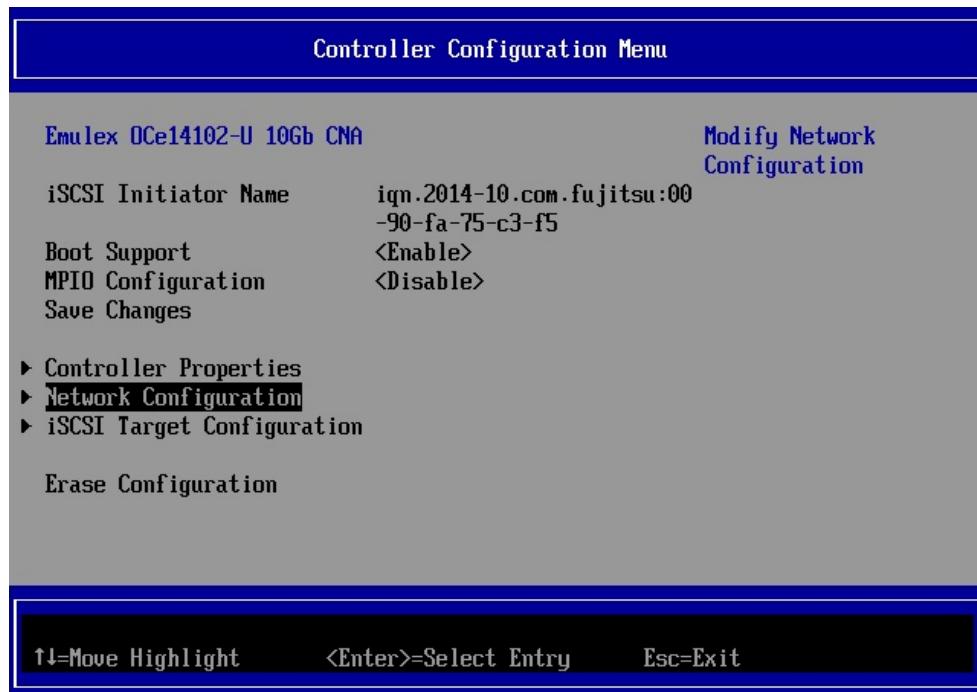


Figure 7-7

Select [IPv4] or [IPv6] or [DUAL MODE] from pull-down menu of [IP Version].

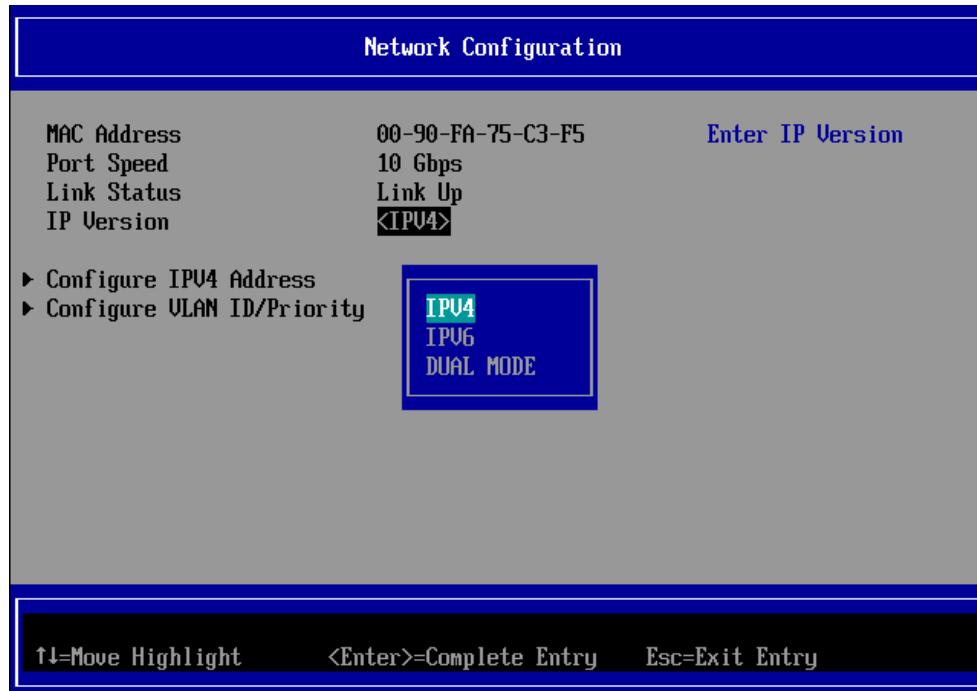


Figure 7-8

### 7.5.1. Configuring IPv4 Address (DHCP)

In Network Configuration menu, set <IPV4> or <DUAL MODE> to [IP Version], move cursor onto [Configure IPV4 Address], and press <Enter> key.

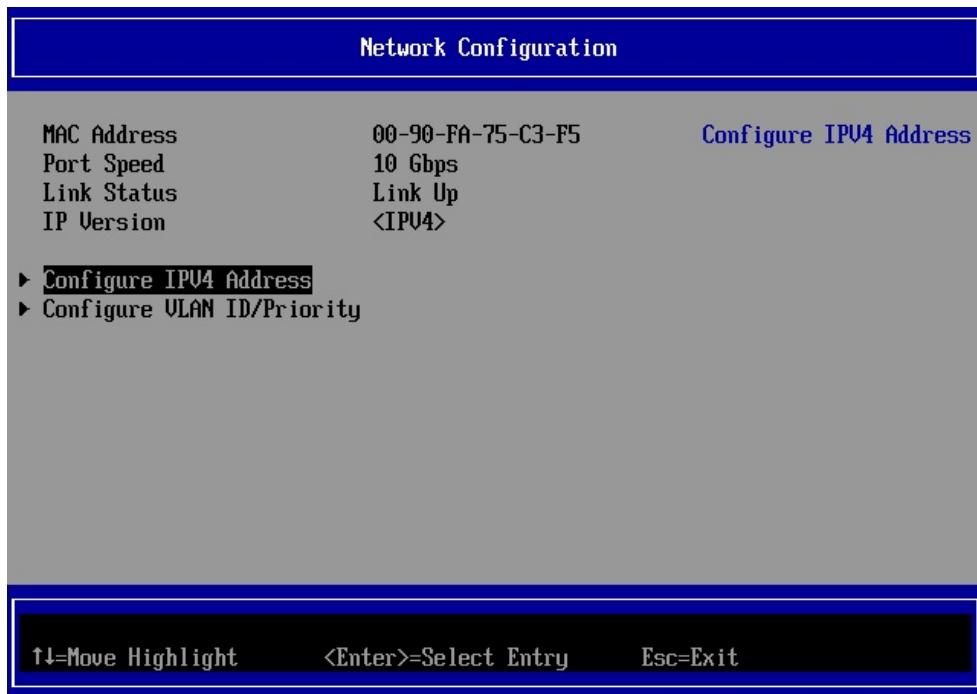


Figure 7-9

Select <Enable> from pull-down menu of [Initiator IP via DHCP].

Move cursor onto [Save DHCP Settings], and press <Enter> key to save the settings.

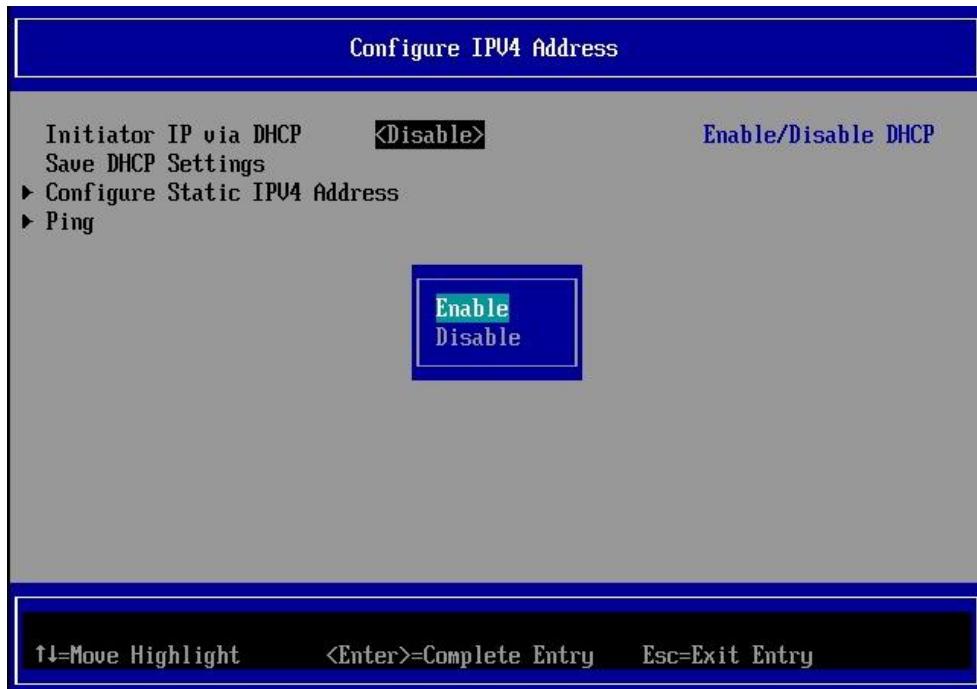


Figure 7-10



If you have set a static IP-address, a message warns that the static IP-address will be lost is displayed.

### 7.5.2. Configuring IPv4 Address (Static)

In Network Configuration menu, set <IPV4> or <DUAL MODE> to [IP Version], move cursor onto [Configure IPV4 Address], and press <Enter> key.

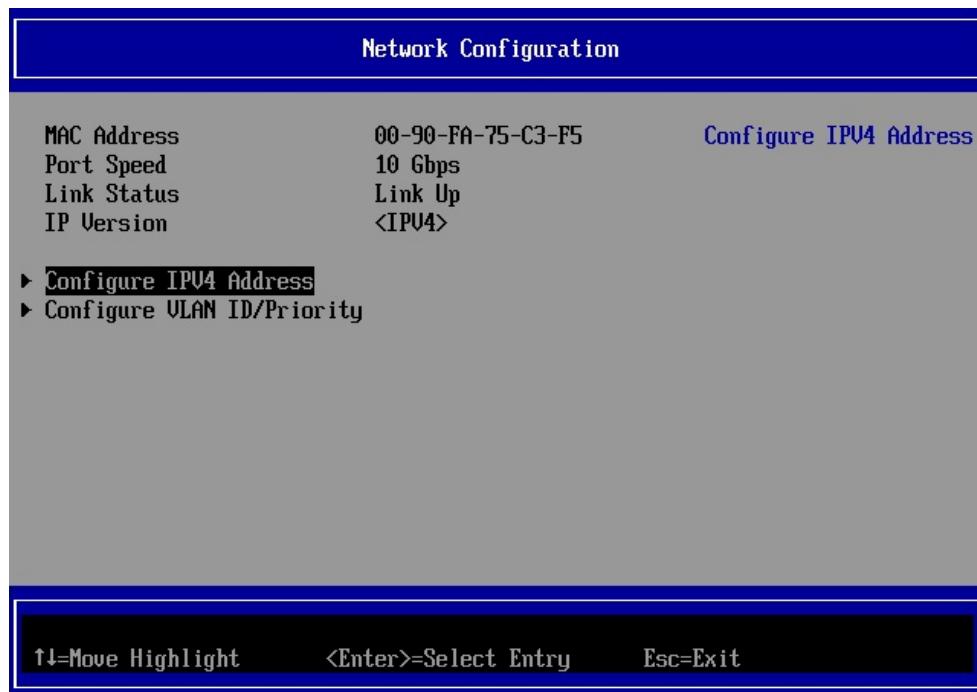


Figure 7-11

Select <Disable> from pull-down menu of [Initiator IP via DHCP].

Move cursor onto [Save DHCP Settings], and press <Enter> key to save the settings.

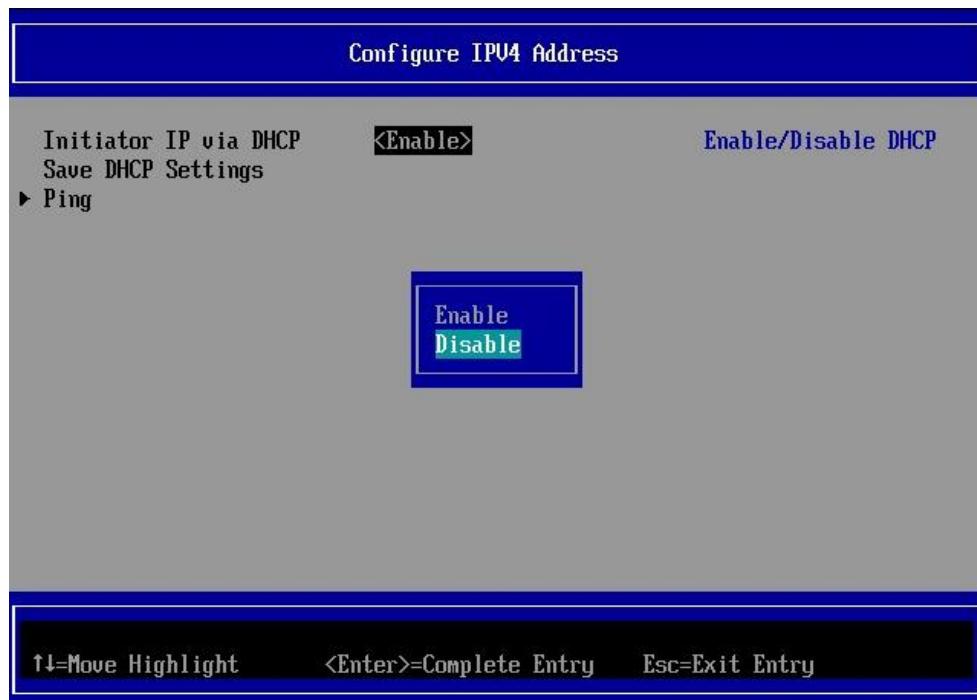


Figure 7-12

Move cursor onto [Configure Static IPV4 Address], and press <Enter> key.

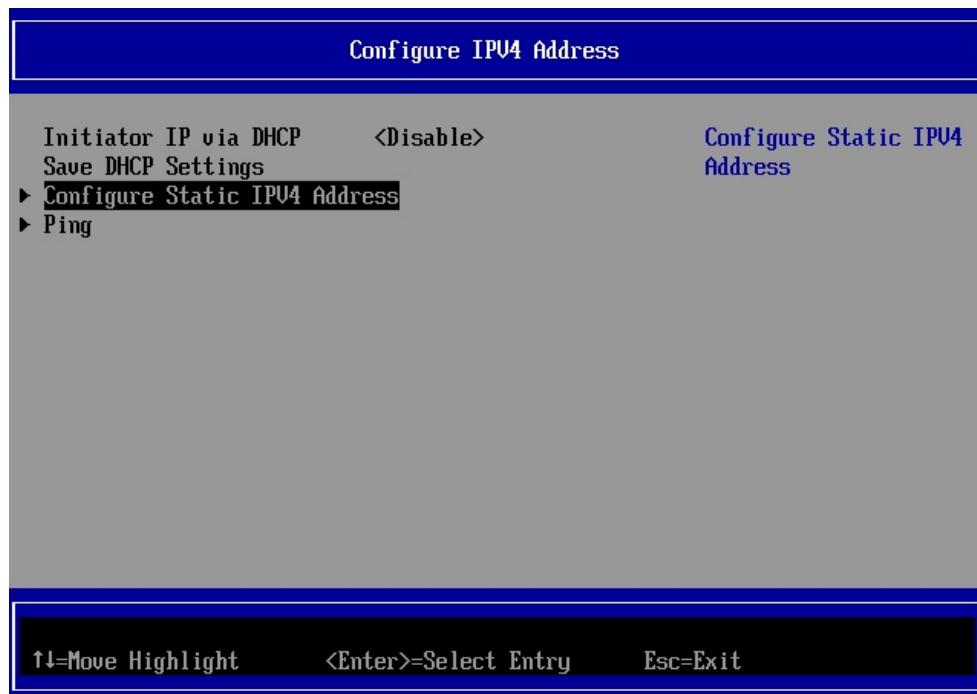


Figure 7-13

Set IP Address, Subnet Mask, and Default Gateway if necessary, and move cursor onto [Save Changes] and press <Enter> key.

Here you can return to the network configuration window with pressing <ESC> key.

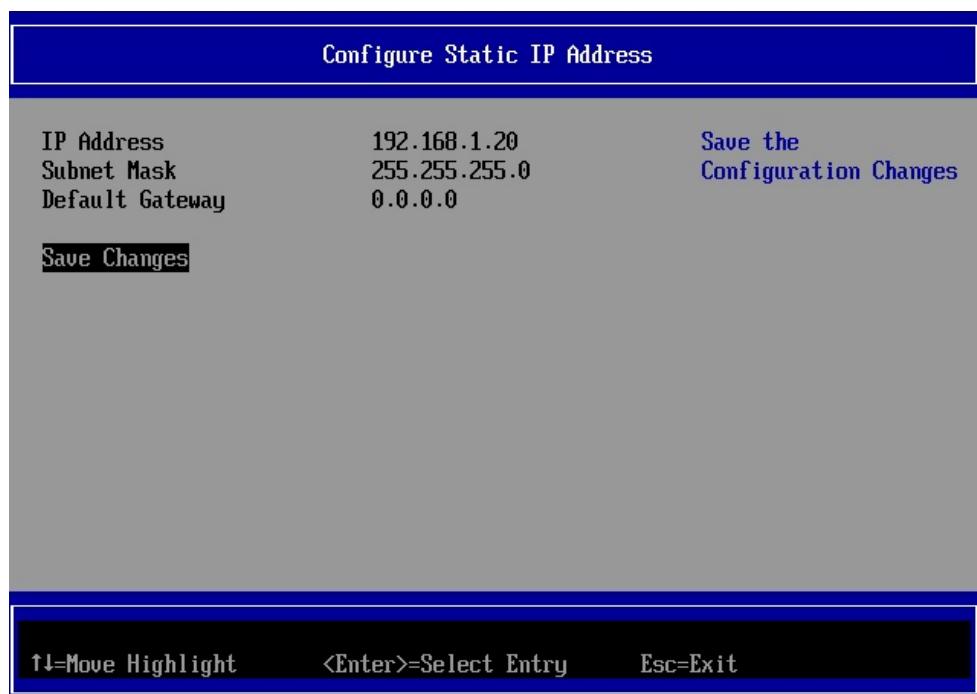


Figure 7-14

### 7.5.3. Configuring IPv6 Address (Auto Configuration)

In Network Configuration menu, set <IPV6> or <DUAL MODE> to [IP Version], move cursor onto [Configure IPV6 Address], and press <Enter> key.

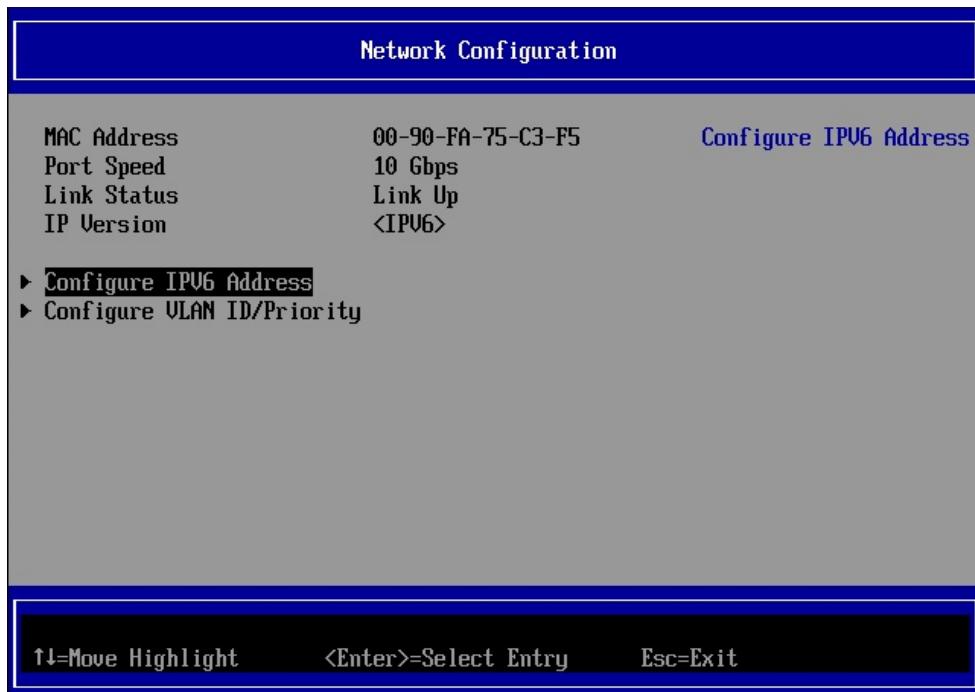


Figure 7-15

Select [Enable] from pull-down menu of [AutoConfiguration]. And move cursor onto [Save AutoConfiguration], and press <Enter> key.

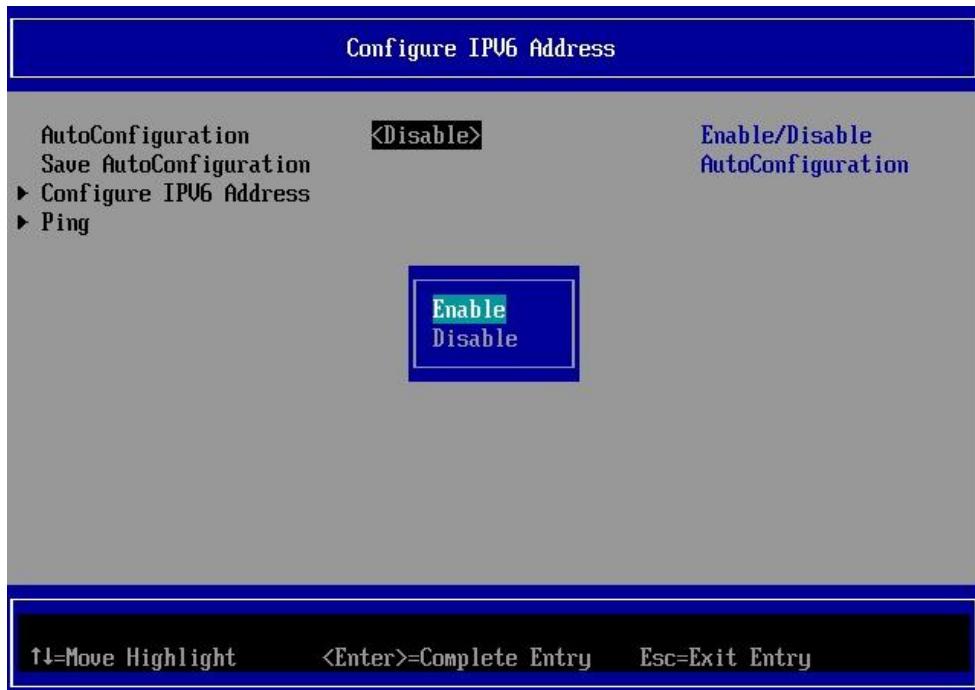


Figure 7-16

#### 7.5.4. Configuring IPv6 Address (Static)

In Network Configuration menu, set <IPV6> or <DUAL MODE> to [IP Version], move cursor onto [Configure IPV6 Address], and press <Enter> key.

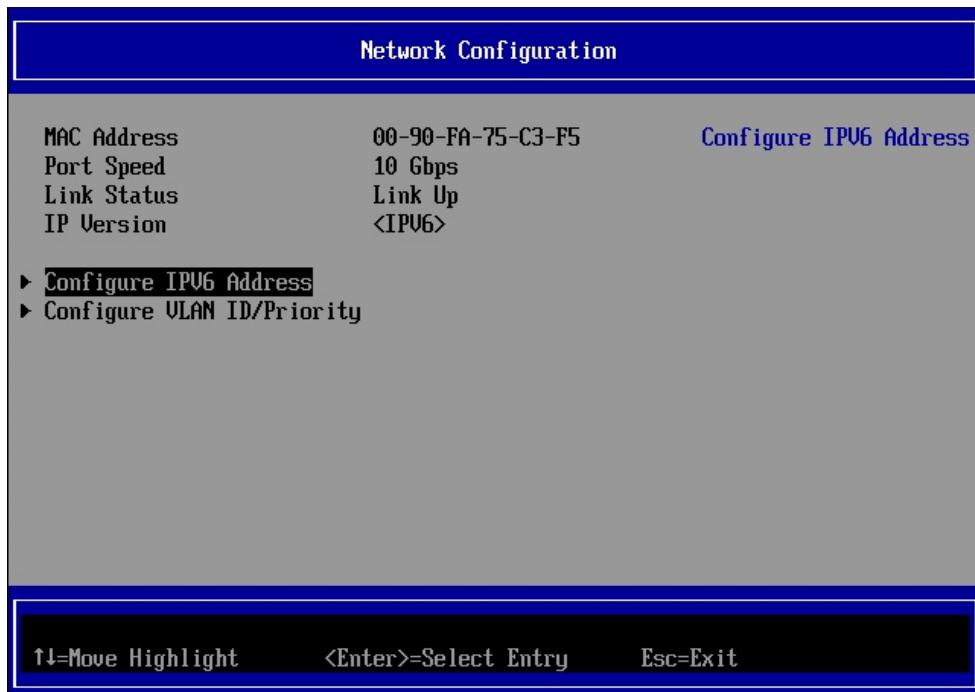


Figure 7-17

Select <Disable> from pull-down menu of [AutoConfiguration]. Move cursor onto [Save AutoConfiguration], and press <Enter> key.

Move cursor onto [Configure IPV6 Address], and press <Enter> key.



Figure 7-18

Set Link Local Address, two Routable Addresses, and Default Gateway Address.

Move cursor onto [Save Changes], and press the <Enter> key.

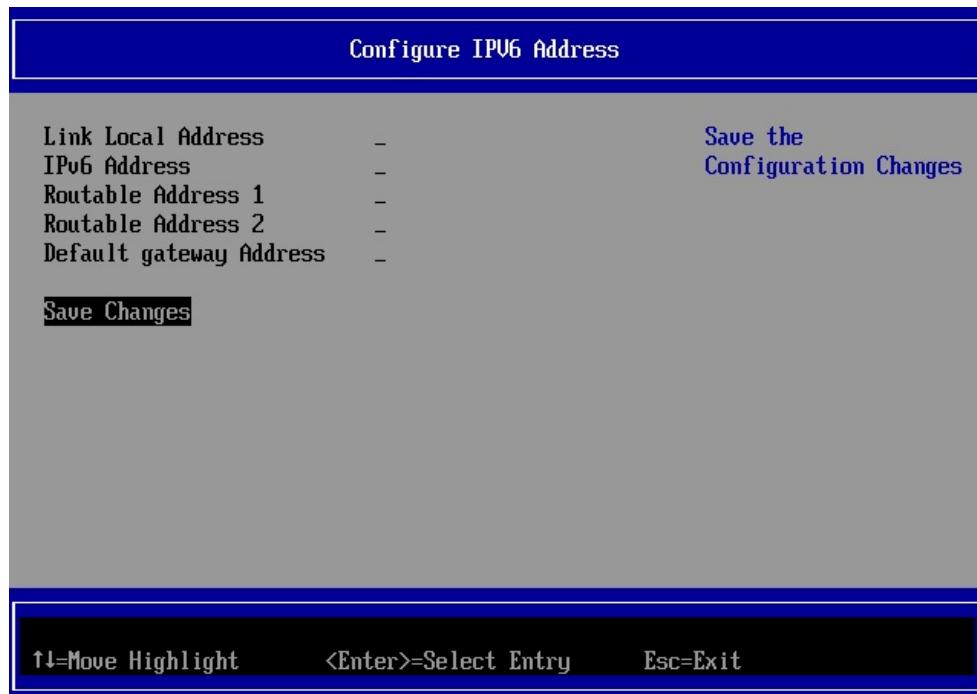


Figure 7-19

### 7.5.5. Configuring VLAN

In Network Configuration menu, Select [Configure VLAN ID/Priority], and press <Enter> key.

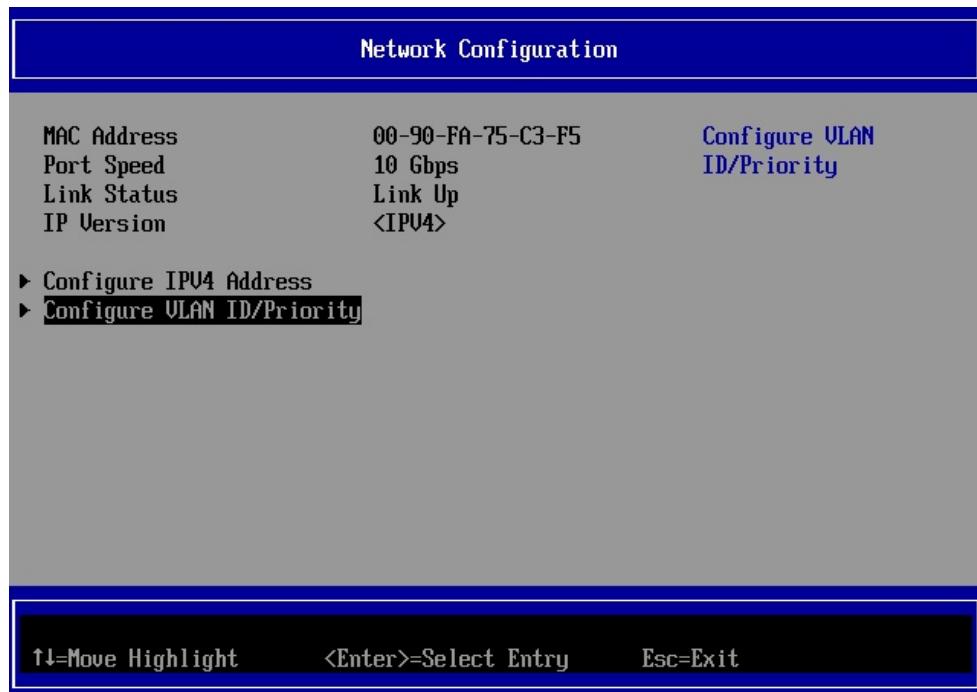


Figure 7-20

If VLAN is supported, select [Enabled] from pull-down menu at VLAN Support, set VLAN ID, and VLAN Priority if necessary. After settings, move cursor onto [Save Changes], and press <Enter> key.



Figure 7-21

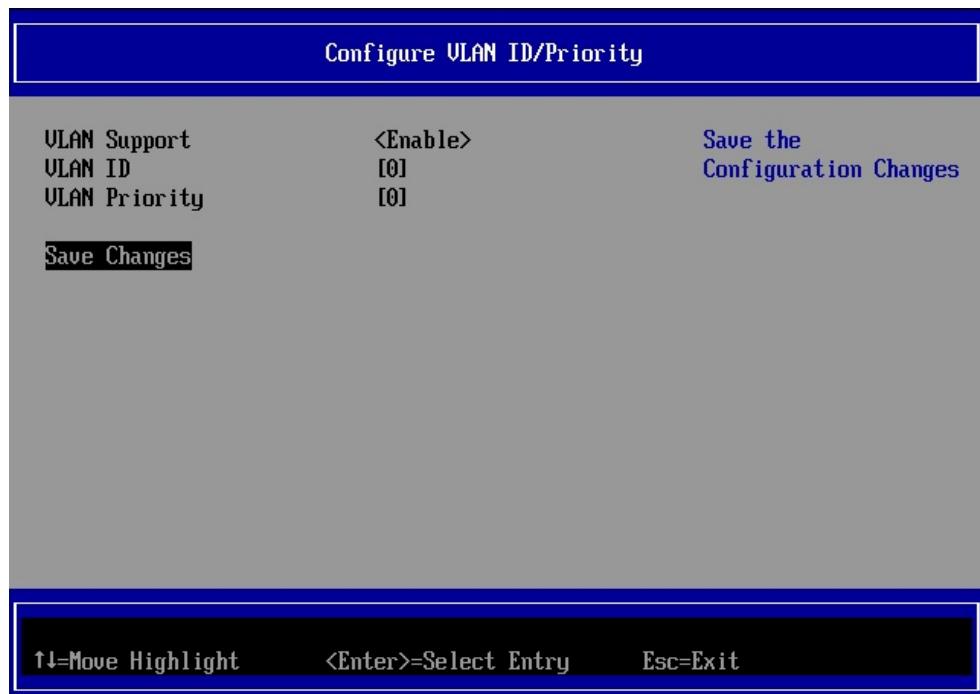


Figure 7-22

| Setting Items | Setting Values        | Settings          |
|---------------|-----------------------|-------------------|
| VLAN ID       | 0~4094                | Set VLAN ID       |
| VLAN Priority | 0(Highest Priority)~7 | Set VLAN Priority |

## 7.6. Configuring iSCSI Target

In Controller Configuration Menu, move cursor onto [iSCSI Target Configuration], and press <Enter> key.

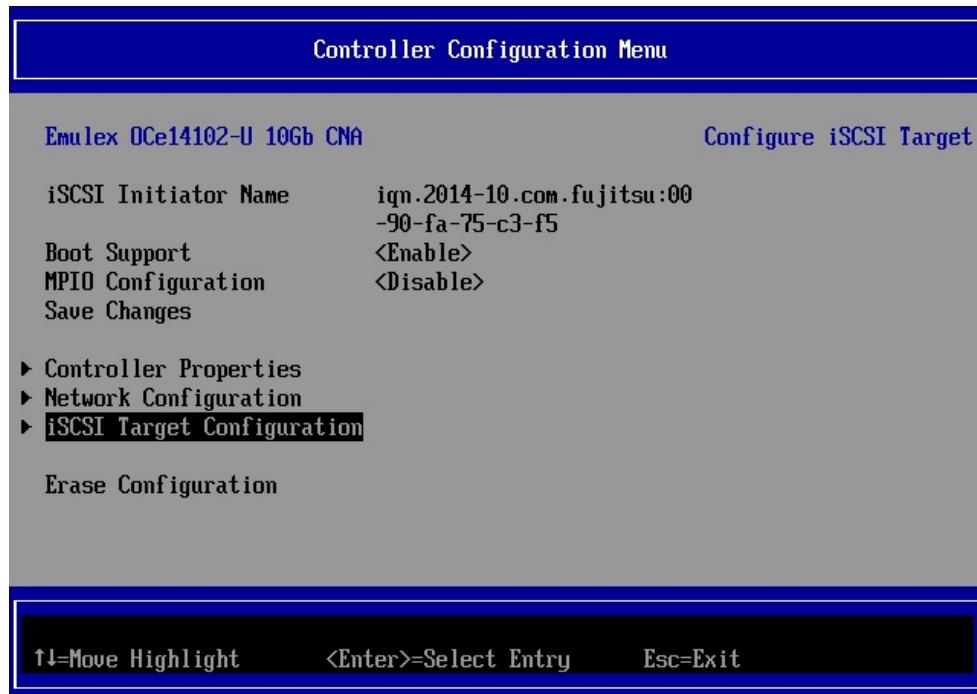


Figure 7-23

Move cursor onto [Add Target], and press <Enter> key.



Figure 7-24

Configure iSCSI Target from now.

After settings, move cursor onto [Save/Login], and then press <Enter> key.



Figure 7-25

## POINT

If you select [**Ping**] and execute it, you can make a test of communication to the iSCSI target.

| Setting Items           | Setting Values                         | Settings  |
|-------------------------|--|---|
| iSCSI Target Name       | IQN of iSCSI target                    | Set IQN of iSCSI target.  |
| iSCSI Target IP Address | iSCSI target IP-address                | Set IP-address of iSCSI target.   |
| TCP Port Number         | 3260(default)                          | Set TCP port number.  |
| Boot Target             | Primary / Secondary / No               | Set primary path, secondary path.   |
| ISID Qualifier          | 1(default)<br>Any value of up to 65535 | If you connect dual session to target portal group, set a unique ISID value.  |
| Header Digest           | Yes / No(default)                      | The integrity of an iSCSI PDU header segment is protected by CRC32C checksum. |
| Data Digest             | Yes / No(default)                      | The integrity of an iSCSI PDU data segment is protected by CRC32C checksum.   |
| Authentication Method   | Mutual CHAP / One-Way CHAP / None      | Select authentication method.   |

## POINT

If you set blank to iSCSI Target Name and press [Save/Login], initiator detects target names that can be logged in, and you can select iSCSI Target Name from the list.

Move cursor onto Target that you want to add, press <space> key to put a check mark.

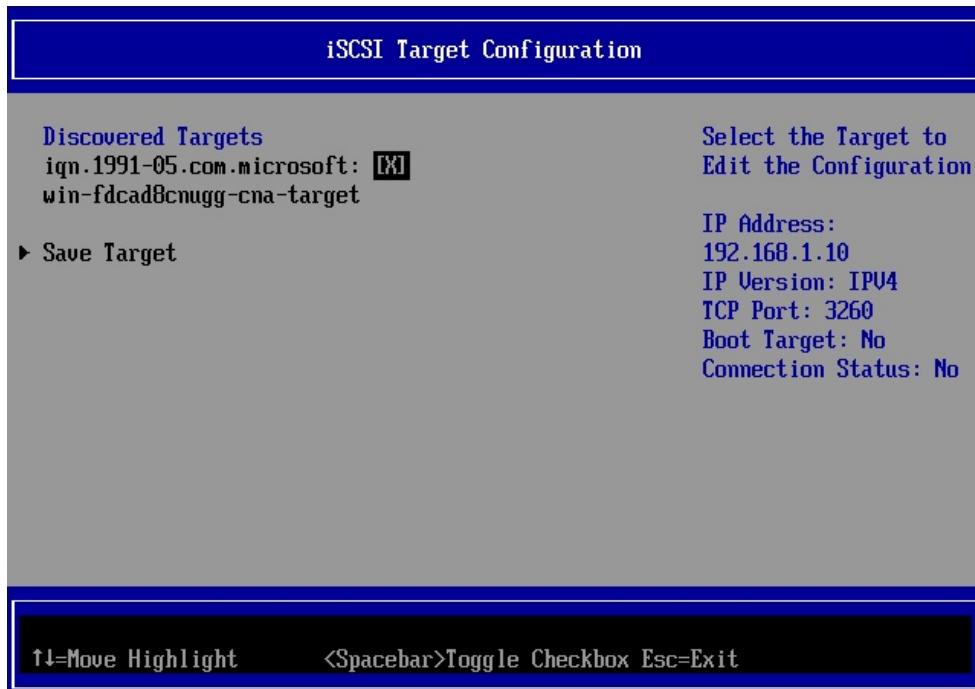


Figure 7-26

Move cursor onto [Save Target] and press <Enter> key.

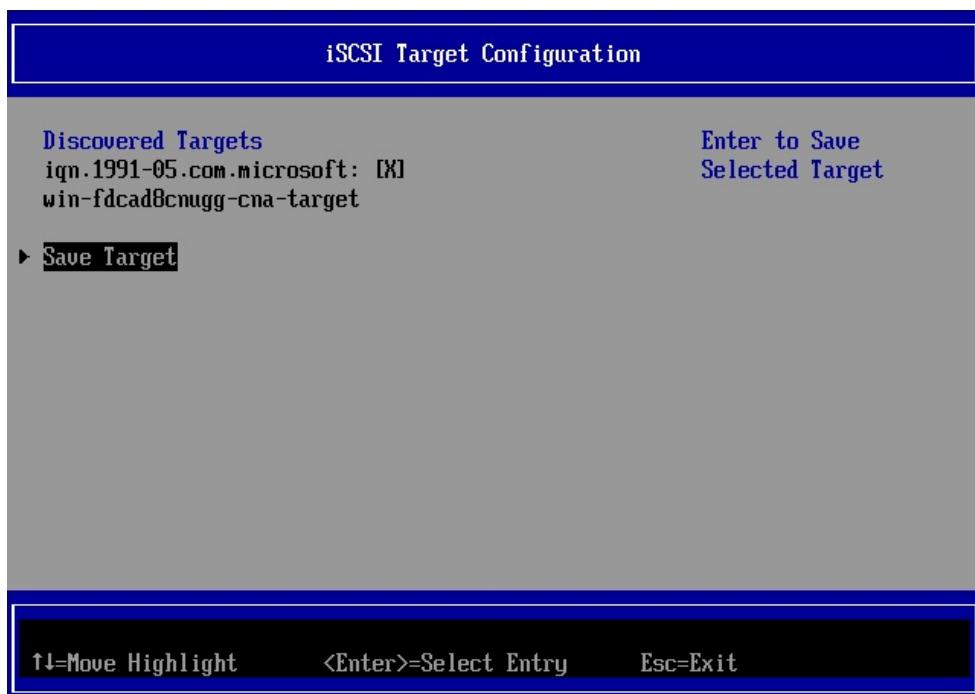


Figure 7-27

## 7.7. iSCSI Target Configuration

From iSCSI Target Configuration menu, you can configure iSCSI Target with function keys.

Move cursor onto Target on which you want to change the setting, press <Enter> key.

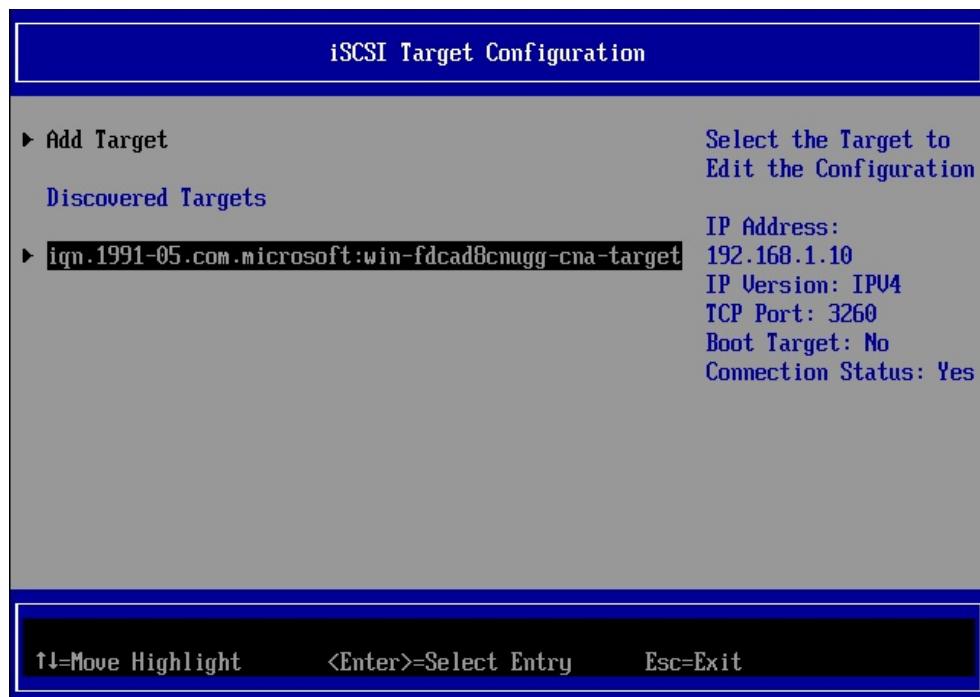


Figure 7-28



Figure 7-29

### Important

If you are able to log in to the target, Connection Status is Yes.

## 7.8. Erase Configuration

In Controller Configuration Menu, select [Erase Configuration], and press <Enter> key.

All settings of the port which is selected will be erased.

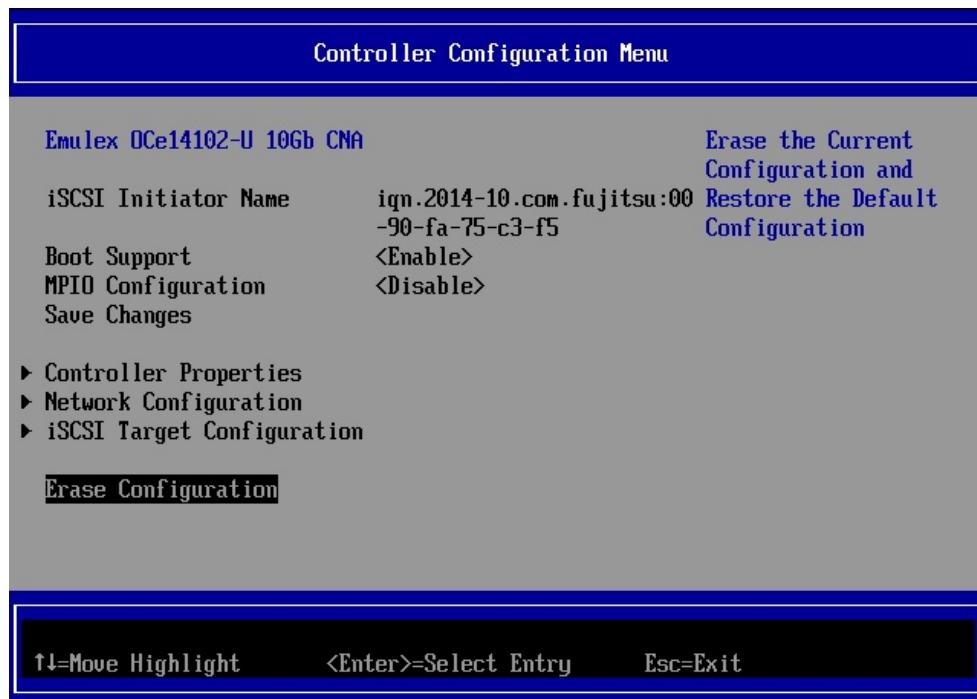


Figure 7-30

## **8. OS Installation**

Using SVIM (SeverView Install Manager), install OS of purpose to your server.

---

**PRIMEQUEST 2000 Series  
Converged Network Adapter  
iSCSI Boot Configuration Manual**

**CA92344-0967-01**

**February 2016**

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