

Firmware Setup

Intel® iSCSI Boot features a setup menu which allows two network ports in one system to be enabled as iSCSI Boot devices. To configure Intel iSCSI Boot, power-on or reset the system and press the Ctrl-D key when the message "Press <Ctrl-D> to run setup..." is displayed. After pressing the Ctrl-D key, you will be taken to the Intel iSCSI Boot Port Selection Setup Menu.

iSCSI Boot Port Selection Menu

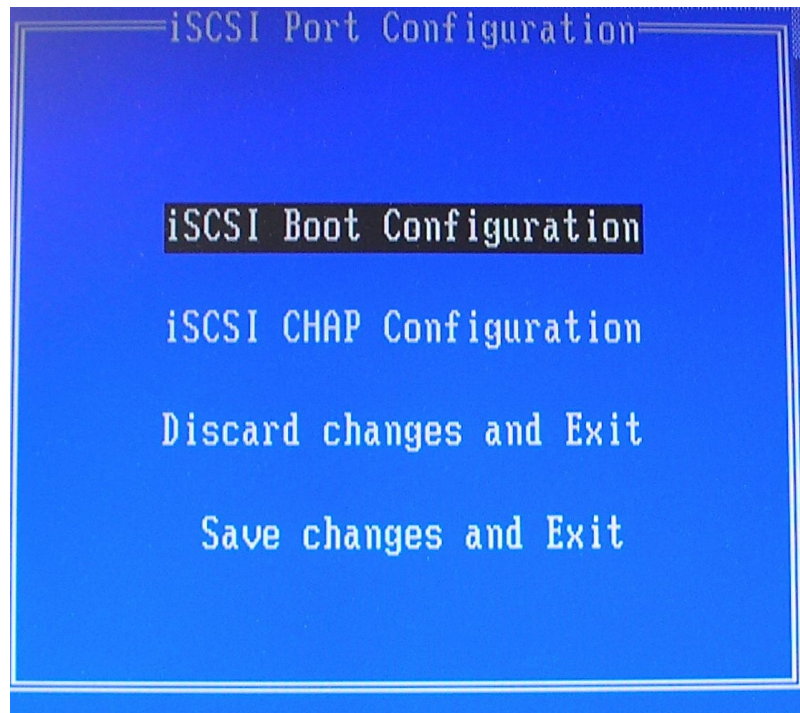
The first screen of the Intel iSCSI Boot Setup Menu displays a list of Intel iSCSI Boot-capable adapters. For each adapter port the associated PCI device ID, PCI bus/device/function location, and a field indicating iSCSI Boot status is displayed. Up to 10 iSCSI Boot-capable ports can be displayed within the Port Selection Menu. If there are more Intel iSCSI Boot-capable adapters, these are not listed in the setup menu.



The usage of this menu is described below:

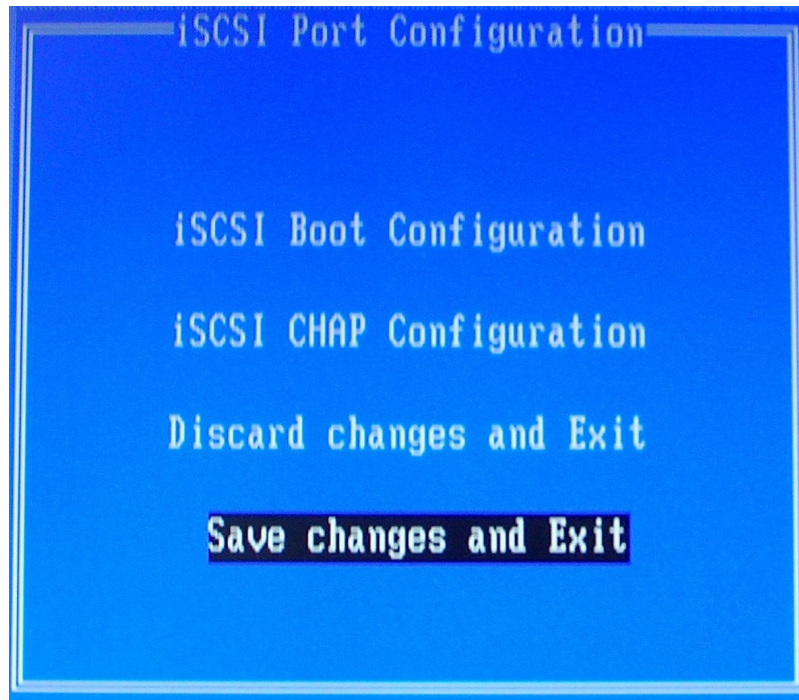
- One network port in the system can be selected as the primary boot port by pressing the 'P' key when highlighted. The primary boot port will be the first port used by Intel iSCSI Boot to connect to the iSCSI target. Only one port may be selected as a primary boot port.
- One network port in the system can be selected as the secondary boot port by pressing the 'S' key when highlighted. The secondary boot port will only be used to connect to the iSCSI target disk if the primary boot port fails to establish a connection. Only one port may be selected as a secondary boot port.
- Pressing the 'D' key with a network port highlighted will disable iSCSI Boot on that port.
- Pressing the 'B' key with a network port highlighted will blink an LED on that port.
- Press the Esc key to leave the screen.

iSCSI Boot Port Specific Setup Menu



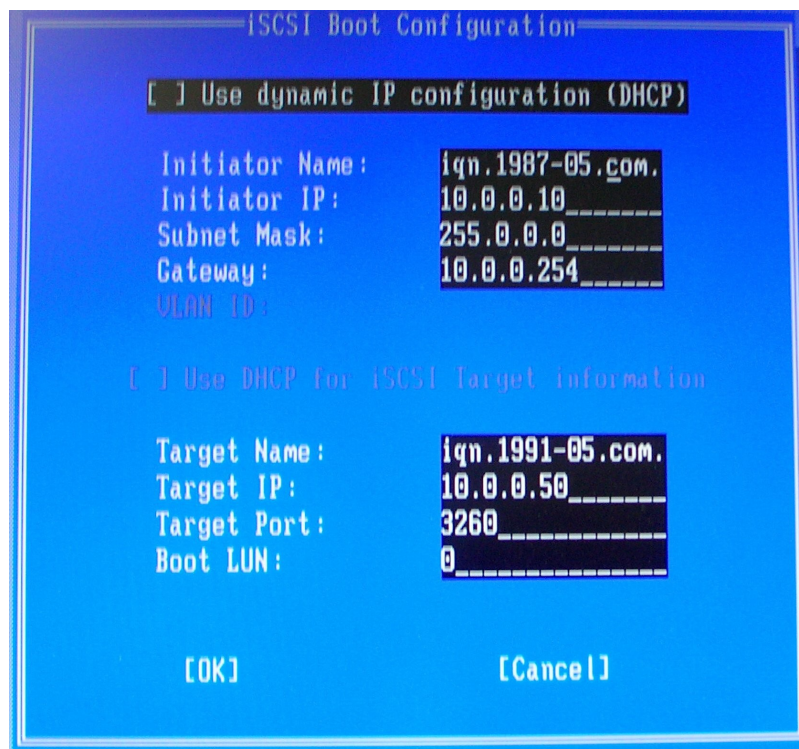
The port specific iSCSI setup menu has four options:

- **iSCSI Boot Configuration** - Selecting this option will take you to the iSCSI Boot Configuration Setup Menu. The [iSCSI Boot Configuration Menu](#) is described in detail in the section below and will allow you to configure the iSCSI parameters for the selected network port.
- **CHAP Configuration** - Selecting this option will take you to the CHAP configuration screen. The [CHAP Configuration Menu](#) is described in detail in the section below.
- **Discard Changes and Exit** - Selecting this option will discard all changes made in the iSCSI Boot Configuration and CHAP Configuration setup screens, and return back to the iSCSI Boot Port Selection Menu.
- **Save Changes and Exit** - Selecting this option will save all changes made in the iSCSI Boot Configuration and CHAP Configuration setup screens. After selecting this option, you will return to the iSCSI Boot Port Selection Menu.



iSCSI Boot Configuration Menu

The iSCSI Boot Configuration Menu allows you to configure the iSCSI Boot and Internet Protocol (IP) parameters for a specific port. The iSCSI settings can be configured manually or retrieved dynamically from a DHCP server.



Listed below are the options in the iSCSI Boot Configuration Menu:

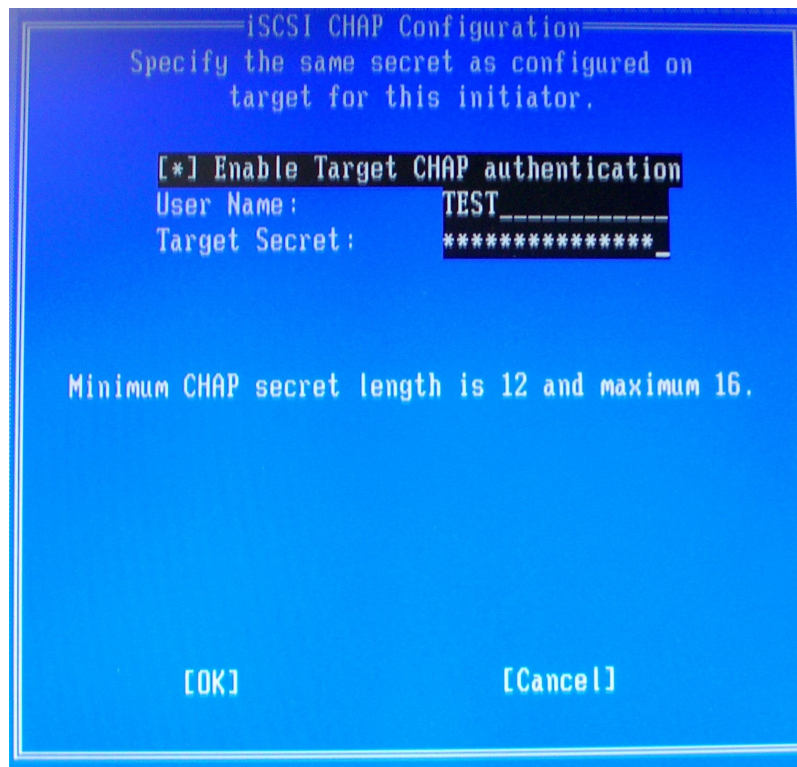
- **Use Dynamic IP Configuration (DHCP)** - Selecting this checkbox will cause iSCSI Boot to attempt to get the client IP address, subnet mask, and gateway IP address from a DHCP server. If this checkbox is enabled, these fields will not be visible.
- **Initiator Name**- Enter the iSCSI initiator name to be used by Intel iSCSI Boot when

connecting to an iSCSI target. The value entered in this field is global and used by all iSCSI Boot enabled ports in the system. This field may be left blank if the "Use DHCP For Target Configuration" checkbox is enabled. For information on how to retrieve the iSCSI initiator name dynamically from a DHCP server see the section "[DHCP Server Configuration](#)".

- **Initiator IP** - Enter the client IP address to be used for this port as static IP configuration in this field. This IP address will be used by the port during the entire iSCSI session. This option is visible if DHCP is not enabled.
- **Subnet Mask** - Enter the IP subnet-mask in this field. This should be the IP subnet mask used on the network which the selected port will be connecting to for iSCSI. This option is visible if DHCP is not enabled.
- **Gateway IP**- Enter the IP address of the network gateway in this field. This field is necessary if the iSCSI target is located on a different sub-network than the selected Intel iSCSI Boot port. This option is visible if DHCP is not enabled.
- **Use DHCP for iSCSI Target Information**- Selecting this checkbox will cause Intel iSCSI Boot to attempt to gather the iSCSI target's IP address, IP port number, iSCSI target name, and SCSI LUN ID from a DHCP server on the network. For information on how to configure the iSCSI target parameters using DHCP see the section "[DHCP Server Configuration](#)". When this checkbox is enabled, these fields will not be visible.
- **Target Name** - Enter the IQN name of the iSCSI target in this field. This option is visible if DHCP for iSCSI target is not enabled.
- **Target IP** - Enter the target IP address of the iSCSI target in this field. This option is visible if DHCP for iSCSI target is not enabled.
- **Target Port** - TCP Port Number.
- **Boot LUN** - Enter the LUN ID of the boot disk on the iSCSI target in this field. This option is visible if DHCP for iSCSI target is not enabled.

iSCSI CHAP Configuration

Intel iSCSI Boot supports one-way CHAP MD5 authentication with an iSCSI target. Intel iSCSI Boot uses the "MD5 Message Digest Algorithm" developed by RSA Data Security, Inc.



The iSCSI CHAP Configuration menu has the following options to enable CHAP authentication:

- **Enable Target CHAP Authentication** - Selecting this checkbox will enable CHAP authentication for this port. After enabling CHAP authentication a user name and password must be entered.
- **User Name** - Enter the CHAP user name in this field. This must be the same as the CHAP user name configured on the iSCSI target.
- **CHAP Secret**- Enter the CHAP password in this field. This must be the same as the CHAP password configured on the iSCSI target and must be between 12 and 16 characters in length.

Intel® PROSet for Windows* Device Manager

Many of the functions of the Intel iSCSI Boot Port Selection Setup Menu can also be configured or revised using Intel PROSet for Windows Device Manager. Click [here](#) for instructions on installing and using Intel PROSet for Windows Device Manager.

Vlan ID

The VLAN ID field was grayed out in the iSCSI boot firmware screen because the Microsoft iSCSI Boot Initiator does not support Vlan's.