

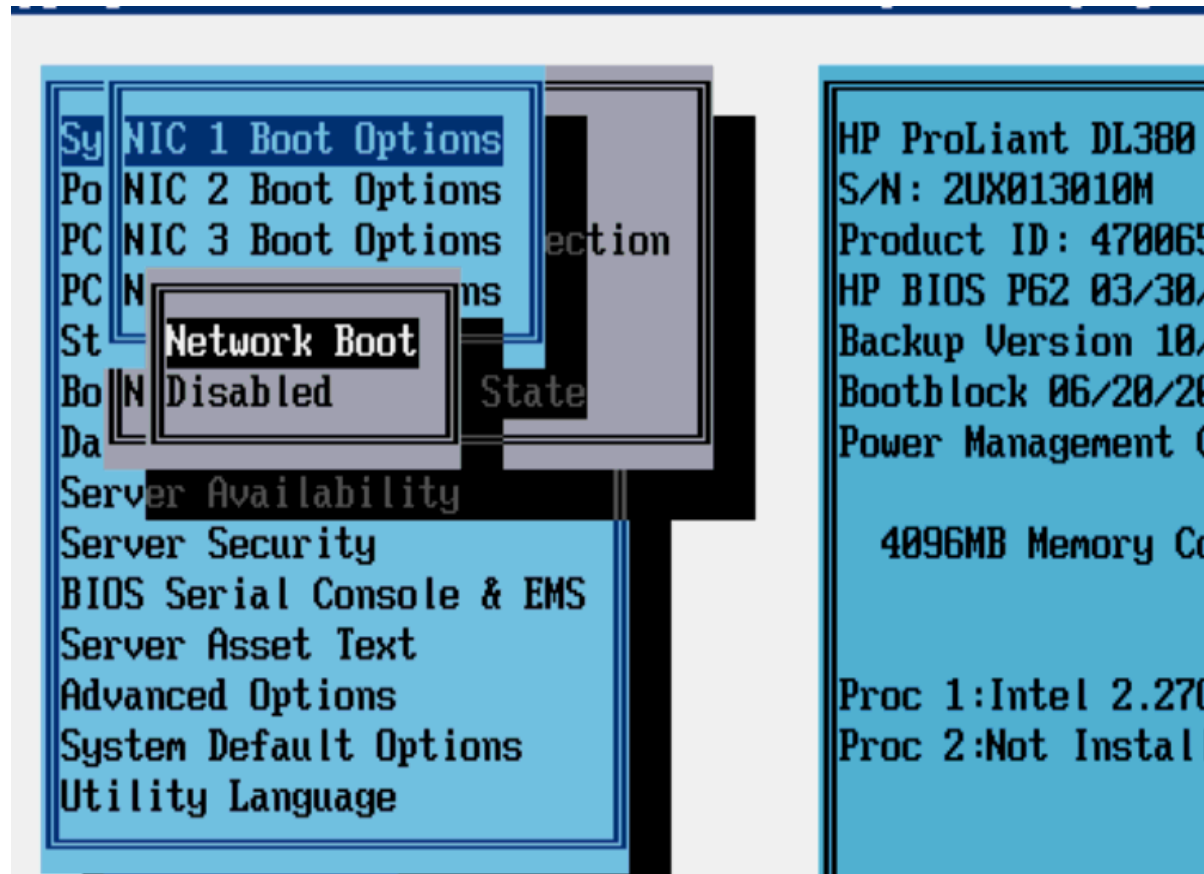
BOOT DL380 G6 to MSA2312i Problems

HARDWARE

HP MSA2312i SAN configured for iSCSI with 6 x 450GB hard drives.

4 x DL380 G6 servers that need to boot to the SAN. Updated with Smart Update version 9 DVD.

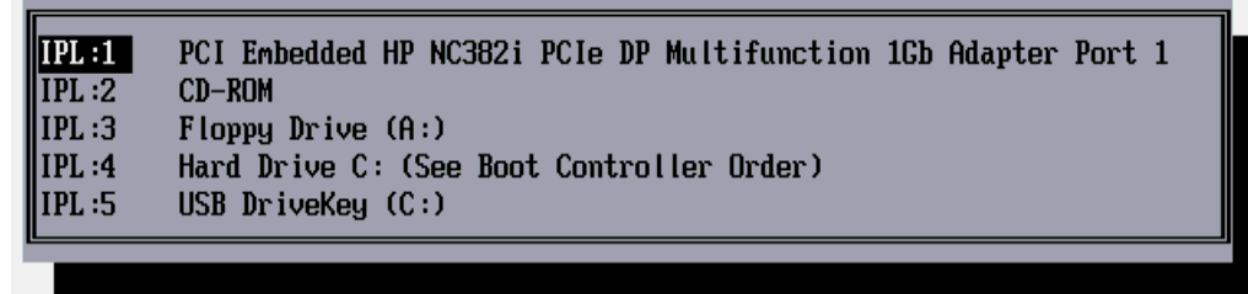
DL380 G6 BIOS CONFIGURATION



NIC 1 = Network Boot

NIC2,3,4= DISABLED

Copyright 1982, 2010 Hewlett-Packard Development Company, L.P.



The network adapter 1 is the primary boot device.

DL380 G6 BROADCOM BOOT AGENT CONFIGURATION

Broadcom NetXtreme II Ethernet Boot Agent v5.0.5
Copyright (C) 2000-2009 Broadcom Corporation
All rights reserved.

MBA Configuration Menu

Boot Protocol	iSCSI
Boot Strap Type	Auto Detect
Hide Setup Prompt	Disable
Setup Key Stroke	Ctrl-S
Banner Message Timeout	5 Seconds
Link Speed	AutoNeg
Pre-boot Wake On LAN	Enable
VLAN Mode	Disable
VLAN ID (0..4095)	0000

Bus = 02 Device = 00 Func = 0 MAC Address - 78E7D18CFDA0

Select Boot Protocol

<Esc> <Ctrl-F6> <Left/Right> <Enter> <Up/Down> <Ctrl-K> <F4>
Quit Blink LEDs Toggle Value Change Value Change Field iSCSI Cfg Save

Device List

(*)	<02:00:00>	BCM5709C	-	78:E7:D1:8C:FD:A0
	<02:00:01>	BCM5709C	-	78:E7:D1:8C:FD:A2
	<03:00:00>	BCM5709C	-	78:E7:D1:8C:FD:A4
	<03:00:01>	BCM5709C	-	78:E7:D1:8C:FD:A6

NIC A0 is the only one that is Enabled for iSCSI. All others are disabled.

General Parameters

```
TCP/IP Parameters via DHCP: Disabled
iSCSI Parameters via DHCP: Disabled
CHAP Authentication: Disabled
Boot to iSCSI target: Disabled
DHCP Vendor ID: BRCM ISAN
Link Up Delay Time: 0
Use TCP Timestamp: Disabled
Target as First HDD: Enabled
LUN Busy Retry Count: 0
Windows HBA Boot Mode: Disabled
```

Current Adapter: Primary, Bus=02 Device=00 Func=00, MAC=78:E7:D1:8C:FD:A0

Windows HBA Boot Mode **Disabled** = Non-Offloaded method

Note: Boot to iSCSI target: Disabled (Broadcom guide shows to leave disabled if installing from DVD)

General Parameters

```
TCP/IP Parameters via DHCP: Disabled
iSCSI Parameters via DHCP: Disabled
CHAP Authentication: Disabled
Boot to iSCSI target: Disabled
DHCP Vendor ID: BRCM ISAN
Link Up Delay Time: 0
Use TCP Timestamp: Disabled
Target as First HDD: Enabled
LUN Busy Retry Count: 0
Windows HBA Boot Mode: Enabled
```

Current Adapter: Primary, Bus=02 Device=00 Func=00, MAC=78:E7:D1:8C:FD:A0

Windows HBA Boot Mode **Enabled** = Offloaded method

Note: Boot to iSCSI target: Disabled (Broadcom guide shows to leave disabled if installing from DVD)

Initiator Parameters

IP Address: 192.168.192.5
Subnet Mask: 255.255.255.0
Default Gateway: 0.0.0.0
Primary DNS: 0.0.0.0
Secondary DNS: 0.0.0.0
iSCSI Name: iqn.1995-05.com.broadcom.ad.iscsiboot
CHAP ID:
CHAP Secret:

Current Adapter: Primary, Bus=02 Device=00 Func=00, MAC=78:E7:D1:8C:FD:A0

This is the address for the NIC1 on the DL380

1st Target Parameters

Connect: Enabled
IP Address: 192.168.192.1
TCP Port: 3260
Boot LUN: 1
iSCSI Name: iqn.1986-03.com.hp:storage.msa2312i.1001daa077
CHAP ID:
CHAP Secret:

Current Adapter: Primary, Bus=02 Device=00 Func=00, MAC=78:E7:D1:8C:FD:A0

This is the address for the port A1 on the MSA2312i

2nd Target Parameters

Connect: Disabled
IP Address: 0.0.0.0
TCP Port: 3260
Boot LUN: 0
iSCSI Name:
CHAP ID:
CHAP Secret:

Current Adapter: Primary, Bus=02 Device=00 Func=00, MAC=78:E7:D1:8C:FD:A0

Second target is disabled.

Secondary Device Parameters

Secondary Device: 00:00:00:00:00:00
Use Independent Target Portal: Disabled
Configure Secondary: Invoke

Secondary device parameters are left untouched.

MSA2312i CONFIGURATION

Controller A Versions	
Property	Value
Storage Controller CPU Type	Athlon 2600+ 1600MHz
Storage Controller Code Version	M110R28
Storage Controller Code Baselevel	M110R28
Memory Controller FPGA Code Version	F300R22
Storage Controller Loader Code Version	19.009
CAPI Version	3.11
Management Controller Code Version	W441R13
Management Controller Loader Code Version	12.015
Expander Controller Code Version	1106
CPLD Code Version	8
Hardware Version	53
Host Interface Module Version	51
Host Interface Module Model	6
Backplane Type	7
Host Interface Hardware (Chip) Version	0
Disk Interface Hardware (Chip) Version	1

Controller B Versions	
Property	Value
Storage Controller CPU Type	Athlon 2600+ 1600MHz
Storage Controller Code Version	M110R28
Storage Controller Code Baselevel	M110R28
Memory Controller FPGA Code Version	F300R22
Storage Controller Loader Code Version	19.009
CAPI Version	3.11
Management Controller Code Version	W441R13
Management Controller Loader Code Version	12.015
Expander Controller Code Version	1106
CPLD Code Version	8
Hardware Version	53
Host Interface Module Version	51
Host Interface Module Model	6
Backplane Type	7
Host Interface Hardware (Chip) Version	0
Disk Interface Hardware (Chip) Version	1

I have updated the firmware for the MSA2312i to M110R28

View ▾ Provisioning ▾ Configuration ▾ Tools ▾ Wizards ▾

MSA2312i > Configuration > System Settings > Host Interfaces

Configure Host Interface

Modify the settings for the host interface

Port A1 (iSCSI): IP Address:* Netmask:* Gateway:*

Port A2 (iSCSI): IP Address:* Netmask:* Gateway:*

Port B1 (iSCSI): IP Address:* Netmask:* Gateway:*

Port B2 (iSCSI): IP Address:* Netmask:* Gateway:*

Common Settings for iSCSI

Authentication (CHAP): Jumbo Frames:

Link Speed: iSNS:

iSNS Address:* Alternate iSNS Address:*

At the moment I am using port A1 only. I have enabled Jumbo Frames.

Volume Overview

Details about a specific volume

Volume Overview				
	Component	Count	Capacity	Storage Space
<input checked="" type="radio"/>	Volume		75.0GB	<div style="width: 100%; text-align: center;">75.0GB</div>
<input type="radio"/>	Maps	2		
<input type="radio"/>	Schedules	0		

Properties for AD	
Property	Value
Vdisk Name	VDISK1
Name	AD
Size	74.9GB
Preferred Owner	A
Current Owner	A
Serial Number	00c0ffda9c4700009212004c01000000
Cache Write Policy	write-back
Cache Optimization	standard
Read Ahead Size	Default
Type	standard
Volume Description	

I have created a volume called AD and mapped it to my host on LUN1

Manage Host Mappings

Set/unset explicit mappings for a host

Select an item to modify the mapping properties for a specific volume:

Maps for Host AD						
	Type	Name	Serial Number	Ports	LUN	Access
<input checked="" type="radio"/>	Explicit	AD	00c0ffda9c4700009212004c01000000	A1,A2,B1,B2	1	read-write

Map: (Clear to remove existing mapping)

LUN:* Access:

Select ports from the view or list below:

Graphical **Tabular**

The graphical view shows a server chassis with two main sections, A and B. Section A contains two iSCSI ports labeled X1 and X2, and an Out Port with IP address 10.0.8.33. Section B contains two iSCSI ports labeled B1 and B2, and an Out Port with IP address 10.0.8.34. Each port has a green checkmark icon next to it, indicating it is selected or available for mapping. The server chassis is labeled with the number 1 on the left side.

INSTALL WINDOWS 2008 X64 (NON-R2) USING NON-OFFLOADED iSCSI METHOD

```
Initializing interface (78:E7:D1:8C:FD:A0) ... Succeeded

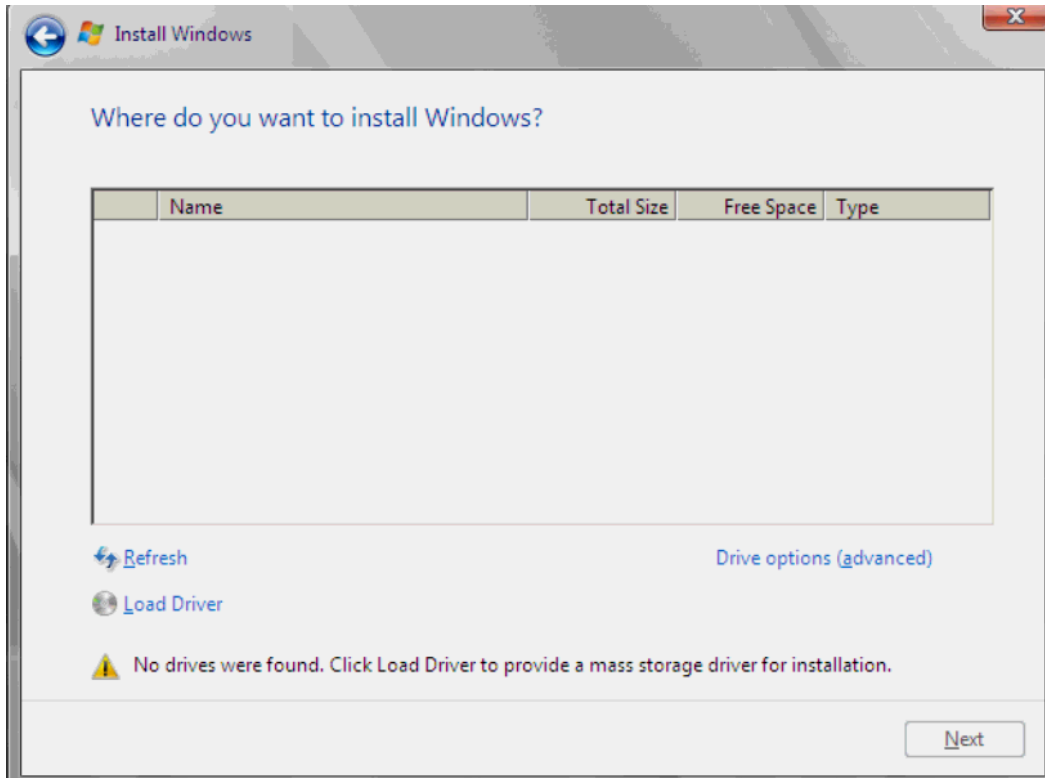
Connecting to iSCSI targets with interface (78:E7:D1:8C:FD:A0)

Initiator Name       : iqn.1995-05.com.broadcom.ad.iscsiboot
Host IP Address      : 192.168.192.5
MAC Address          : 78:E7:D1:8C:FD:A0
Subnet Mask          : 255.255.255.0
Default Gateway      : 0.0.0.0
1st Target Name      : iqn.1986-03.com.hp:storage.nsa2312i.1001daa077
1st Target IP Addr   : 192.168.192.1
1st Target TCP Port  : 3260
1st Target Boot LUN : 1
Logging in the 1st iSCSI Target ... Succeeded

SCSI Target Drive: HP      NSA2312i      (Rev: M110)

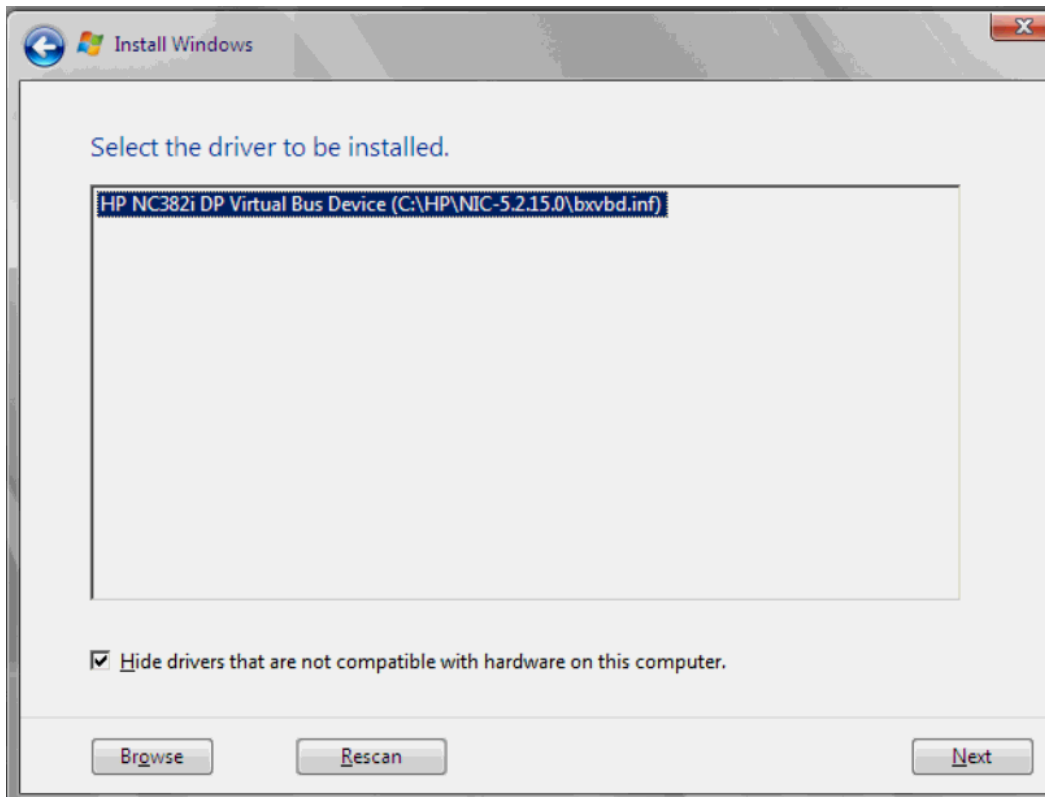
Booting Next Device ...
```

This screen shows the DL380 G6 server successfully connecting to the iSCSI SAN. Then it boots to DVD to install Windows 2008 x64.

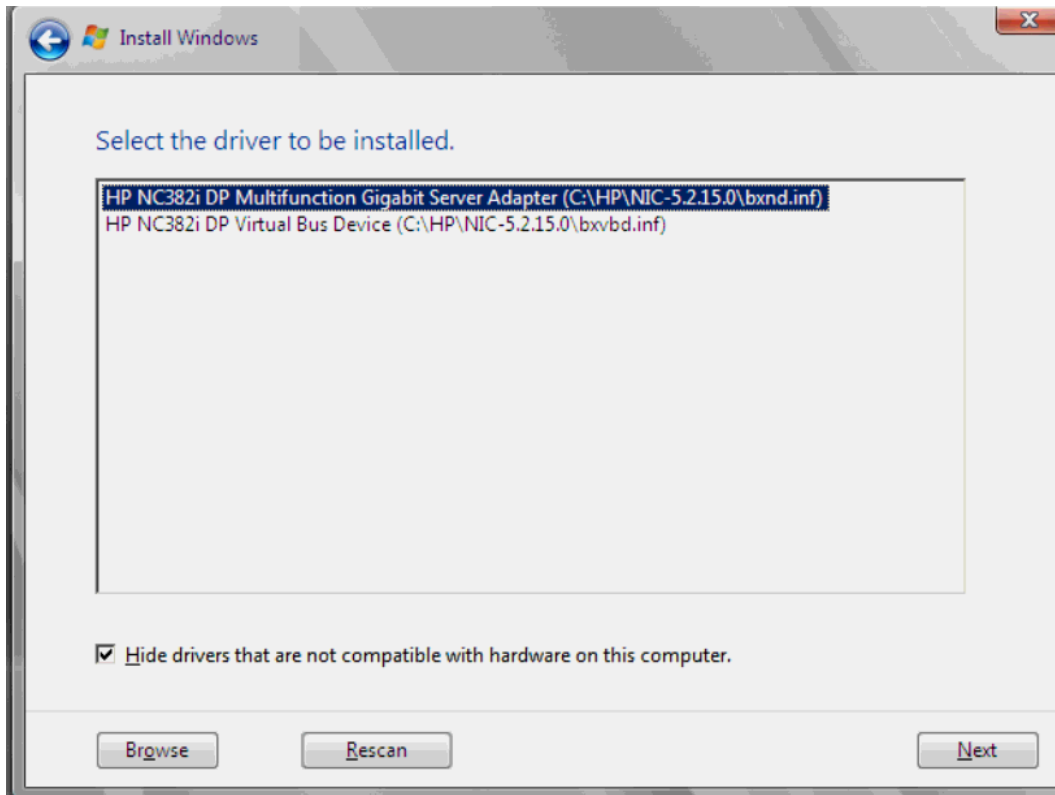


The volume doesn't show up automatically. Click Load Driver

NOTE: The drivers that I am using are the most recent drivers posted on the HP website.

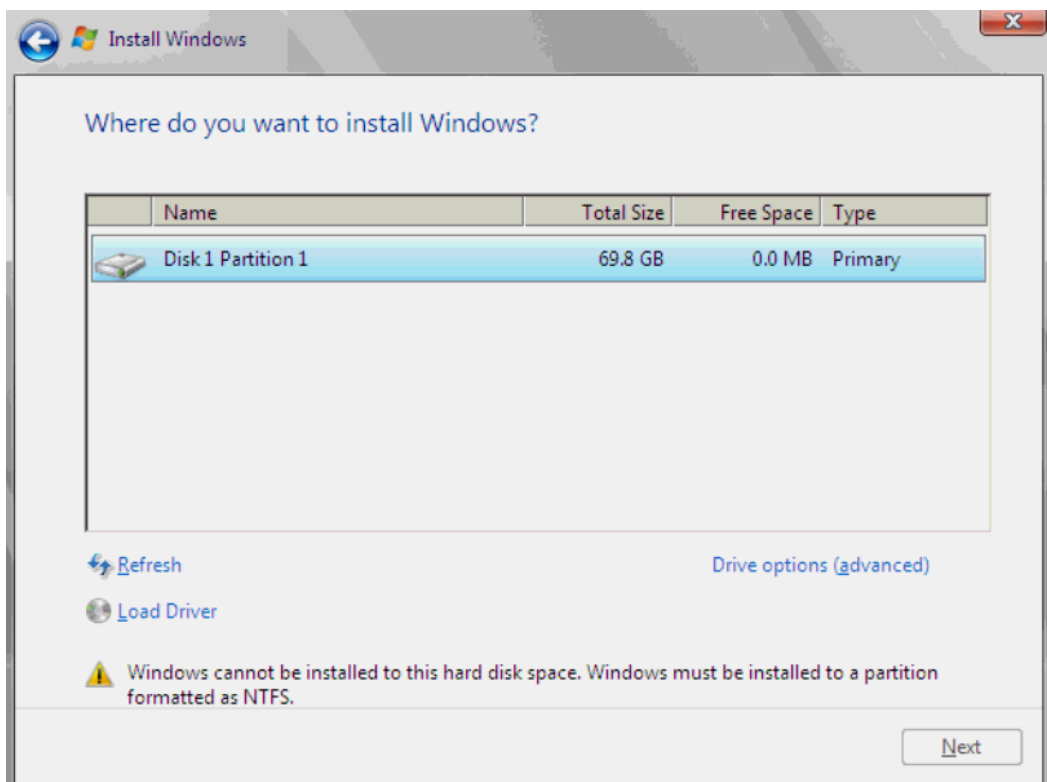


First Driver bxybd.inf



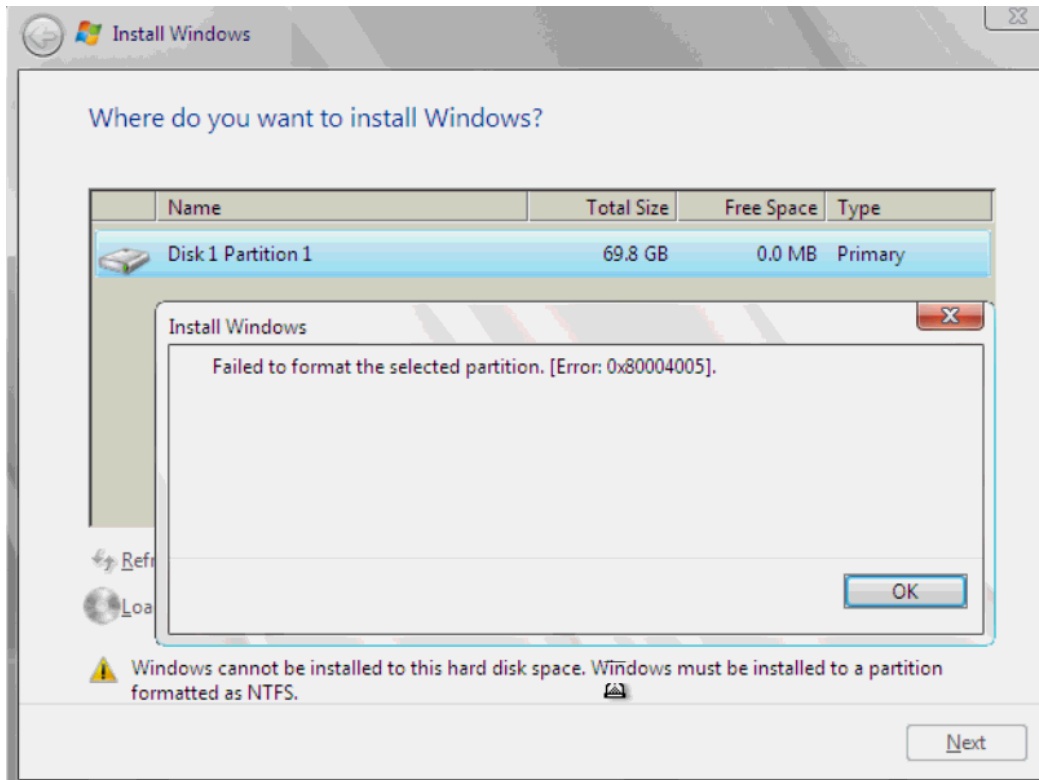
Second driver bxnd.inf

NOTE: For Offloaded method you also need to load a third driver, bxios.inf

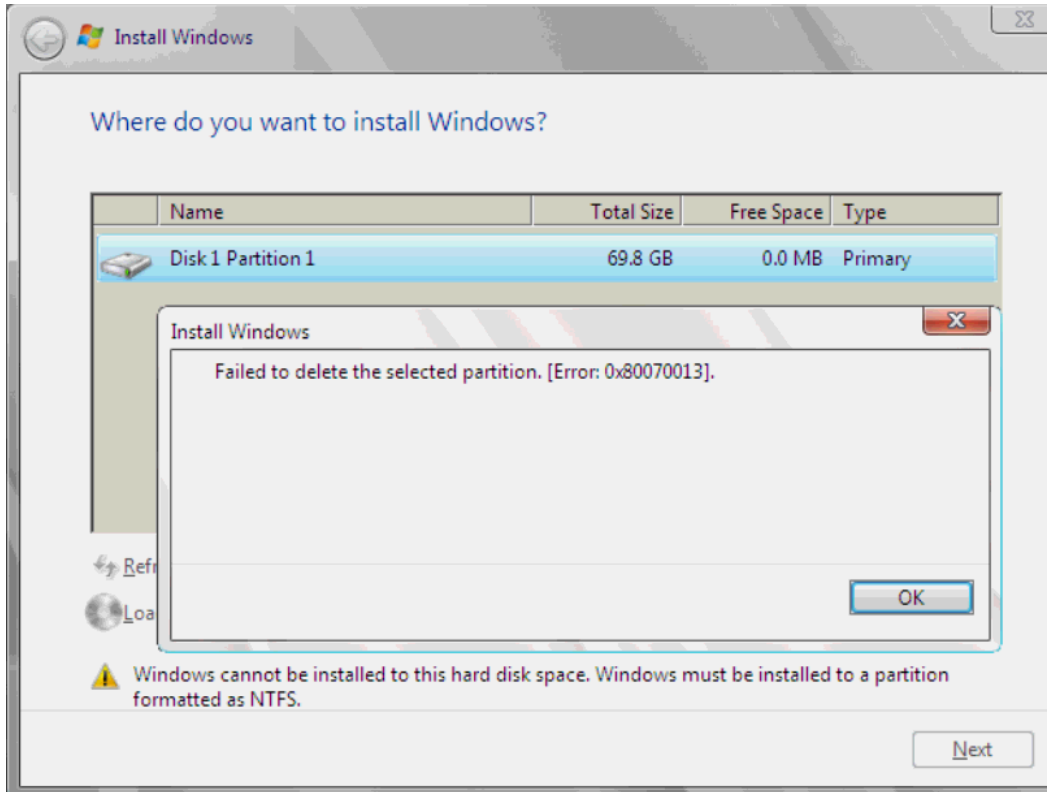


Refresh shows the volume on the SAN

Click Drive Options



Click Format → Failed to format the selected partition. [Error: 0x80004005].



Click Delete → Failed to delete the selected partition. [Error: 0x80070013].