

## IGNITE CLIENT RESTORATION

### PA-RISC Systems

#### Ignite-UX server requirements:-

To boot the client from LAN we have to configure the following files.

- Ø [Add a network entry in instl\\_boottab file](#) -----> this will register the IP address for Mentioned client to boot the system
- 

1. Edit the `/etc/opt/ignite/instl_boottab` file.

```
# vi /etc/opt/ignite/instl_boottab
```

2. Add an entry of new IP address and MAC address of the client which needs to be installed.

```
client_IP_address:client_MAC_address::reserve
```

#### Example:

```
# 10.0.0.12:0018FE2F01B3::reserve
```

3. Save the `/etc/opt/ignite/instl_boottab` file.  
wq!

- Ø [Enable the instl\\_bootd daemon](#)
- 

1. Edit the `/etc/inetd.conf` file.

```
# vi /etc/inetd.conf
```

2. Remove the (#) from the bootpd line.

```
bootps dgram udp wait root /opt/ignite/sbin/instl_bootd \
instl_bootd
```

3. Save the `/etc/inetd.conf` file and exit vi.

```
:wq
```

4. Make the inetd daemon reread the `/etc/inetd.conf` file.

```
#!/usr/sbin/inetd -c
```

## Ø Ensure that the Ignite-Server is configured as NFS server

---

1. Check the entry on `/etc/rc.config.d/nfsconf` file.

```
NFS_SERVER=1
```

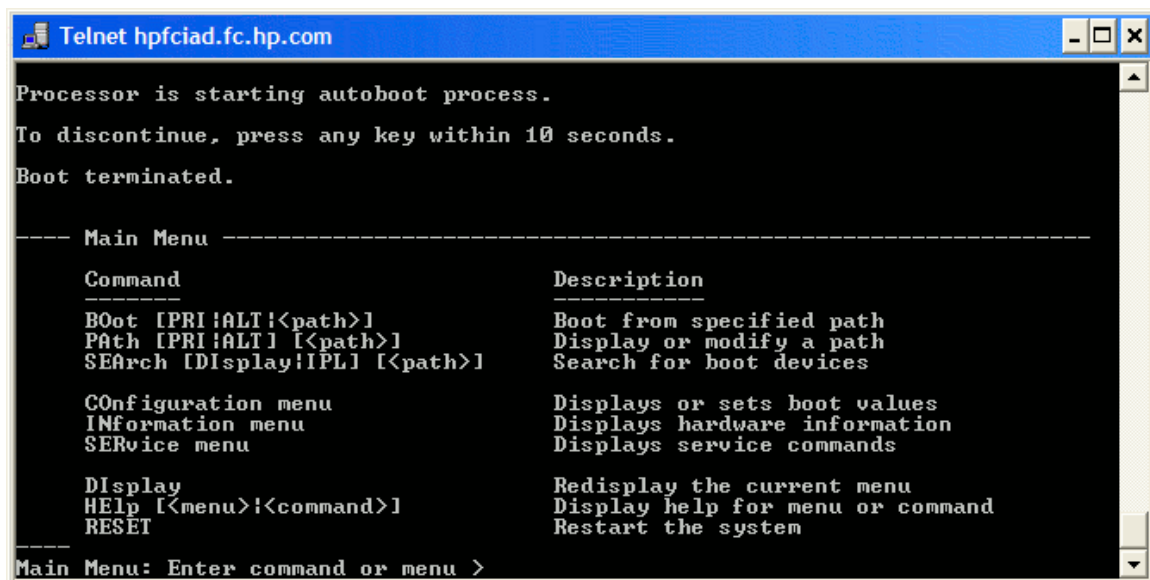
2. Ensure the following entry in `/etc/exports` file.

```
/var/opt/ignite/clients -anon=2
```

## Ø Boot the system from LAN

---

1. To get the MAC address for a PA-RISC system, interrupt the boot process at the To discontinue, press any key within 10 seconds prompt.



```
Telnet hpfciaad.fc.hp.com

Processor is starting autoboot process.
To discontinue, press any key within 10 seconds.
Boot terminated.

----- Main Menu -----

```

Command	Description
B0ot [PRI:ALT:<path>]	Boot from specified path
PAth [PRI:ALT] [<path>]	Display or modify a path
SEArch [Display:IPL] [<path>]	Search for boot devices
COntfiguration menu	Displays or sets boot values
INformation menu	Displays hardware information
SERvice menu	Displays service commands
DIisplay	Redisplay the current menu
HElp [<menu>:<command>]	Display help for menu or command
RESET	Restart the system

```
-----
Main Menu: Enter command or menu >
```

2. Enter the Information menu by typing in. Then enter LanAddress.

```

Telnet hpfciaad.fc.hp.com
----- Information Menu -----
Command                                Description
-----
ALL                                    Display all system information
BootInfo                              Display boot-related information
CAche                                 Display cache information
ChipRevisions                         Display revisions of major ULSI
COprocessor                           Display coprocessor information
FRU                                   Display FRU information
FwrVersion                           Display firmware version
IO                                    Display I/O interface information
LanAddress                            Display Core LAN station address
MEmory                               Display memory information
PProcessor                            Display processor information
WArnings                             Display selftest warning messages

B0ot [PRI:ALT!<path>]                Boot from specified path
Display                               Redisplay the current menu
HElp [<command>]                     Display help for specified command
RESEt                                Restart the system
MAin                                  Return to Main Menu

Information Menu: Enter command > LanAddress
LAN Station Address: 00306e-065541
Information Menu: Enter command >

```

3. Back to main menu and boot the client using your Ignite-UX server's IP address by entering this command at the client console:  

```
firmware prompt> boot lan.n.n.n.n install
```

(where: n.n.n.n is the IP address of the Ignite-UX server and proceed for complete installation)

- Ø After the successful boot you will get [Ignite Welcome screen](#) to customize the Filesystems, root password, etc...
- Ø Then proceed with [GO](#)

### For Itanium-Based Systems

#### Ignite-UX server requirements

To boot the client from LAN we have to configure the following files and enable the daemon.

#### Ø Enable the bootpd daemon if DHCP Services are running

- a. Edit the /etc/inetd.conf file:  

```
# vi /etc/inetd.conf
```
- b. Remove the (#) from the bootpd line:  

```
bootps dgram udp wait root /usr/sbin/bootpd bootpd
```
- c. Save the /etc/inetd.conf file and exit vi:  

```
:wq
```

- d. Make the inetd daemon reread the /etc/inetd.conf file:

```
# inetd -c
```

---

#### Ø Edit the entry in bootptab file

---

1. Edit the /etc/bootptab file

```
# vi /etc/bootptab
```

2. Add an entry for your client. The following is an example bootptab entry.

```
ignite-defaults:\
ht=ethernet:\
hn:\
dn=domain_name.com:\
gw=10.1.1.1:\      ----- > Gate way
sm=255.0.0.0:\     ----- > Subnet Mask
vm=rfc1048:\
bf=/opt/ignite/boot/nbp.efi:

iuxclient1:\
tc=ignite-defaults:\
ha=0018FE2F01B3:\  ----- > MAC address of new client
ip=10.0.0.12:      ----- > temp IP address for new client
```

3. Save the /etc/bootptab file and exit vi:

```
:wq!
```

Note: If DHCP services are not running in Ignite-UX server we can replace the bootpd with instl\_bootd daemon

---

#### Ø Enable the instl\_bootd daemon if DHCP Services are not running

---

1. After you have set up your Ignite-UX server, ensure that bootpd is disabled by commenting out the following line in the

```
#Vi /etc/inetd.conf file:
```

```
bootps dgram udp wait root /usr/sbin/bootpd bootpd
```

2. Enable the instl\_bootd daemon by adding the following line to /etc/inetd.conf.

```
bootps dgram udp wait root /opt/ignite/sbin/instl_bootd \
instl_bootd
```

3. Restart the Internet daemon, inetd, to implement the port changes made in step 2:

```
#!/usr/sbin/inetd -c
```

---

Ø Add a network entry in `instl_boottab` file ----- > This will register the IP address for  
Mentioned client

---

1. Edit the `/etc/opt/ignite/instl_boottab` file
3. Add an entry of new ip address and MAC address of the client which needs to be installed

`client_IP_address:client_MAC_address::reserve`

Example:

`# 10.0.0.12:0018FE2F01B3::reserve`

3. Save the `/etc/opt/ignite/instl_boottab` file  
wq!

Ø Ensure that the Ignite-Server is configured as NFS server

---

1. Check the entry on `/etc/rc.config.d/nfsconf` file.
2. Ensure the following entry in `/etc/exports` file.

`NFS_SERVER=1`

`/var/opt/ignite/clients -anon=2`

Ø Boot the system from LAN

---

1. Reboot the client system with the `reboot` command or cycle the power on the client system. Interrupt the reboot process by pressing the down arrow when prompted.

```
C:\ Telnet iuxlp4c.fc.hp.com
EFI Boot Manager ver 1.10 [14.61] Firmware ver 2.31 [4411]
Please select a boot option

HP-UX Primary Boot: 0/1/1/0.0x1.0x0
EFI Shell [Built-in]
Boot from DVD
Boot Option Maintenance Menu
System Configuration Menu

Use ^ and v to change option(s). Use Enter to select an option
Default boot selection will be booted in 6 seconds _
```

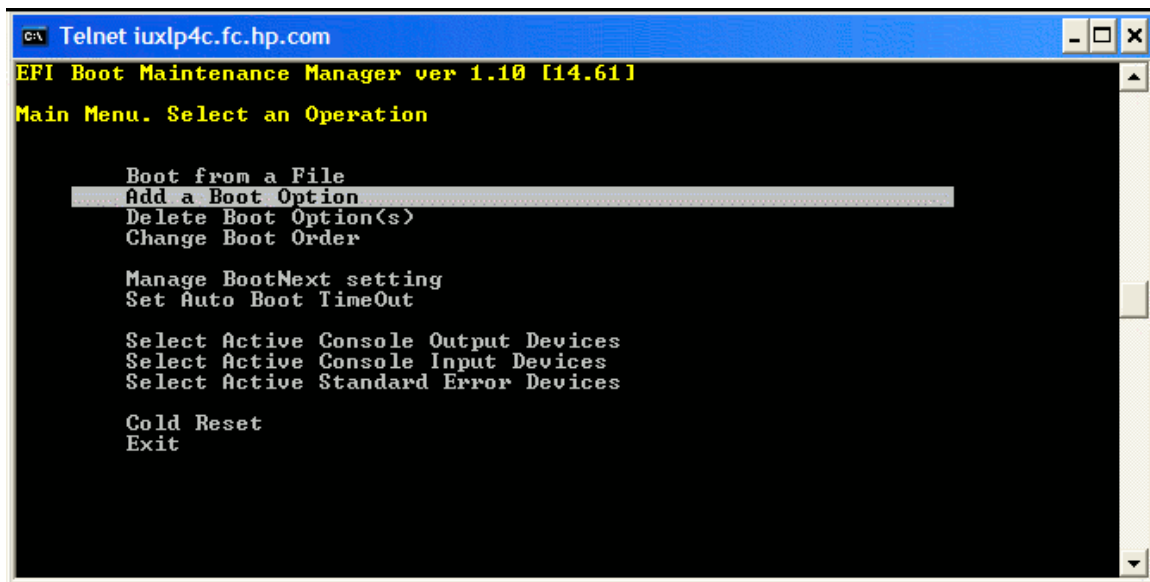
2. Select Boot Option Maintenance Menu.

```
C:\ Telnet iuxlp4c.fc.hp.com
EFI Boot Manager ver 1.10 [14.61] Firmware ver 2.31 [4411]
Please select a boot option

HP-UX Primary Boot: 0/1/1/0.0x1.0x0
EFI Shell [Built-in]
Boot from DVD
Boot Option Maintenance Menu
System Configuration Menu

Use ^ and v to change option(s). Use Enter to select an option
```

3. Select Add a Boot Option



The screenshot shows a terminal window titled "Telnet iuxlp4c.fc.hp.com". The text displayed is the "EFI Boot Maintenance Manager ver 1.10 [14.61]" Main Menu. The menu options are: "Boot from a File", "Add a Boot Option" (highlighted with a grey bar), "Delete Boot Option(s)", "Change Boot Order", "Manage BootNext setting", "Set Auto Boot TimeOut", "Select Active Console Output Devices", "Select Active Console Input Devices", "Select Active Standard Error Devices", "Cold Reset", and "Exit".

```
C:\ Telnet iuxlp4c.fc.hp.com
EFI Boot Maintenance Manager ver 1.10 [14.61]
Main Menu. Select an Operation

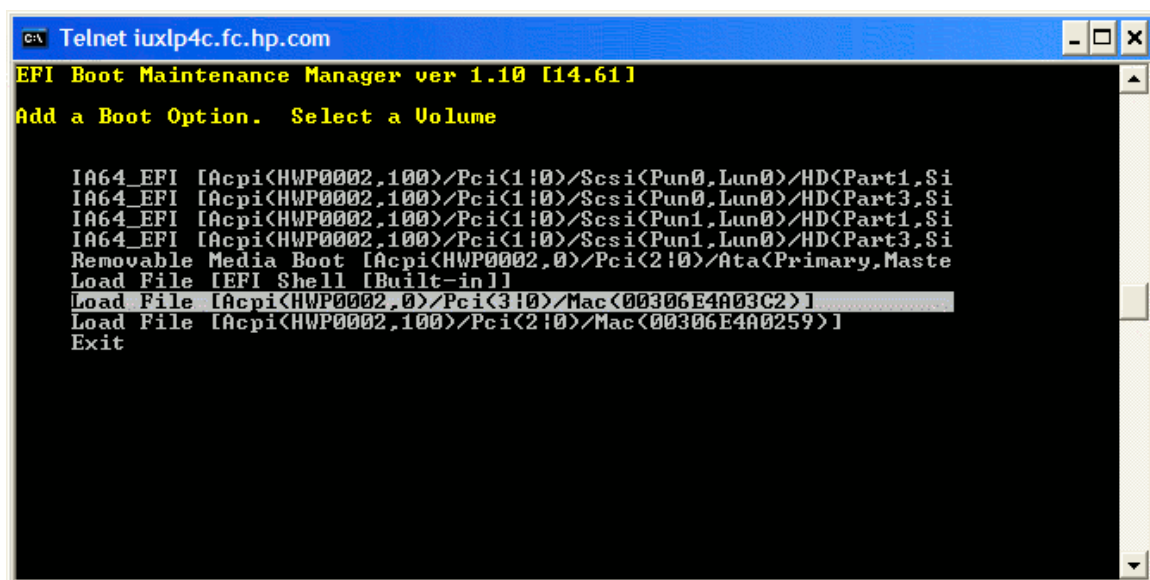
  Boot from a File
  Add a Boot Option
  Delete Boot Option(s)
  Change Boot Order

  Manage BootNext setting
  Set Auto Boot TimeOut

  Select Active Console Output Devices
  Select Active Console Input Devices
  Select Active Standard Error Devices

  Cold Reset
  Exit
```

4. Select the network interface with the MAC address you entered in the /etc/bootptab file.

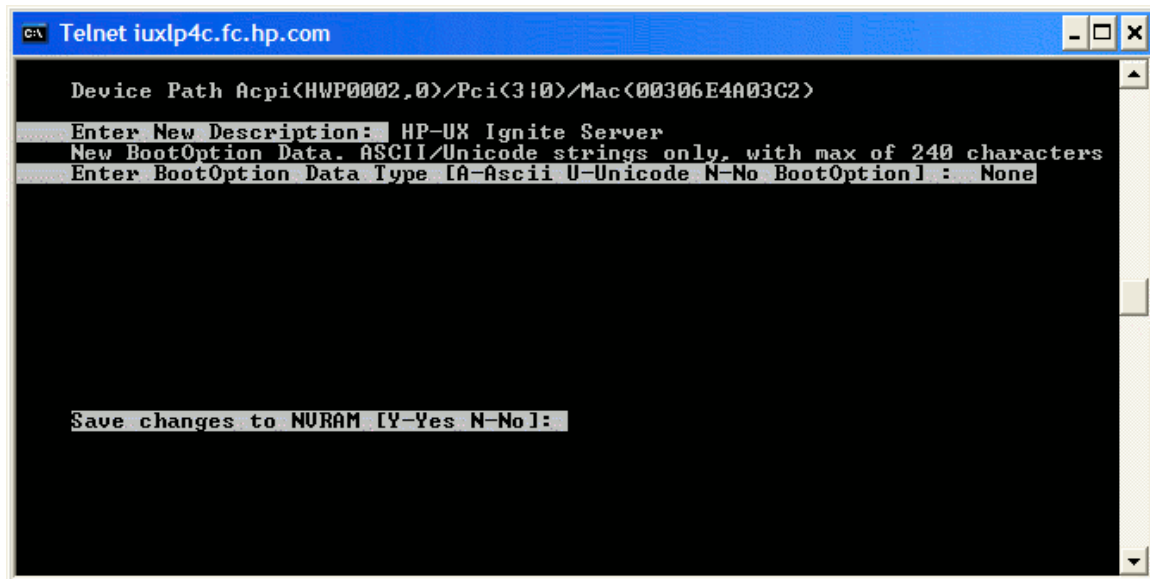


The screenshot shows the same terminal window as before, but now displaying the "Add a Boot Option. Select a Volume" screen. The menu options are: "IA64\_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun0,Lun0)/HD(Part1,Si", "IA64\_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun0,Lun0)/HD(Part3,Si", "IA64\_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun1,Lun0)/HD(Part1,Si", "IA64\_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun1,Lun0)/HD(Part3,Si", "Removable Media Boot [Acpi(HWP0002,0)/Pci(2:0)/Ata(Primary,Maste", "Load File [EFI Shell [Built-in]]", "Load File [Acpi(HWP0002,0)/Pci(3:0)/Mac(00306E4A03C2)]" (highlighted with a grey bar), "Load File [Acpi(HWP0002,100)/Pci(2:0)/Mac(00306E4A0259)]", and "Exit".

```
C:\ Telnet iuxlp4c.fc.hp.com
EFI Boot Maintenance Manager ver 1.10 [14.61]
Add a Boot Option. Select a Volume

  IA64_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun0,Lun0)/HD(Part1,Si
  IA64_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun0,Lun0)/HD(Part3,Si
  IA64_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun1,Lun0)/HD(Part1,Si
  IA64_EFI [Acpi(HWP0002,100)/Pci(1:0)/Scsi(Pun1,Lun0)/HD(Part3,Si
  Removable Media Boot [Acpi(HWP0002,0)/Pci(2:0)/Ata(Primary,Maste
  Load File [EFI Shell [Built-in]]
  Load File [Acpi(HWP0002,0)/Pci(3:0)/Mac(00306E4A03C2)]
  Load File [Acpi(HWP0002,100)/Pci(2:0)/Mac(00306E4A0259)]
  Exit
```

5. Enter a description of this boot option, n for the No BootOption data type, and y to the Save changes to NVRAM prompt.

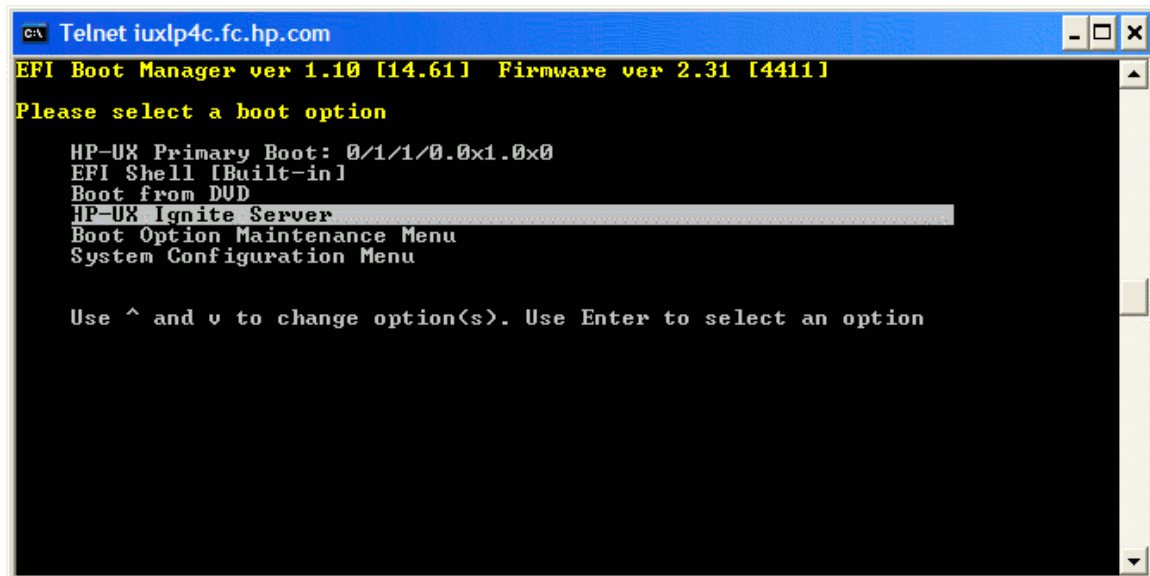


```
C:\> Telnet iuxlp4c.fc.hp.com

Device Path Acpi<HWP0002,0>/Pci<3!0>/Mac<00306E4A03C2>
Enter New Description: HP-UX Ignite Server
New BootOption Data. ASCII/Unicode strings only, with max of 240 characters
Enter BootOption Data Type [A-Ascii U-Unicode N-No BootOption] : None

Save changes to NVRAM [Y-Yes N-No]:
```

6. Select your new boot option from the Please selects a boot option menu



```
C:\> Telnet iuxlp4c.fc.hp.com

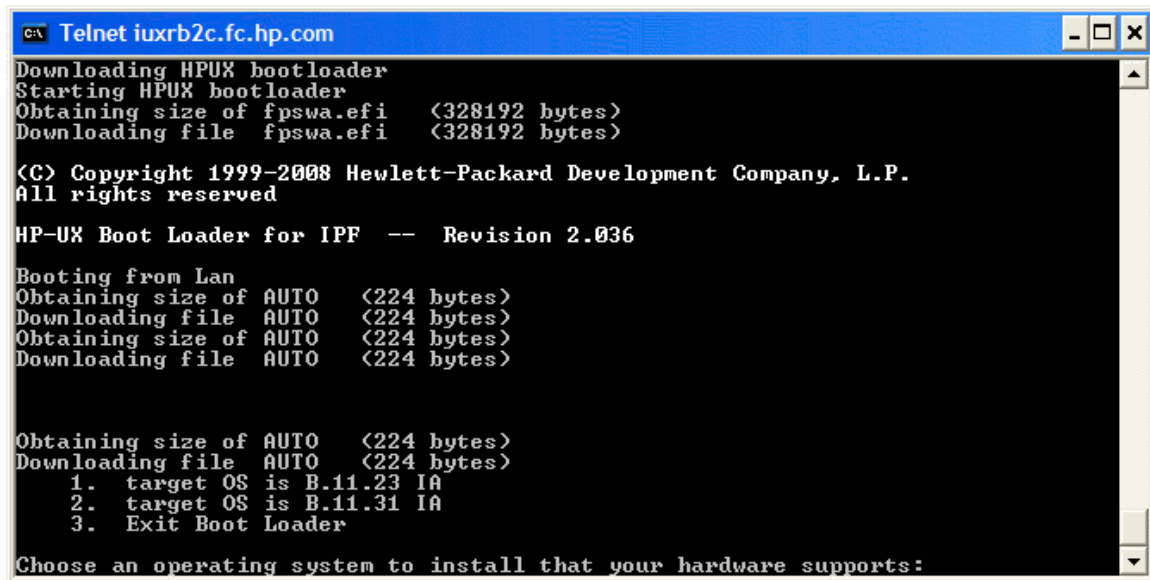
EFI Boot Manager ver 1.10 [14.61] Firmware ver 2.31 [4411]
Please select a boot option

HP-UX Primary Boot: 0/1/1/0.0x1.0x0
EFI Shell [Built-in]
Boot from DVD
HP-UX Ignite Server
Boot Option Maintenance Menu
System Configuration Menu

Use ^ and v to change option(s). Use Enter to select an option
```



7. Enter the version of HP-UX you would like to install and proceed for complete installation



```
C:\> Telnet iuxrb2c.fc.hp.com

Downloading HPUX bootloader
Starting HPUX bootloader
Obtaining size of fpswa.efi    <328192 bytes>
Downloading file  fpswa.efi    <328192 bytes>

<C> Copyright 1999-2008 Hewlett-Packard Development Company, L.P.
All rights reserved

HP-UX Boot Loader for IPF -- Revision 2.036

Booting from Lan
Obtaining size of AUTO    <224 bytes>
Downloading file  AUTO    <224 bytes>
Obtaining size of AUTO    <224 bytes>
Downloading file  AUTO    <224 bytes>

Obtaining size of AUTO    <224 bytes>
Downloading file  AUTO    <224 bytes>
  1. target OS is B.11.23 IA
  2. target OS is B.11.31 IA
  3. Exit Boot Loader

Choose an operating system to install that your hardware supports:
```

- Ø After the successful boot you will get [Ignite Welcome screen](#) to customize the File systems, root password, etc...
- Ø Then proceed with [GO](#)

## RESTORING THE IGNITE ON A DIFFERENT CLIENT

- Ø In the server copy the source client's configuration files in the name of destination client
1. The client information will be available in location `/var/opt/ignite/clients/0x{MAC address of the client}` for all the clients configured in the server.

### Example:

```
#/var/opt/ignite/clients/0x0018FE2F01B3
```

2. Copy the source client's configuration files in the name of destination client's MAC address and create a symbolic link in the name of the destination hostname.

```
#cd /var/opt/ignite/clients/
#cp -pr 0x{Source MAC} 0x{Destination MAC}
#ln -s <hostname> 0x{Destination MAC}
```

---

## Ø Enable the instl\_bootd daemon if DHCP Services are not running

---

1. After you have set up your Ignite-UX server, ensure that bootpd is disabled by commenting out the following line in the

#Vi /etc/inetd.conf file:

```
#bootps dgram udp wait root /usr/sbin/bootpd bootpd
```

2. Enable the instl\_bootd daemon by adding the following line to /etc/inetd.conf:

```
bootps dgram udp wait root /opt/ignite/sbin/instl_bootd \
instl_bootd
```

3. Restart the Internet daemon, inetd, to implement the port changes made in step 2:

```
#!/usr/sbin/inetd -c
```

## Ø Add a network entry in instl\_boottab file ----- > This will register the IP address for Mentioned client

---

1. Edit the /etc/opt/ignite/instl\_boottab file

```
# vi /etc/opt/ignite/instl_boottab
```

4. Add an entry of new ip address and MAC address of the client which needs to be installed

```
client_IP_address:client_MAC_address::reserve
```

Example:

```
# 10.0.0.12:0018FE2F01B3::reserve
```

3. Save the /etc/opt/ignite/instl\_boottab file  
wq!

## Ø Ensure that the Ignite-Server is configured as NFS server

---

1. Check the entry on /etc/rc.config.d/nfsconf file.

```
NFS_SERVER=1
```

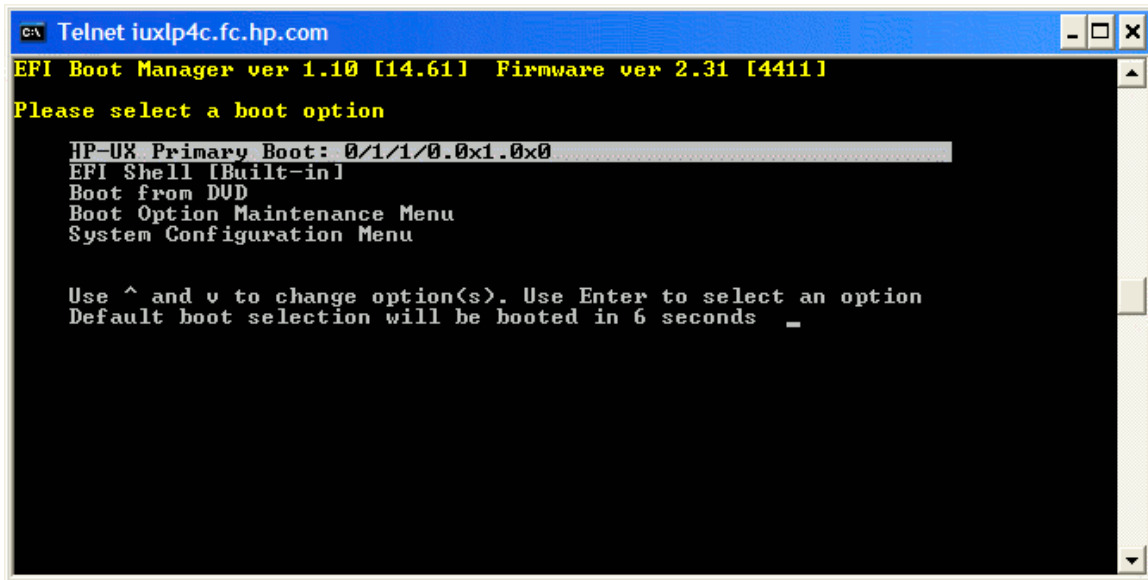
2. Ensure the following entry in /etc/exports file.

```
/var/opt/ignite/clients -anon=2
```

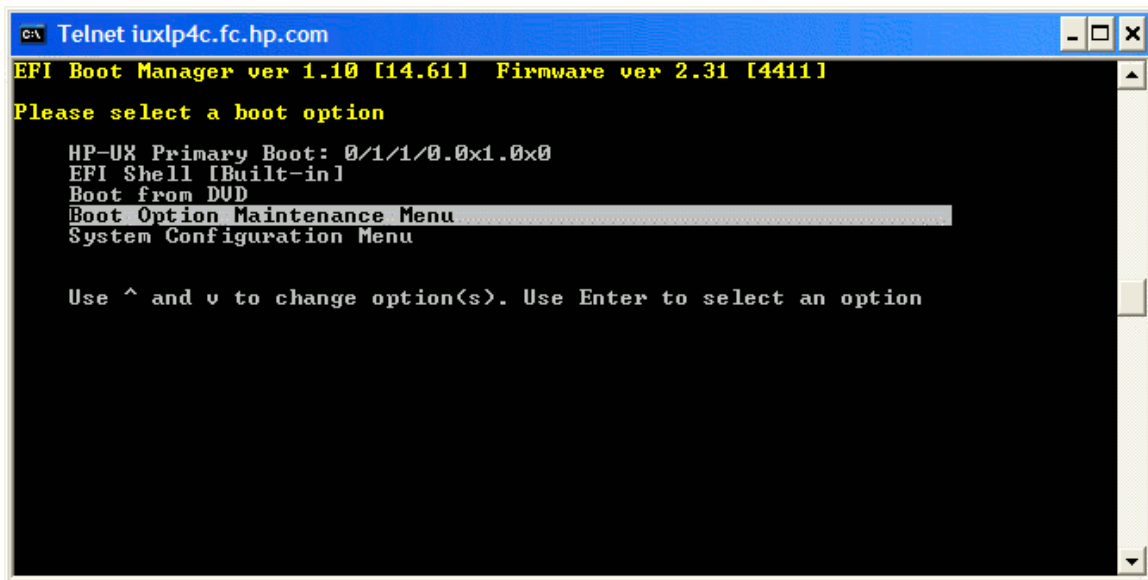
## Ø Boot the system from LAN

---

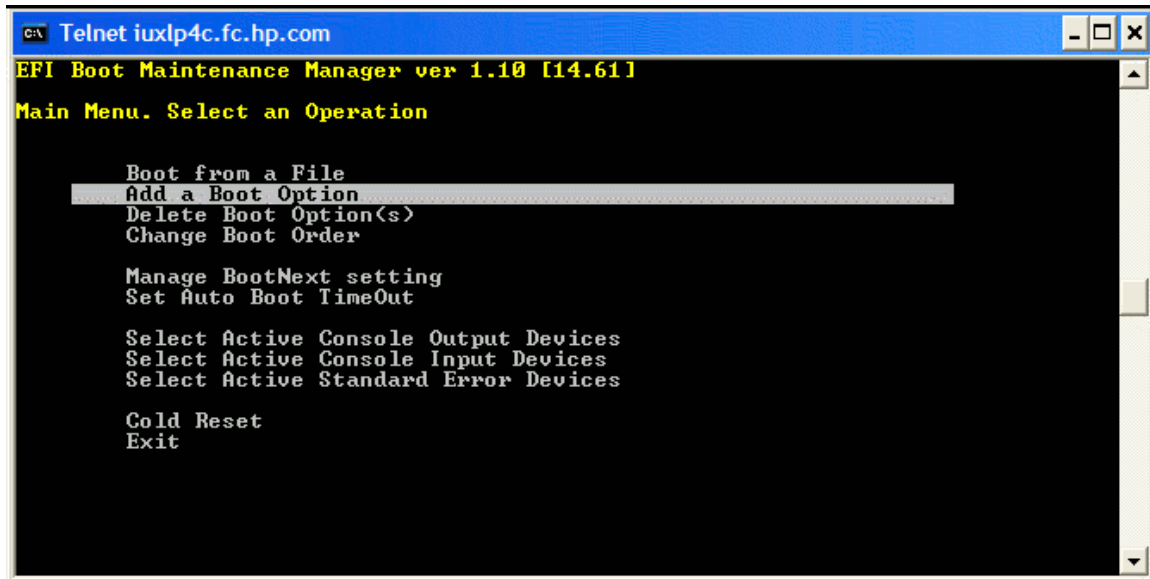
1. Reboot the client system with the reboot command or cycle the power on the client system. Interrupt the reboot process by pressing the down arrow when prompted.



2. Select Boot Option Maintenance Menu.



3. Select Add a Boot Option



The screenshot shows a terminal window titled "Telnet iuxlp4c.fc.hp.com". The main text is "EFI Boot Maintenance Manager ver 1.10 [14.61]". Below this is the prompt "Main Menu. Select an Operation". A list of options is displayed, with "Add a Boot Option" highlighted by a horizontal bar. The options are: "Boot from a File", "Add a Boot Option", "Delete Boot Option(s)", "Change Boot Order", "Manage BootNext setting", "Set Auto Boot TimeOut", "Select Active Console Output Devices", "Select Active Console Input Devices", "Select Active Standard Error Devices", "Cold Reset", and "Exit".

```
Telnet iuxlp4c.fc.hp.com
EFI Boot Maintenance Manager ver 1.10 [14.61]
Main Menu. Select an Operation

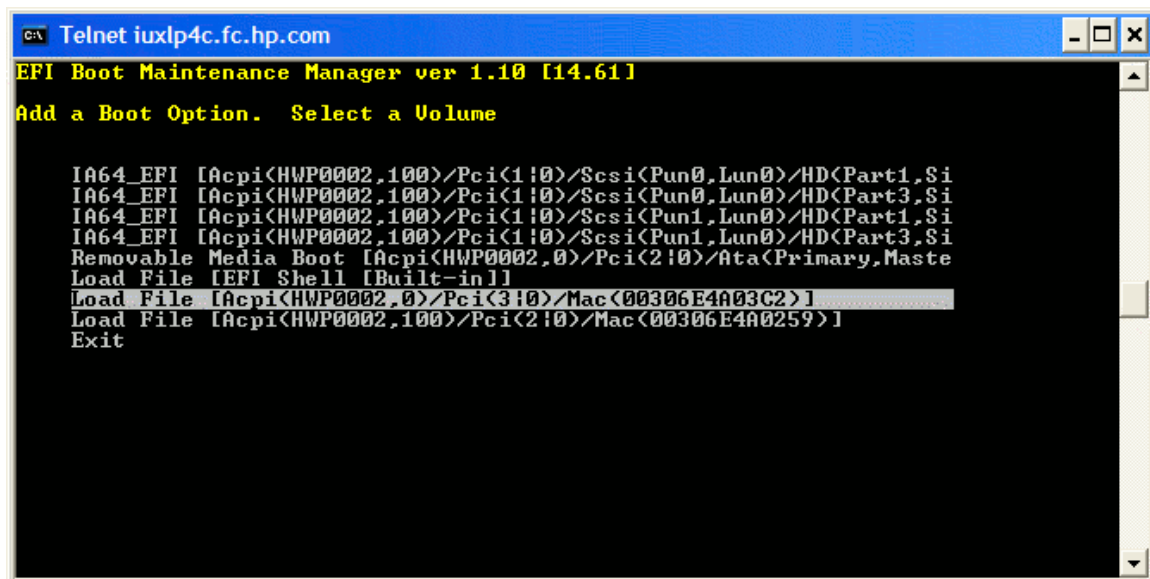
  Boot from a File
  Add a Boot Option
  Delete Boot Option(s)
  Change Boot Order

  Manage BootNext setting
  Set Auto Boot TimeOut

  Select Active Console Output Devices
  Select Active Console Input Devices
  Select Active Standard Error Devices

  Cold Reset
  Exit
```

4. Select the network interface with the MAC address you entered in the /etc/bootptab file.

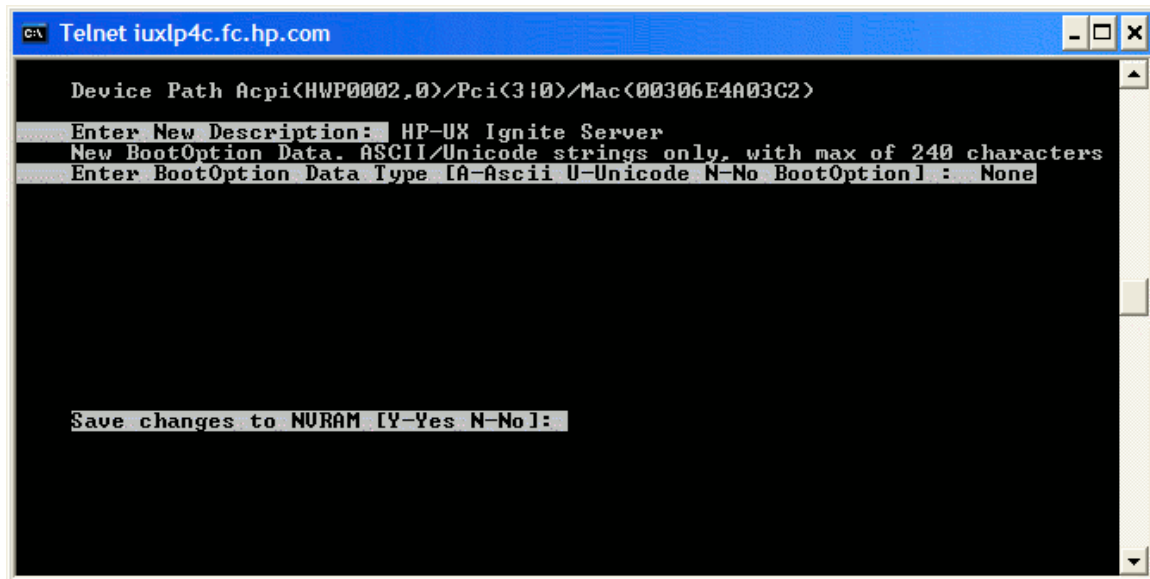


The screenshot shows the same terminal window as before, but now at the "Add a Boot Option. Select a Volume" prompt. A list of bootable volumes is shown, each with a path and a file name. The first four entries are IA64\_EFI volumes. The fifth entry is "Removable Media Boot". The sixth entry is "Load File [EFI Shell [Built-in]]". The seventh entry is "Load File [Acpi<HWP0002,0>/Pci<3:0>/Mac<00306E4A03C2>]". The eighth entry is "Load File [Acpi<HWP0002,100>/Pci<2:0>/Mac<00306E4A0259>]". The ninth entry is "Exit".

```
Telnet iuxlp4c.fc.hp.com
EFI Boot Maintenance Manager ver 1.10 [14.61]
Add a Boot Option. Select a Volume

IA64_EFI [Acpi<HWP0002,100>/Pci<1:0>/Scsi<Pun0,Lun0>/HD<Part1,Si
IA64_EFI [Acpi<HWP0002,100>/Pci<1:0>/Scsi<Pun0,Lun0>/HD<Part3,Si
IA64_EFI [Acpi<HWP0002,100>/Pci<1:0>/Scsi<Pun1,Lun0>/HD<Part1,Si
IA64_EFI [Acpi<HWP0002,100>/Pci<1:0>/Scsi<Pun1,Lun0>/HD<Part3,Si
Removable Media Boot [Acpi<HWP0002,0>/Pci<2:0>/Ata<Primary,Maste
Load File [EFI Shell [Built-in]]
Load File [Acpi<HWP0002,0>/Pci<3:0>/Mac<00306E4A03C2>]
Load File [Acpi<HWP0002,100>/Pci<2:0>/Mac<00306E4A0259>]
Exit
```

6. Enter a description of this boot option, n for the No BootOption data type, and y to the Save changes to NVRAM prompt.

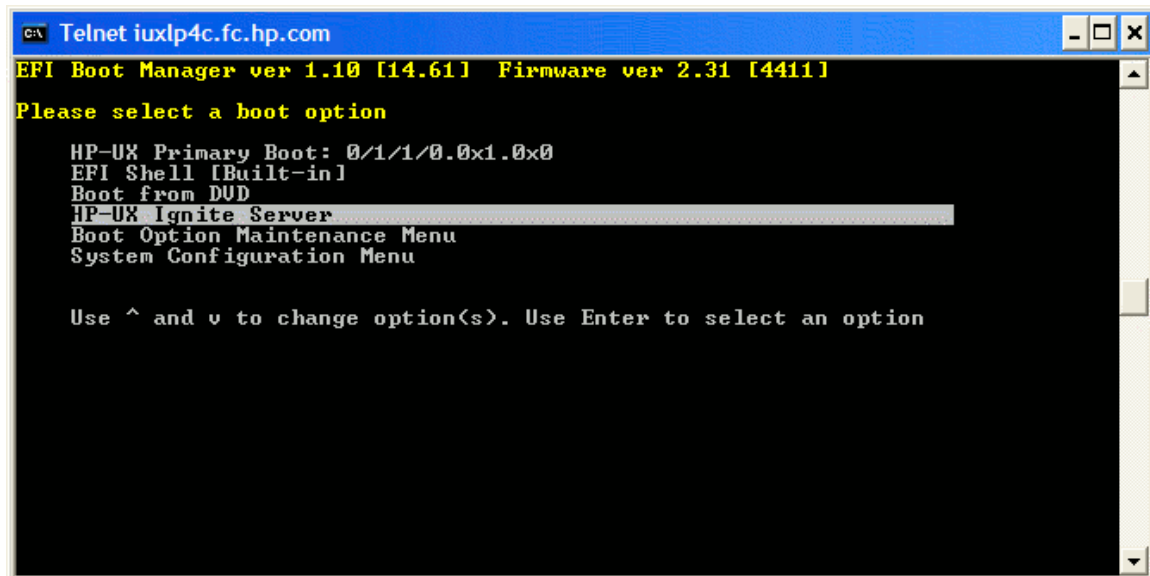


```
C:\> Telnet iuxlp4c.fc.hp.com

Device Path Acpi<HWP0002,0>/Pci<3!0>/Mac<00306E4A03C2>
Enter New Description: HP-UX Ignite Server
New BootOption Data. ASCII/Unicode strings only, with max of 240 characters
Enter BootOption Data Type [A-Ascii U-Unicode N-No BootOption] : None

Save changes to NVRAM [Y-Yes N-No]:
```

6. Select your new boot option from the Please selects a boot option menu



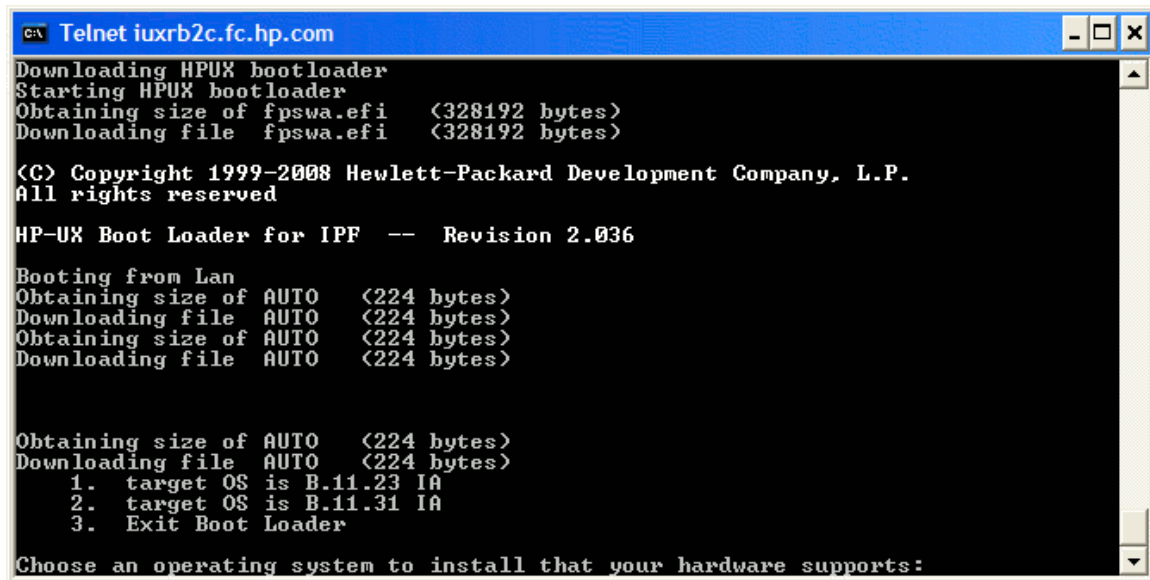
```
C:\> Telnet iuxlp4c.fc.hp.com

EFI Boot Manager ver 1.10 [14.61] Firmware ver 2.31 [4411]
Please select a boot option

HP-UX Primary Boot: 0/1/1/0.0x1.0x0
EFI Shell [Built-in]
Boot from DVD
HP-UX Ignite Server
Boot Option Maintenance Menu
System Configuration Menu

Use ^ and v to change option(s). Use Enter to select an option
```

7. Enter the version of HP-UX you would like to install and proceed for complete installation



```
C:\> Telnet iuxrb2c.fc.hp.com

Downloading HPUX bootloader
Starting HPUX bootloader
Obtaining size of fpswa.efi    <328192 bytes>
Downloading file  fpswa.efi    <328192 bytes>

<C> Copyright 1999-2008 Hewlett-Packard Development Company, L.P.
All rights reserved

HP-UX Boot Loader for IPF -- Revision 2.036

Booting from Lan
Obtaining size of AUTO    <224 bytes>
Downloading file  AUTO    <224 bytes>
Obtaining size of AUTO    <224 bytes>
Downloading file  AUTO    <224 bytes>

Obtaining size of AUTO    <224 bytes>
Downloading file  AUTO    <224 bytes>
  1. target OS is B.11.23 IA
  2. target OS is B.11.31 IA
  3. Exit Boot Loader

Choose an operating system to install that your hardware supports:
```

- Ø After the successful boot you will get [Ignite Welcome screen](#) to customize the File systems, root password, etc...
- Ø Then proceed with [GO](#)