

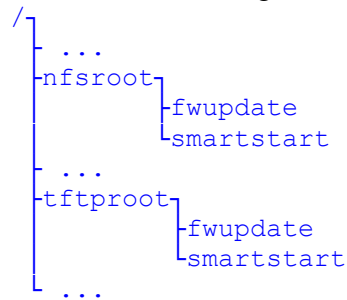
## ***PXE Booting HP SmartStart or Firmware Update CDs***

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For the purposes of this HowTo, we assume that we are working on a server with IP address 192.168.0.100. Substitute address in examples as needed.

### **1. Set up NFS, TFTP and DHCP servers.**

Create the following directory structure:



Install TFTP server (e.g. tftpd-hpa), configure /tftproot as the root directory.

Install NFS server, add this line:

```
/nfsroot 192.168.0.0/255.255.255.0(ro,no_root_squash,async)
```

to /etc/exports. Change permissions as needed, read NFS documentation for more info.

Configure your DHCP server to pass appropriate options for PXE booting and configure the PXE menus as needed.

### **2. Make contents of the CDs available on the server**

Either mount the SmartStart CD itself or copy and mount the ISO:

```
mount /dev/cdrom /mnt/cdrom
```

or

```
mount -o loop SS792.2008_0124.1.iso /mnt/cdrom
```

Copy the contents of the CD to the NFS server directory:

```
rsync -av /mnt/cdrom/ /nfsroot/smartstart
```

(use rsync to make sure all file permissions remain correct)

```
umount /mnt/cdrom
```

Copy initrd image & kernel to TFTP directory:

```
cp /nfsroot/smartstart/system/initrd.img /tftproot/smartstart/
```

```
cp /nfsroot/smartstart/system/vmlinuz /tftproot/smartstart
```

Repeat the same process for the Firmware Update CD

### **3. Set up PXE boot options**

Add the appropriate menu items to /tftproot/pxelinux.cfg/default or a submenu of your choice.

```
LABEL smartstart
MENU LABEL ^SmartStart 7.92
KERNEL smartstart/vmlinuz
APPEND initrd=smartstart/initrd.img media=network rw root=/dev/ram0
ramdisk_size=91776 init=/bin/init loglevel=3 ide=nodma ide=noraid
pnpbios=off splash=0 debug console=ttyS0,115200n8 console=tty0
showopts isol=nfs://192.168.0.100/nfsroot/smartstart/
```

```
LABEL fwupdate
MENU LABEL ^Firmware Update 8.00
KERNEL fwupdate/vmlinuz
APPEND initrd= fwupdate/initrd.img media=network rw root=/dev/ram0
ramdisk_size=127464 init=/bin/init loglevel=3 ide=nodma ide=noraid
pnpbios=off splash=0 debug console=ttyS0,115200n8 console=tty0
showopts isol=nfs://192.168.0.100/nfsroot/fwupdate/
```

#### 4. Update the bootrun script

The bootrun script on the Firmware Update CD does not function correctly when system is booted from network. You need to replace the /nfsroot/fwupdate/\_autorun/bootrun script with the following:

```
#!/bin/bash

CDVOLNAME="HPFWUP"
CDTITLE="HPFWUP"

LCLSHELL="/bin/bash"

echo "/mnt/bootdevice" > /tmp/autorun_mtab

/bin/cat /tmp/autorun_mtab | while read MNTPT ; do
    MNTDEV=`df -k $MNTPT | grep $MNTPT | cut -d \ -f 1`
    echo "var cdrom = \"${MNTPT}/\";" > /tmp/cdrom.js
    echo "${MNTDEV}      ${MNTPT}" > /tmp/autorun_mtab2
    break
done

MNTDEV=`cat /tmp/autorun_mtab2 2>/dev/null | cut -f 1`
MNTPT=`cat /tmp/autorun_mtab2 2>/dev/null | cut -f 2`
CDLABEL=`cat $MNTPT/usb/sdgconfig 2>/dev/null | cut -f 1`

SS_CD_MOUNTPOINT=$MNTPT
HDU_BOOTENV_SMPJTB="yes"

export MNTPT MNTDEV CDLABEL SS_CD_MOUNTPOINT HDU_BOOTENV_SMPJTB

# Create script to unmount and eject CD
echo "umount -l $MNTPT" >> /tmp/cdrom_eject.sh
echo "reboot" >> /tmp/cdrom_eject.sh
chmod 777 /tmp/cdrom_eject.sh

cd ${MNTPT}/_autorun/
./bootar

exit 0
```