1. Install Packages For PXE Server

[root@foo1 ~]# yum install tftp-server syslinux httpd -y

2. Create TFTP Server Directory

Create a new directory where you want to store TFTP server files. Copy TFTP server configuration files into it.

[root@foo1 ~]# mkdir /tftpboot [root@foo1 ~]# cp /usr/share/syslinux/pxelinux.0 /tftpboot/ [root@foo1 ~]# cp /usr/share/syslinux/menu.c32 /tftpboot/ [root@foo1 ~]# cp /usr/share/syslinux/memdisk /tftpboot/ [root@foo1 ~]# cp /usr/share/syslinux/mboot.c32 /tftpboot/ [root@foo1 ~]# cp /usr/share/syslinux/chain.c32 /tftpboot/

3. Create PXE Server Configuration Directory

[root@foo1 ~]# mkdir /tftpboot/pxelinux.cfg

4. Edit TFTP Configuration File (/etc/xinetd.d/tftp)

Edit “server_args = -s /var/lib/tftpboot” line to point to the newly created TFTP server directory and “disable = yes” to no, to enable TFTP service.

[root@foo1 ~]# cat /etc/xinetd.d/tftp # default: off # description: The tftp server serves files using the trivial file transfer # protocol. The tftp protocol is often used to boot diskless # workstations, download configuration files to network-aware printers, # and to start the installation process for some operating systems. service tftp { socket_type = dgram protocol = udp wait = yes user = root server = /usr/sbin/in.tftpd **server_args = -s /tftpboot** **disable = no** per_source = 11 cps = 100 2 flags = IPv4

5. Create CentOS 6 Boot Image Directory

Create CentOS 6 (or other desired distribution) boot image directory and mount or copy the linux ISO image contents into it.

[root@foo1 ~]# mkdir -p /tftpboot/centos6/i386 [root@foo1 ~]# mount -o loop CentOS-6.4-i386-bin-DVD1.iso /tftpboot/centos6/i386/

6. Create PXE Server Apache Configuration File

Apache (httpd) is used to transfer CentOS 6 installation ISO files to PXE client since it is faster and more reliable then TFTP Edit the directory path and IP address to reflect your

configuration.

[root@foo1 ~]# cat /etc/httpd/conf.d/pxeboot.conf Alias /centos6/i386 /tftpboot/centos6/i386 <Directory /tftpboot/centos6/i386> Options Indexes FollowSymLinks Order Deny,Allow Deny from all Allow from 127.0.0.1 **192.168.1.0/24** </Directory>

7. Create PXE Server Configuration File

Edit the directory path and HTTP path to reflect your configuration.

[root@foo1 ~]# cat /tftpboot/pxelinux.cfg/default default menu.c32 prompt 0 timeout 300 ONTIMEOUT local menu title ########## PXE Boot Menu ########## label 1 menu label ^1) Install CentOS 6 i386 kernel **centos6/i386/images/pxeboot/vmlinuz** append initrd=**centos6/i386/images/pxeboot/initrd.img**
method=
http://192.168.1.5/centos6/i386
devfs=nomount label 2 menu label ^2) Boot from local drive localboot

8. Reconfigure DHCP Server

Append this at the end of your DHCP configuration file (/etc/dhcp/dhcpd.conf). Edit the IP address with your PXE Server IP address.

GeekPeek.Net scripts - Added for PXE Server configuration allow booting; allow bootp; option option-128 code 128 = string; option option-129 code 129 = text; next-server **192.168.1.5** ;
filename "pxelinux.0";

9. Restart/reload all services

[root@foo1 ~]# /etc/init.d/xinetd restart Stopping xinetd: [OK] Starting xinetd: [OK] [root@foo1 ~]# /etc/init.d/httpd restart Stopping httpd: [OK] Starting httpd: [OK] [root@foo1 ~]# /etc/init.d/dhcpd restart Shutting down dhcpd: [OK] Starting dhcpd: [OK]

We have successfully installed and configured our PXE Server.