PXE boot(Pre Execution Environment)

First of all we need to download some packages that are mentioned below:-

== Iptable and selinux should be disable

# yum install dhcp\* xinetd tftp-server httpd syslinux vsftpd

Mount iso image

# mount /dev/iso /mnt

# mkdir /var/www/rhel7

# cp -var /mnt/\* /var/www/rhel7/

# chmod -R 755 /var/www/rhel7/

# vi /etc/httpd/conf.d/pxe.conf

Add the following lines:

Alias /rhel7 /var/www/rhel7/

<Directory /var/www/rhel7/>

Options Indexes FollowSymLinks

Order Deny,Allow

Allow from all

</Directory>

# cp -a /usr/share/syslinux/\* /var/lib/tftpboot/

# mkdir /var/lib/tftpboot/rhel7

#cp /mnt/images/pxeboot/vmlinz /var/lib/tftpboot/rhel7/

# cp /mnt /images/pxeboot/initrd.img /var/lib/tftpboot//rhel7/

# mkdir /var/lib/tftpboot/pxelinux.cfg

# vi /var/lib/tftpboot/pxelinux.cfg/default

Add some lines:-

default menu.c32

prompt 0

timeout 300

ONTIMEOUT 1

menu title ########## RHEL 7 PXE Boot Menu ##########

label 1

menu label ^1) Install RHEL 7

menu default

kernel rhel7/vmlinuz

append initrd=rhel7/initrd.img inst.ks=http://192.168.199.129/rhel7/anaconda-ks.cfg

label 2

menu label ^2) Boot from local drive

localboot

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Now enable tftp

# vi /etc/xinetd.d/tftp

# systemctl restart vsftpd.service

# systemctl enable vsftpd.service

# systemctl restart httpd

# systemctl enable httpd

# cp /usr/share/doc/dhcp-4.2.5/dhcpd.conf.example /etc/dhcp/dhcpd.conf

Press “y” for overwriting

# vi /etc/dhcp/dhcpd.conf

Add some lines here

################## DHCP SERVER CONFIG START ############################

Allow booting;

Allow bootp;

authoritative;

subnet 192.168.199.0 netmask 255.255.255.0 {

}

# This is a very basic subnet declaration.

subnet 192.168.199.0 netmask 255.255.255.0 {

range 192.168.199.201 192.168.199.210;

option routers 192.168.199.200;

default-lease-time 21600;

max-lease-time 43200;

}

# This declaration allows BOOTP clients to get dynamic addresses,

# which we don't really recommend.

subnet 192.168.199.0 netmask 255.255.255.0 {

range dynamic-bootp 192.168.199.211 192.168.199.220;

option broadcast-address 192.168.199.255;

option routers 192.168.199.200;

option domain-name "abcdef.com";

option domain-name-servers 192.168.199.201;

default-lease-time 21600;

max-lease-time 43200;

filename "pxelinux.0";

next-server 192.168.199.129; # < -----This is your server ip

}

# dhcpd configtest

Warning is acceptable but not error

# systemctl restart dhcpd.service

# systemctl enable dhcpd.service

# cp anaconda-ks.cfg /var/www/rhel7/

# chmod 755 /var/www/rehl7/anaconda-ks.cfg

# vi /var/www/rehl7/anaconda-ks.cfg

add some lines

#cdrom

# Use network for installation

url --url="http://192.168.199.129/rhel7"

# systemctl restart httpd

# systemctl restart vsftpd

# systemctl restart dhcpd

# systemctl restart xinetd