**[Setup Kickstart Server in Linux](http://www.lazysystemadmin.com/2011/01/setup-kickstart-server-in-linux.html)**

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Red Hat Linux operating system installations can be done via a network connection using a Kickstart server. It is frequently much faster than using CDs and the process can be automated.

Example Kickstart

Get the kickstart cfg from http server and start the install

boot: linux ks=<http://server.com/path/to/kickstart/file>

Get the kickstart cfg from nfs server and start the install

boot: linux ks=nfs:server:/path/to/kickstart/file

Serving the Kickstart file from nfs server through dhcp /etc/dhcpd.conf

next-server 10.10.10.100;

filename "/export/rhinstall/kickstart/ks.cfg"

Setup a Kickstart Server

01. Install and configure the DHCPD server

02. Install tftp server and enable TFTP service

a. yum install tftp-server

b. Enable TFTP server.

vi /etc/xinetd.d/tftp and change disable to 'no'

c. service xinetd restart

03. Install syslinux if not already installed

a. yum install syslinux

04. Copy needed files from syslinux to the tftpboot directory

cp /usr/lib/syslinux/pxelinux.0 /tftpboot

cp /usr/lib/syslinux/menu.c32 /tftpboot

cp /usr/lib/syslinux/memdisk /tftpboot

cp /usr/lib/syslinux/mboot.c32 /tftpboot

cp /usr/lib/syslinux/chain.c32 /tftpboot

04. Create the directory for your PXE menus

mkdir /tftpboot/pxelinux.cfg

05. For each "Release" and "ARCH" Copy vmlinuz and initrd.img from /images/pxeboot/ directory on "disc 1" of that $Release/$ARCH to /tftpboot/images/RHEL/$ARCH/$RELEASE

mkdir -p /tftpboot/images/RHEL/i386/4.3

mkdir -p /tftpboot/images/RHEL/i386/5.5

mkdir -p /tftpboot/images/RHEL/x86\_64/4.3

mkdir -p /tftpboot/images/RHEL/x86\_64/5.5

For RHEL 5.5 x86\_64, do the following

mount /dev/cdrom /cdrom

cd /cdrom/images/pxeboot

cp vmlinuz initrd.img /tftpboot/images/RHEL/x86\_64/5.5

Do the above for all releases and ARCH you want to kickstart from this server.

06. Add this to your existing or new /etc/dhcpd.conf.  
Note: xxx.xxx.xxx.xxx is the IP address of your PXE server

allow booting;

allow bootp;

option option-128 code 128 = string;

option option-129 code 129 = text;

next-server xxx.xxx.xxx.xxx;

filename "/pxelinux.0";

07. Restart DHCP service

# service dhcpd restart

08. Create Simple or Multilevel PIXIE menu. Create a file called "default" in /tftpboot/pxelinux.cfg directory. A Sample file named "isolinux.cfg" is found on the boot installation media in "isolinux" directory. Copy this file as default and edit this file as per requirement. A sample default file is given bellow.

default menu.c32

prompt 0

timeout 300

ONTIMEOUT local

MENU TITLE PXE Menu

LABEL Pmajic

MENU LABEL Pmajic

kernel images/pmagic/bzImage

append noapic initrd=images/pmagic/initrd.gz root=/dev/ram0 init=/linuxrc ramdisk\_size=100000

label Dos Bootdisk

MENU LABEL ^Dos bootdisk

kernel memdisk

append initrd=images/622c.img

LABEL RHEL 5 x86 eth0

MENU LABEL RHEL 5 x86 eth0

KERNEL images/RHEL/x86/5.5/vmlinuz

APPEND initrd=images/RHEL/x86\_64/5.5/initrd.img ramdisk\_size=10000

ks=nfs:xx.xx.xx.xxx:/ ksdevice=eth1

LABEL RHEL 5 x86\_64 eth0

MENU LABEL RHEL 5 x86\_64 eth0

KERNEL images/RHEL/x86\_64/5.5/vmlinuz

APPEND initrd=images/RHEL/x86\_64/5.5/initrd.img ramdisk\_size=10000

ks=nfs:xx.xx.xx.xxx:/ ksdevice=eth1

09. Install the kickstart Configurator tool. This tool will be helpful to create the kickstart configuration file.

yum install system-config-kickstart

10. Create the kickstart config file. This file can be created using kickstart Configuration Tool. A Sample file anaconda-ks.cfg based on current installation of a system is placed in /root directory. We can also use this /root/anaconda-ks-cfg as the configuration file. Copy this file to the location specified in the default file. Make sure the directory is NFS exported if you are using NFS for installing the OS.

11. Modify the kickstart configuration file as per requirement. If you are using NFS for installation, Make sure to copy the ISO images of Linux disks to any NFS server and NFS export the directory. This server/directory details need to be specified in the jumpstart configuration file.

12. After creating the KS configuration files and copying the ISO images, the installation can be started.