28.10. Starting a Kickstart Installation

To begin a kickstart installation, you must boot the system from boot media you have made or the Red Hat Enterprise Linux CD-ROM #1, and enter a special boot command at the boot prompt. The installation program looks for a kickstart file if the **ks** command line argument is passed to the kernel.

CD-ROM #1 and Diskette

The **linux ks=floppy** command also works if the **ks.cfg** file is located on a vfat or ext2 file system on a diskette and you boot from the Red Hat Enterprise Linux CD-ROM #1.

An alternate boot command is to boot off the Red Hat Enterprise Linux CD-ROM #1 and have the kickstart file on a vfat or ext2 file system on a diskette. To do so, enter the following command at the `boot:` prompt:

```
linux ks=hd:fd0:/ks.cfg
```

With Driver Disk

If you need to use a driver disk with kickstart, specify the **dd** option as well. For example, to boot off a boot diskette and use a driver disk, enter the following command at the `boot:` prompt:

```
linux ks=floppy dd
```

Boot CD-ROM

If the kickstart file is on a boot CD-ROM as described in Section 28.8.1, "Creating Kickstart Boot Media", insert the CD-ROM into the system, boot the system, and enter the following command at the `boot:` prompt (where **ks.cfg** is the name of the kickstart file):

```
linux ks=cdrom:/ks.cfg
```

Other options to start a kickstart installation are as follows:

askmethod

Do not automatically use the CD-ROM as the install source if we detect a Red Hat Enterprise Linux CD

in your CD-ROM drive.

autostep

Make kickstart non-interactive.

autostep

Make kickstart non-interactive.

debug

Start up pdb immediately.

dd

Use a driver disk.

dhcpclass=*<class>*

Sends a custom DHCP vendor class identifier. ISC's dhcpcd can inspect this value using "option vendor-class-identifier".

dns=*<dns>*

Comma separated list of nameservers to use for a network installation.

driverdisk

Same as 'dd'.

expert

Turns on special features:

- allows partitioning of removable media
- prompts for a driver disk

gateway=*<gw>*

Gateway to use for a network installation.

graphical

Force graphical install. Required to have ftp/http use GUI.

isa

Prompt user for ISA devices configuration.

ip=*<ip>*

IP to use for a network installation, use 'dhcp' for DHCP.

keymap=*<keymap>*

Keyboard layout to use. Valid values are those which can be used for the 'keyboard' kickstart command.

ks=nfs:*<server>*:/*<path>*

The installation program looks for the kickstart file on the NFS server ***<server>***, as file ***<path>***. The installation program uses DHCP to configure the Ethernet card. For example, if your NFS server is server.example.com and the kickstart file is in the NFS share **/mydir/ks.cfg**, the correct boot command would be **ks=nfs:server.example.com:/mydir/ks.cfg**.

ks=http://*<server>*/*<path>*

The installation program looks for the kickstart file on the HTTP server ***<server>***, as file ***<path>***. The installation program uses DHCP to configure the Ethernet card. For example, if your HTTP server is server.example.com and the kickstart file is in the HTTP directory **/mydir/ks.cfg**, the correct boot command would be **ks=http://server.example.com/mydir/ks.cfg**.

ks=floppy

The installation program looks for the file **ks.cfg** on a vfat or ext2 file system on the diskette in **/dev/fd0**.

ks=floppy:/*<path>*

The installation program looks for the kickstart file on the diskette in **/dev/fd0**, as file ***<path>***.

ks=hd:*<device>*:/*<file>*

The installation program mounts the file system on ***<device>*** (which must be vfat or ext2), and look for the kickstart configuration file as ***<file>*** in that file system (for example, **ks=hd:sda3:/mydir/ks.cfg**).

ks=file:/*<file>*

The installation program tries to read the file ***<file>*** from the file system; no mounts are done. This is normally used if the kickstart file is already on the **initrd** image.

ks=cdrom:/*<path>*

The installation program looks for the kickstart file on CD-ROM, as file ***<path>***.

ks

If **ks** is used alone, the installation program configures the Ethernet card to use DHCP. The kickstart file is read from the "bootServer" from the DHCP response as if it is an NFS server sharing the kickstart file. By default, the bootServer is the same as the DHCP server. The name of the kickstart file is one of the following:

- If DHCP is specified and the boot file begins with a **/**, the boot file provided by DHCP is looked for on the NFS server.
- If DHCP is specified and the boot file begins with something other than a **/**, the boot file provided by DHCP is looked for in the **/kickstart** directory on the NFS server.
- If DHCP did not specify a boot file, then the installation program tries to read the file **/kickstart/1.2.3.4-kickstart**, where ***1.2.3.4*** is the numeric IP address of the machine being installed.

ksdevice=*<device>*

The installation program uses this network device to connect to the network. For example, to start a kickstart installation with the kickstart file on an NFS server that is connected to the system through the eth1 device, use the command **ks=nfs:*<server>*:/*<path>* ksdevice=eth1** at the `boot:` prompt.

kssendmac

Adds HTTP headers to ks=http:// request that can be helpful for provisioning systems. Includes MAC address of all nics in CGI environment variables of the form: "X-RHN-Provisioning-MAC-0: eth0 01:23:45:67:89:ab".

lang=*<lang>*

Language to use for the installation. This should be a language which is valid to be used with the 'lang' kickstart command.

loglevel=*<level>*

Set the minimum level required for messages to be logged. Values for <level> are debug, info, warning, error, and critical. The default value is info.

lowres

Force GUI installer to run at 640x480.

mediacheck

Activates loader code to give user option of testing integrity of install source (if an ISO-based method).

method=cdrom

Do a CDROM based installation.

method=ftp://*<path>*

Use <path> for an FTP installation.

method=hd://*<dev>*/*<path>*

Use <path> on <dev> for a hard drive installation.

method=http://*<path>*

Use <path> for an HTTP installation.

method=nfs:*<path>*

Use <path> for an NFS installation.

netmask=*<nm>*

Netmask to use for a network installation.

nofallback

If GUI fails exit.

nofb

Do not load the VGA16 framebuffer required for doing text-mode installation in some languages.

nofirewire

Do not load support for firewire devices.

noipv6

Disable IPv6 networking during installation.

nokill

A debugging option that prevents anaconda from terminating all running programs when a fatal error occurs.

nomount

Don't automatically mount any installed Linux partitions in rescue mode.

nonet

Do not auto-probe network devices.

noparport

Do not attempt to load support for parallel ports.

nopass

Don't pass keyboard/mouse info to stage 2 installer, good for testing keyboard and mouse config screens in stage2 installer during network installs.

nopcmcia

Ignore PCMCIA controller in system.

noprobe

Do not attempt to detect hw, prompts user instead.

noshell

Do not put a shell on tty2 during install.

nostorage

Do not auto-probe storage devices (SCSI, IDE, RAID).

nousb

Do not load USB support (helps if install hangs early sometimes).

nousbstorage

Do not load usbstorage module in loader. May help with device ordering on SCSI systems.

rescue

Run rescue environment.

resolution=*<mode>*

Run installer in mode specified, '1024x768' for example.

serial

Turns on serial console support.

skipddc

Skips DDC probe of monitor, may help if it's hanging system.

syslog=*<host>*[:*<port>*]

Once installation is up and running, send log messages to the syslog process on ***<host>***, and optionally, on port ***<port>***. Requires the remote syslog process to accept connections (the -r option).

text

Force text mode install.

updates

Prompt for floppy containing updates (bug fixes).

updates=ftp://*<path>*

Image containing updates over FTP.

updates=http://*<path>*

Image containing updates over HTTP.

upgradeany

Don't require an /etc/redhat-release that matches the expected syntax to upgrade.

vnc

Enable vnc-based installation. You will need to connect to the machine using a vnc client application.

vncconnect=*<host>*[:*<port>*]

Once installation is up and running, connect to the vnc client named ***<host>***, and optionally use port ***<port>***.

Requires 'vnc' option to be specified as well.

vncpassword=*<password>*

Enable a password for the vnc connection. This will prevent someone from inadvertently connecting to the vnc-based installation.

Requires 'vnc' option to be specified as well.