



Linux Howtos

Kernel update with yum (126)
CIS 191 - Fall 2008

Kernel update with yum

This Howto shows how to do a kernel "update" for a CentOS 5 system. As a precaution against breaking any modules dependent on the previous version, the new kernel is installed side-by-side with the old kernel.

Supplies:

- Any non-updated CentOS 5 VM
The CentOS 5 star VM will be used in this Howto
- VMWare Server 1.05
<http://www.vmware.com/products/server/>

Run or create a new CentOS 5 VM

- This howto is using the star VM which was created as part of Lab Assignment 3.
(<http://simms-teach.com/docs/cis191/cis191lab3.pdf>)

Examine current grub.conf Linux boot option

```
[root@star ~]# cat /boot/grub/grub.conf
# grub.conf generated by anaconda
#
# Note that you do not have to rerun grub after making changes to this file
# NOTICE: You have a /boot partition. This means that
#           all kernel and initrd paths are relative to /boot/, eg.
#           root (hd0,1)
#           kernel /vmlinuz-version ro root=/dev/sda3
#           initrd /initrd-version.img
#boot=/dev/sda2
default=0
timeout=35
splashimage=(hd0,1)/grub/splash.xpm.gz
#hiddenmenu
title CentOS (2.6.18-8.el5)
    root (hd0,1)
    kernel /vmlinuz-2.6.18-8.el5 ro root=LABEL=/ rhgb
    initrd /initrd-2.6.18-8.el5.img
title FreeDOS
    rootnoverify (hd0,0)
    chainloader +1
[root@star ~]#
```

Issue yum command

```
[root@star ~]# yum install kernel
Loading "installonlyn" plugin
Setting up Install Process
Setting up repositories
Reading repository metadata in from local files
Parsing package install arguments
Resolving Dependencies
--> Populating transaction set with selected packages. Please wait.
---> Downloading header for kernel to pack into transaction set.
kernel-2.6.18-92.1.13.el5 100% |=====| 319 kB    00:01
---> Package kernel.i686 0:2.6.18-92.1.13.el5 set to be installed
--> Running transaction check
```

Dependencies Resolved

```
=====
Package                Arch      Version                Repository              Size
=====
Installing:
kernel                 i686     2.6.18-92.1.13.el5    updates                 14
M
```

Transaction Summary

```
=====
Install      1 Package(s)
Update      0 Package(s)
Remove      0 Package(s)
```

Total download size: 14 M

Is this ok [y/N]: y

Downloading Packages:

```
(1/1): kernel-2.6.18-92.1 100% |=====| 14 MB    01:15
warning: rpmts_HdrFromFdno: Header V3 DSA signature: NOKEY, key ID e8562897
Importing GPG key 0xE8562897 "CentOS-5 Key (CentOS 5 Official Signing Key)
<centos-5-key@centos.org>" from http://mirror.centos.org/centos/RPM-GPG-KEY-
CentOS-5
```

Is this ok [y/N]: y

Running Transaction Test

Finished Transaction Test

Transaction Test Succeeded

Running Transaction

```
Installing: kernel                                     ##### [1/1]
```

Installed: kernel.i686 0:2.6.18-92.1.13.el5

Complete!

[root@star ~]#

Review new kernel option in modified grub.conf

The new option is shown in blue italic below.

```
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default=0
timeout=35
splashimage=(hd0,1)/grub/splash.xpm.gz
#hiddenmenu
title CentOS (2.6.18-92.1.13.el5)
    root (hd0,1)
    kernel /vmlinuz-2.6.18-92.1.13.el5 ro root=LABEL=/ rhgb
    initrd /initrd-2.6.18-92.1.13.el5.img
title CentOS (2.6.18-8.el5)
    root (hd0,1)
    kernel /vmlinuz-2.6.18-8.el5 ro root=LABEL=/ rhgb
    initrd /initrd-2.6.18-8.el5.img
title FreeDOS
    rootnoverify (hd0,0)
    chainloader +1
[root@star ~]#
```