Managing Software on CentOS 7

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Exam Objectives

Update operating systems to provide required functionality and security

Update software to provide required functionality and security

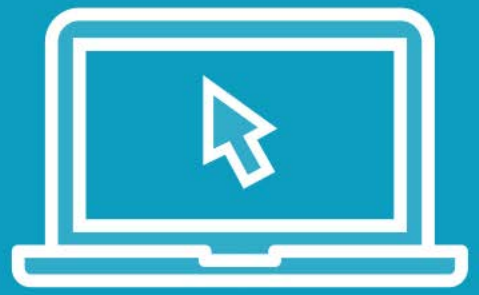
Update the kernel and ensure the system is bootable

Manage the startup process and services

Update packages from the network, a remote repository, or from the local file system

Install software from source

Demo



Software management with RPM

Using YUM

Working with YUM Repositories

Working with the YUM Cache

Controlling kernel updates

Working with services

Working with source code

Software Management with RPM

Using YUM

Configuring YUM Repositories

Working with the YUM Cache

Controlling Kernel Updates

Working with Source RPMS

Enabling Services

Using RPM

```
# rpm -qa

# rpm -i <name.rpm>

# rpm -e nmap

# rpm -ql nmap

# rpm -qpl <name.rpm>

# rpm -V nmap
```

Using YUM

```
# yum install bash-completion

# yum install -y bash-completion

# yum info bash-completion

# yum list installed

# yum remove bash-completion
```

YUM Repos

/etc/yum.repos.d/

yum repolist

yum repolist all

YUM Cache

/var/cache/yum

yum clean all

yum makecache

Kernel Updates

When updating kernel yum will install new kernel and does not update the original

This makes it safe as we can always choose to boot to the original kernel

If we do not want to install new kernels or upgrade the existing we can add exclude=kernel* to /etc/yum.conf

Source RPMS

```
# Enable repos in CentOS-Source.repo
# yum install -y yum-utils ncurses-devel
# yum groupinstall “Development Tools”
# yumdownloader --source zsh
# rpm -i zsh...src.rpm
# cd ~/rpmbuild/SOURCES
# tar -xjf zsh..tar.bz2
# cd zsh... ; ./configure
# make ; make install
```

Services

```
# systemctl enable httpd.service
# systemctl start httpd.service
# systemctl status httpd.service
```

Next Up: Configuration Management Tools