

## Assignment: Installation of APACHE Server.

The `cd /etc/yum.repos.d` command allows you to access the directory where yum repository configurations are stored.

This directory contains repository configuration files for yum, which is a package manager used in CentOS and other Red Hat-based distributions. Each `.repo` file in this directory defines a software repository that yum can use to install packages.

```
[root@localhost ~]# cd /etc/yum.repos.d
[root@localhost yum.repos.d]#
```

```
rm -rf local.repo
```

- **rm:** This command is used to remove files or directories.
- **-r:** This option stands for "recursive," which means it will delete directories and their contents recursively.
- **-f:** This option stands for "force," which means it will ignore non-existent files and won't prompt for confirmation.
- **local.repo:** This is the name of the file or directory you want to remove.

*What It Does:*

Running `rm -rf local.repo` will:

- Forcefully and recursively delete the local.repo directory (or file) and all its contents without any confirmation prompt.

**ls:** This command lists the contents of the current directory.

```
[root@localhost yum.repos.d]# rm -rf local.repo
[root@localhost yum.repos.d]# ls
centos-addons.repo centos.repo redhat.repo
[root@localhost yum.repos.d]#
```

The command `vi local.repo` is used to open or create a file named `local.repo` using the `vi` text editor in a Linux terminal

```
[root@localhost yum.repos.d]# vi local.repo
```

```
[dvd1]
name=AppStream
baseurl=file:///mnt/AppStream
gpgcheck=0

[dvd2]
name=BaseOS
baseurl=file:///mnt/BaseOS
gpgcheck=0
```

The command `yum clean all` is used in CentOS and other Red Hat-based Linux distributions to clean up the local cache and metadata related to the yum package manager. Here's a breakdown of what it does:

### Purpose of `yum clean all`

1. **Clear Cached Packages:**
2. **Remove Metadata:**
3. **Free Up Disk Space:**

```
[root@localhost yum.repos.d]# yum clean all
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

21 files removed
[root@localhost yum.repos.d]#
```

The command `yum repolist all` is used in CentOS and other Red Hat-based distributions to display a list of all configured YUM repositories, including both enabled and disabled ones. Here's a breakdown of the command:

### Purpose of `yum repolist all`

1. **List All Repositories:**
2. **Check Repository Status:**
3. **Debugging and Configuration:**

```
[root@localhost yum.repos.d]# yum repolist all
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

repo id                repo name                status
appstream               CentOS Stream 9 - AppStream      enabled
appstream-debuginfo    CentOS Stream 9 - AppStream - Debug disabled
appstream-source       CentOS Stream 9 - AppStream - Source disabled
baseos                  CentOS Stream 9 - BaseOS        enabled
baseos-debuginfo       CentOS Stream 9 - BaseOS - Debug disabled
baseos-source          CentOS Stream 9 - BaseOS - Source disabled
crb                     CentOS Stream 9 - CRB           disabled
crb-debuginfo          CentOS Stream 9 - CRB - Debug   disabled
crb-source             CentOS Stream 9 - CRB - Source  disabled
dvd1                    AppStream                   enabled
dvd2                    BaseOS                       enabled
extras-common          CentOS Stream 9 - Extras packages enabled
```

The command `yum install httpd* -y` is used to install packages related to the Apache HTTP Server on a CentOS or Red Hat-based system. Here's a breakdown of its components and what it does:

## Breakdown of the Command

1. **yum:**
  - This is the package manager used in CentOS and other Red Hat-based distributions to manage software packages.
2. **install:**
  - This is the action that tells yum you want to install a package or packages.
3. **httpd\*:**
  - The `httpd*` syntax uses a wildcard (\*), which means "install any package that starts with `httpd`." This will typically include:
    - `httpd`: The main Apache HTTP server package.
    - `httpd-tools`: Utilities for managing the Apache server.
    - Any other packages that start with `httpd`.
4. **-y:**
  - This option automatically answers "yes" to any prompts during the installation process. It allows the installation to proceed without requiring user interaction, making it useful for scripting or when you want to install packages without interruption.

```
[root@localhost yum.repos.d]# yum install httpd* -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or
subscription-manager" to register.

CentOS Stream 9 - BaseOS                               1.2 MB/s | 8.3 MB    00:06
CentOS Stream 9 - AppStream                             2.6 MB/s | 20 MB    00:08
CentOS Stream 9 - Extras packages                       16 kB/s | 19 kB     00:01
BaseOS                                                  33 MB/s | 2.0 MB    00:00
AppStream                                               60 MB/s | 7.1 MB    00:00
Dependencies resolved.
=====
Package           Arch      Version           Repository        Size
=====
Installing:
  httpd            x86_64    2.4.62-1.el9     appstream         47
  httpd-core       x86_64    2.4.62-1.el9     appstream         1.5
  httpd-devel      x86_64    2.4.62-1.el9     appstream        206
  httpd-filesystem noarch    2.4.62-1.el9     appstream         13
  httpd-manual     noarch    2.4.62-1.el9     appstream         2.3
  httpd-tools      x86_64    2.4.62-1.el9     appstream         82
```

**cd /:**

- **Purpose:** Change the current directory to the root directory (/).
- **Effect:** You move to the top level of the filesystem.

**ls:**

- **Purpose:** List the contents of the current directory.
- **Effect:** After executing this command while in the root directory, you will see a list of all top-level directories and files, such as bin, etc, home, var, etc.

**cd /var/www/html:**

- **Purpose:** Change the current directory to /var/www/html.
- **Effect:** You navigate to the directory typically used as the web root for the Apache HTTP server, where website files are stored.

**ls:**

- **Purpose:** Again, this lists the contents of the current directory.

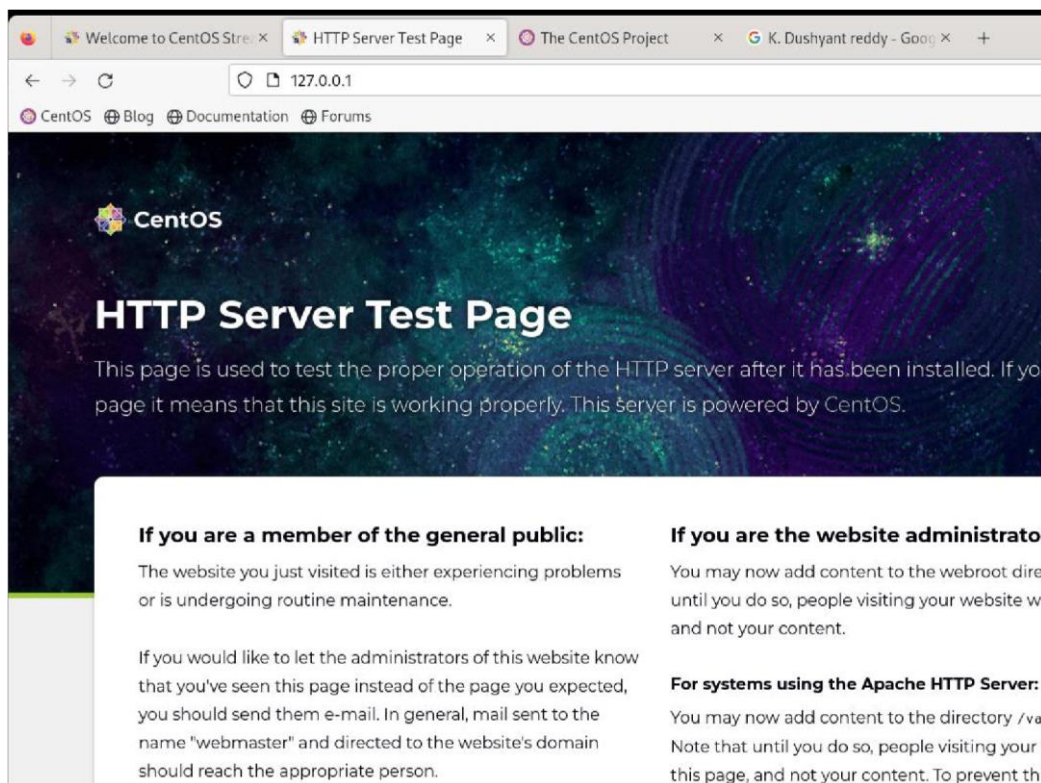
```
[root@localhost yum.repos.d]# cd /
[root@localhost /]# ls
afs  boot  etc  lib  media  opt  root  sbin  sys  usr
bin  dev  home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost /]# cd /var/www/html
[root@localhost html]# ls
[root@localhost html]#
```

```
[root@localhost ~]# cd /
[root@localhost /]# systemctl start httpd
[root@localhost /]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: d>
   Active: active (running) since Tue 2024-09-24 13:28:21 IST; 8s ago
     Docs: man:httpd.service(8)
  Main PID: 35814 (httpd)
    Status: "Started, listening on: port 80"
     Tasks: 177 (limit: 10949)
   Memory: 31.8M
      CPU: 135ms
   CGroup: /system.slice/httpd.service
           └─35814 /usr/sbin/httpd -DFOREGROUND
             └─35815 /usr/sbin/httpd -DFOREGROUND
               └─35816 /usr/sbin/httpd -DFOREGROUND
                 └─35820 /usr/sbin/httpd -DFOREGROUND
                   └─35821 /usr/sbin/httpd -DFOREGROUND

Sep 24 13:28:21 localhost.localdomain systemd[1]: Starting The Apache HTTP Serv>
```

```
[root@localhost ~]# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fea0:ce:f1 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:a0:ce:f1 txqueuelen 1000 (Ethernet)
    RX packets 59822 bytes 87295229 (83.2 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 12359 bytes 1384862 (1.3 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 18 bytes 2112 (2.0 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 18 bytes 2112 (2.0 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```



**CentOS**

## HTTP Server Test Page

This page is used to test the proper operation of the HTTP server after it has been installed. If you see this page it means that this site is working properly. This server is powered by CentOS.

**If you are a member of the general public:**

The website you just visited is either experiencing problems or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

**If you are the website administrator**

You may now add content to the webroot directory until you do so, people visiting your website will see this page, and not your content.

**For systems using the Apache HTTP Server:**

You may now add content to the directory /var/www/html. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this