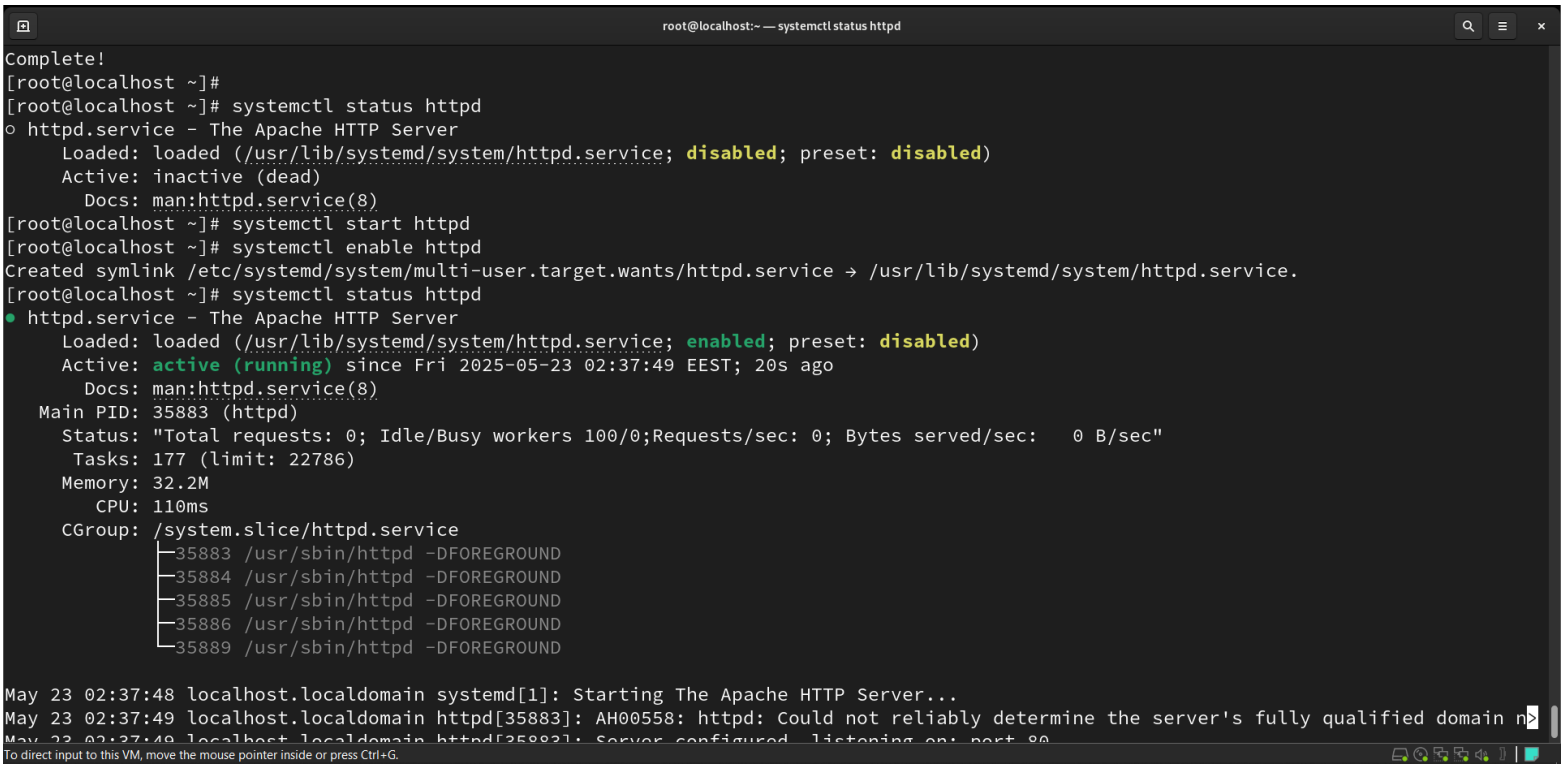
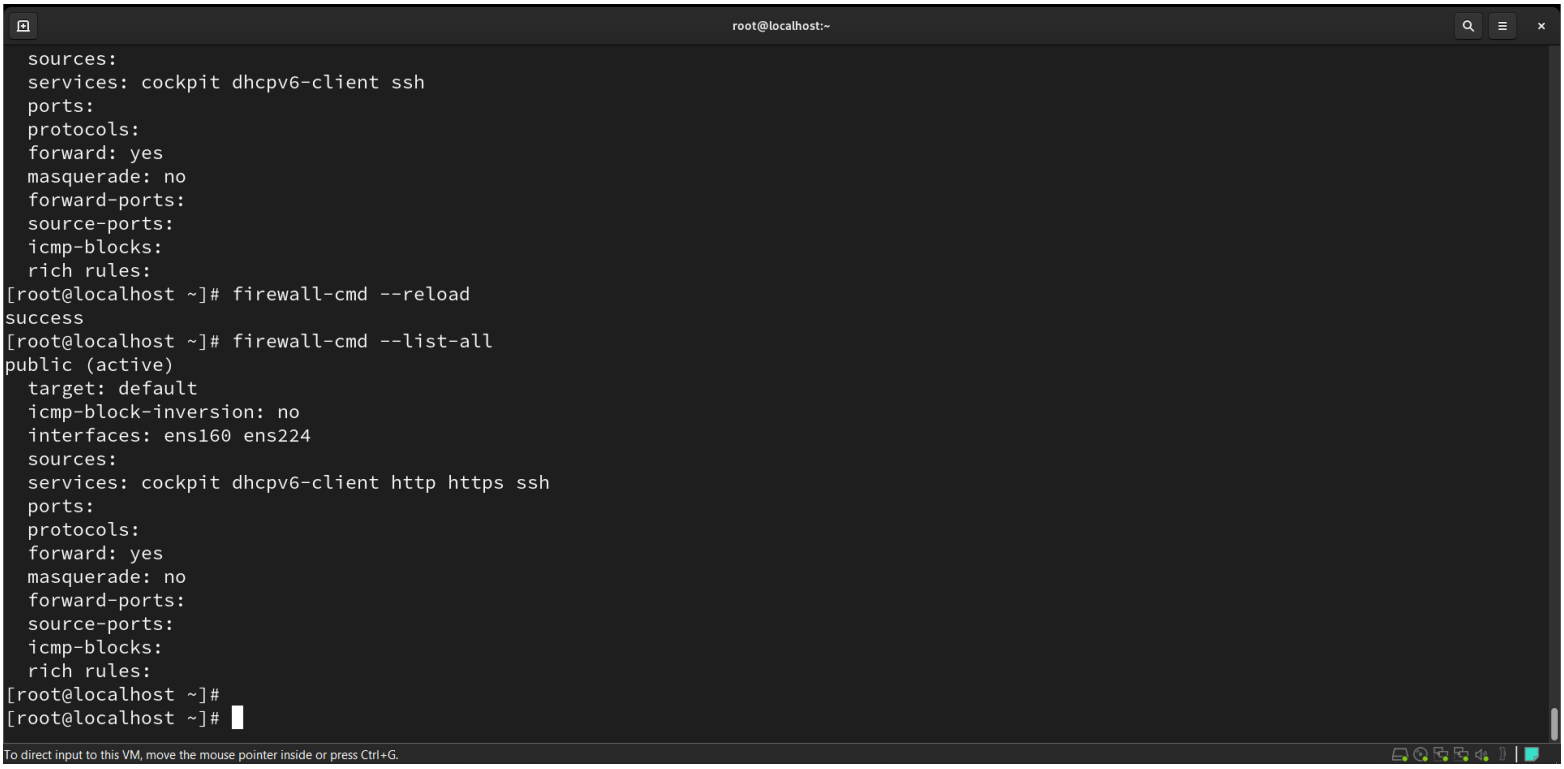
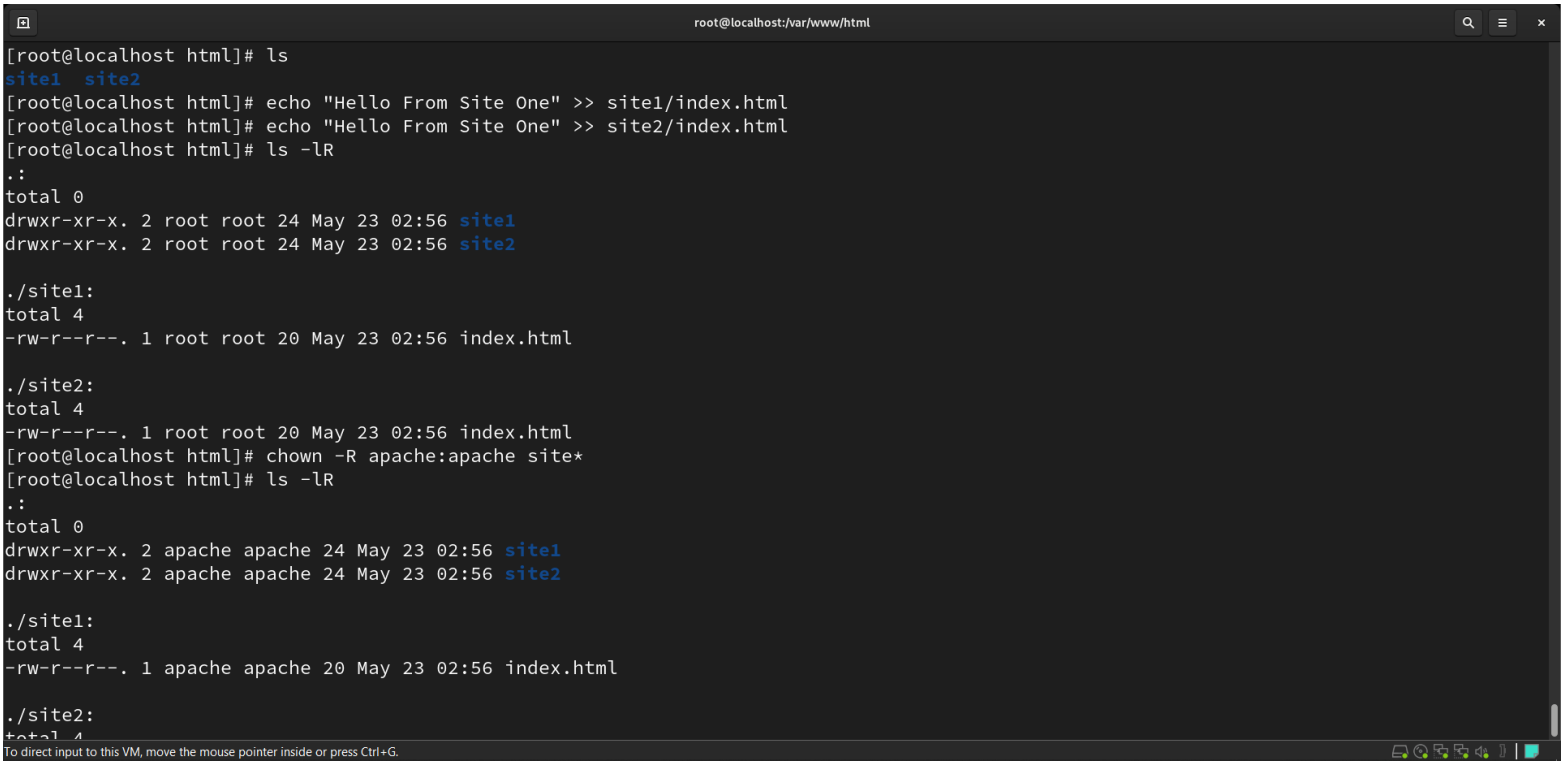
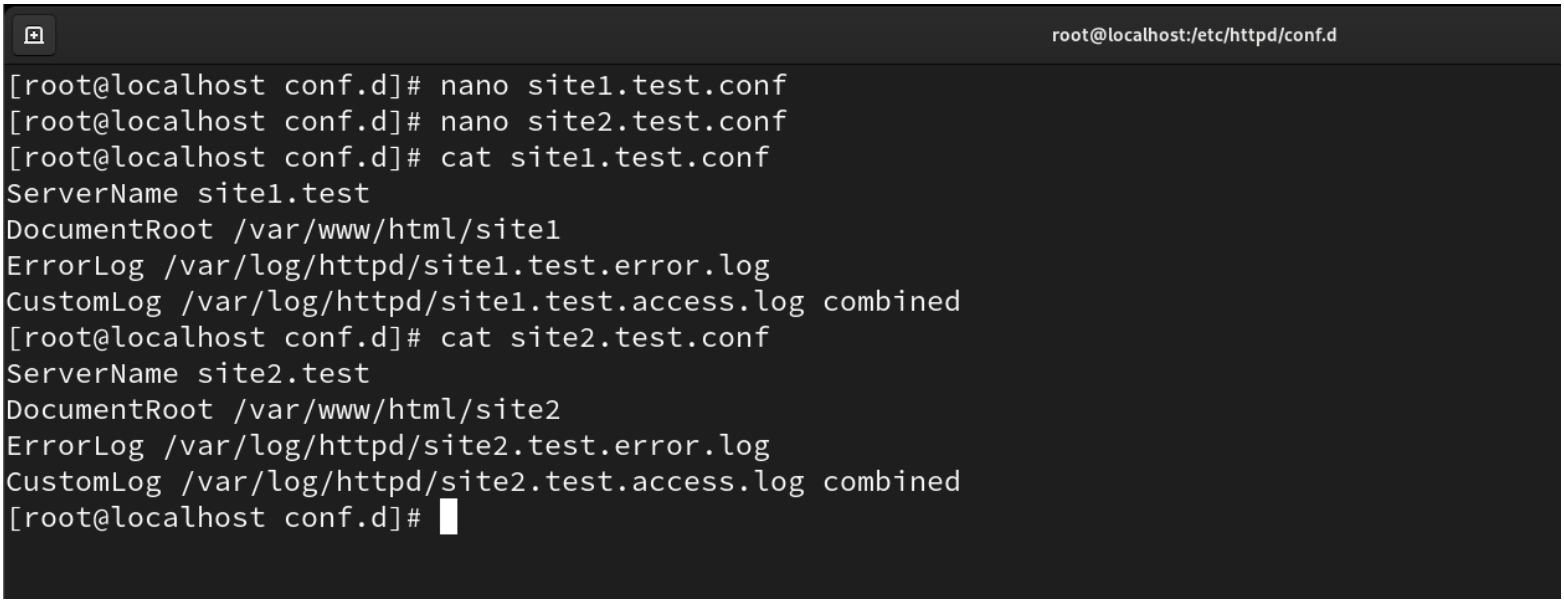
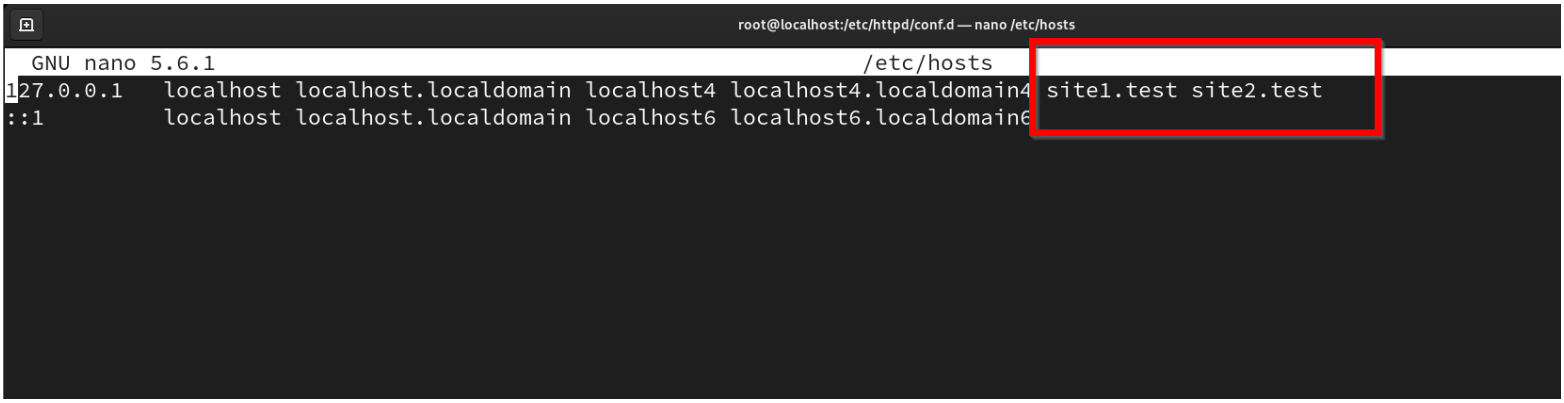
Hosting two sites site1, site2 using http, https protocols

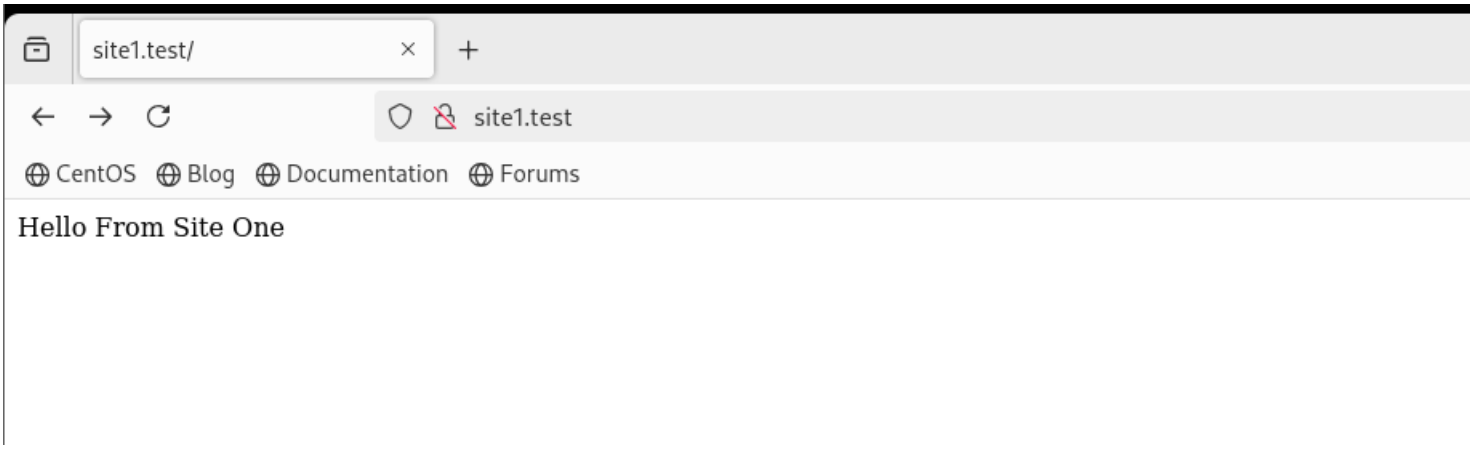


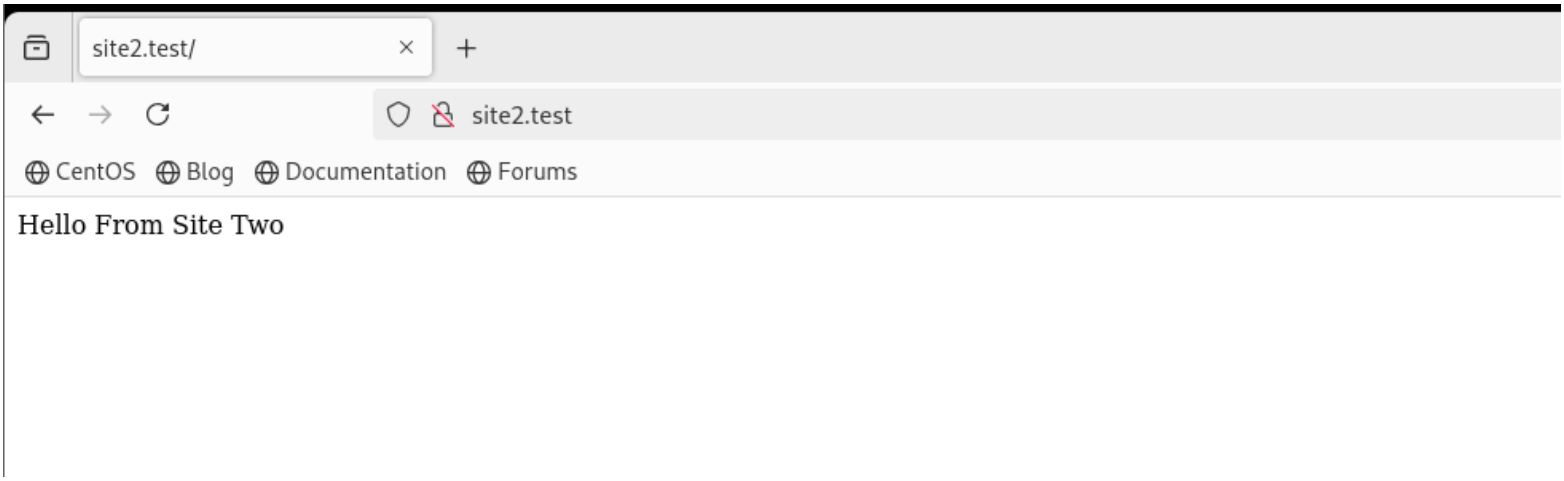



root@localhost:/var/www/html
[root@localhost html]# ls
site1 site2
[root@localhost html]# echo "Hello From Site One" >> site1/index.html
[root@localhost html]# echo "Hello From Site One" >> site2/index.html
[root@localhost html]# ls -lR
.:
total 0
drwxr-xr-x. 2 root root 24 May 23 02:56 site1
drwxr-xr-x. 2 root root 24 May 23 02:56 site2
./site1:
total 4
-rw-r--r--. 1 root root 20 May 23 02:56 index.html
./site2:
total 4
-rw-r--r--. 1 root root 20 May 23 02:56 index.html
[root@localhost html]# chown -R apache:apache site*
[root@localhost html]# ls -lR
.:
total 0
drwxr-xr-x. 2 apache apache 24 May 23 02:56 site1
drwxr-xr-x. 2 apache apache 24 May 23 02:56 site2
./site1:
total 4
-rw-r--r--. 1 apache apache 20 May 23 02:56 index.html
./site2:
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.


root@localhost:/etc/httpd/conf.d
[root@localhost conf.d]# nano site1.test.conf
[root@localhost conf.d]# nano site2.test.conf
[root@localhost conf.d]# cat site1.test.conf
ServerName site1.test
DocumentRoot /var/www/html/site1
ErrorLog /var/log/httpd/site1.test.error.log
CustomLog /var/log/httpd/site1.test.access.log combined
[root@localhost conf.d]# cat site2.test.conf
ServerName site2.test
DocumentRoot /var/www/html/site2
ErrorLog /var/log/httpd/site2.test.error.log
CustomLog /var/log/httpd/site2.test.access.log combined
[root@localhost conf.d]#


root@localhost:/etc/httpd/conf.d — nano /etc/hosts
GNU nano 5.6.1 /etc/hosts
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4 site1.test site2.test
::1 localhost localhost.localdomain localhost6 localhost6.localdomain6





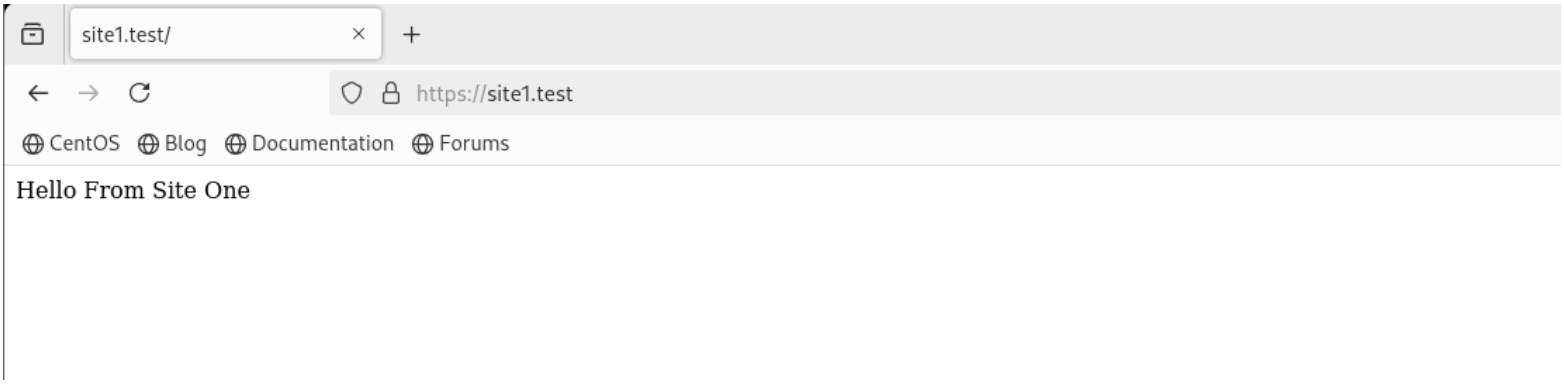

```
root@localhost:/etc/httpd/conf.d
[root@localhost conf.d]# mkcert site1.test

Created a new certificate valid for the following names 📜
 - "site1.test"

The certificate is at "./site1.test.pem" and the key at "./site1.test-key.pem" ✅

It will expire on 23 August 2027 🗓️

[root@localhost conf.d]# mkcert site2.test

Created a new certificate valid for the following names 📜
 - "site2.test"

The certificate is at "./site2.test.pem" and the key at "./site2.test-key.pem" ✅

It will expire on 23 August 2027 🗓️

[root@localhost conf.d]# ls /
afs  bin  boot  dev  etc  home  lib  lib64  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
[root@localhost conf.d]# ls
autoindex.conf  site1.test.conf  site1.test.key      site1.test.pem   site2.test-key.pem  userdir.conf
README          site1.test.crt   site1.test-key.pem  site2.test.conf  site2.test.pem      welcome.conf
[root@localhost conf.d]#
```

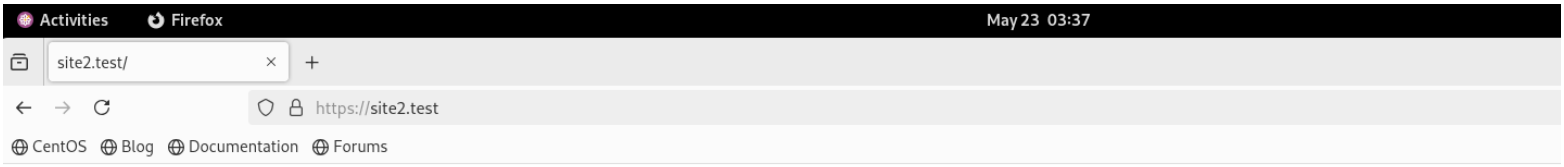
```
[root@localhost conf.d]# curl -JLO "https://dl.filippo.io/mkcert/latest?for=linux/amd64"
chmod +x mkcert-v*-linux-amd64
sudo mv mkcert-v*-linux-amd64 /usr/local/bin/mkcert
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   123  100   123    0     0    124      0 --:--:-- --:--:-- --:--:--   124
  0     0    0     0    0     0      0      0 --:--:--  0:00:01 --:--:--     0
100 4676k  100 4676k    0     0  1392k      0  0:00:03  0:00:03 --:--:-- 2521k
[root@localhost conf.d]# mkcert -install
Created a new local CA 💥
The local CA is now installed in the system trust store! ⚡
Warning: "certutil" is not available, so the CA can't be automatically installed in Firefox and/or Chrome/Chromium! ⚠️
Install "certutil" with "yum install nss-tools" and re-run "mkcert -install" 👈

[root@localhost conf.d]# yum install nss-tools
Last metadata expiration check: 0:41:58 ago on Fri 23 May 2025 02:36:23 AM EEST.
Dependencies resolved.
================================================================================================================================
 Package                         Architecture               Version                            Repository                      Size
================================================================================================================================
Installing:
 nss-tools                       x86_64                     3.101.0-10.el9                     appstream                      449 k
Upgrading:
 nss                             x86_64                     3.101.0-10.el9                     appstream                      717 k
 nss-sysinit                     x86_64                     3.101.0-10.el9                     appstream                       19 k

Transaction Summary
--------------------------------------------------------------------------------------------------------------------------------
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.
```

```
root@localhost:/etc/httpd/conf.d — nano site1.test.conf
  GNU nano 5.6.1                                                    site1.test.conf
<VirtualHost *:443>
ServerName site1.test
DocumentRoot /var/www/html/site1
ErrorLog /var/log/httpd/site1.test.error.log
CustomLog /var/log/httpd/site1.test.access.log combined

SSLEngine on
SSLCertificateFile /etc/httpd/conf.d/site1.test.pem
SSLCertificateKeyFile /etc/httpd/conf.d/site1.test-key.pem

</VirtualHost>

<VirtualHost *:80>
    ServerName site1.test
    Redirect permanent / https://site1.test/
</VirtualHost>
```

```
root@localhost:/etc/httpd/conf.d — nano site2.test.conf
  GNU nano 5.6.1                                                    site2.test.conf
<VirtualHost *:443>
ServerName site2.test
DocumentRoot /var/www/html/site2
ErrorLog /var/log/httpd/site2.test.error.log
CustomLog /var/log/httpd/site2.test.access.log combined

SSLEngine on
SSLCertificateFile /etc/httpd/conf.d/site2.test.pem
SSLCertificateKeyFile /etc/httpd/conf.d/site2.test-key.pem
</VirtualHost>

<VirtualHost *:80>
    ServerName site2.test
    Redirect permanent / https://site2.test/
</VirtualHost>
```

```
[root@localhost conf.d]# systemctl restart httpd
Job for httpd.service failed because the control process exited with error code.
See "systemctl status httpd.service" and "journalctl -xeu httpd.service" for details.
[root@localhost conf.d]# httpd -t
AH00526: Syntax error on line 7 of /etc/httpd/conf.d/site1.test.conf:
Invalid command 'SSLEngine', perhaps misspelled or defined by a module not included in the server configuration
[root@localhost conf.d]# yum install mod_ssl -y
Last metadata expiration check: 0:10:22 ago on Fri 23 May 2025 03:23:02 AM EEST.
Dependencies resolved.
==========================================================================================================================
 Package                      Architecture                Version                              Repository                      Size
==========================================================================================================================
Installing:
 mod_ssl                      x86_64                      1:2.4.62-4.el9                       appstream                      110 k

Transaction Summary
==========================================================================================================================
Install  1 Package

Total download size: 110 k
Installed size: 272 k
Downloading Packages:
mod_ssl-2.4.62-4.el9.x86_64.rpm                                                                  105 kB/s | 110 kB     00:01
--------------------------------------------------------------------------------------------------------------------------
Total                                                                                                65 kB/s | 110 kB     00:01
Running transaction check
Transaction check succeeded.
```





Hello From Site Two