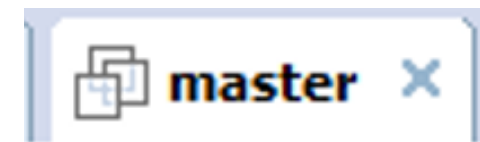


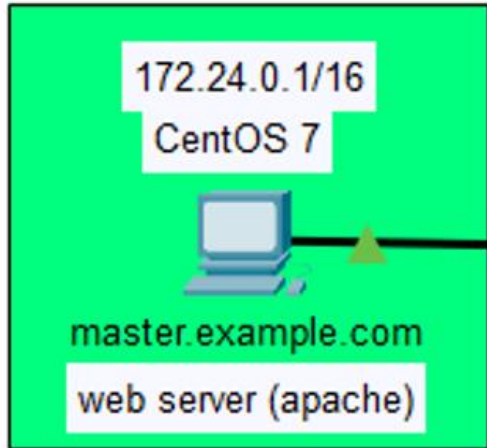
# Host Based Security On Apache

(Grant/Deny Access Based On IP/Network/Hostname/Domain)

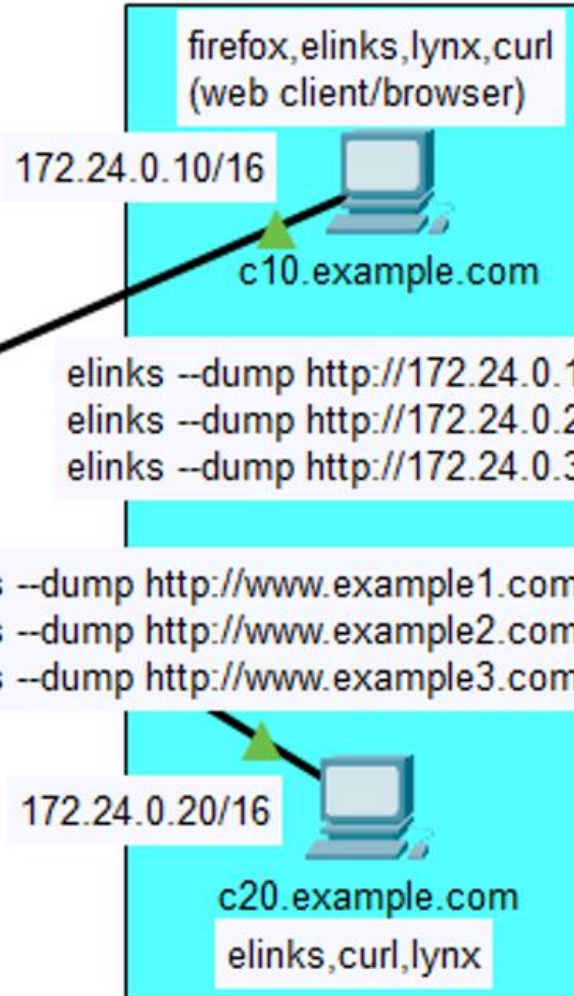


# Host Based Security

```
/var/www/html/example1  
/var/www/html/example2  
/var/www/html/example3 (index.html)
```



```
/etc/hosts  
172.24.0.1 www.example1.com www  
172.24.0.2 www.example2.com www  
172.24.0.3 www.example3.com www
```



The "Require" offers different ways to restrict access to your site or portions of your web sites. To enforce complex policy, it uses "RequireAll", "RequireAny" and "RequireNone" directives. The access can be granted/denied based on IP, Network, Hostname and Domain Names.

In older versions of Apache, Allow, Deny, and Order directives were used.

# Case 1

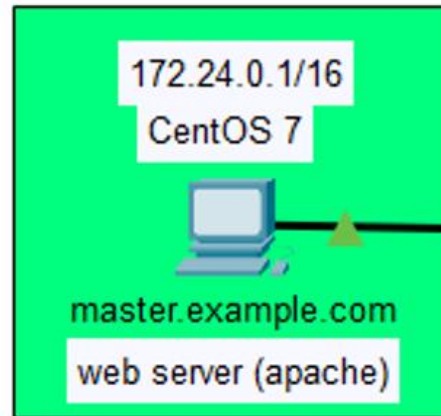
Deny access to web site ([www.example1.com](http://www.example1.com)) on "172.24.0.1" from everywhere. Deny access to web site ([www.example2.com](http://www.example2.com)) on "172.24.0.2" from "172.24.0.10", but allow from rest of the network "172.24.0.0/16". Allow access to web site ([www.example3.com](http://www.example3.com)) on "172.24.0.3" from everywhere. Edit the "/etc/httpd/conf/httpd.conf" file to include "Directory" directive as given.

```
[root@master ~]# tail -11 /etc/httpd/conf/httpd.conf
```

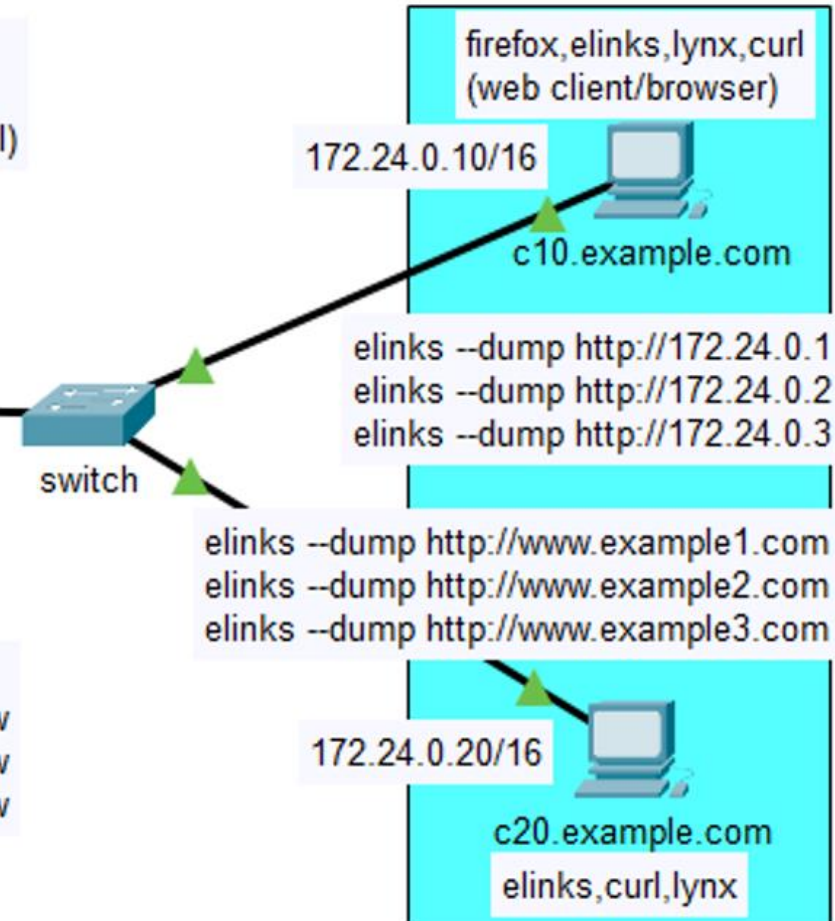
```
<Directory /var/www/html/example1>
    Require all denied
</Directory>

<Directory /var/www/html/example2>
    <RequireAll>
        Require ip 172.24.0.0/16
        Require not ip 172.24.0.10
    </RequireAll>
</Directory>
[root@master ~]#
[root@master ~]# service httpd configtest
Syntax OK
[root@master ~]#
[root@master ~]# systemctl reload httpd
[root@master ~]#
```

```
/var/www/html/example1
/var/www/html/example2
/var/www/html/example3 (index.html)
```



```
/etc/hosts
172.24.0.1 www.example1.com www
172.24.0.2 www.example2.com www
172.24.0.3 www.example3.com www
```



# Case 1 Verify

Deny access to web site ([www.example1.com](http://www.example1.com)) on "172.24.0.1" from everywhere. Deny access to web site ([www.example2.com](http://www.example2.com)) on "172.24.0.2" from "172.24.0.10", but allow from rest of the network "172.24.0.0/16". Allow access to web site ([www.example3.com](http://www.example3.com)) on "172.24.0.3" from everywhere.

```
[root@c10 ~]# elinks --dump http://www.example1.com |head -1
Testing 123..
[root@c10 ~]# elinks --dump http://www.example2.com |head -1
Testing 123..
[root@c10 ~]# elinks --dump http://www.example3.com |head -1
wel to example3 site
[root@c10 ~]#
```

```
[root@c20 ~]# elinks --dump http://www.example1.com |head -1
Testing 123..
[root@c20 ~]#
[root@c20 ~]#
[root@c20 ~]# elinks --dump http://www.example2.com |head -1
wel to example2 site
[root@c20 ~]#
[root@c20 ~]#
[root@c20 ~]# elinks --dump http://www.example3.com |head -1
wel to example3 site
[root@c20 ~]#
```

# Case 2

Allow access to web site ([www.example1.com](http://www.example1.com)) on "172.24.0.1" from only "172.24.0.10". Allow access to web site ([www.example2.com](http://www.example2.com)) on "172.24.0.2" from "172.24.0.10", and "172.24.0.20" only. Allow access to web site ([www.example3.com](http://www.example3.com)) on "172.24.0.3" from "172.24.0.0/16" network only. Edit the "/etc/httpd/conf/httpd.conf" file to include "Directory" directive as given.

```
[root@master ~]# tail -13 /etc/httpd/conf/httpd.conf
```

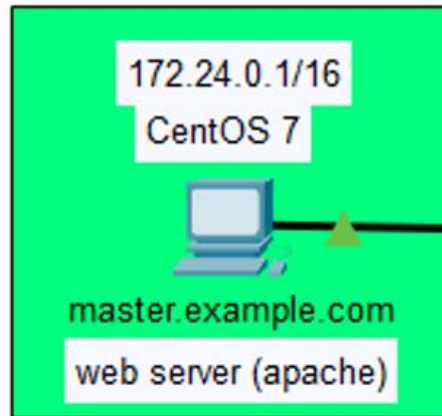
```
<Directory /var/www/html/example1>  
    Require ip 172.24.0.10  
</Directory>
```

```
<Directory /var/www/html/example2>  
    Require ip 172.24.0.10  
    Require ip 172.24.0.20  
</Directory>
```

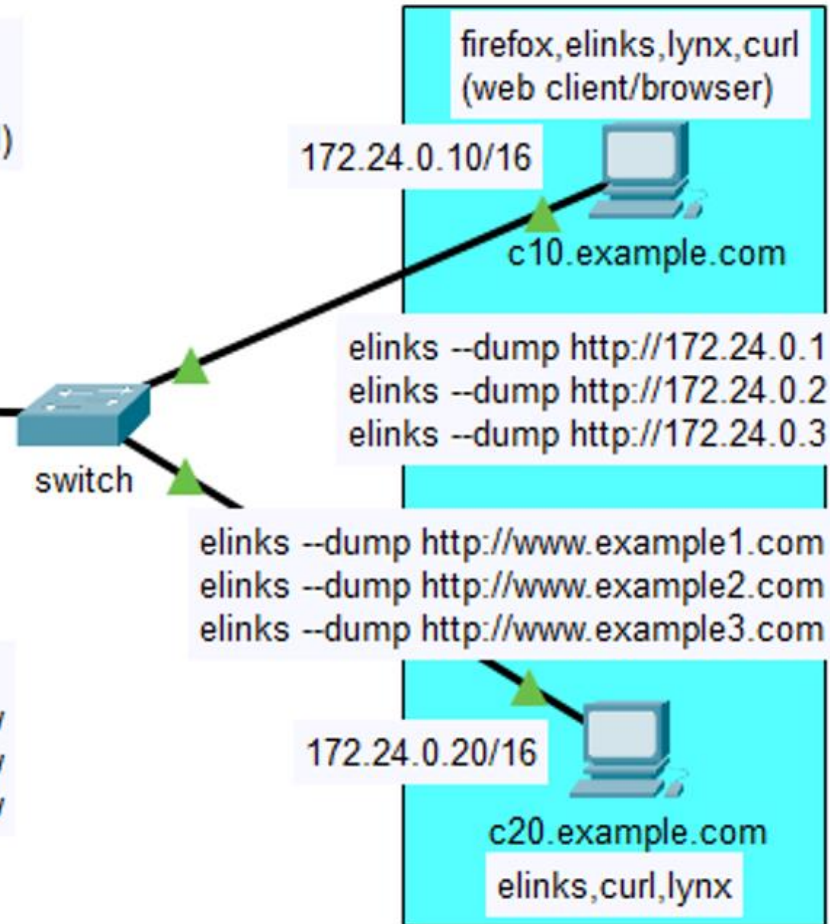
```
<Directory /var/www/html/example3>  
    Require ip 172.24  
</Directory>
```

```
[root@master ~]#  
[root@master ~]# service httpd configtest  
Syntax OK  
[root@master ~]#  
[root@master ~]# systemctl reload httpd  
[root@master ~]#
```

```
/var/www/html/example1  
/var/www/html/example2  
/var/www/html/example3 (index.html)
```



```
/etc/hosts  
172.24.0.1 www.example1.com www  
172.24.0.2 www.example2.com www  
172.24.0.3 www.example3.com www
```



# Case 2 Verify

```
[root@master ~]# elinks --dump http://www.example1.com |head -1
Testing 123..
[root@master ~]#
[root@master ~]# elinks --dump http://www.example2.com |head -1
Testing 123..
[root@master ~]#
[root@master ~]# elinks --dump http://www.example3.com |head -1
wel to example3 site
```

Allow access to web site ([www.example1.com](http://www.example1.com)) on "172.24.0.1" from only "172.24.0.10". Allow access to web site ([www.example2.com](http://www.example2.com)) on "172.24.0.2" from "172.24.0.10", and "172.24.0.20" only. Allow access to web site ([www.example3.com](http://www.example3.com)) on "172.24.0.3" from "172.24.0.0/16" network only.

```
[root@c10 ~]# elinks --dump http://www.example1.com |head -1
wel to example1 site
[root@c10 ~]#
[root@c10 ~]# elinks --dump http://www.example2.com |head -1
wel to example2 site
[root@c10 ~]#
[root@c10 ~]# elinks --dump http://www.example3.com |head -1
wel to example3 site
```

```
[root@c20 ~]# elinks --dump http://www.example1.com |head -1
Testing 123..
[root@c20 ~]#
[root@c20 ~]# elinks --dump http://www.example2.com |head -1
wel to example2 site
[root@c20 ~]#
[root@c20 ~]# elinks --dump http://www.example3.com |head -1
wel to example3 site
```

# Case 3

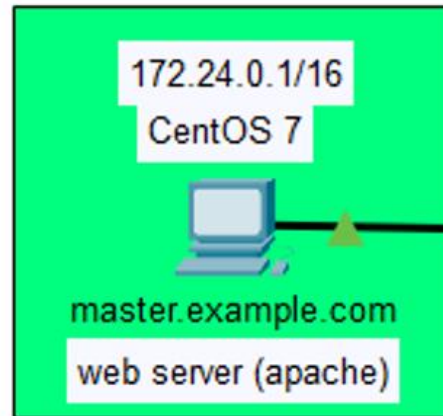
Allow access to web site ([www.example1.com](http://www.example1.com)) on "172.24.0.1" from everywhere except "172.24.0.10". Edit the "/etc/httpd/conf/httpd.conf" file to include "Directory" directive as given.

```
[root@master ~]# tail -7 /etc/httpd/conf/httpd.conf
```

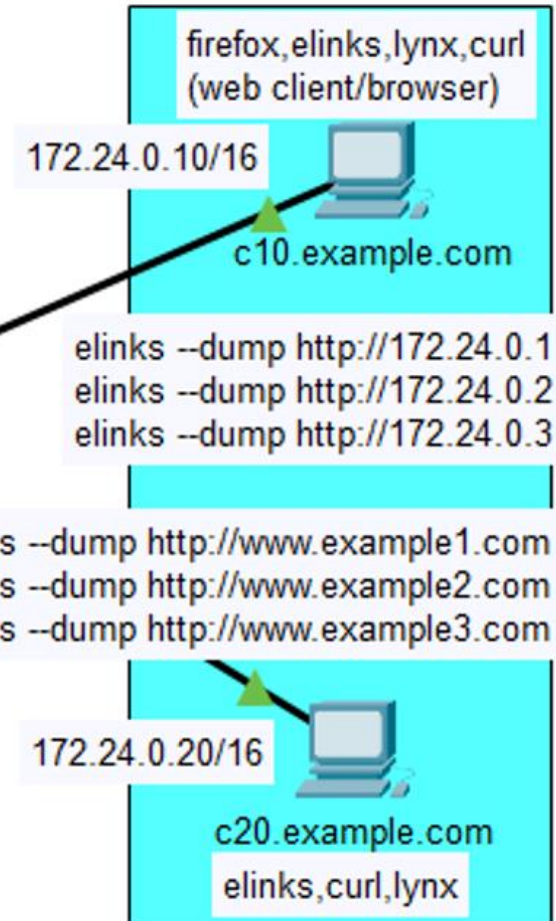
```
<Directory /var/www/html/example1>  
  <RequireAll>  
    Require all granted  
    Require not ip 172.24.0.10  
  </RequireAll>  
</Directory>
```

```
[root@master ~]#  
[root@master ~]# service httpd configtest  
Syntax OK  
[root@master ~]#  
[root@master ~]# systemctl reload httpd  
[root@master ~]#
```

```
/var/www/html/example1  
/var/www/html/example2  
/var/www/html/example3 (index.html)
```



```
/etc/hosts  
172.24.0.1 www.example1.com www  
172.24.0.2 www.example2.com www  
172.24.0.3 www.example3.com www
```



# Case 3 Verify

Allow access to web site ([www.example1.com](http://www.example1.com)) on "172.24.0.1" from everywhere except "172.24.0.10".

```
[root@c10 ~]# elinks --dump http://www.example1.com |head -1
Testing 123..
[root@c10 ~]#
```

```
[root@c20 ~]# elinks --dump http://www.example1.com |head -1
wel to example1 site
[root@c20 ~]#
```