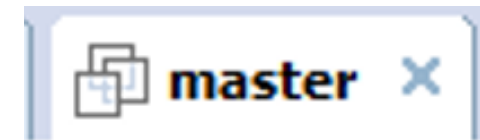
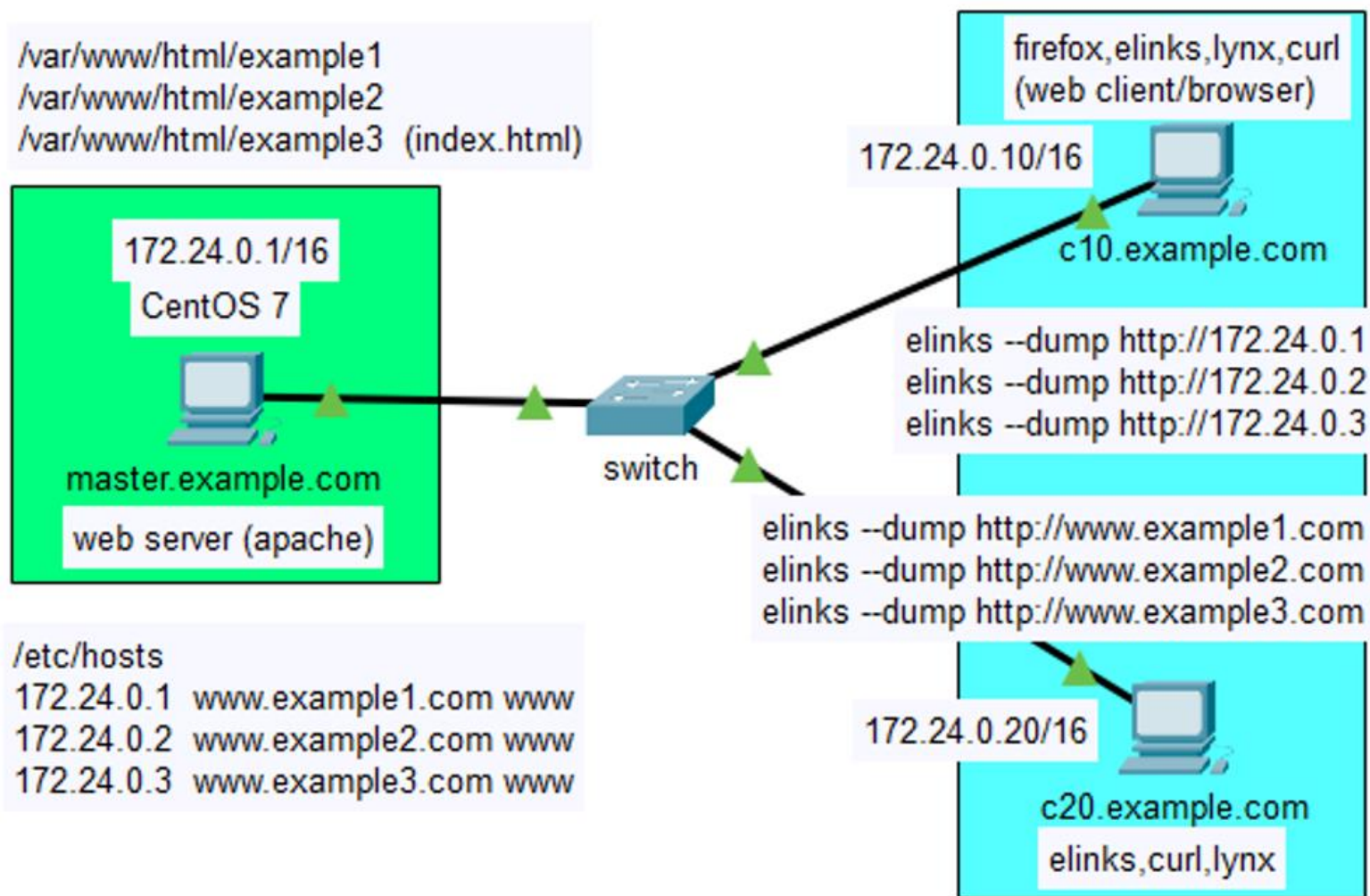


Other Important Apache Configuration Options

(Indexes, Redirect)



Lab Setup



“Indexes” Option

The “Indexes” option instructs the web server to display directory listing if index file is not present. This option further depends upon “DirectoryIndex” option, which helps web server in deciding which default page to display. The default is “index.html” i.e. if web server is not going to find “index.html”, then it will display the contents of directory. Sometimes this behavior is not desired, so we may want to negate this option.

```
[root@master ~]# cd /var/www/html/example2
[root@master example2]#
[root@master example2]# mkdir test soft
[root@master example2]#
[root@master example2]# cd test
[root@master test]#
[root@master test]# touch t1 t2
[root@master test]#
[root@master test]# cd ../soft
[root@master soft]#
[root@master soft]# touch s1 s2
[root@master soft]# cd ..
[root@master example2]#
[root@master example2]# tree
```

Now go to “/var/www/html/example2” directory. Create “test” and “soft” directories and put some files there.

```
.
├── index.html
├── soft
│   ├── s1
│   └── s2
├── test
│   ├── t1
│   └── t2
```

Edit "httpd.conf"

Disable "Indexes" option for "/var/www/html/example2/test" directory by using "Options -Indexes". By using "-" before the options will disable that option. You can also use "Options None". Enable "Indexes" option for "/var/www/html/example2/soft" directory by using "Options Indexes".

```
[root@master ~]# tail -8 /etc/httpd/conf/httpd.conf
```

```
<Directory /var/www/html/example2/test>  
    Options -Indexes  
</Directory>
```

```
<Directory /var/www/html/example2/soft>  
    Options Indexes  
</Directory>
```

```
[root@master ~]#
```

```
[root@master ~]# service httpd configtest
```

```
Syntax OK
```

```
[root@master ~]#
```

```
[root@master ~]# systemctl reload httpd
```

```
[root@master ~]#
```

Test “Indexes” Option

Now open web site using “`elinks --dump http://172.24.0.2`”. Since “`index.html`” file is present in “`/var/www/html/example2`” it will display contents of this file.

Try to open web site using “`elinks --dump http://172.24.0.2/test`”. Since no “`index.html`” file is present in “`/var/www/html/example2/test`” directory and “Indexes” option is disabled So no directory listing will be shown. It will give “Forbidden” message.

```
[root@c10 ~]# elinks --dump http://172.24.0.2
  wel to example2 site
[root@c10 ~]#
[root@c10 ~]# elinks --dump http://172.24.0.2/test
                Forbidden
```

You don't have permission to access `/test/` on this server.

Test “Indexes” Option

Try to open web site using “`elinks --dump http://172.24.0.2/soft`”. Since no “`index.html`” file is present in “`/var/www/html/example2/soft`” directory and “`Indexes`” option is enabled so directory listing will be shown.

```
[root@c10 ~]# elinks --dump http://172.24.0.2/soft
                          Index of /soft
```

[1][IC0]	[2]Name	[3]Last modified	[4]Size	[5]Description
[6][PARENTDIR]	[7]Parent Directory		-	
[8][TXT]	[9]s1	2021-01-09 18:25	0	
[10][TXT]	[11]s2	2021-01-09 18:25	0	

References

Visible links

2. <http://172.24.0.2/soft/?C=N;O=D>
 3. <http://172.24.0.2/soft/?C=M;O=A>
 4. <http://172.24.0.2/soft/?C=S;O=A>
 5. <http://172.24.0.2/soft/?C=D;O=A>
 7. <http://172.24.0.2/>
 9. <http://172.24.0.2/soft/s1>
 11. <http://172.24.0.2/soft/s2>
-

“Redirect” Option

It is used to redirect some url/page to another one. To understand create additional page “new.html” in “/var/www/html/example1” directory and change the “VirtualHost” setting for “172.24.0.1”.

```
[root@master ~]# cd /var/www/html/example1/
[root@master example1]#
[root@master example1]# ls
index.html
[root@master example1]# cat >new.html
redirect to new page
[root@master example1]#
[root@master example1]# ls -l
total 8
-rw-r--r-- 1 root root 21 Jan  8 17:10 index.html
-rw-r--r-- 1 root root 21 Jan  9 19:24 new.html
[root@master example1]#
```

```
[root@master ~]# tail -16 /etc/httpd/conf/httpd.conf

<VirtualHost 172.24.0.1>
    ServerName 172.24.0.1
    DocumentRoot /var/www/html/example1
    Redirect permanent /index.html http://172.24.0.1/new.html
</VirtualHost>

<VirtualHost 172.24.0.2>
    ServerName 172.24.0.2
    DocumentRoot /var/www/html/example2
</VirtualHost>

<VirtualHost 172.24.0.3>
    ServerName 172.24.0.3
    DocumentRoot /var/www/html/example3
</VirtualHost>
[root@master ~]#
[root@master ~]# service httpd configtest
Syntax OK
[root@master ~]#
[root@master ~]# systemctl reload httpd
[root@master ~]#
```

Test “Redirect” Option

Now when we are trying to access “<http://172.24.0.1>”, instead of displaying default “[index.html](#)”, it has redirected the clients to “[new.html](#)”.

```
[root@c10 ~]# elinks --dump http://172.24.0.1
  redirect to new page
[root@c10 ~]#
```

Modify Lab Settings

```
[root@master ~]# cd /var/www/html
[root@master html]#
[root@master html]# rm -rf *
[root@master html]#
[root@master html]# rm /etc/httpd/webpass
rm: remove regular file /etc/httpd/webpass? y
[root@master html]#
[root@master html]# rm -f /etc/httpd/webgroup
[root@master html]#
[root@master html]# vi /etc/httpd/conf/httpd.conf
```

Modify Lab Settings

```
[root@master ~]# cat /etc/sysconfig/network-scripts/ifcfg-ens33
TYPE="Ethernet"
PROXY_METHOD="none"
BROWSER_ONLY="no"
BOOTPROTO="static"
DEFROUTE="yes"
IPV4_FAILURE_FATAL="no"
IPV6INIT="yes"
IPV6_AUTOCONF="yes"
IPV6_DEFROUTE="yes"
IPV6_FAILURE_FATAL="no"
IPV6_ADDR_GEN_MODE="stable-privacy"
NAME="ens33"
DEVICE="ens33"
ONBOOT="yes"
IPADDR=172.24.0.1
NETMASK=255.255.0.0
[root@master ~]#
[root@master ~]# systemctl restart network
[root@master ~]#
[root@master ~]# ip a s ens33 |head -3
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo
    link/ether 00:0c:29:ac:38:ef brd ff:ff:ff:ff:ff:ff
    inet 172.24.0.1/16 brd 172.24.255.255 scope global ens33
```