Report Project Part 1

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420-635-AB-Network Installation and Administration

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Table of Contents

1-Creating a Website

-On the AlmaLinux machine

Install the httpd service

```
[root@server10 ~]# dnf install httpd
```

Creating a backup copy of the original configuration file

```
[root@server10 conf]# cp httpd.conf httpd.conf.original
[root@server10 conf]# ls -la
total 40
drwxr-xr-x. 2 root root    64 Apr 15 15:24 .
drwxr-xr-x. 5 root root   105 Apr 15 15:09 ..
-rw-r--r--. 1 root root 12005 Jan 21 16:19 httpd.conf
-rw-r--r--. 1 root root 12005 Apr 15 15:24 httpd.conf.original
-rw-r--r--. 1 root root 13430 Jan 21 16:24 magic
```

Creating the html_project1 directory in the www folder and giving it proper permissions

```
[root@server10 ~]# mkdir /var/www/html_project1
[root@server10 ~]# ls /var/www
cgi-bin  html  html_project1
```

```
[root@server10 ~]# chmod -R 755 /var/www/html_project1
```

Changing the configuration file for Apache to read from the new directory

```
DocumentRoot "/var/www/html_project1"

<Directory "/var/www">
    AllowOverride None
    # Allow open access:
    Require all granted
</Directory>

<Directory "/var/www/html_project1">
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>
```

Allowing the server to be accessible from an ip address

```
[root@server10 ~]# vim /etc/httpd/conf/httpd.conf
```

```
<Directory "/var/www/html_project1">
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
    Require ip 192.168.50.10
```

Ensuring the httpd service is running and enabled

```
[root@server10 ~]# systemctl start httpd
[root@server10 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /
usr/lib/systemd/system/httpd.service.
[root@server10 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset:>
     Active: active (running) since Tue 2025-04-15 17:36:14 EDT; 13s ago
```

Creating the index.html

```
[root@server10 ~]# vim /var/www/html_project1/index.html
```

Setting the document type and the head of the html page

```
<!doctype html>
<html>
   <head>
   <title>Project Part 1 - Homepage</title>
   </head>
```

Adding the body and a hyperlink to each web page following the example

```
<body>
  <p><b><h2>Project Part 1</b></p></h2>
     <hr>
<p><b><u>Task 2 - Secure directories:</b></u></p>
     <ul>
  <p><b><u><a href=http://192.168.50.10/secure1>secure1 (user01 - accessible)</a></b></u></p>
  <p><b><u><a href=http://192.168.50.10/secure2>secure2 (user01 and 192.168.50.0/24 - accessible)</a></b></u></p>
  <p><b><u><a href=http://10.35.16.1/secure2>secure2 (user01 and 10.35.16.1/24 - not accessible)</a></b></u></p>
  <p><b><u><a href=http://192.168.50.10/secure3>secure3 (user01 or 192.168.50.0/24 - accessible)</a></b></u></p>
  <p><b><u><a href=http://10.35.16.1/secure3>secure3 (user01 or 192.168.50.0/24 - accessible)</a></b></u></p>
  <p><b><u><a href=http://192.168.50.10/secure4>secure4 (user02 - accessible)</a></b></u></p>
  <p><b><u><a href=http://192.168.50.10/secure5>secure5 (user01 with .htaccess - accessible)</a></b></u></p>
  <p><b><u><a href=http://192.168.50.10/secure6>secure6 (user01 and 192.168.50 with .htaccess - Accessible)</a></b></u></p>
  <p><b><u><a href=http://10.35.16.1/secure6>secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)</a></b></u><
/p>
  <p><b><u><a href=http://192.168.50.10/secure7>secure7 (user01 or 192.168.50 with .htaccess - Accessible)</a></b></u></p>
     </ul>
```

```
     <hr>
<p><b><u>Task 3 - Project 1:</b></u></p>
     <ul>
  <p><b><u><a href=http://192.168.50.10/Project1>Project1 (192.168.50.10 - All is accessible)</a></b></u></p>
  <p><b><u><a href=http://10.35.16.1/Project1>Project1 (10.35.16.1 accessible except files secret.* and *.txt)</a></b></u></
p>
  <p><b><u><a href=http://10.35.17.1/Project1>Project1 (10.35.17.1 accessible except files secret.* and *.txt)</a></b></u></
p>
  <p><b><u><a href=http://192.168.100.1/Project1>Project1 (192.168.100.1 Not accessible)</a></b></u></p>
     </ul>
     <hr>
<p><b><u>Task 3 - Project 2:</b></u></p>
     <ul>
  <p><b><u><a href=http://192.168.50.10/Project2>Project2 (192.168.50.10 - All is accessible)</a></b></u></p>
  <p><b><u><a href=http://10.35.16.1/Project2>Project2 (10.35.16.1 Not accessible)</a></b></u></p>
  <p><b><u><a href=http://10.35.17.1/Project2>Project2 (10.35.17.1 accessible except files *.txt)</a></b></u></p>
  <p><b><u><a href=http://192.168.100.1/Project2>Project2 (192.168.100.1 accessible except files *.txt)</a></b></u></p>
     </ul>
```

```html
        <hr>
<p><b><u>Task 3 - Project 3:</b></u></p>
        <ul>
    <p><b><u><a href=http://192.168.50.10/Project3>Project3 (192.168.50.10 - All is accessible)</a></b></u></p>
    <p><b><u><a href=http://10.35.16.1/Project3>Project3 (10.35.16.1 Not accessible)</a></b></u></p>
    <p><b><u><a href=http://10.35.17.1/Project3>Project3 (10.35.17.1 Not accessible)</a></b></u></p>
    <p><b><u><a href=http://192.168.100.1/Project3>Project3 (192.168.100.1 accessible except files *.gif and *.txt)</a></b></u
></p>
        </ul>
        <hr>
<p><b><u>Task 3 - Project 4:</b></u></p>
        <ul>
    <p><b><u><a href=http://192.168.50.10/Project4>Project4 (192.168.50.10 - All is accessible)</a></b></u></p>
    <p><b><u><a href=http://10.35.16.1/Project4>Project4 (10.35.16.1 accessible except files test.html)</a></b></u></p>
    <p><b><u><a href=http://10.35.17.1/Project4>Project4 (10.35.17.1 Not accessible)</a></b></u></p>
    <p><b><u><a href=http://192.168.100.1/Project4>Project4 (192.168.100.1 accessible except files test.html)</a></b></u></p>
        </ul>
```

```html
        <hr>
<p><b><u>Task 4 - Vendors website:</b></u></p>
        <ul>
    <p><b><u><a href=http://10.50.1.1/vendors>Accessible to Vendors (10.50.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.51.1.1/vendors>Not accessible to Accountants (10.51.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.52.1.1/vendors>Accessible to Administrators (10.52.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.53.1.1/vendors>Accessible to Programmers (10.53.1.0/24) but not *.gif and *.jpg files</a></b></
u></p>
        </ul>
        <hr>
<p><b><u>Task 4 - Accountants website:</b></u></p>
        <ul>
    <p><b><u><a href=http://10.50.1.1/accountants>Not accessible to Vendors (10.50.1.0/24) but not *.html files</a></b></u></p
>
    <p><b><u><a href=http://10.51.1.1/accountants>Accessible to Accountants (10.51.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.52.1.1/accountants>Accessible to Administrators (10.52.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.53.1.1/accountants>Accessible to Programmers (10.53.1.0/24) but not *.gif and *.jpg files</a></
b></u></p>
        </ul>
```

```html
        <hr>
<p><b><u>Task 4 - Programmers website:</b></u></p>
        <ul>
    <p><b><u><a href=http://10.50.1.1/programmers>Not accessible to Vendors (10.50.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.51.1.1/programmers>Not accessible to Accountants (10.51.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.52.1.1/programmers>Accessible to Administrators (10.52.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.53.1.1/programmers>Accessible to Programmers (10.53.1.0/24)</a></b></u></p>
        </ul>
        <hr>
<p><b><u>Task 4 - Administrators website:</b></u></p>
        <ul>
    <p><b><u><a href=http://10.50.1.1/administrators>Not accessible to Vendors (10.50.1.0/24) but not *.html files</a></b></u>
</p>
    <p><b><u><a href=http://10.51.1.1/administrators>Not accessible to Accountants (10.51.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.52.1.1/administrators>Accessible to Administrators (10.52.1.0/24)</a></b></u></p>
    <p><b><u><a href=http://10.53.1.1/administrators>Accessible to Programmers (10.53.1.0/24) but not *.gif and *.jpg files</a
></b></u></p>
        </ul>
    </body>
/html
```

Restarting the httpd service

```
[root@server10 html_project1]# systemctl restart httpd
```

Change firewall permissions to add the httpd port

```
[root@server10 html_project1]# firewall-cmd --permanent --add-port=80/tcp --zone=nm-shared
success
[root@server10 html_project1]# firewall-cmd --reload
success
```

-On the Ubuntu machine

Open a browser and type in the provided IP address to access the newly created website

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Task 3 - Project 1:

Project1 (192.168.50.10 - All is accessible)

Project1 (10.35.16.1 accessible except files secret.* and *.txt)

Project1 (10.35.17.1 accessible except files secret.* and *.txt)

Project1 (192.168.100.1 Not accessible)

Task 3 - Project 2:

2-Authentication

-On the AlmaLinux machine

Creating user01 and user02 with htpasswd

```
[root@server10 www]# htpasswd -bc /var/www/.htpasswd user01 secret
Adding password for user user01
```

```
[root@server10 www]# htpasswd -b /var/www/.htpasswd user02 secret
Adding password for user user02
```

```
[root@server10 www]# cat .htpasswd
user01:$apr1$UlT7E055$R8unUD/4Q8ksr7FLCE4nE0
user02:$apr1$d6ZsBC1d$WLmWJvC9.TGXYX3IJo48c0
```

Adding the necessary IP address to the LAN1 connection

```
[root@server10 ~]# nmcli con mod LAN1 +ipv4.addresses 10.35.16.1/24 +ipv4.addresses 10.35.17.1/24 +ipv4.addresses 192.168.100.
1/24 +ipv4.addresses 10.50.1.1/24 +ipv4.addresses 10.51.1.1/24 +ipv4.addresses 10.52.1.1/24 +ipv4.addresses 10.53.1.1/24
[root@server10 ~]# nmcli con d LAN1 ; nmcli con u LAN1
Connection 'LAN1' successfully deactivated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/3)
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/4)
```

-On the Ubuntu machine

Adding the necessary IP address to the LAN1 connection

```
jchedore@client10:~$ nmcli con mod LAN1 +ipv4.addresses 10.35.16.2/24 +ipv4.addr
esses 10.35.17.2/24 +ipv4.addresses 192.168.100.2/24 +ipv4.addresses 10.50.1.2/2
4 +ipv4.addresses 10.51.1.2/24 +ipv4.addresses 10.52.1.2/24 +ipv4.addresses 10.5
3.1.2/24
jchedore@client10:~$ nmcli con d LAN1 ; nmcli con u LAN1
Connection 'LAN1' successfully deactivated (D-Bus active path: /org/freedesktop/
NetworkManager/ActiveConnection/2)
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkMa
nager/ActiveConnection/3)
```

-On the AlmaLinux machine

Creating the seven secure directories in the html_project1 directory

```
[root@server10 ~]# cd /var/www/html_project1
```

```
[root@server10 html_project1]# mkdir secure1
[root@server10 html_project1]# mkdir secure2
[root@server10 html_project1]# mkdir secure3
[root@server10 html_project1]# mkdir secure4
```

```
[root@server10 html_project1]# mkdir secure5
[root@server10 html_project1]# mkdir secure6
[root@server10 html_project1]# mkdir secure7
[root@server10 html_project1]# ls
index.html  secure1  secure2  secure3  secure4  secure5  secure6  secure7
```

Creating the html files for the secure folders

```
[root@server10 secure1]# vim index.html
```

```
<!doctype html>
<html>
  <head>
    <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure1</b></u></p>
</body>
/html
```

```
[root@server10 html_project1]# cd secure2
[root@server10 secure2]# vim index.html
```

```
<!doctype html>
<html>
  <head>
    <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure2</b></u></p>
</body>
</html>
```

```
[root@server10 html_project1]# cd secure3
[root@server10 secure3]# vim index.html
```

```html
<!doctype html>
<html>
  <head>
  <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure3</b></u></p>
</body>
</html>
```

```
[root@server10 html_project1]# cd secure4
[root@server10 secure4]# vim index.html
```

```html
<!doctype html>
<html>
  <head>
  <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure4</b></u></p>
</body>
</html>
```

```
[root@server10 html_project1]# cd secure5
[root@server10 secure5]# vim index.html
```

```html
<!doctype html>
<html>
  <head>
  <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure5</b></u></p>
</body>
</html>
```

```
[root@server10 html_project1]# cd secure6
[root@server10 secure6]# vim index.html
```

```html
<!doctype html>
<html>
  <head>
  <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure6</b></u></p>
</body>
</html>
```

```
[root@server10 html_project1]# cd secure7
[root@server10 secure7]# vim index.html
```

```
<!doctype html>
<html>
  <head>
  <title>Project Part 1-Jacob Chedore</title>
  </head>
  <body>
    <p><b><u>Secure7</b></u></p>
</body>
</html>
```

Configure the httpd configuration file according to the specific task for the first four secure folders

```
<Directory "/var/www/html_project1/secure1">
    AuthType Basic
    AuthName "Restricted Access"
    AuthUserFile "/var/www/.htpasswd"
    Require user user01
</Directory>

<Directory "/var/www/html_project1/secure2">
    <RequireAll>
    Require ip 192.168.50.0/24
    AuthType Basic
    AuthName "Restricted Access"
    AuthUserFile "/var/www/.htpasswd"
    Require user user01
    </RequireAll>
</Directory>
```

```
<Directory "/var/www/html_project1/secure3">
    AuthType Basic
    AuthName "Restricted Access"
    AuthUserFile "/var/www/.htpasswd"
    Require user user01
    Require ip 192.168.50.0/24
</Directory>

<Directory "/var/www/html_project1/secure4">
    AuthType Basic
    AuthName "Restricted Access"
    AuthUserFile "/var/www/.htpasswd"
    Require user user02
</Directory>
```

Configuring the last 3 secure folders using .htaccess files using the parameters given

```
[root@server10 ~]# vim /var/www/html_project1/secure5/.htaccess
```

```
    AuthType Basic
    AuthName "Access Restricted"
    AuthUserFile "/var/www/.htpasswd"
    Require user user01
```

```
[root@server10 ~]# vim /etc/httpd/conf/httpd.conf
```

```
<Directory "/var/www/html_project1/secure5">
    AllowOverride All
</Directory>
```

```
[root@server10 ~]# vim /var/www/html_project1/secure6/.htaccess
```

```
<RequireAll>
    AuthType Basic
    AuthName "Access Restricted"
    AuthUserFile "/var/www/.htpasswd"
    Require user user01
    Require ip 192.168.50.0/24
</RequireAll>
```

```
[root@server10 ~]# vim /etc/httpd/conf/httpd.conf
```

```
<Directory "/var/www/html_project1/secure6">
    AllowOverride All
</Directory>
```

```
[root@server10 ~]# vim /var/www/html_project1/secure7/.htaccess
```

```
    AuthType Basic
    AuthName "Access Restricted"
    AuthUserFile "/var/www/.htpasswd"
    Require user user01
    Require ip 192.168.50.0/24
```

```
[root@server10 ~]# vim /etc/httpd/conf/httpd.conf
```

```
<Directory "/var/www/html_project1/secure7">
    AllowOverride All
</Directory>
```

Restarting the httpd service

```
[root@server10 ~]# systemctl restart httpd
```

-On the Ubuntu machine

Doing tests for each link on the website

← → C ⚠ Not secure 192.168.50.10

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Sign in

http://192.168.50.10
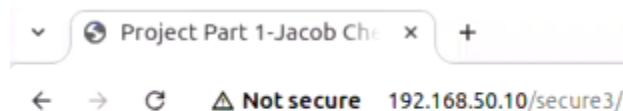
Your connection to this site is not private

Username	user01
Password	••••••

Cancel   Sign in

← → C ⚠ Not secure 192.168.50.10/secure1/

Secure1

← → C ⚠ Not secure 192.168.50.10

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Sign in

http://192.168.50.10
Your connection to this site is not private

Username	user01
Password	••••••

Cancel   Sign in

← → C ⚠ Not secure 192.168.50.10/secure2/

Secure2

Project Part 1 - Homepa × +

← → C ⚠ Not secure 192.168.50.10

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

---

403 Forbidden × +

← → C ⚠ Not secure 10.35.16.1/secure2

Forbidden

You don't have permission to access this resource.

Project Part 1 - Homepa × +

← → C ⚠ Not secure 192.168.50.10

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Project Part 1-Jacob Ch × +

← → C ⚠ Not secure 192.168.50.10/secure3/

Secure3

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Sign in

http://10.35.16.1
Your connection to this site is not private

Username   user01

Password   ••••••

Cancel   Sign in

Secure3

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Sign in

http://192.168.50.10

Your connection to this site is not private

| Username | user02 |
| Password | •••••• |

Cancel   Sign in

← → C ⚠ Not secure   192.168.50.10/secure4/

Secure4

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

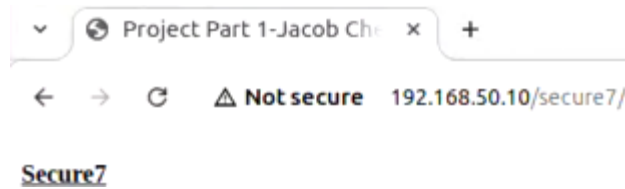secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Sign in

http://192.168.50.10

Your connection to this site is not private

Username	user01
Password	••••••

Cancel   Sign in

192.168.50.10/secure5/

Secure5

Project Part 1

Task 2 - Secure directories:

secure1 (user01 - accessible)

secure2 (user01 and 192.168.50.0/24 - accessible)

secure2 (user01 and 10.35.16.1/24 - not accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure3 (user01 or 192.168.50.0/24 - accessible)

secure4 (user02 - accessible)

secure5 (user01 with .htaccess - accessible)

secure6 (user01 and 192.168.50 with .htaccess - Accessible)

secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Sign in

http://192.168.50.10

Your connection to this site is not private

| Username | user01 |
| Password | •••••• |

Cancel   Sign in

192.168.50.10/secure6/

Secure6

← → C ⚠ Not secure 192.168.50.10

Project Part 1

Task 2 - Secure directories:

    secure1 (user01 - accessible)

    secure2 (user01 and 192.168.50.0/24 - accessible)

    secure2 (user01 and 10.35.16.1/24 - not accessible)

    secure3 (user01 or 192.168.50.0/24 - accessible)

    secure3 (user01 or 192.168.50.0/24 - accessible)

    secure4 (user02 - accessible)

    secure5 (user01 with .htaccess - accessible)

    secure6 (user01 and 192.168.50 with .htaccess - Accessible)

    secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

    secure7 (user01 or 192.168.50 with .htaccess - Accessible)

← → C ⚠ Not secure 10.35.16.1/secure6

Forbidden

You don't have permission to access this resource.

← → C ⚠ Not secure 192.168.50.10

Project Part 1

Task 2 - Secure directories:

    secure1 (user01 - accessible)

    secure2 (user01 and 192.168.50.0/24 - accessible)

    secure2 (user01 and 10.35.16.1/24 - not accessible)

    secure3 (user01 or 192.168.50.0/24 - accessible)

    secure3 (user01 or 192.168.50.0/24 - accessible)

    secure4 (user02 - accessible)

    secure5 (user01 with .htaccess - accessible)

    secure6 (user01 and 192.168.50 with .htaccess - Accessible)

    secure6 (user01 and 10.35.16.1/24 with .htaccess - Not accessible)

    secure7 (user01 or 192.168.50 with .htaccess - Accessible)

Secure7

3-Accessibility

-On the AlmaLinux machine

Creating the four Project directories

```
[root@server10 html_project1]# mkdir Project1
[root@server10 html_project1]# mkdir Project2
[root@server10 html_project1]# mkdir Project3
[root@server10 html_project1]# mkdir Project4
[root@server10 html_project1]# ls
index.html  Project1  Project2  Project3  Project4
```

Creating a .html for each project directory

```
[root@server10 html_project1]# vim Project1/project1.html
[root@server10 html_project1]# vim Project2/project2.html
[root@server10 html_project1]# vim Project3/project3.html
[root@server10 html_project1]# vim Project4/project4.html
```

Creating the necessary test files for each of the respective project directories

```
[root@server10 html_project1]# vim Project1/doc.txt
[root@server10 html_project1]# vim Project2/doc.txt
[root@server10 html_project1]# vim Project3/doc.txt
[root@server10 html_project1]# vim Project4/doc.txt
[root@server10 html_project1]# vim Project1/secret.doc
[root@server10 html_project1]# vim Project2/secret.doc
[root@server10 html_project1]# vim Project2/some.gif
[root@server10 html_project1]# vim Project3/some.gif
[root@server10 html_project1]# vim Project4/some.gif
[root@server10 html_project1]# vim Project3/some.jpg
[root@server10 html_project1]# vim Project4/test.html
```

Configuring the .txt file in apache to be seen only by the 192.168.50.10 address

```
[root@server10 html_project1]# vim /etc/httpd/conf/httpd.conf
```

```
<FilesMatch "\.txt$">
        Require all denied
        Require ip 192.168.50
</FilesMatch>
```

Making configurations according to each Project directory's specifications

```
<Directory "/var/www/html_project1/Project1">
    <RequireAll>
    Require all granted
    Require not ip 192.168.100
    </RequireAll>
        <Files "secret.*">
        Require all denied
        Require ip 192.168.50
        </Files>
</Directory>
```

```
<Directory "/var/www/html_project1/Project2">
    <RequireAll>
    Require all granted
    Require not ip 10.35.16
    </RequireAll>
</Directory>
```

```
<Directory "/var/www/html_project1/Project3">
    <RequireAll>
    Require all granted
    Require not ip 10.35.16
    Require not ip 10.35.17
    </RequireAll>
        <Files "*.gif">
        Require all denied
        Require ip 192.168.50
        </Files>
</Directory>
```

```
<Directory "/var/www/html_project1/Project4">
    <RequireAll>
    Require all granted
    Require not ip 10.35.17
    </RequireAll>
        <Files "test.html">
        Require all denied
        Require ip 192.168.50
        </Files>
</Directory>
```

Restarting the httpd service

```
[root@server10 html_project1]# systemctl restart httpd
```

-On the Ubuntu machine

Testing on the website

Task 3 - Project 1:

Project1 (192.168.50.10 - All is accessible)

Project1 (10.35.16.1 accessible except files secret.* and *.txt)

Project1 (10.35.17.1 accessible except files secret.* and *.txt)

Project1 (192.168.100.1 Not accessible)

Index of /Project1   ×   +

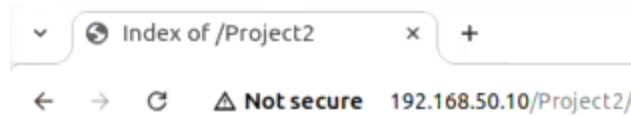← → C   ⚠ Not secure   192.168.50.10/Project1/

Index of /Project1

Name	Last modified	Size	Description
Parent Directory		-	
doc.txt	2025-04-17 22:16	0	
project1.html	2025-04-17 22:08	0	
secret.doc	2025-04-17 22:16	0	

Task 3 - Project 1:

Project1 (192.168.50.10 - All is accessible)

Project1 (10.35.16.1 accessible except files secret.* and *.txt)

Project1 (10.35.17.1 accessible except files secret.* and *.txt)

Project1 (192.168.100.1 Not accessible)

Index of /Project1   ×   +

← → C   ⚠ Not secure   10.35.16.1/Project1/

Index of /Project1

Name	Last modified	Size	Description
Parent Directory		-	
project1.html	2025-04-17 22:08	0	

Task 3 - Project 1:

Project1 (192.168.50.10 - All is accessible)

Project1 (10.35.16.1 accessible except files secret.* and *.txt)

Project1 (10.35.17.1 accessible except files secret.* and *.txt)

Project1 (192.168.100.1 Not accessible)

Index of /Project1

Name	Last modified	Size	Description
Parent Directory		-	
project1.html	2025-04-17 22:08	0	

Task 3 - Project 1:

Project1 (192.168.50.10 - All is accessible)

Project1 (10.35.16.1 accessible except files secret.* and *.txt)

Project1 (10.35.17.1 accessible except files secret.* and *.txt)

Project1 (192.168.100.1 Not accessible)

Forbidden

You don't have permission to access this resource.

Task 3 - Project 2:

Project2 (192.168.50.10 - All is accessible)

Project2 (10.35.16.1 Not accessible)

Project2 (10.35.17.1 accessible except files *.txt)

Project2 (192.168.100.1 accessible except files *.txt)

Index of /Project2

Name	**Last modified**	**Size**	**Description**
Parent Directory		-	
doc.txt	2025-04-17 22:16	0	
project2.html	2025-04-17 22:11	0	
secret.doc	2025-04-17 22:17	0	
some.gif	2025-04-17 22:18	0	

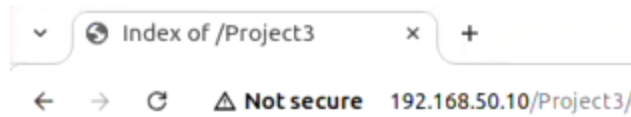**Task 3 - Project 2:**

Project2 (192.168.50.10 - All is accessible)

Project2 (10.35.16.1 Not accessible)

Project2 (10.35.17.1 accessible except files *.txt)

Project2 (192.168.100.1 accessible except files *.txt)

Forbidden

You don't have permission to access this resource.

Task 3 - Project 2:

Project2 (192.168.50.10 - All is accessible)

Project2 (10.35.16.1 Not accessible)

Project2 (10.35.17.1 accessible except files *.txt)

Project2 (192.168.100.1 accessible except files *.txt)

Index of /Project2

	Name	**Last modified**	**Size**	**Description**
	Parent Directory		-	
📄	project2.html	2025-04-17 22:11	0	
❓	secret.doc	2025-04-17 22:17	0	
🖼	some.gif	2025-04-17 22:18	0	

Task 3 - Project 2:

Project2 (192.168.50.10 - All is accessible)

Project2 (10.35.16.1 Not accessible)

Project2 (10.35.17.1 accessible except files *.txt)

Project2 (192.168.100.1 accessible except files *.txt)

Index of /Project2

	Name	**Last modified**	**Size**	**Description**
	Parent Directory		-	
📄	project2.html	2025-04-17 22:11	0	
❓	secret.doc	2025-04-17 22:17	0	
🖼	some.gif	2025-04-17 22:18	0	

Task 3 - Project 3:

Project3 (192.168.50.10 - All is accessible)

Project3 (10.35.16.1 Not accessible)

Project3 (10.35.17.1 Not accessible)

Project3 (192.168.100.1 accessible except files *.gif and *.txt)

Index of /Project3

Name	**Last modified**	**Size**	**Description**
Parent Directory		-	
doc.txt	2025-04-17 22:16	0	
project3.html	2025-04-17 22:11	0	
some.gif	2025-04-17 22:18	0	
some.jpg	2025-04-17 22:19	0	

Task 3 - Project 3:

Project3 (192.168.50.10 - All is accessible)

Project3 (10.35.16.1 Not accessible)

Project3 (10.35.17.1 Not accessible)

Project3 (192.168.100.1 accessible except files *.gif and *.txt)

Forbidden

You don't have permission to access this resource.

Task 3 - Project 3:

Project3 (192.168.50.10 - All is accessible)

Project3 (10.35.16.1 Not accessible)

Project3 (10.35.17.1 Not accessible)

Project3 (192.168.100.1 accessible except files *.gif and *.txt)

Forbidden

You don't have permission to access this resource.

Task 3 - Project 3:

Project3 (192.168.50.10 - All is accessible)

Project3 (10.35.16.1 Not accessible)

Project3 (10.35.17.1 Not accessible)

Project3 (192.168.100.1 accessible except files *.gif and *.txt)

| ∨ | ⊙ Index of /Project3 | × | + |

← → C ⚠ Not secure 192.168.100.1/Project3/

Index of /Project3

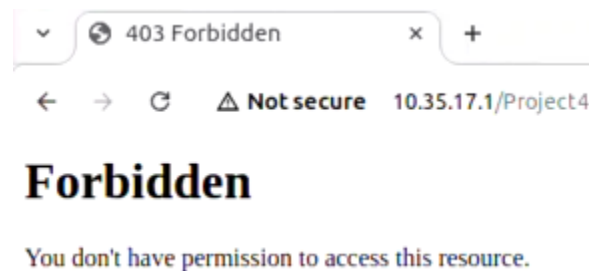| Name	Last modified	Size	Description
Parent Directory		-	
project3.html	2025-04-17 22:11	0	
some.jpg	2025-04-17 22:19	0	

Task 3 - Project 4:

Project4 (192.168.50.10 - All is accessible)

Project4 (10.35.16.1 accessible except files test.html)

Project4 (10.35.17.1 Not accessible)

Project4 (192.168.100.1 accessible except files test.html)

| ∨ | ⊙ Index of /Project4 | × | + |

← → C ⚠ Not secure 192.168.50.10/Project4/

Index of /Project4

Name	Last modified	Size	Description
Parent Directory		-	
doc.txt	2025-04-17 22:16	0	
project4.html	2025-04-17 22:11	0	
some.gif	2025-04-17 22:19	0	
test.html	2025-04-17 22:19	0	

Task 3 - Project 4:

Project4 (192.168.50.10 - All is accessible)

Project4 (10.35.16.1 accessible except files test.html)

Project4 (10.35.17.1 Not accessible)

Project4 (192.168.100.1 accessible except files test.html)

Index of /Project4

← → C ⚠ Not secure 10.35.16.1/Project4/

Index of /Project4

Name	Last modified	Size	Description
Parent Directory		-	
project4.html	2025-04-17 22:11	0	
some.gif	2025-04-17 22:19	0	

Task 3 - Project 4:

Project4 (192.168.50.10 - All is accessible)

Project4 (10.35.16.1 accessible except files test.html)

Project4 (10.35.17.1 Not accessible)

Project4 (192.168.100.1 accessible except files test.html)

403 Forbidden

← → C ⚠ Not secure 10.35.17.1/Project4

Forbidden

You don't have permission to access this resource.

Task 3 - Project 4:

Project4 (192.168.50.10 - All is accessible)

Project4 (10.35.16.1 accessible except files test.html)

Project4 (10.35.17.1 Not accessible)

Project4 (192.168.100.1 accessible except files test.html)

4-Authorization

-On the AlmaLinux machine

Creating the htdocs directory and adding department directories inside

Adding the proper files for testing to each department directory for testing

Configuring apache to user aliases for each department

```
[root@server10 ~]# vim /etc/httpd/conf/httpd.conf
```

```
Alias /accountants "/var/www/htdocs/accountants"
Alias /administrators "/var/www/htdocs/administrators"
Alias /programmers "/var/www/htdocs/programmers"
Alias /vendors "var/www/htdocs/vendors"
```

Configuring apache with the proper settings for each department

```
<Directory "/var/www/htdocs">
    Options Indexes
    AllowOverride none
    Require all granted
</Directory>
```

```
<Directory "/var/www/htdocs/vendors">
    <RequireAny>
    Require ip 10.50.1
    Require ip 10.52.1
    Require ip 10.53.1
    </RequireAny>
        <FilesMatch "\.(gif|jpg)$">
        Require ip 10.50.1
        Require ip 10.52.1
        </FilesMatch>
</Directory>
```

```
<Directory "/var/www/htdocs/accountants">
    Require ip 10.51.1
    Require ip 10.52.1
    Require ip 10.53.1
        <FilesMatch "\.(gif|jpg)$">
        Require ip 10.51.1
        Require ip 10.52.1
        </FilesMatch>
</Directory>
```

```
<Directory "/var/www/htdocs/programmers">
    Require ip 10.52.1
    Require ip 10.53.1
</Directory>
```

```
<Directory "/var/www/htdocs/administrators">
    Require ip 10.52.1
    Require ip 10.53.1
        <FilesMatch "\.(gif|jpg)$">
        Require ip 10.52.1
        </FilesMatch>
</Directory>
```

Testing the links on the website

Task 4 - Vendors website:

Accessible to Vendors (10.50.1.0/24)

Not accessible to Accountants (10.51.1.0/24)

Accessible to Administrators (10.52.1.0/24)

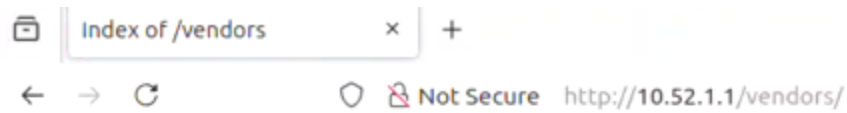**Accessible to Programmers (10.53.1.0/24) but not *.gif and *.jpg files**

Index of /vendors   ×   +

← → C   ○ 🔓 Not Secure http://**10.50.1.1**/vendors/

Index of /vendors

Name	Last modified	Size	Description
Parent Directory		-	
Moving.gif	2025-04-18 09:49	0	
Picture.jpg	2025-04-18 09:49	0	
vendors.html	2025-04-18 09:48	0	

403 Forbidden   ×   +

← → C   ○ 🔓 Not Secure http://**10.51.1.1**/vendors
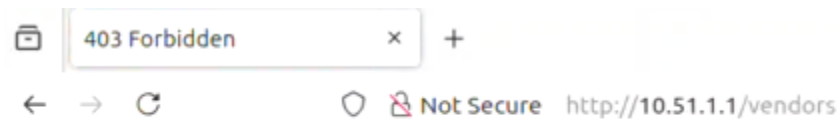
Forbidden

You don't have permission to access this resource.

Index of /vendors   ×   +

← → C   ○ 🔓 Not Secure http://**10.52.1.1**/vendors/

Index of /vendors

Name	Last modified	Size	Description
Parent Directory		-	
Moving.gif	2025-04-18 09:49	0	
Picture.jpg	2025-04-18 09:49	0	
vendors.html	2025-04-18 09:48	0	

Index of /vendors

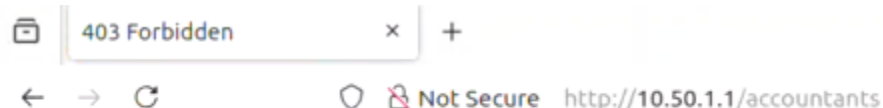| **Name**	**Last modified**	**Size**	**Description**
Parent Directory		-	
vendors.html	2025-04-18 09:48	0	

Task 4 - Accountants website:

Not accessible to Vendors (10.50.1.0/24) but not *.html files

Accessible to Accountants (10.51.1.0/24)

Accessible to Administrators (10.52.1.0/24)

Accessible to Programmers (10.53.1.0/24) but not *.gif and *.jpg files

Forbidden

You don't have permission to access this resource.

Index of /accountants

Name	**Last modified**	**Size**	**Description**
Parent Directory		-	
Moving.gif	2025-04-18 09:46	0	
Picture.jpg	2025-04-18 09:46	0	
accountants.html	2025-04-18 09:45	0	

← → C   ◯   🔓 Not Secure   http://**10.52.1.1**/accountants/

Index of /accountants

Name	**Last modified**	**Size**	**Description**
📁 Parent Directory		-	
📄 Moving.gif	2025-04-18 09:46	0	
📄 Picture.jpg	2025-04-18 09:46	0	
📄 accountants.html	2025-04-18 09:45	0	

← → C   ◯   🔓 Not Secure   http://**10.53.1.1**/accountants/

Index of /accountants

Name	**Last modified**	**Size**	**Description**
📁 Parent Directory		-	
📄 accountants.html	2025-04-18 09:45	0	

Task 4 - Programmers website:

Not accessible to Vendors (10.50.1.0/24)

Not accessible to Accountants (10.51.1.0/24)

Accessible to Administrators (10.52.1.0/24)

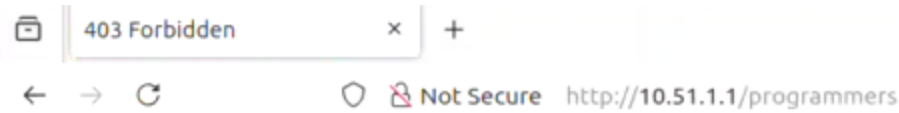**Accessible to Programmers (10.53.1.0/24)**

← → C   ◯   🔓 Not Secure   http://**10.50.1.1**/programmers/

Forbidden

You don't have permission to access this resource.

Forbidden

You don't have permission to access this resource.

Index of /programmers

Name	Last modified	Size	Description
Parent Directory		-	
Moving.gif	2025-04-18 09:48	0	
Picture.jpg	2025-04-18 09:48	0	
programmers.html	2025-04-18 09:48	0	

Index of /programmers

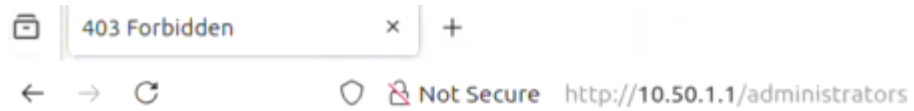| Name	Last modified	Size	Description
Parent Directory		-	
Moving.gif	2025-04-18 09:48	0	
Picture.jpg	2025-04-18 09:48	0	
programmers.html	2025-04-18 09:48	0	

Task 4 - Administrators website:

Not accessible to Vendors (10.50.1.0/24) but not *.html files

Not accessible to Accountants (10.51.1.0/24)
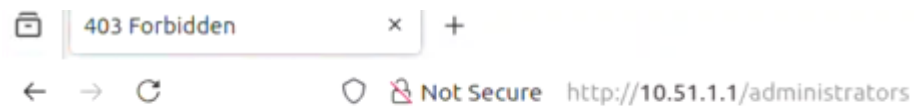
Accessible to Administrators (10.52.1.0/24)

Accessible to Programmers (10.53.1.0/24) but not *.gif and *.jpg files

403 Forbidden × +

← → C ○ 🔒 Not Secure http://**10.50.1.1**/administrators

Forbidden

You don't have permission to access this resource.

403 Forbidden × +

← → C ○ 🔒 Not Secure http://**10.51.1.1**/administrators

Forbidden

You don't have permission to access this resource.

Index of /administrators × +

← → C ○ 🔒 Not Secure http://**10.52.1.1**/administrators/

Index of /administrators

	Name	Last modified	Size	Description
	Parent Directory		-	
	Moving.gif	2025-04-18 09:47	0	
	Picture.jpg	2025-04-18 09:47	0	
	administrators.html	2025-04-18 09:47	0	

Index of /administrators × +

← → C ○ 🔒 Not Secure http://**10.53.1.1**/administrators/
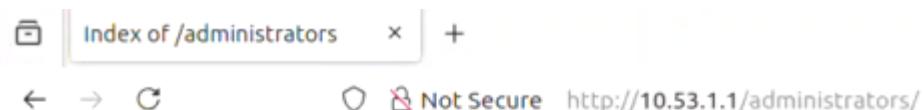
Index of /administrators

	Name	Last modified	Size	Description
	Parent Directory		-	
	administrators.html	2025-04-18 09:47	0	

5-Creating a Compressed File with the Configs

-On the AlmaLinux machine

Use the tar command to name the file and provide all directories to go inside the file

```
[root@server10 ~]# tar -czf jacob_project1.tar /etc/httpd/conf/httpd.conf /var/www/html_project1 /var/www/htdocs
tar: Removing leading `/' from member names
tar: Removing leading `/' from hard link targets
[root@server10 ~]# ll
total 8
-rw-------. 1 root root 1287 Mar 24 14:54 anaconda-ks.cfg
-rw-r--r--. 1 root root 3817 Apr 18 13:51 jacob_project1.tar
```

Copy the compressed file over to a connected share folder

```
[root@server10 ~]# ls /mnt/hgfs
AlmaLinux-Temp-Share
[root@server10 ~]# ls
anaconda-ks.cfg  jacob_project1.tar
[root@server10 ~]# cp jacob_project1.tar /mnt/hgfs/AlmaLinux-Temp-Share
```

This will allow the host machine to gain access to this newly compressed file

AlmaLinux-Temp-Share   ×   +

← → ↑ C � > JAC-G5ZW7V3 > Local Disk (C:) > VMs > AlmaLinux-Temp-Share >

⊕ New ⌄   ✂   ⌘   ⌘   ⌘   ⌘   🗑   ↑↓ Sort ⌄   ☰ View ⌄   •••

Name   Date modified   Type   Size

📄 Documents 📌   📦 jacob_project1   2025-04-18 5:35 PM   Compressed Archi...   4 KB