**Configure Apache access restrictions on directories.**

Note: This is an [RHCE 7 exam objective](https://www.certdepot.net/rhel7-rhce-exam-objectives/). It has been renamed in June 2016 from “Configure private directories” to “Configure access restrictions on directories” without any particular change.

**Prerequisites**

First, follow the instructions to [install an Apache web server](https://www.certdepot.net/rhel7-install-apache/).

Then, create a private directory (called here **private**):

# **cd /var/www/html**

# **mkdir private**

# **echo "This is a test." > private/index.html**

# **restorecon -R .**

There are several ways to restrict access to this directory:

**1) host-based private directories**

To only allow the **test.example.com** host (add the name/IP address in the **/etc/hosts** file if necessary) to access a specific directory (here **private**), edit the **/etc/httpd/conf/httpd.conf** file and paste the following lines at the end:

<Directory "/var/www/html/private">

AllowOverride None

Options None

Require host test.example.com

</Directory>

Check the configuration file:

# **apachectl configtest**

Syntax OK

**2) user-based private directories**

To only allow **me** to access a specific directory (here **private**), edit the **/etc/httpd/conf/httpd.conf** file and paste the following lines at the end:

<Directory "/var/www/html/private">

AuthType Basic

AuthName "Password protected area"

AuthUserFile /etc/httpd/conf/passwd

Require user me

</Directory>

Check the configuration file:

# **apachectl configtest**

Syntax OK

Create the **passwd** file and store **me**‘s password:

# **htpasswd -c /etc/httpd/conf/passwd me**

New password:

Re-type new password:

Adding password for user me

# **chmod 600 /etc/httpd/conf/passwd**

# **chown apache:apache /etc/httpd/conf/passwd**

Note: The **.htpasswd** file can be used locally instead of the **httpd.conf** file in 1) and 2) for the same purpose.

**Whatever the option chosen**, restart the **httpd** service:

# **systemctl restart httpd**

**Configuration Check**

Check the **httpd** service:

# **yum install -y curl**

# **curl -u user:password http://localhost**

or

# **yum install -y elinks**

# **elinks http://localhost/private**

**Useful Tip**

If you forget the syntax of some **Apache** directives, install the **httpd-manual** package and browse the documentation in the **/usr/share/httpd/manual/howto** directory:

# **yum install -y httpd-manual**

# **elinks /usr/share/httpd/manual/howto/auth.html**