**Deploy an Apache basic CGI application.**

Note: This is an [RHCE 7 exam objective](https://www.certdepot.net/rhel7-rhce-exam-objectives/).

**Prerequisites**

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

**Configuration Procedure**

Create the **/var/www/cgi-bin/hello.pl** Perl script and insert the following lines:

**#!/usr/bin/perl**

**print "Content-type: text/html\n\n";**

**print "Hello, World!";**

Make this script executable:

# **chmod 755 /var/www/cgi-bin/hello.pl**

Restart the **httpd** service:

# **systemctl restart httpd**

Check the **SELinux** **httpd\_enable\_cgi** boolean is **on** (it is **on** by default):

# **getsebool httpd\_enable\_cgi**

httpd\_enable\_cgi --> on

Note: Another **SELinux** boolean useful to remember is **httpd\_can\_sendmail**: it allows the **httpd** server to send emails.

Check the **httpd** service:

# **yum install -y elinks**

# **elinks http://localhost/cgi-bin/hello.pl**

**Alternatively**, if you want to use a directory other than the **/var/www/cgi-bin/** default (**/webapp** for example), you will have some additional steps.

Create the **/webapp** directory:

# **mkdir /webapp**

Move the **hello.pl** file into it:

# **mv /var/www/cgi-bin/hello.pl /webapp**

Set up **SElinux** configuration for the **/webapp** directory:

# **yum install -y setroubleshoot-server**

# **semanage fcontext -a -t httpd\_sys\_script\_exec\_t "/webapp(/.\*)?"**

# **restorecon -R /webappelinks /usr/share/httpd/manual/howto/cgi.html**

Edit the **/etc/httpd/conf/httpd.conf** file and replace the ‘**ScriptAlias**‘ option with the following line:

**ScriptAlias /cgi-bin/ "/webapp/"**

In the same file, where the configuration of your website (or virtual host) is located, add the following lines:

**<Directory "/webapp">**

**AllowOverride None**

**Options None**

**Require all granted**

**</Directory>**

In the same stanza, you can optionally add the following lines (but it doesn’t seem mandatory):

**Options ExecCGI**

**AddHandler cgi-script .pl**

Check the configuration file:

# **apachectl configtest**

Syntax OK

Restart the **httpd** service:

# **systemctl restart httpd**

**Testing Time**

Check the execution of the Perl script:

# **yum install -y elinks**

# **elinks http://localhost/cgi-bin/hello.pl**

**Useful Tip**

If you don’t remember the syntax of any directive, type:

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

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