

<https://www.tuxtips.net/how-to-run-multiple-php-versions-with-apache-on-centos-7-linux/>

Here is our environment:

OS: CentOS 7 linux on VMWare

Firewall: enabled

SELinux: enforcing

PHP versions: 5.6 and 7.2

1- Install prerequisites

before installing and running two php versions, we need to install apache and some repository. so execute these commands:

```
# yum install httpd
# yum install epel-release
# yum install yum-utils
```

2- Install multiple php versions

php-fpm is available in remi repository. so we install this repo and then after multiple php versions:

```
# yum install http://rpms.remirepo.net/enterprise/remi-release-7.rpm
# yum install php56
# yum install php72
# yum install php56-php-fpm
# yum install php72-php-fpm
```

then make sure both versions are stopped:

```
# systemctl stop php56-php-fpm
# systemctl stop php72-php-fpm
```

3- Configure SELinux

to allow selinux run php-fpm's scripts, run these commands:

```
# semanage port -a -t http_port_t -p tcp 9072
# semanage port -a -t http_port_t -p tcp 9056
```

4- Configure php-fpm

by default, each php-fpm version is listening on port 9000. because we want to run multiple php versions, we need to change default port:

```
# sed -i 's/:9000/:9056/' /etc/opt/remi/php56/php-fpm.d/www.conf
# sed -i 's/:9000/:9072/' /etc/opt/remi/php72/php-fpm.d/www.conf
```

now run two php-fpm's:

```
# systemctl start php72-php-fpm
# systemctl start php56-php-fpm
```

now we need to make script wrapper to call php56-cgi and php72-cgi:

```
# cat > /var/www/cgi-bin/php56.fcgi << EOF
# #!/bin/bash
# exec /bin/php56-cgi
# EOF

# cat > /var/www/cgi-bin/php72.fcgi << EOF
# #!/bin/bash
# exec /bin/php72-cgi
# EOF
```

then we set executable bit on both scripts:

```
# sudo chmod 755 /var/www/cgi-bin/php56.fcgi
```

```
# sudo chmod 755 /var/www/cgi-bin/php72.fcgi
```

5- Configure apache

Here we create two path. one for php-fpm56 and another for php-fpm72. you can change these paths with your own:

```
# cat > /etc/httpd/conf.d/php.conf << EOF

# ScriptAlias /cgi-bin/ "/var/www/cgi-bin/"

# AddHandler php56-fcgi .php

# Action php56-fcgi /cgi-bin/php56.fcgi

# Action php72-fcgi /cgi-bin/php72.fcgi


# <Directory /var/www/html/php56>

#   DirectoryIndex index.php

#   AllowOverride all

#   Require all granted

# </Directory>

# <Directory /var/www/html/php72>

#   DirectoryIndex index.php

#   AllowOverride all

#   Require all granted

# </Directory>

# EOF
```

then we put two php script on these two paths to test:

```
# mkdir -p /var/www/html/php56
```

```
# mkdir -p /var/www/html/php72

# echo "<?php phpinfo(); ?>" > /var/www/html/php56/index.php

# echo "<?php phpinfo(); ?>" > /var/www/html/php72/index.php

# echo "AddHandler php72-fcgi .php" >
/var/www/html/php72/.htaccess
```

6- Start services

Now we enable and start apache and php-fpm services:

```
# systemctl enable httpd

# systemctl enable php56-php-fpm

# systemctl enable php72-php-fpm

# systemctl start httpd

# systemctl start php56-php-fpm

# systemctl start php72-php-fpm
```

7- Configure firewall

we need to open port 80 to access apache. so run these commands:

```
# firewall-cmd --permanent --add-service=http

# firewall-cmd --reload
```

Now refer to these address and you must see php_info page with two different versions:

```
http://127.0.0.1/php56

http://127.0.0.1/php72
```