

“no matter where you are, everyone is always connected”

# Apache2 Configuration

# What is Apache?

Apache is an HTTP server. It hosts websites and allows people to connect to them over HTTP.

Apache is one of the most common HTTP servers and ubiquitous in hosting websites on the Internet. Proper configuration is a must.

# Apache Modules

in terminal

```
# a2enmod reqtimeout  
# a2enmod headers  
# a2enmod security2
```

Make sure the proper Apache2 modules are even enabled by using the *a2enmod* command.

# Apache Config

in file */etc/apache2/conf-enabled/security.conf*

```
ServerTokens Prod  
ServerSignature Off  
TraceEnable Off  
Header unset ETag  
FileETag none
```

In this file, we will change configuration to send as little information as we can in Server headers. We will also turn off the signature.

We will also disable any TRACE (loopback test) http requests and unset ETag headers which are used for caching.

# Apache Config

in file */etc/apache2/mods-available/ssl.conf*

```
SSLProtocol -SSLv2 -SSLv3  
SSLProtocol +TLSv1.2 +TLSv1.3
```

We will **enable** Transport Layer Security or TLS.

We will **disable** SSL as it is less secure and more vulnerable.

# Apache Config

in file */etc/apache2/apache.conf*

```
PidFile ${APACHE_PID_FILE}
```

```
KeepAlive Off
```

```
KeepAliveTimeout 5
```

```
User ${APACHE_RUN_USER}
```

```
Group ${APACHE_RUN_GROUP}
```

```
HostnameLookups Off
```

```
LogLevel warn
```

Now the meat. Yum.  
This is the global  
configuration.

# Apache Config

in file `/etc/apache2/apache.conf`

```
<Directory />
    Options None
    Order deny,allow
    Deny from all
    Require all denied
    AllowOverride None
</Directory>
```

We will also look at the directory-specific configurations.

Take a special note of the root configuration.

# Apache Config

in file /etc/apache2/apache.conf

```
<Directory /usr/share>
    Require all granted
    AllowOverride None
</Directory>

<Directory /var/www>
    Options -FollowSymLinks -Includes
    -ExecCGI -Indexes
    AllowOverride None
    Require all granted
</Directory>
```

# Environmental Care

in file `/etc/apache2/envvars`

```
export APACHE_RUN_USER=www-data  
export APACHE_RUN_GROUP=www-data
```

We need to make sure Apache is running as the correct user. This is set in the envvars file (environment variables).

The proper user for Apache is *www-data*.

# Remember to Restart

in terminal

```
# apachectl configtest  
# apachectl restart
```

Test your configuration and restart.

# Spare Commands

in terminal

```
# a2ensite /etc/apache2/sites-available/site1.conf
```

```
# a2dissite /etc/apache2/sites-available/site1.conf
```

These commands allow you to enable and disable the sites defined in the sites-available directory.

These create symbolic links in the sites-enabled directory to indicate that the site is online