

## Some commands used:

---

```
sudo systemctl (start|restart|enable|reload) apache2
```

### Our App Called `test.org`

- 1- Create a directory for the app in `/var/www/test.org`
- 2- Create a directory called `html` for the content of the web app
- 3- Create a `.htaccess` file
- 4- Create a file `/etc/apache2/sites-available/test.org.conf`

contain:

```
<VirtualHost *:80>
    ServerAdmin admin@test.org
    ServerName test.org
    ServerAlias www.test.org
    DocumentRoot /var/www/test.org/html
    ErrorLog /var/www/test.org/logs/error.log
    CustomLog /var/www/test.org/logs/access.log combined
</VirtualHost>
```

OR:

```
ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

## You can find logs on /var/log/apache2/
```

`combined` is the format of log you can find more on [mod\\_log\\_config](#)

- Or you can specify you format ex:

```
CustomLog /var/www/test.org/logs/access.log "Browser: ${User-agent}i -- Time: %t
-- Method: %m "
```

5-

```
sudo a2ensite test.org.conf
sudo a2dissite 000-default.conf
```

```
#####
```

```
!* On /etc/apache2/sites-available
```

```
sudo a2ensite new-site.conf --> to enable new website
sudo a2dissite site.conf --> to disable website
```

7- Go to `/etc/hosts`

```
127.0.0.2      test.org
```

8- Test for errors

```
sudo apache2ctl configtest
# OR
sudo apache2ctl -t
```

9- Go to `/etc/apache2/apache2.conf` file and put on it :

```
ServerName test.org
```

Don't forget to allowing `.htaccess` overrides:

```
<Directory "/var/www/test.org">
    AllowOverride All
</Directory>
```

## Documentation for htaccess file [link](#)

- To list enabled mods:

```
sudo apache2ctl -M
```

- To `enable|disable` mods:

```
sudo a2enmod <mod-name>
sudo a2dismod <mod-name>
```

# Rewrite mod :

---

## Official [Documentation](#)

Syntaxe:

```
RewriteEngine On
RewriteCond TestString Condition [flags]
RewriteRule Pattern Substitution [flags]
```

### RewriteCond:

**TestString** : Typically a server variable which is of the form %{**VARIABLE**}

**Condition** : One of the following:

1. Regular Expression
2. String Comparison
3. File/Path Test

**Flags** :

- NC : Case insensitive
- OR : logical ' or '

### RewriteRule:

**Pattern** : Regular Expression checked against the requested URI which is the part after [http://hostname](#)

**Substitution** : One of the following

- Modification to the part matched by the pattern
- Absolute path to a file

- Full URL to redirect to
- A dash "-" to do nothing

Flags :

- F : forrbeiden (403)
- L : last

## Examples:

```
## When the referer was "siradj.com" give a 403 forbidden
RewriteEngine on
RewriteCond %{HTTP_REFERER} siradj.com [NC]
RewriteRule .* - [F,L]

## Block oth "HEAD" and "POST" request methods
RewriteCond %{REQUEST_METHOD} (POST|HEAD) [NC]
RewriteRule .* - [F,L]

# Set time zone
SetEnv TZ America/Los_Angeles

## Create an error page to display it when the user requets a wrong page
ErrorDocument 404 /errors/404.php

## Block request from specific User-Agent
RewriteEngine on
RewriteCond %{HTTP_USER_AGENT} (siradj|Botname2|Botname3) [NC]
RewriteRule (.*?) - [F,L]

## Redirect all files and pages to the home page "index.php"
RewriteCond %{SCRIPT_FILENAME} !-f
RewriteCond %{SCRIPT_FILENAME} !-d
RewriteRule . index.php [NC,L]

## ex: GET http://test.org/facebook -Redirect-> https://www.facebook.com
RewriteRule [a-z]+ https://www.$0.com [L]
```