

Practice: Configuring Apache with .htaccess Files

Objective

Learn to use the `.htaccess` file to modify a website's behavior directly from its directory. You will practice the following directives:

- `DirectoryIndex`
 - `Options -Indexes`
 - `ErrorDocument`
 - Authentication with `.htpasswd`
 - Restricting access by IP address
-

1. Preparing the Environment

◆ Requirements

- A **web hosting with Apache** (e.g., InfinityFree, 000WebHost, Hostinger, Ionos, etc.)
- Access to the **File Manager** or **FTP**
- A text editor (Visual Studio Code, Notepad++, nano, etc.)

Folder Structure

Create a folder on your hosting called `htaccess-practice` with the following structure:

```
/htaccess-practice/  
├── index.html  
├── home.html  
├── private/  
│   └── secret.html  
├── errors/  
│   ├── error404.html  
│   └── error403.html  
└── .htaccess
```

1. First we need to enable the htaccess in the apache

```
usuario@usuariovm:~$ sudo nano /etc/apache2/sites-available/iria.com.conf
```

```
<Directory /var/www/iria.com>
    Options -Indexes
    AllowOverride All
    Require all granted
    DirectoryIndex index.html
</Directory>
```

```
usuario@usuariovm:~$ sudo systemctl restart apache2
```

2. Change the Default Page (DirectoryIndex)

File: .htaccess

DirectoryIndex home.html

✓ **Test:**

- In your browser, go to:
<https://yourdomain.com/htaccess-practice/>
- The server should load **home.html** instead of **index.html**.

```
usuario@usuariovm: /var/www/iria.com
GNU nano 7.2 .htaccess
DirectoryIndex home.html
```

If we go to the navigator, the default web is the home



3. Disable Directory Listing (Options -Indexes)

File: .htaccess

Options -Indexes

1. We put in this file the line

```
usuario@usuariovm:~$ sudo nano /etc/apache2/sites-available/iria.com.conf  
  
<Directory /var/www/iria.com>  
    Options -Indexes
```

2. we rename the index.html

```
usuario@usuariovm:/var/www/iria.com$ sudo nano index.html  
Nombre del archivo a escribir: indexOld.html  
^G Ayuda M-D Formato DOS M-A Añadir  
^C Cancelar M-M Formato Mac M-P Anteponer
```

3. we search the index and see the error



✓ Test:

- Temporarily rename or delete index.html.
 - Visit <https://yourdomain.com/htaccess-practice/>
 - The server should show a **403 Forbidden** error instead of listing files.
-

4. Password-Protect a Directory (.htpasswd)

Inside the `private/` folder, create:

- An `.htaccess` file
- An `.htpasswd` file (with encrypted credentials)

```
usuario@usuariovm:/var/www/iria.com/private$ sudo touch .htaccess .htpasswd
usuario@usuariovm:/var/www/iria.com/private$ ls
secret.html
usuario@usuariovm:/var/www/iria.com/private$ ls -la
total 8
drwxr-xr-x 2 root root 4096 nov  6 10:53 .
drwxr-xr-x 4 root root 4096 nov  6 10:51 ..
-rw-r--r-- 1 root root    0 nov  6 10:53 .htaccess
-rw-r--r-- 1 root root    0 nov  6 10:53 .htpasswd
-rw-r--r-- 1 root root    0 nov  5 14:11 secret.html
usuario@usuariovm:/var/www/iria.com/private$
```

Step 1. Generate the password hash

You can use one of the following:

- Online tool: <https://www.htaccesstools.com/htpasswd-generator/>
- Or from a terminal:
- `htpasswd -nb user1 mypassword123`

Example output:

```
user1:$apr1$hQfT....$b4Xzp.9WZ6fmpJxv2vC4C.
```

Step 2. .htpasswd

```
user1:$apr1$hQfT....$b4Xzp.9WZ6fmpJxv2vC4C.
```

```
usuario@usuariovm:~$ sudo htpasswd -c /var/www/iria.com/private/.htpasswd usuari
o
New password:
Re-type new password:
Adding password for user usuario
```

Step 3. .htaccess inside /private/

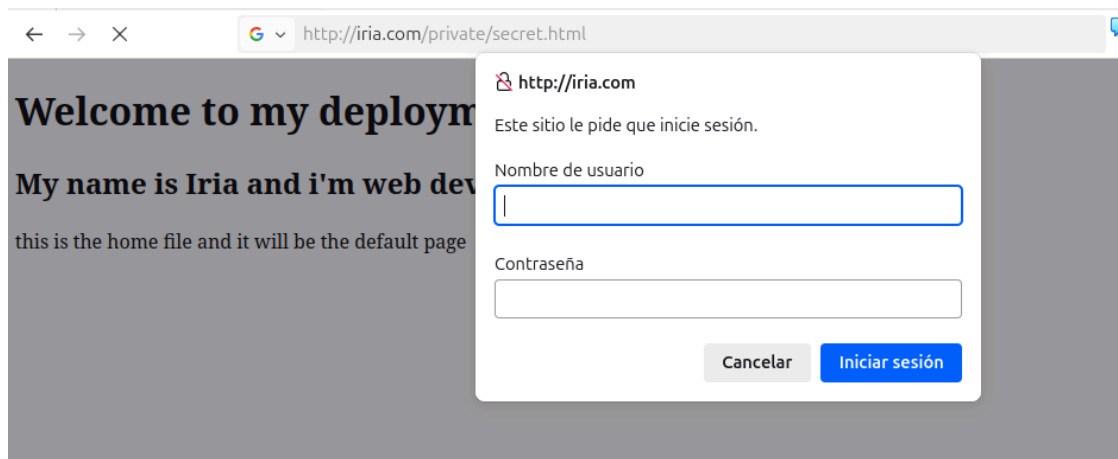
```
AuthType Basic
AuthName "Restricted Area"
AuthUserFile /home/USERNAME/public_html/htaccess-practice/private/.htpasswd
Require valid-user
```

♦ Adjust the path according to your hosting (you can find it by uploading a PHP script that runs `echo __DIR__;`).

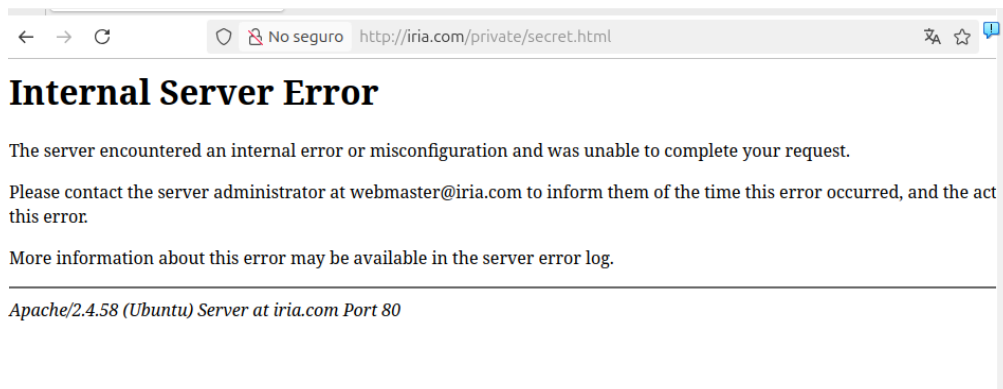
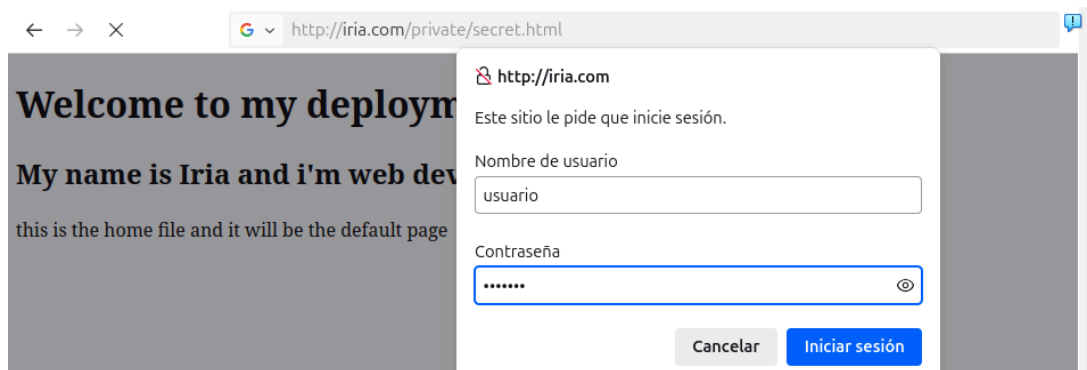
```
usuario@usuariovm: ~  
GNU nano 7.2 /var/www/iria.com/private/.htaccess *  
AuthType Basic  
AuthName "Área restringida"  
AuthUserFile /var/www/minombre/htaccess-practice/private/.htpasswd  
Require valid-user  
█
```

✓ Test:


- Go to `https://yourdomain.com/htaccess-practice/private/secret.html`



- You should be prompted to enter a username and password.



5. Custom Error Pages (`ErrorDocument`)

 **File:** `.htaccess`

```
ErrorDocument 404 /htaccess-practice/errors/error404.html
ErrorDocument 403 /htaccess-practice/errors/error403.html
```

```
usuario@usuariomv: ~
GNU nano 7.2 /var/www/iria.com/.htaccess *
DirectoryIndex home.html
ErrorDocument 404 /errors/404.html
ErrorDocument 403 /errors/403.html
```

 **Test:**

- Visit a non-existent URL (`/doesnotexist.html`) → should show **error404.html**



- If you try to access a restricted folder, it should show **error403.html**
-

6. Restrict Access by IP Address

File: `.htaccess`

```
Order Allow,Deny
Deny from 123.123.123.123
Allow from all
```

✓ **Test:**

- Find your IP address at <https://ifconfig.me>
- Replace it in the example.
- When you try to access your site from that IP, you'll be blocked (you can later comment out the line to regain access).

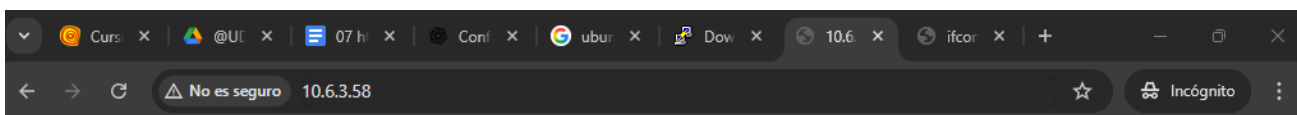
```
C:\Users\Alumno>ipconfig

Configuración IP de Windows

Adaptador de Ethernet Ethernet:

    Sufixo DNS específico para la conexión. . . : tic.enlac
    Vínculo: dirección IPv6 local. . . . . : fe80::6b0:9297:1
    Dirección IPv4. . . . . : 10.6.3.9
    Máscara de subred . . . . . : 255.255.2
    Puerta de enlace predeterminada . . . . . : 10.6.3.20
```

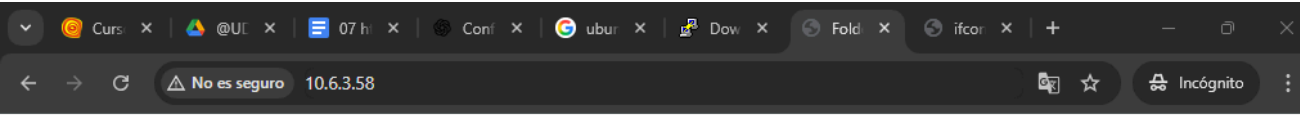
```
usuario@usuariovm: ~
GNU nano 7.2 /var/www/iria.com/.htaccess
DirectoryIndex home.html
ErrorDocument 404 /errors/404.html
ErrorDocument 403 /errors/403.html
<RequireAll>
    Require all granted
    Require not ip 10.6.3.9
</RequireAll>
```



Welcome to my deployment web

My name is Iria and i'm web developer

this is the home file and it will be the default page



Folder not found in iria.com

[Volver atras](#)