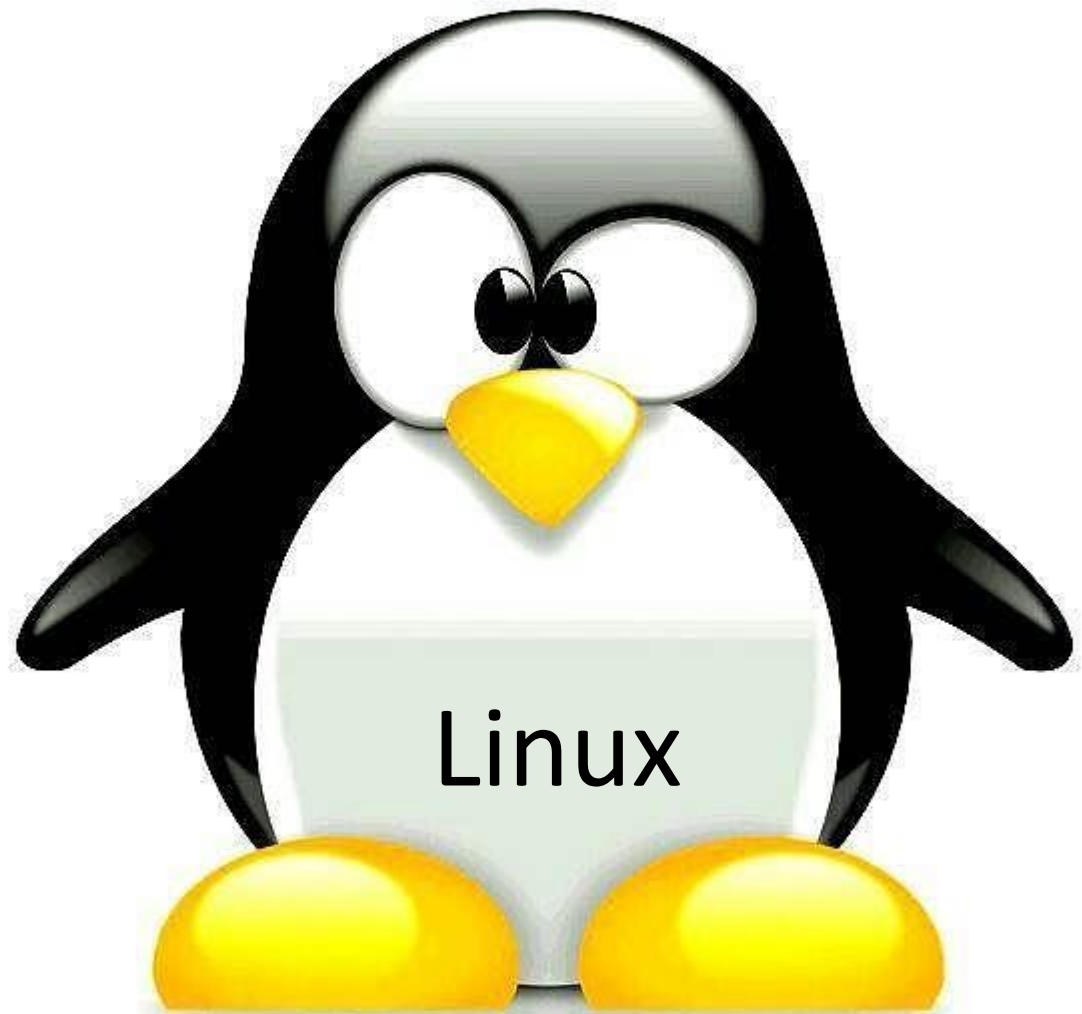


digital
escola
profissional

OpenCart



Up-to-date ...

Como sempre é ajuizado actualizar todo o sistema para garantir que vamos começar com uma configuração consistente e sem problemas.

Vamos também desabilitar o selinux para não interferir nesta fase.

```
[root@centos64 ~]# yum -y update
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirrors.pt
* epel: mirror.hosting90.cz
* extras: mirrors.pt
* updates: mirrors.pt
No packages marked for update
```

```
[root@centos64 ~]# setenforce 0
```



Instalar WebServer / Apache

A instalação é simples e poderá requerer alguns packages adicionais / dependentes que o utilitário yum resolve sem problemas.

```
[root@centos64 ~]# yum -y install httpd
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirrors.pt
* epel: mirror.hosting90.cz
* extras: mirrors.pt
* updates: mirrors.pt
Resolving Dependencies
→ Running transaction check
...
Total download size: 2.8 M
Installed size: 9.5 M
Downloading packages:
(1/2): httpd-tools-2.4.6-97.el7.centos.x86_64.rpm | 93 kB 00:01
(2/2): httpd-2.4.6-97.el7.centos.x86_64.rpm | 2.7 MB 00:01
...
Complete!
```

Arrancamos o Apache

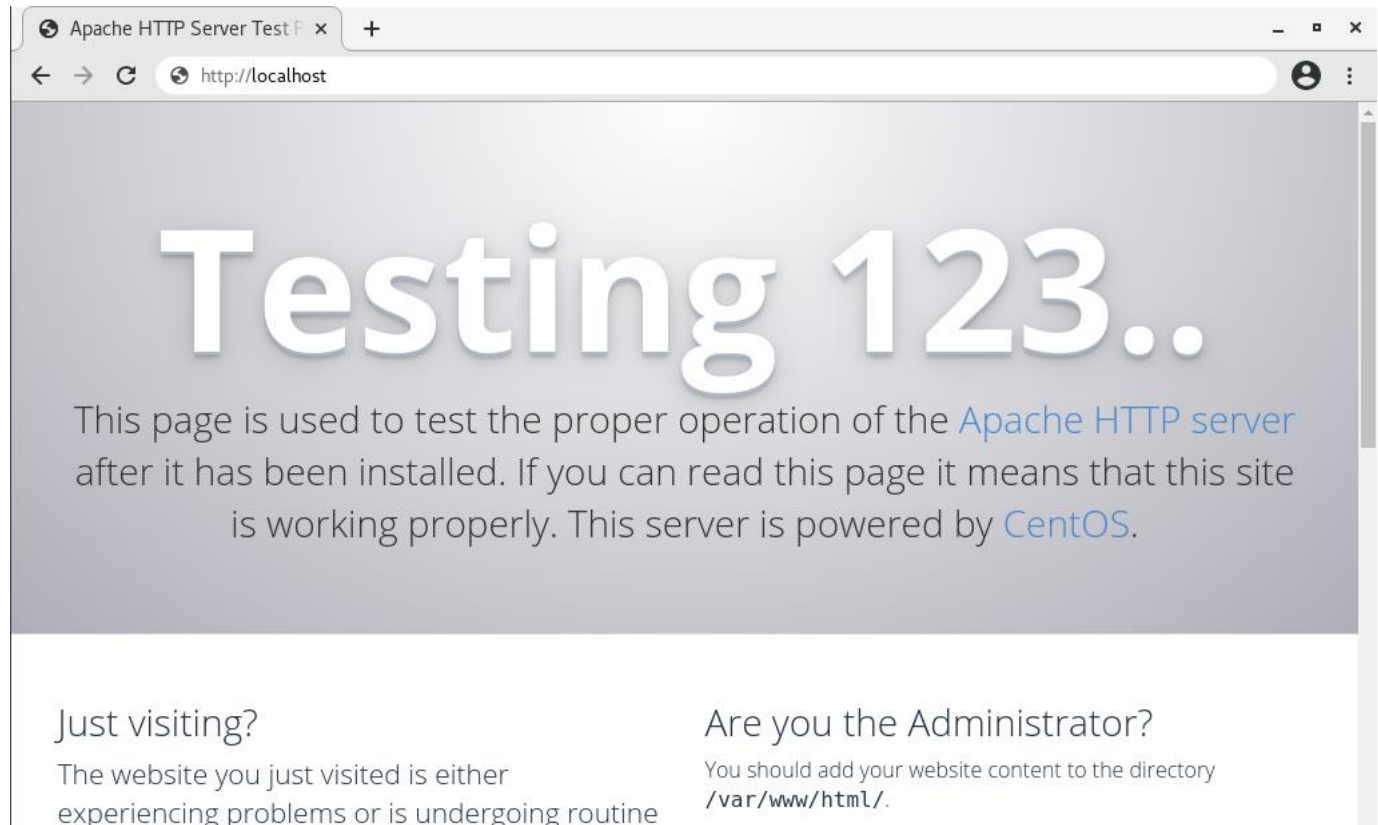
Arrancamos e para garantir que ele arranca automaticamente no boot, fazemos também o enable

```
[root@centos64 ~]# systemctl start httpd
[root@centos64 ~]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@centos64 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Sat 2020-12-26 10:49:38 WET; 18s ago
     Docs: man:httpd(8)
           man:apachectl(8)
  Main PID: 3775 (httpd)
    Status: "Total requests: 0; Current requests/sec: 0; Current traffic: 0 B/sec"
    CGroup: /system.slice/httpd.service
            └─3775 /usr/sbin/httpd -DFOREGROUND
              └─3779 /usr/sbin/httpd -DFOREGROUND
                └─3780 /usr/sbin/httpd -DFOREGROUND
                  └─3781 /usr/sbin/httpd -DFOREGROUND
                    └─3782 /usr/sbin/httpd -DFOREGROUND
                      └─3783 /usr/sbin/httpd -DFOREGROUND

Dec 26 10:49:38 centos64.myhome systemd[1]: Starting The Apache HTTP Server...
Dec 26 10:49:38 centos64.myhome systemd[1]: Started The Apache HTTP Server.
```

Testar com o browser

Para testar que o Webserver está “à escuta” no port http/80, acedemos a `http://localhost`



Instalamos a base de dados

Deveremos instalar a base de dados onde vão ser guardadas as configurações, produtos e vendas da loja.

Caso já esteja instalada, vamos seguir em frente 😊

```
[root@centos64 ~]# yum -y install mariadb-server mariadb
```

```
Loaded plugins: fastestmirror, langpacks
```

```
Loading mirror speeds from cached hostfile
```

```
* base: mirrors.pt
```

```
* epel: mirror.hosting90.cz
```

```
* extras: mirrors.pt
```

```
* updates: mirrors.pt
```

```
Package 1:mariadb-server-5.5.68-1.el7.x86_64 already installed and latest version
```

```
Package 1:mariadb-5.5.68-1.el7.x86_64 already installed and latest version
```

```
Nothing to do
```

Instalamos a base de dados

Deveremos instalar a base de dados onde vão ser guardadas as configurações, produtos e vendas da loja.

Arrancamos o seu serviço e tornamo-lo enable para os próximos boot.

```
[root@centos64 ~]# yum -y install mariadb-server mariadb
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirrors.pt
* epel: mirror.hosting90.cz
* extras: mirrors.pt
* updates: mirrors.pt
Package 1:mariadb-server-5.5.68-1.el7.x86_64 already installed and latest version
Package 1:mariadb-5.5.68-1.el7.x86_64 already installed and latest version
Nothing to do
[root@centos64 ~]# systemctl start mariadb
[root@centos64 ~]# systemctl enable mariadb
Created symlink from /etc/systemd/system/multi-user.target.wants/mariadb.service to
/usr/lib/systemd/system/mariadb.service.
[root@centos64 ~]# systemctl status mariadb
● ...
  Active: active (running) since Sat 2020-12-26 11:04:51 WET; 12s ago
  ...
```

Configuração da base de dados

A configuração passa por atribuir password de root (que não tem, por isso quando pede a corrente, não deve ser dada password) e aceitar com Y as configurações default por questões de segurança.

```
[root@centos64 ~]# mysql_secure_installation
```

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current password for the root user. If you've just installed MariaDB, and you haven't set the root password yet, the password will be blank, so you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password ensures that nobody can log into the MariaDB root user without the proper authorisation.

Set root password? [Y/n] y
New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
... Success!

```
...  
Remove anonymous users? [Y/n] Y  
... Success!  
  
Normally, root should only be allowed to connect from 'localhost'. This ensures that someone cannot guess at the root password from the network.  
  
Disallow root login remotely? [Y/n] Y  
... Success!  
  
...  
  
Remove test database and access to it? [Y/n] Y  
- Dropping test database...  
... Success!  
- Removing privileges on test database...  
... Success!  
  
...  
  
Reload privilege tables now? [Y/n] Y  
... Success!  
  
Cleaning up...  
  
All done! If you've completed all of the above steps, your MariaDB installation should now be secure.  
  
Thanks for using MariaDB!
```


Instalar PHP

A instalação deve ser feita usando versões recentes, por isso há que instalar as que estão disponíveis na distribuição mas depois uma versão mais actualizada, por exemplo a 7.3.



```
# php -v
PHP 7.3.25 (cli)
```

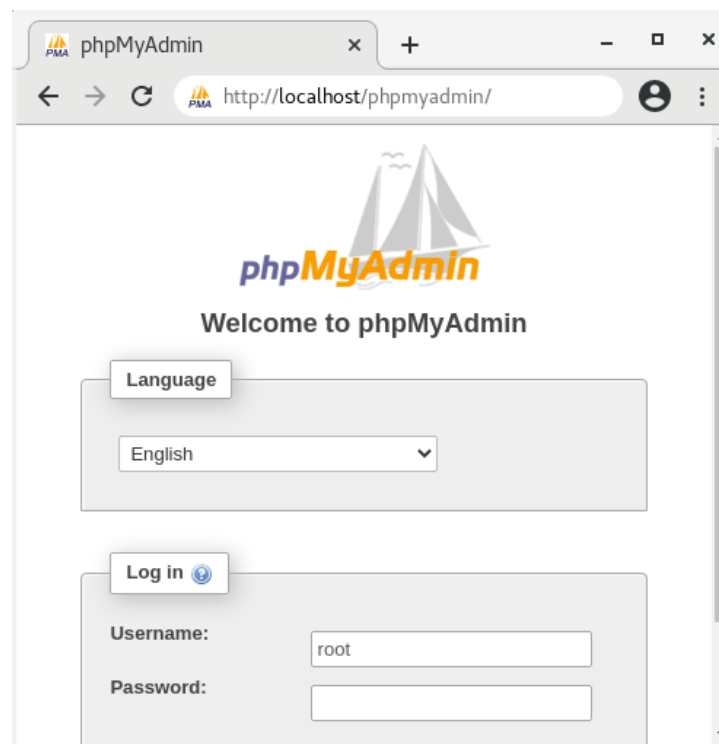
```
root@centos64 ~]# yum -y install php php-mysql php-gd php-ldap php-odbc
php-pear php-xml php-xmlrpc php-mbstring php-snmp php-soap php-mcrypt
curl zlib
...
[root@centos64 ~]# yum -y install http://rpms.remirepo.net/enterprise/remi-
release-7.rpm
...
Installing:
remi-release    noarch    7.8-1.el7.remi    /remi-release-7    28 k
...
yum -y install epel-release yum-utils
...
[root@centos64 ~]# yum-config-manager --disable remi-php54
...
[root@centos64 ~]# yum-config-manager --enable remi-php73
...
root@centos64 ~]# yum -y install php php-cli php-fpm php-mysqlnd php-zip
php-devel php-gd php-mcrypt php-mbstring php-curl php-xml php-pear php-
bcmath php-json
```

Instalar phpmyadmin

Instalamos o módulo, fazemos restart ao servidor.
E vamos testar em <http://localhost/phpmyadmin/>...



```
[root@centos64 ~]# yum -y install phpmyadmin  
...  
[root@centos64 ~]# systemctl restart httpd.service
```

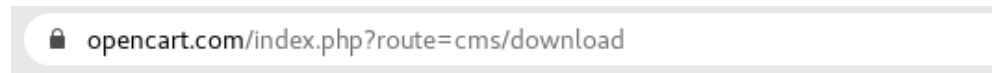


Download OpenCart



Vamos fazer download do módulo através da sua página oficial:

<https://www.opencart.com/index.php?route=cms/download>



OR



Download & host your own

v3.0.3.6 July 20, 2020. [Release notes](#)

- Download **OpenCart 3.0.3.6** for free
- Customise your own hosting solution
- Install and configure your store
- Paid support from [approved partners](#)
- Or clone the OpenCart [GitHub repository](#)

Download OpenCart



Criamos um local
para descomprimir o
package ...
e ...

```
[root@centos64 ~]# mkdir opencart
[root@centos64 ~]# cd opencart
[root@centos64 opencart]# mv /home/amatias/Downloads/opencart-3.0.3.6.zip .
[root@centos64 opencart]# ls -l
total 16228
-rw-rw-r--. 1 amatias amatias 16616967 Dec 26 11:50 opencart-3.0.3.6.zip
[root@centos64 opencart]# unzip opencart-3.0.3.6.zip
[root@centos64 opencart]# ls -l
total 16688
-rw-r--r--. 1 root  root    2106 Jul 20 20:59 build.xml
-rw-r--r--. 1 root  root  327817 Jul 20 20:59 CHANGELOG_AUTO.md
-rw-r--r--. 1 root  root   33574 Jul 20 20:59 CHANGELOG.md
-rw-r--r--. 1 root  root    635 Jul 20 20:59 composer.json
-rw-r--r--. 1 root  root   36033 Jul 20 20:59 composer.lock
-rw-r--r--. 1 root  root    3709 Jul 20 20:59 install.txt
-rw-r--r--. 1 root  root   34529 Jul 20 20:59 license.txt
-rw-rw-r--. 1 amatias amatias 16616967 Dec 26 11:50 opencart-3.0.3.6.zip
-rw-r--r--. 1 root  root    5021 Jul 20 20:59 README.md
-rw-r--r--. 1 root  root    5995 Jul 20 20:59 upgrade.txt
drwxr-xr-x. 8 root  root     165 Jul 20 21:22 upload
```

Copiar OpenCart



Copiamos as páginas PHP para serem executadas dentro do contexto do nosso WebServer.

Acertar permissões a atribuir ao utilizador que executa o processo do webserver, apache neste caso.

```
[root@centos64 ~]# cp -avr opencart /var/www/html
[root@centos64 ~]# cd /var/www/html/opencart/
[root@centos64 opencart]# ls -l
total 16688
-rw-r--r--. 1 root  root    2106 Jul 20 20:59 build.xml
-rw-r--r--. 1 root  root  327817 Jul 20 20:59 CHANGELOG_AUTO.md
-rw-r--r--. 1 root  root  33574 Jul 20 20:59 CHANGELOG.md
-rw-r--r--. 1 root  root    635 Jul 20 20:59 composer.json
-rw-r--r--. 1 root  root  36033 Jul 20 20:59 composer.lock
-rw-r--r--. 1 root  root   3709 Jul 20 20:59 install.txt
-rw-r--r--. 1 root  root  34529 Jul 20 20:59 license.txt
-rw-rw-r--. 1 amatias amatias 16616967 Dec 26 11:50 opencart-3.0.3.6.zip
-rw-r--r--. 1 root  root   5021 Jul 20 20:59 README.md
-rw-r--r--. 1 root  root   5995 Jul 20 20:59 upgrade.txt
drwxr-xr-x. 8 root  root    165 Jul 20 21:22 upload
[root@centos64 opencart]# cd ..
[root@centos64 html]# chmod -R 775 opencart
[root@centos64 html]# chown -R apache:apache opencart
```

Ficheiros de configuração

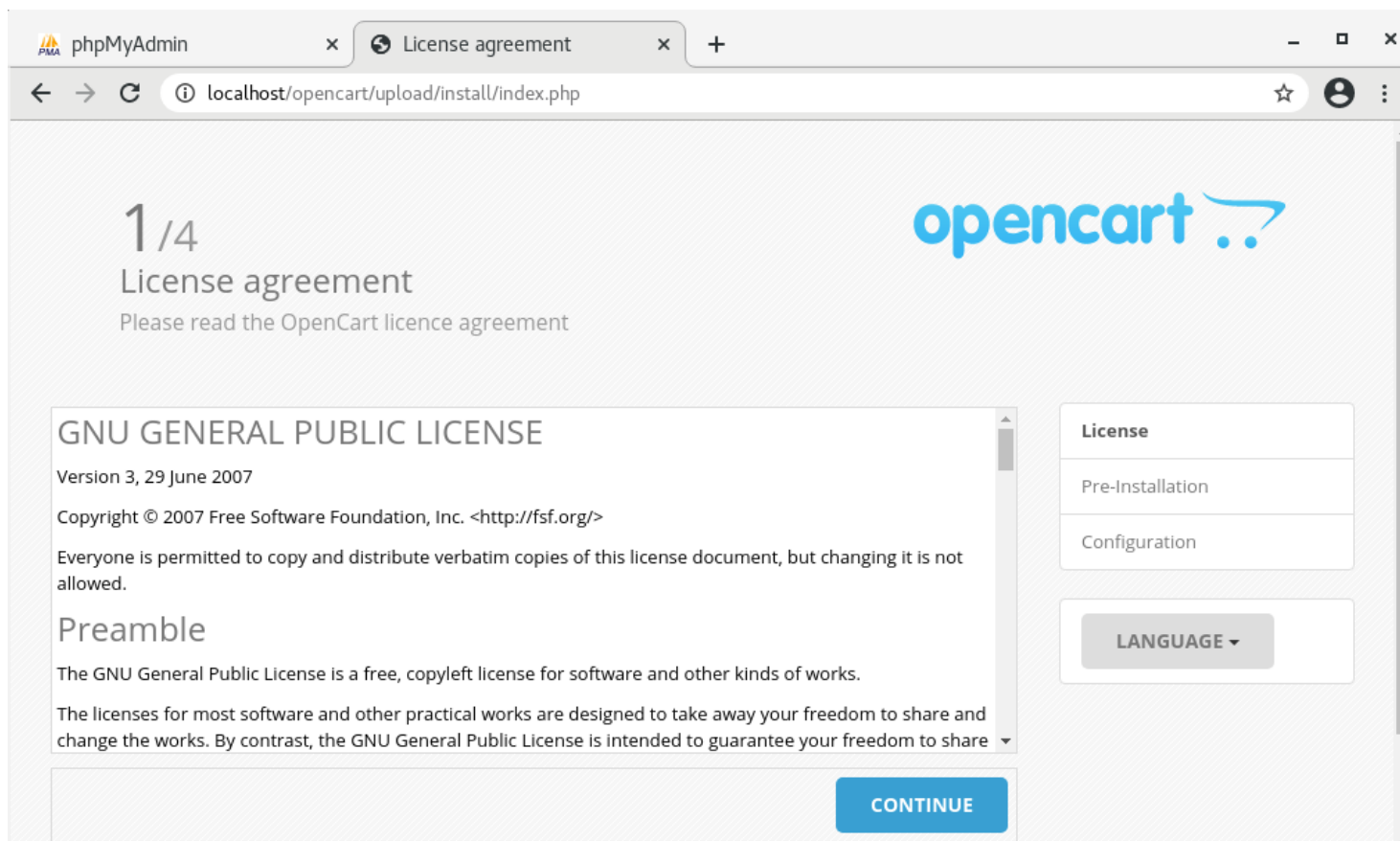


Criamos os ficheiros de configuração
(atenção às permissões e owner)

```
[root@centos64 html]# cd opencart/upload
[root@centos64 upload]# cp config-dist.php config.php
[root@centos64 upload]# cp /var/www/html/opencart/upload/admin/config-dist.php
/var/www/html/opencart/upload/admin/config.php
[root@centos64 opencart]# cd ..
[root@centos64 html]# chmod -R 775 opencart
[root@centos64 html]# chown -R apache:apache opencart
```

E vamos começar ...

Através do browser aceder a ... <http://localhost/opencart/upload>




Continue ...

Verificar os requisitos ... tudo a verde ... E continue ...

2/4

Pre-Installation

Check your server is set-up correctly



1. Please configure your PHP settings to match requirements listed below.

PHP Settings	Current Settings	Required Settings	Status
PHP Version	7.3.25	7.3+	✓
Register Globals	Off	Off	✓
Magic Quotes GPC	Off	Off	✓
File Uploads	On	On	✓
Session Auto Start	Off	Off	✓

2. Please make sure the PHP extensions listed below are installed.

Extension Settings	Current Settings	Required Settings	Status
--------------------	------------------	-------------------	--------

License

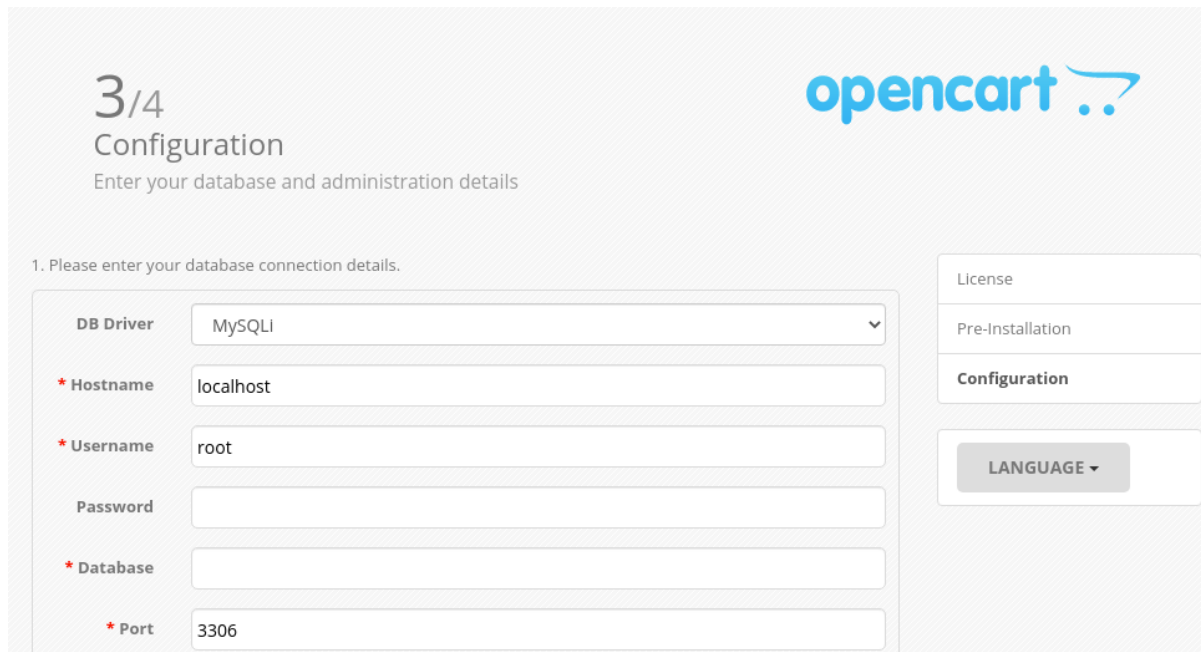
Pre-Installation

Configuration

LANGUAGE ▼

Continue ... Para a BD

E vamos criar a BD para lá inserir os conteúdos ...



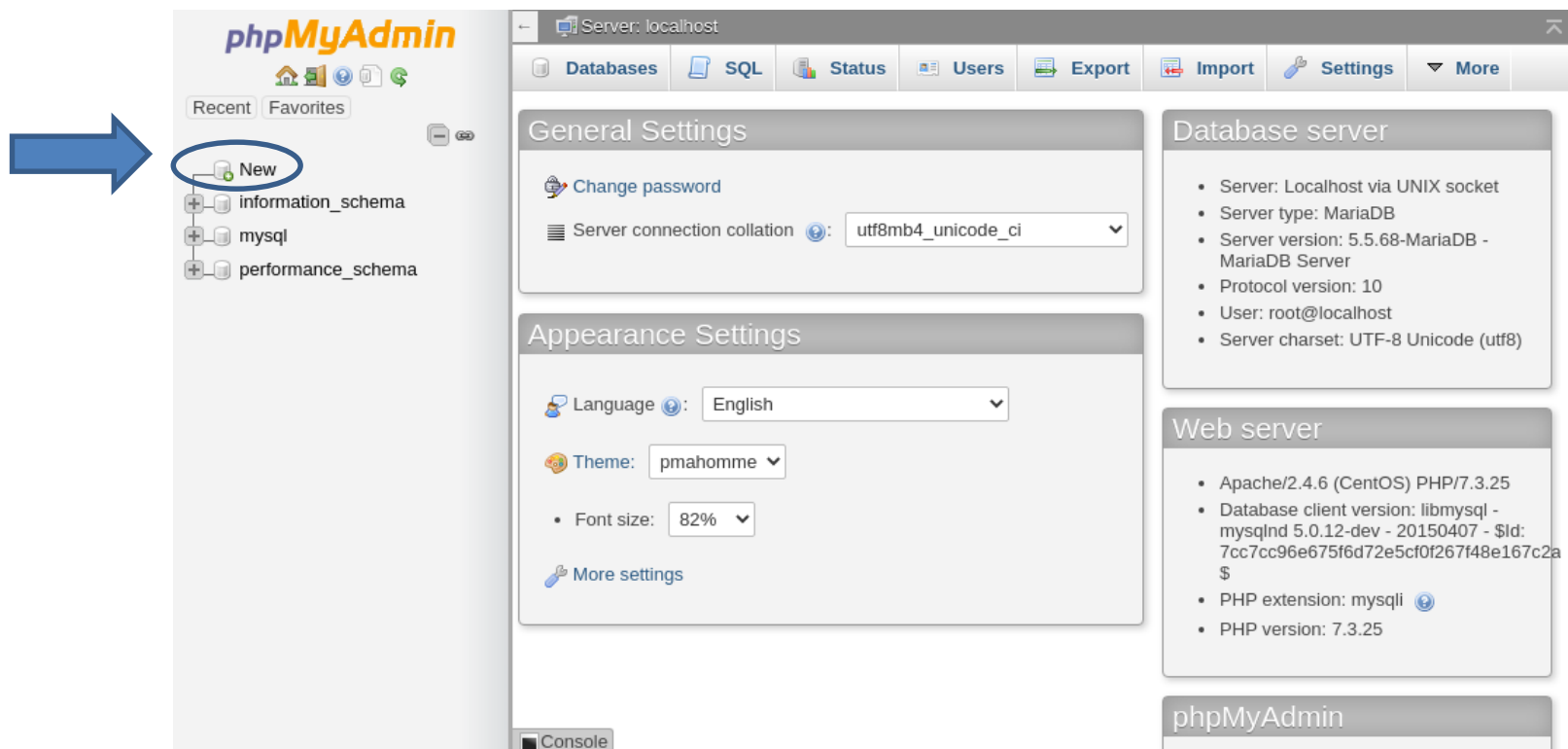
The screenshot shows the OpenCart 3/4 Configuration screen. The title is "3/4 Configuration" with the subtitle "Enter your database and administration details". The OpenCart logo is in the top right. The main content area is titled "1. Please enter your database connection details." and contains a form with the following fields:

- DB Driver:** A dropdown menu with "MySQL" selected.
- * Hostname:** A text input field containing "localhost".
- * Username:** A text input field containing "root".
- Password:** A text input field.
- * Database:** A text input field.
- * Port:** A text input field containing "3306".

On the right side, there is a sidebar with a "LANGUAGE" dropdown and a list of links: "License", "Pre-Installation", and "Configuration".

No phpMyAdmin

Vamos aceder via browser a `http://localhost/phpmyadmin/`
e autenticamo-nos como root e password anteriormente
indicada durante a instalação/configuração da mariaDB



No phpMyAdmin

Criar a BD


Databases



Create database ?

iftekher

Collation

Create

 Note: Enabling the database statistics here might cause heavy traffic between the web server and the MySQL server.

	Database	Collation	
<input type="checkbox"/>	information_schema	utf8_general_ci	 Check Privileges
<input type="checkbox"/>	mysql	latin1_swedish_ci	 Check Privileges
<input type="checkbox"/>	performance_schema	utf8_general_ci	 Check Privileges
Total: 3		latin1_swedish_ci	



☐ Check All

With selected:



Drop

E configurar no OpenCart



DB Driver: MySQLI

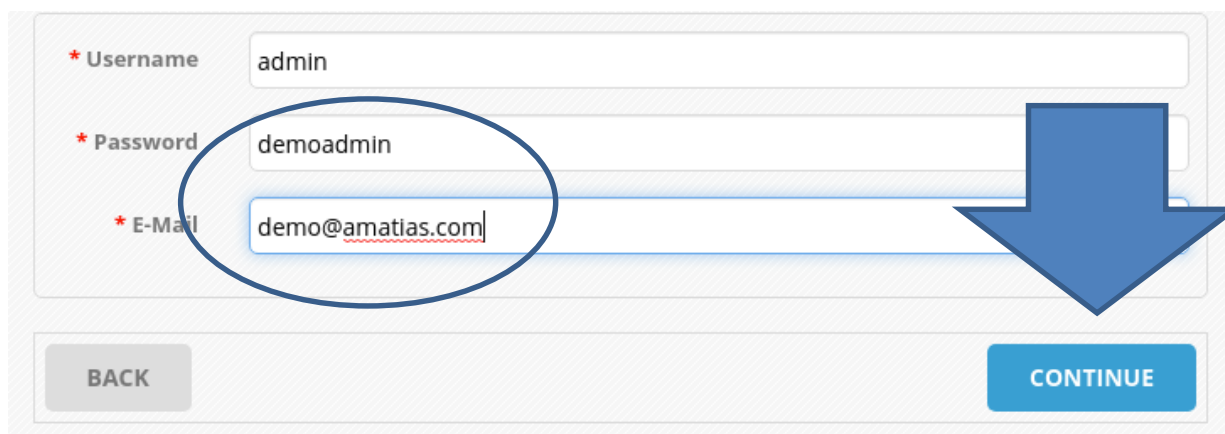
* Hostname: localhost

* Username: root

Password:

* Database: iftekher

* Port: 3306



* Username: admin

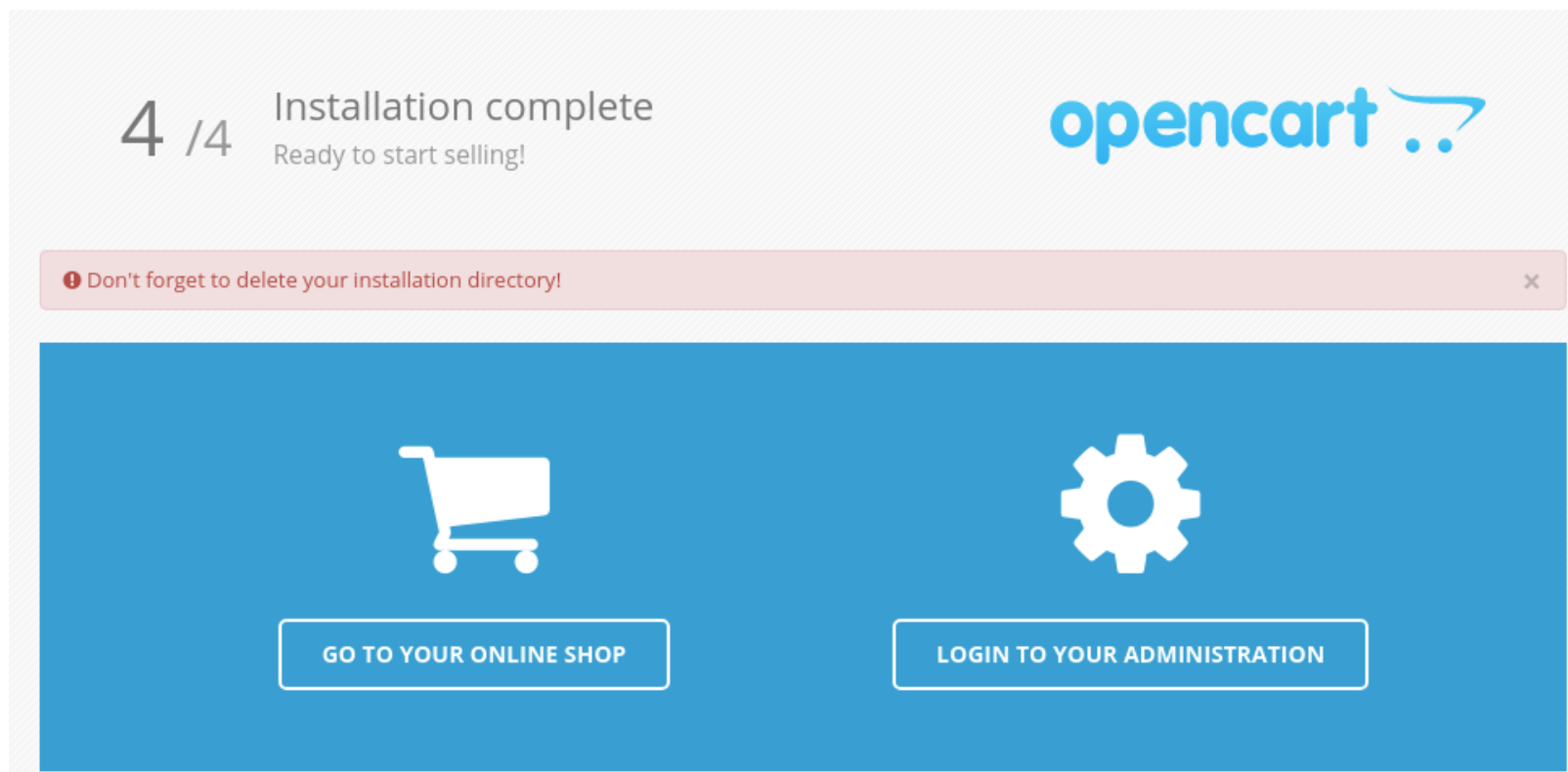
* Password: demoadmin

* E-Mail: demo@amatias.com

BACK CONTINUE

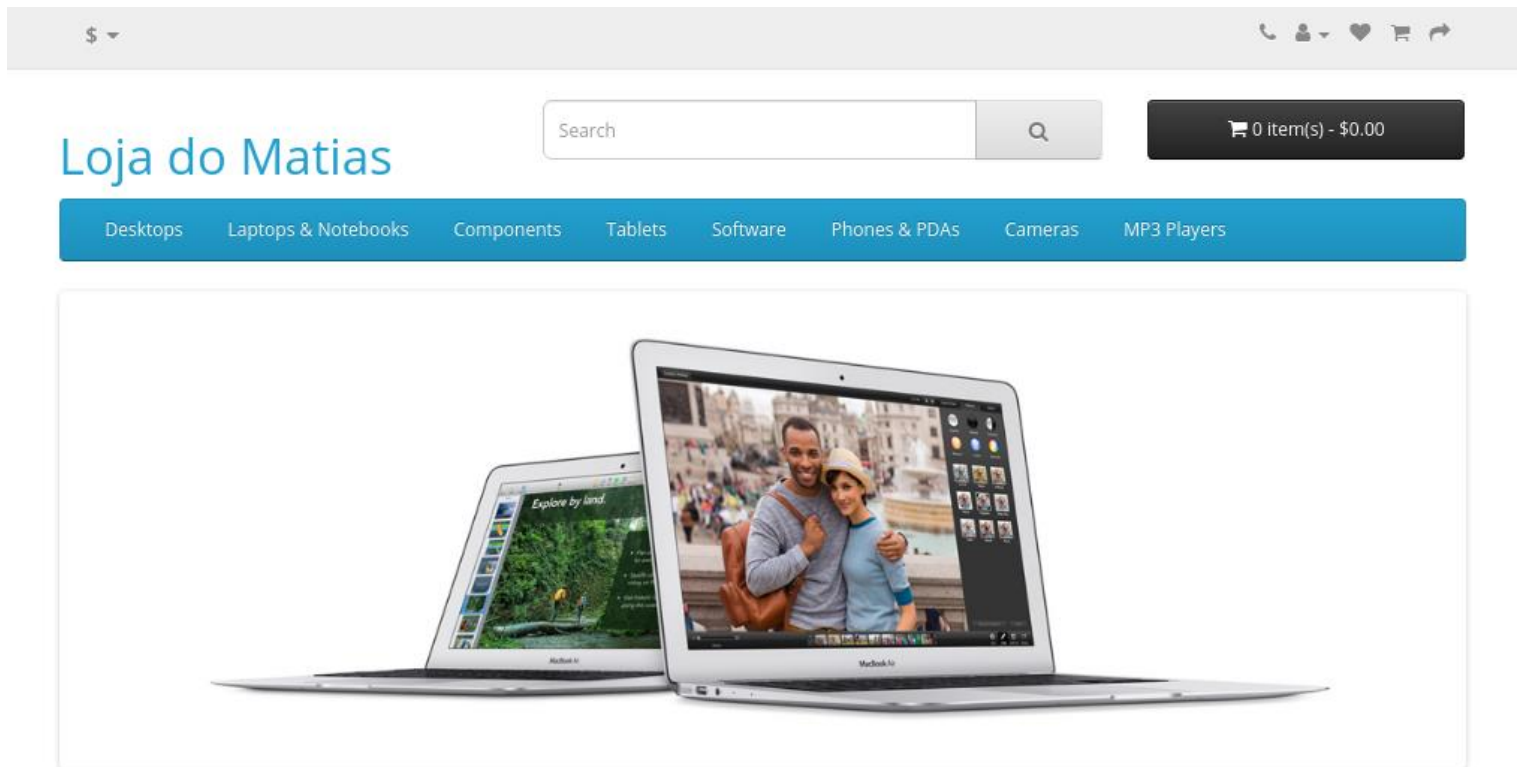
E finalizamos com ...

Ficando com os dois botões de acesso à loja e à página de administração da loja



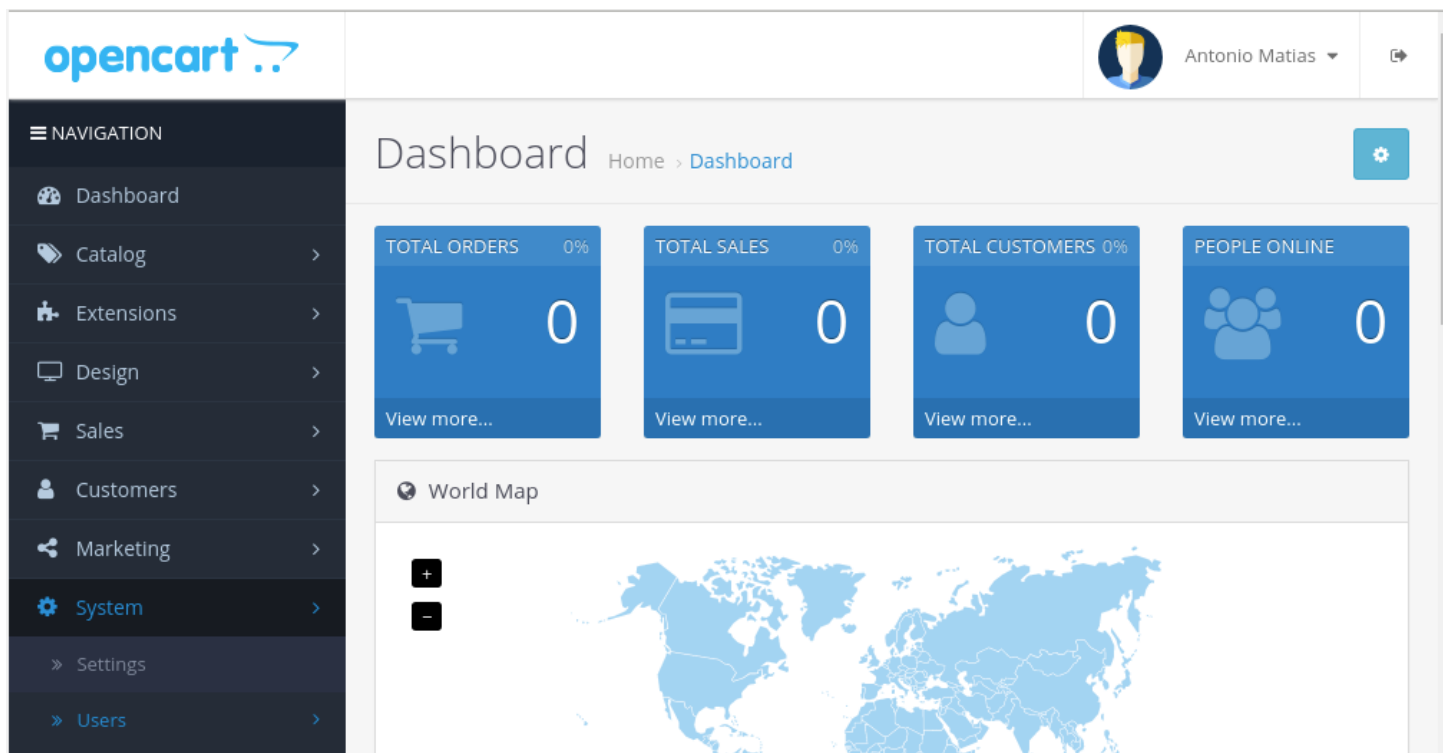
A loja ...

<http://localhost/opencart/upload/>



Administrar a loja ...

<http://localhost/opencart/upload/admin/> , usando as credenciais configuradas na loja (admin/demoadmin)



Endereço / nome da loja ...

Para controlar alguns parâmetros, incluindo o nome porque a loja é endereçada a partir do exterior, ver `/var/www/html/opencart/upload/config.php`

A firewall bloqueia acessos vindos do exterior?

```
[root@centos64 upload]# systemctl start firewalld
```

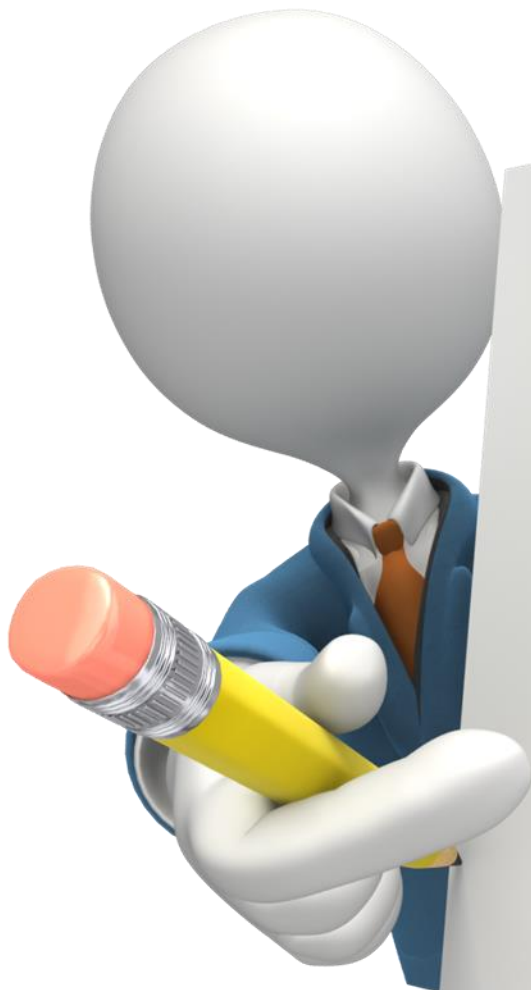
ou

```
[root@centos64 upload]# firewall-cmd --add-service=http --permanent
```

SELinux atrapalha? -> `# setenforce=0`

Também através da consola de administração podem ser criadas outras lojas visto que a criada é a de base, mas a ferramenta implementa um CMS para lojas virtuais.

Por questões naturais de segurança, deve ser configurado um certificado digital para que utilização com SSL / HTTPS



Perguntas

1. Quais as componentes da infraestrutura de uma loja virtual?
2. Qual o objectivo de usar uma Base de Dados em detrimento de ficheiros? Será sempre necessário?
3. Indica componentes da loja que automatizam o processo?
4. Indique métodos de finalizar a compra e formalizar a encomenda.