

M010: Sistemes de Gestió Empressarial

UF1-Sistemes ERP-CRM Implantació

Activitat 103 - Instal·lació de sistemes ERP-CRP



Curs: 2019-20

CFGS: DAM2

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Data: 26/02/2020

Nom i Cognoms	Data
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Activitat 103- Instal·lació de sistemes ERP-CRM

OBJECTIU DE L'ACTIVITAT

Conèixer els requeriments tècnics per a la instal·lació i funcionament òptim de sistemes ERP /CRM interpretant-ne la documentació tècnica i identificant-ne les diferents opcions i mòduls.

PROCEDIMENT

Instal·lació d'un sistema CRM i tot el programari de suport (llenguatge, base de dades, servidor, ...) que permeti el funcionament del sistema en mode local.

Durant tot el procés cal fer les anotacions i captures de pantalla necessàries per a la seva documentació. El nom de l'usuari del sistema ha de ser el del alumne que fa la instal·lació. Per a la instal·lació del CRM, si no es treballa amb un sistema Linux, cal fer servir Windows Subsystem for Linux (WSL). En cap cas es faran servir màquines virtuals Linux sobre Windows.

Per a la habilitació de WSL s'afegeixen enllaços a guies d'instal·lació al document Instal·lació d'un sistema CRM.

DOCUMENTACIÓ

Un cop instal·lada l'aplicació i comprovat el seu funcionament creeu un document que expliqui

tot el procés d'instal·lació:

- Característiques del maquinari sobre el que es fa la instal·lació
 - Sistema operatiu emprat (arquitectura, distribució, versió, ...)
 - Versió i procés d'instal·lació del servidor (Apache)
 - Versió i procés d'instal·lació de la base de dades
 - Versió i procés d'instal·lació del llenguatge de suport
 - Versió i procés d'instal·lació del sistema CRM
 - Anotacions sobre possibles problemes o altres aspectes a destacar del procés
- A més d'aquests es podran afegir tots aquells aspectes que creieu oportú indicar. El document incorporarà portada, amb les dades de l'activitat i de l'alumne, i índex del contingut.

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

ÍNDEX

1. PROCEDIMENT

- 1.1. Mostrem S.O. i WSL
- 1.2. Installacio de Ubuntu 16.04 LTS (errors)
 - 1.2.1. Instal.larem el servidor web : Apache 2
 - 1.2.2. Instal.larem MariaDB
 - 1.2.3. Instal.larem PHP 7.1 i els mòduls relacionats
 - 1.2.4. Creació d'una base SuiteCRM
 - 1.2.5. Descargar SuiteCRM
 - 1.2.6. Configuracio del servidor Web Apache2
 - 1.2.7. Habilitar el modul SuiteCRM
 - 1.2.8. Obtenir i configurar certificats SSL
 - 1.2.9. Problemes amb la versió de Php i Let's Encrypt
- 1.3. Installacio de Ubuntu 18.04 (definitiu)
 - 1.3.1. Instal.larem el servidor web : Apache 2
 - 1.3.2. Instal.larem MariaDB
 - 1.3.3. Instal.larem PHP 7.1 i els mòduls relacionats
 - 1.3.4. Creació d'una base SuiteCRM
 - 1.3.5. Descargar SuiteCRM
 - 1.3.6. Configuracio del servidor Web Apache2
 - 1.3.7. Habilitar el modul SuiteCRM

2. DOCUMENTACIÓ

- 2.1. Caracterisitques del maquinari
- 2.2. Sistema Operatiu(versió,arquitectura....)
- 2.3. Versió i procés d'instal·lació del servidor (Apache)
- 2.4. Versió i procés d'instal·lació de la base de dades
- 2.5. Versió i procés d'instal·lació del llenguatge de suport
- 2.6. Versió i procés d'instal·lació del sistemaCRM (SuiteCRM)

3. BIBLIOGRAFIA

Nom i Cognoms

Data

Arnau Subirós Puigarnau

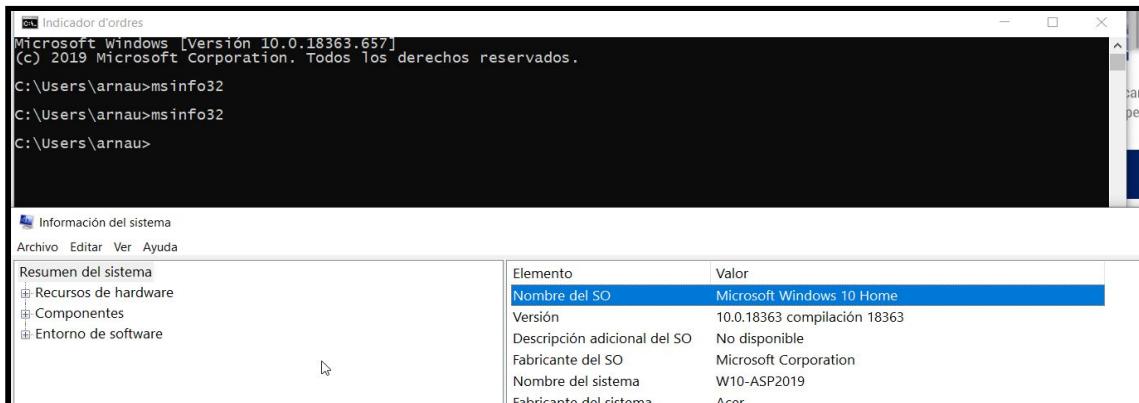
26/02/2020

1. PROCEDIMENT

- Primer de tot mostrarem el S.O que farem servir (tot i que està configurat el dual boot) s'utilitzarà el wsl (subsistema de linux)

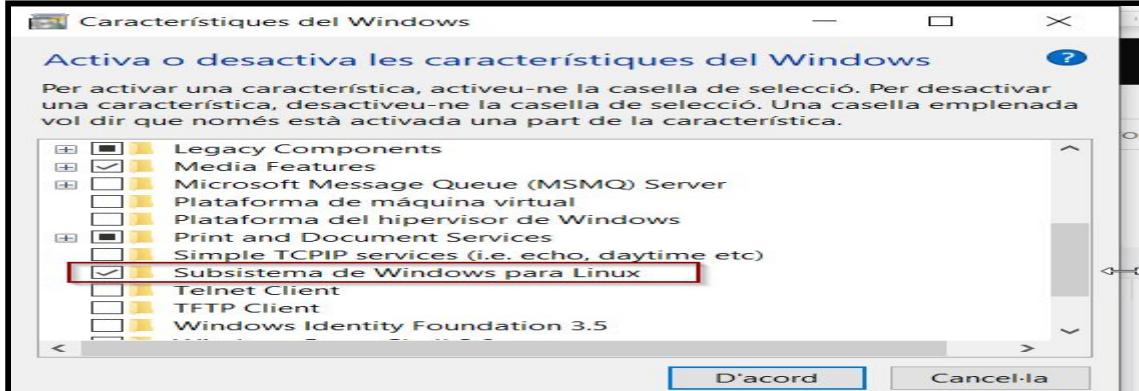
1.1. Mostrem S.O. i WSL

- Mostrem la versió meu S.O.



Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Ja tenia activat el subsistema de Windows per Linux(WSL)



1.2. Instal·lació Ubuntu 16.04 LTS



- Desde el directori /mnt tinc accés a les 4 particions del Windows 10

```
root@W10-ASP2019: /mnt
root@W10-ASP2019:/mnt# ls
c d v z
root@W10-ASP2019:/mnt#
```

Desde Windows 10 utilitzant el kernel de linux farem les instal·lacions necessàries pel funcionament de Suite CRM :

- Instal·lem el servidor web : Apache 2
- Instal·lem la base de dades :MariaDB

Nom i Cognoms

Data

Arnau Subirós Puigarnau

26/02/2020

- Instal·lem PHP i els mòduls relacionats
- Creació d'una base SuiteCRM
- Descargar SuiteCRM
- Configuració Web Apache2
- Habilitar el mòdul SuiteCRM

1.2.1. Instal·lació el servidor web : Apache 2

root@W10-ASP2019:~# sudo apt-get install apache2

```
root@W10-ASP2019:~# apt-get update
Get:1 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]
Hit:2 http://archive.ubuntu.com/ubuntu xenial InRelease
Get:3 http://archive.ubuntu.com/ubuntu xenial-updates InRelease [107 kB]
Get:4 http://archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Get:5 http://security.ubuntu.com/ubuntu xenial-security/main amd64 Packages [822 kB]
Get:6 http://archive.ubuntu.com/ubuntu xenial/universe amd64 Packages [7,532 kB]
Get:7 http://security.ubuntu.com/ubuntu xenial-security/main Translation-en [314 kB]
Get:8 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [479 kB]
Get:9 http://security.ubuntu.com/ubuntu xenial-security/universe Translation-en [197 kB]
Get:10 http://security.ubuntu.com/ubuntu xenial-security/multiverse amd64 Packages [5,728 B]
Get:11 http://security.ubuntu.com/ubuntu xenial-security/multiverse Translation-en [2,708 B]
Get:12 http://archive.ubuntu.com/ubuntu xenial/universe Translation-en [4,354 kB]
Get:13 http://archive.ubuntu.com/ubuntu xenial/multiverse amd64 Packages [144 kB]
Get:14 http://archive.ubuntu.com/ubuntu xenial/multiverse Translation-en [106 kB]
Get:15 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [1,101 kB]
Get:16 http://archive.ubuntu.com/ubuntu xenial-updates/main Translation-en [422 kB]
Get:17 http://archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [784 kB]
Get:18 http://archive.ubuntu.com/ubuntu xenial-updates/universe Translation-en [329 kB]
Get:19 http://archive.ubuntu.com/ubuntu xenial-updates/multiverse amd64 Packages [16.8 kB]
Get:20 http://archive.ubuntu.com/ubuntu xenial-updates/multiverse Translation-en [8,468 B]
Get:21 http://archive.ubuntu.com/ubuntu xenial-backports/main amd64 Packages [7,280 B]
Get:22 http://archive.ubuntu.com/ubuntu xenial-backports/main Translation-en [4,456 B]
Get:23 http://archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [8,064 B]
Get:24 http://archive.ubuntu.com/ubuntu xenial-backports/universe Translation-en [4,328 B]
Fetched 17.0 MB in 11s (1,429 kB/s)
Reading package lists... Done
root@W10-ASP2019:~#
```

```
root@W10-ASP2019:/
root@W10-ASP2019:~/# apt-get install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfreetype6
Use 'apt autoremove' to remove it.
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.1-0 ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom openssl-blacklist
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.1-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 0 not upgraded.
Need to get 1558 kB of archives.
After this operation, 6436 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
root@W10-ASP2019: ~
Enabling module authz_core.
Enabling module authz_host.
Enabling module authn_core.
Enabling module auth_basic.
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
invoke-rc.d: could not determine current runlevel
Setting up ssl-cert (1.0.37) ...
Processing triggers for libc-bin (2.23-0ubuntu11) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.21) ...
Processing triggers for ufw (0.35-0ubuntu2) ...
root@W10-ASP2019:~#
```

- Després de instal.lar Apache2 , ejectarem els següents comandos per deshabilitar la llista de directoris

root@W10-ASP2019:~# `sudo sed -i "s/Options Indexes FollowSymLinks/Options FollowSymLinks/" /etc/apache2/apache2.conf`

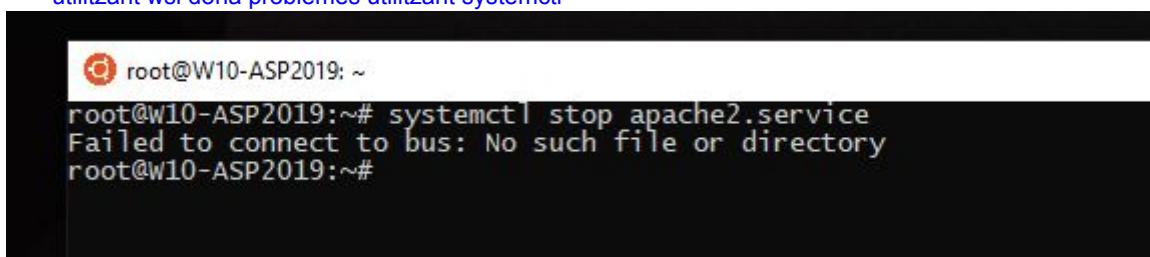
```
root@W10-ASP2019: ~
root@W10-ASP2019:~# sudo sed -i "s/Options Indexes FollowSymLinks/Options FollowSymLinks/" /etc/apache2/apache2.conf
root@W10-ASP2019:~#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- A continuació, executi els següents comandos per a detenir, iniciar i habilitar el servei Apache2 perquè sempre s'iniciï amb l'arrencada del servidor

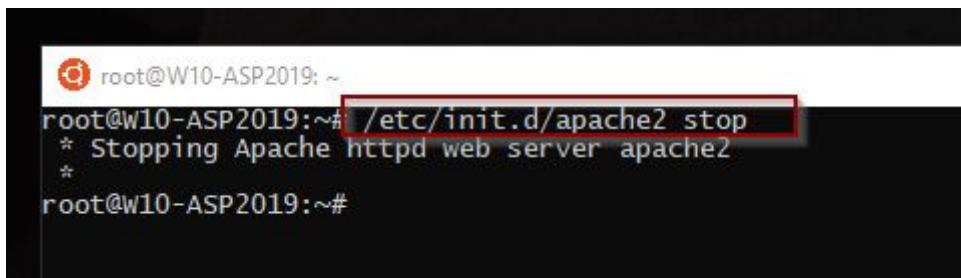
```
root@W10-ASP2019:~# sudo systemctl stop apache2.service
```

**** utilitzant wsl dona problemes utilitzant systemctl ***



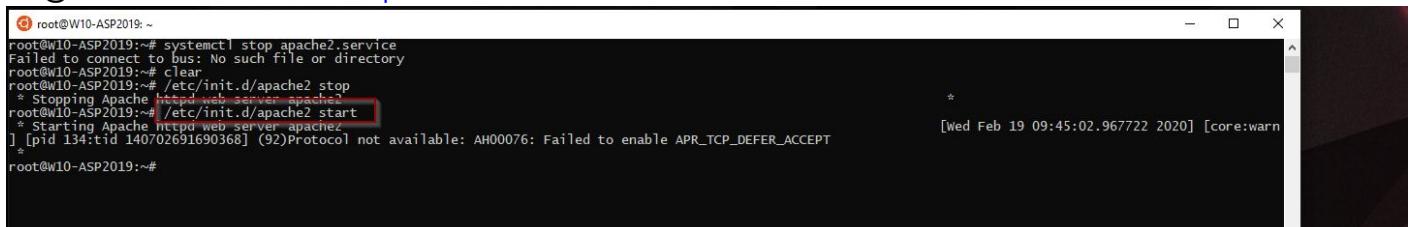
```
root@W10-ASP2019:~#
root@W10-ASP2019:~# systemctl stop apache2.service
Failed to connect to bus: No such file or directory
root@W10-ASP2019:~#
```

```
root@W10-ASP2019:~# /etc/init.d/apache2 stop
```



```
root@W10-ASP2019:~#
root@W10-ASP2019:~# /etc/init.d/apache2 stop
* Stopping Apache httpd web server apache2
 *
root@W10-ASP2019:~#
```

```
root@W10-ASP2019:~# /etc/init.d/apache2 start
```



```
root@W10-ASP2019:~#
root@W10-ASP2019:~# systemctl stop apache2.service
Failed to connect to bus: No such file or directory
root@W10-ASP2019:~# clear
root@W10-ASP2019:~# /etc/init.d/apache2 stop
* Stopping Apache httpd web server apache2
root@W10-ASP2019:~# /etc/init.d/apache2 start
* Starting Apache httpd web server apache2
[pid 134:tid 140702691690368] (92)Protocol not available: AH00076: Failed to enable APR_TCP_DEFER_ACCEPT
[  OK  ]
root@W10-ASP2019:~#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

root@W10-ASP2019:~# service apache2 restart

```
root@W10-ASP2019:~#
Failed to connect to bus: No such file or directory
root@W10-ASP2019:~# clear
root@W10-ASP2019:~# /etc/init.d/apache2 stop
* Stopping Apache httpd web server apache2
root@W10-ASP2019:~# /etc/init.d/apache2 start
* Starting Apache httpd web server apache2
] [pid 134:tid 140702691690368] (92)Protocol not available: AH00076: Failed to enable APR_TCP_DEFER_ACCEPT
*
root@W10-ASP2019:~# service apache2 restart
* Restarting Apache httpd web server apache2
[Wed Feb 19 09:45:02 2020] [core:warn] [pid 233:tid 140256300500864] (92)Protocol not available: AH00076: Failed to enable APR_TCP_DEFER_ACCEPT
root@W10-ASP2019:~# [ OK ]
```

root@W10-ASP2019:~# service apache2 enable

```
root@W10-ASP2019: /etc/apache2
root@W10-ASP2019:/etc/apache2# service apache2 status
* apache2 is running
root@W10-ASP2019:/etc/apache2# service apache2 enable
Usage: apache2 {start|stop|graceful-stop|restart|reload|force-reload}
root@W10-ASP2019:/etc/apache2#
```

root@W10-ASP2019:~# service apache2 status

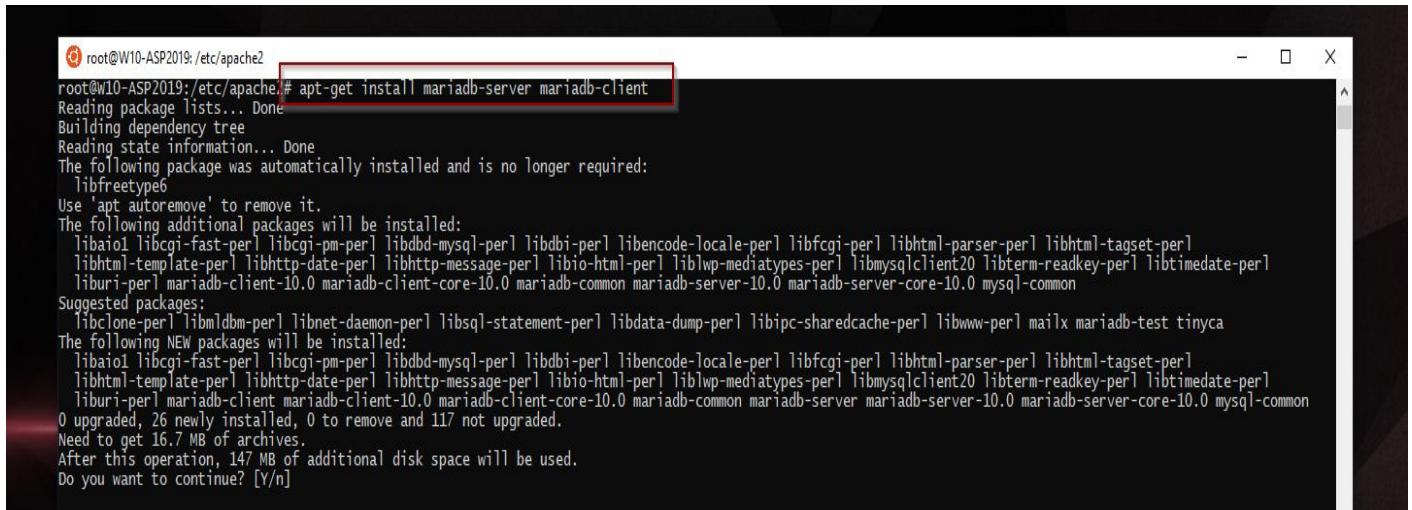
```
root@W10-ASP2019: /etc/apache2
root@W10-ASP2019:/etc/apache2# service apache2 enable
Usage: apache2 {start|stop|graceful-stop|restart|reload|force-reload}
root@W10-ASP2019:/etc/apache2# service apache2 status
* apache2 is running
root@W10-ASP2019:/etc/apache2#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.2.2. Instal·lació de MariaDB

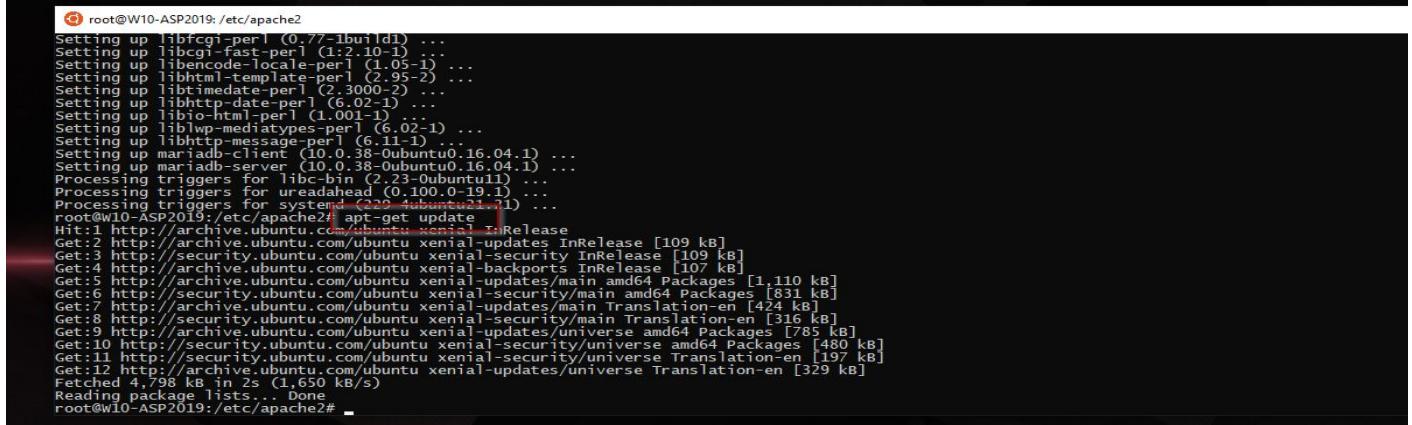
SuiteCRM també requereix un servidor de base de dades.

```
root@W10-ASP2019:~# apt-get install mariadb-server mariadb-client
```



```
root@W10-ASP2019:/etc/apache2# apt-get install mariadb-server mariadb-client
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfreetype6
Use 'apt autoremove' to remove it.
The following additional packages will be installed:
  libao1 libcgi-fast-perl libcgi-pm-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-perl libhtml-parser-perl libhtml-tagset-perl
  libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmysqlclient20 libterm-readkey-perl libtimedate-perl
  liburi-perl mariadb-client-10.0 mariadb-client-core-10.0 mariadb-common mariadb-server-10.0 mariadb-server-core-10.0 mysql-common
Suggested packages:
  libclone-perl libltdbm-perl libnet-daemon-perl libsql-statement-perl libdata-dump-perl libipc-sharedcache-perl libwww-perl mailx mariadb-test tinyca
The following NEW packages will be installed:
  libao1 libcgi-fast-perl libcgi-pm-perl libdbd-mysql-perl libdbi-perl libencode-locale-perl libfcgi-perl libhtml-parser-perl libhtml-tagset-perl
  libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmysqlclient20 libterm-readkey-perl libtimedate-perl
  liburi-perl mariadb-client-10.0 mariadb-client-core-10.0 mariadb-common mariadb-server mariadb-server-10.0 mariadb-server-core-10.0 mysql-common
0 upgraded, 26 newly installed, 0 to remove and 117 not upgraded.
Need to get 16.7 MB of archives.
After this operation, 147 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

```
root@W10-ASP2019:~# apt-get update
```



```
root@W10-ASP2019:/etc/apache2# apt-get update
Setting up libfcgi-perl (0.77-1build1) ...
Setting up libcgi-fast-perl (1:2.10-1) ...
Setting up libencode-locale-perl (1.05-1)
Setting up libhtml-template-perl (2.95-2) ...
Setting up libtimedate-perl (2.3000-2) ...
Setting up libhttp-date-perl (6.02-5) ...
Setting up liblwp-mediatypes-perl (6.02-1) ...
Setting up liburi-perl (6.11-1) ...
Setting up mariadb-client (10.0.38-0ubuntu0.16.04.1) ...
Setting up mariadb-server (10.0.38-0ubuntu0.16.04.1) ...
Processing triggers for libc-bin (2.23-0ubuntu11) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-ubuntu21-1) ...
root@W10-ASP2019:/etc/apache2# apt-get update
Hit:1 http://archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Get:3 http://security.ubuntu.com/ubuntu xenial-security InRelease [107 kB]
Get:4 http://archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Get:5 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [1,110 kB]
Get:6 http://security.ubuntu.com/ubuntu xenial-security/main amd64 Packages [831 kB]
Get:7 http://archive.ubuntu.com/ubuntu xenial-updates/main Translation-en [424 kB]
Get:8 http://security.ubuntu.com/ubuntu xenial-security/main Translation-en [316 kB]
Get:9 http://archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [785 kB]
Get:10 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [480 kB]
Get:11 http://security.ubuntu.com/ubuntu xenial-security/universe Translation-en [197 kB]
Get:12 http://archive.ubuntu.com/ubuntu xenial-updates/universe Translation-en [329 kB]
Fetched 4,798 kB in 2s (1,650 kB/s)
Reading package lists... Done
root@W10-ASP2019:/etc/apache2#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

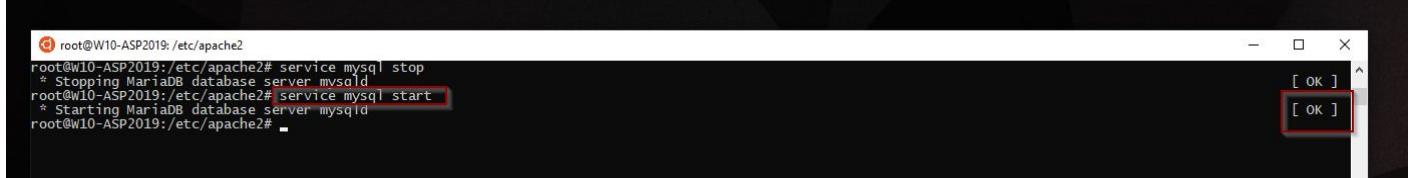
- A continuació, executi els següents comandos per a detenir, iniciar i habilitar el servei MariaDB perquè sempre s'iniciï amb l'arrencada del servidor

```
root@W10-ASP2019:~# service mysql stop
```



```
root@W10-ASP2019:/etc/apache2# service mysql stop
 * Stopping MariaDB database server mysqld
[ OK ]
```

```
root@W10-ASP2019:~# service mysql start
```



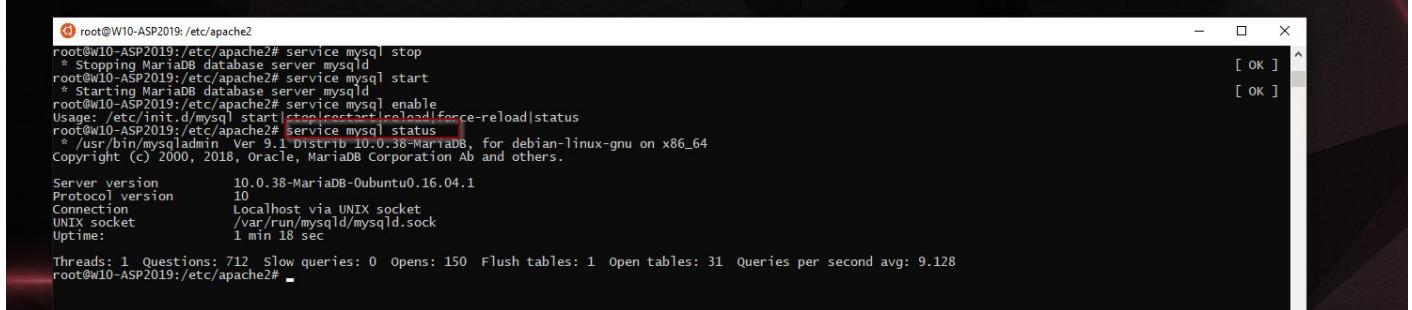
```
root@W10-ASP2019:/etc/apache2# service mysql stop
 * Stopping MariaDB database server mysqld
[ OK ]
root@W10-ASP2019:/etc/apache2# service mysql start
 * Starting MariaDB database server mysqld
[ OK ]
```

```
root@W10-ASP2019:~# service mysql enable
```



```
root@W10-ASP2019:/etc/apache2# service mysql stop
 * Stopping MariaDB database server mysqld
[ OK ]
root@W10-ASP2019:/etc/apache2# service mysql start
 * Starting MariaDB database server mysqld
[ OK ]
root@W10-ASP2019:/etc/apache2# service mysql enable
Usage: /etc/init.d/mysql start|stop|restart|reload|force-reload|status
root@W10-ASP2019:/etc/apache2#
```

```
root@W10-ASP2019:~# service mysql status
```



```
root@W10-ASP2019:/etc/apache2# service mysql stop
 * Stopping MariaDB database server mysqld
[ OK ]
root@W10-ASP2019:/etc/apache2# service mysql start
 * Starting MariaDB database server mysqld
[ OK ]
root@W10-ASP2019:/etc/apache2# service mysql enable
Usage: /etc/init.d/mysql start|stop|restart|reload|force-reload|status
root@W10-ASP2019:/etc/apache2# service mysql status
 * /usr/bin/mysqladmin Ver 9.1 Distrib 10.0.38-MariaDB, for debian-linux-gnu on x86_64
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Server version      10.0.38-MariaDB-Ubuntu0.16.04.1
Protocol version    10
Connection          localhost via UNIX socket
UNIX socket         /var/run/mysqld/mysqld.sock
Uptime:             1 min 18 sec

Threads: 1 Questions: 712 Slow queries: 0 Opens: 150 Flush tables: 1 Open tables: 31 Queries per second avg: 9.128
root@W10-ASP2019:/etc/apache2#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Després d'això s'haurà d'executar els següents comandos per protegir el servidor MariaDB

```
root@W10-ASP2019:~# mysql_secure_installation
```

```
root@W10-ASP2019:/etc/apache2#
root@W10-ASP2019:/etc/apache2# 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!

By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB without having to have a user account created for
them. This is intended only for testing, and to make the installation
go a bit smoother. You should remove them before moving into a
production environment.
```

```
root@W10-ASP2019:/etc/apache2#
them. This is intended only for testing, and to make the installation
go a bit smoother. You should remove them before moving into a
production environment.

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!

By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] y
... Success!

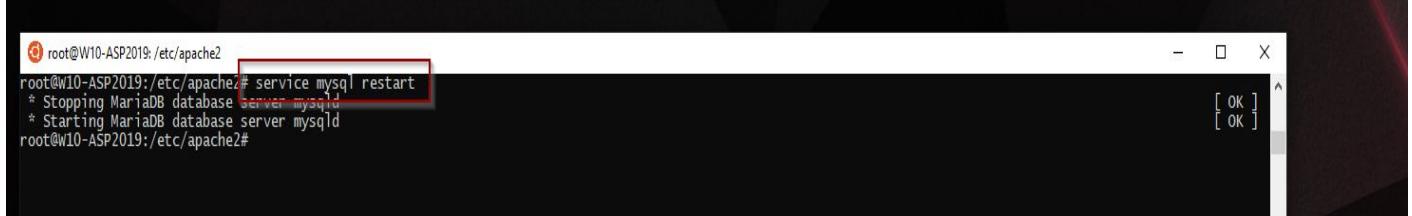
Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Un cop fet tot això toca reiniciar el servidor

```
root@W10-ASP2019:~# service mysql restart
```

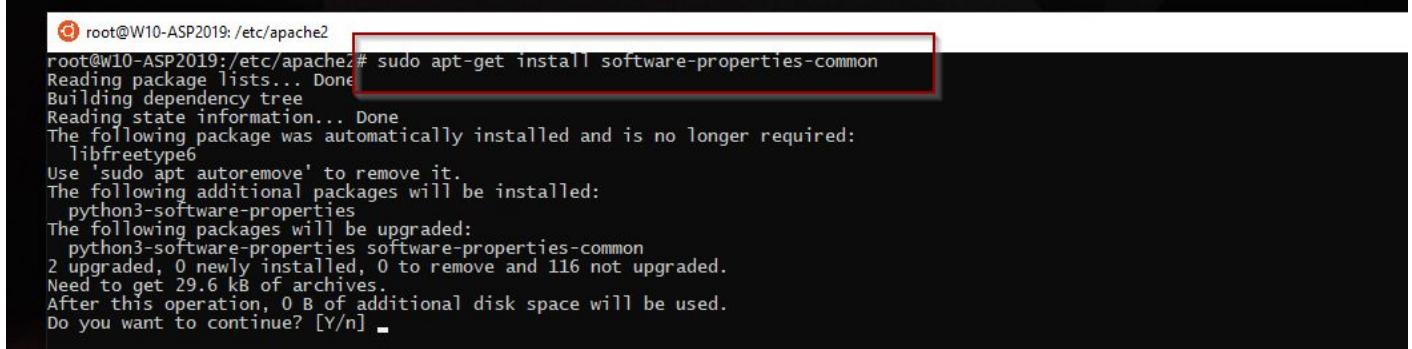


```
root@W10-ASP2019:/etc/apache2# service mysql restart
* Stopping MariaDB database server mysqld
* Starting MariaDB database server mysqld
[ OK ]
[ OK ]
```

1.2.3. Instal·lació PHP 7.1 i els mòduls relacionats

- PHP 7.1 no està disponible en els repositoris predeterminats de Ubuntu ... per a instal·lar-ho, haurà d'obtenir-ho de repositoris de tercers.
- Executi els següents comandos per a agregar el següent repositori de tercers per a actualitzar a PHP 7.1

```
root@W10-ASP2019:~# apt-get install software-properties-common
```



```
root@W10-ASP2019:/etc/apache2# sudo apt-get install software-properties-common
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfreetype6
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  python3-software-properties
The following packages will be upgraded:
  python3-software-properties software-properties-common
2 upgraded, 0 newly installed, 0 to remove and 116 not upgraded.
Need to get 29.6 kB of archives.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] -
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

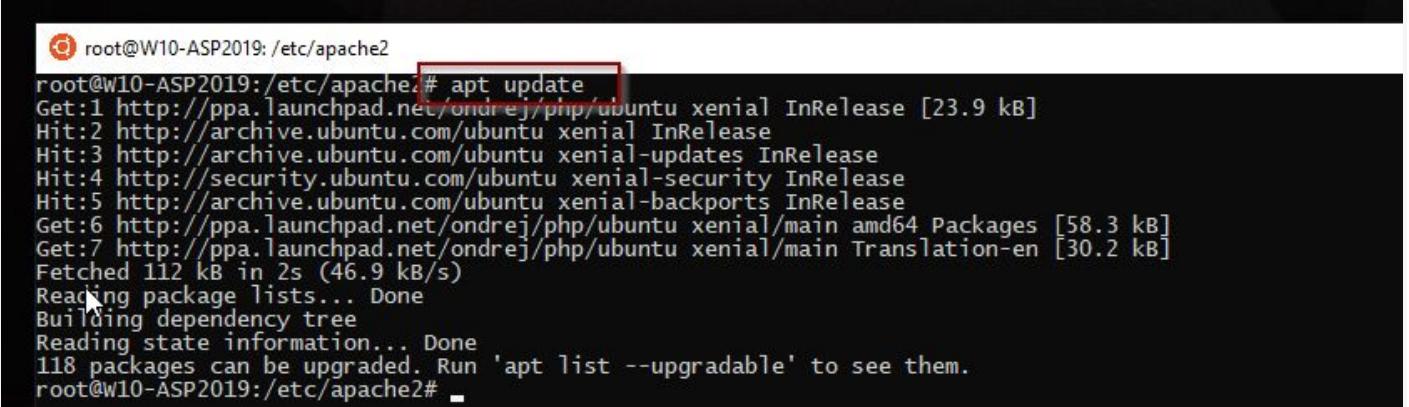
root@W10-ASP2019:~# add-apt-repository ppa:ondrej/php



```
root@W10-ASP2019: /etc/apache2
root@W10-ASP2019: /etc/apache2 # add-apt-repository ppa:ondrej/php
Co-installable PHP versions 5.6, 7.0, and most requested extensions are included. Only supported Versions of PHP (http://php.net/supported-versions.php) for Supported Ubuntu Releases (https://wiki.ubuntu.com/Releases) are provided. Don't ask for end-of-life PHP versions or Ubuntu release, they won't be provided.
Debian oldstable and stable packages are provided as well: https://deb.sury.org/#debian-dpa
You can get more information about the packages at https://deb.sury.org
BUGS&FEATURES: This PPA now has a issue tracker:
https://deb.sury.org/#bug-reporting
CAVEATS:
1. If you are using php-gearman, you need to add ppa:ondrej/pkg-gearman
2. If you are using apache2, you are advised to add ppa:ondrej/apache2
3. If you are using nginx, you are advise to add ppa:ondrej/nginx-mainline
or ppa:ondrej/nginx
PLEASE READ: if you like my work and want to give me a little motivation, please consider donating regularly: https://donate.sury.org/
```

- Un cop fet això tot fer un update dels repositoris apt

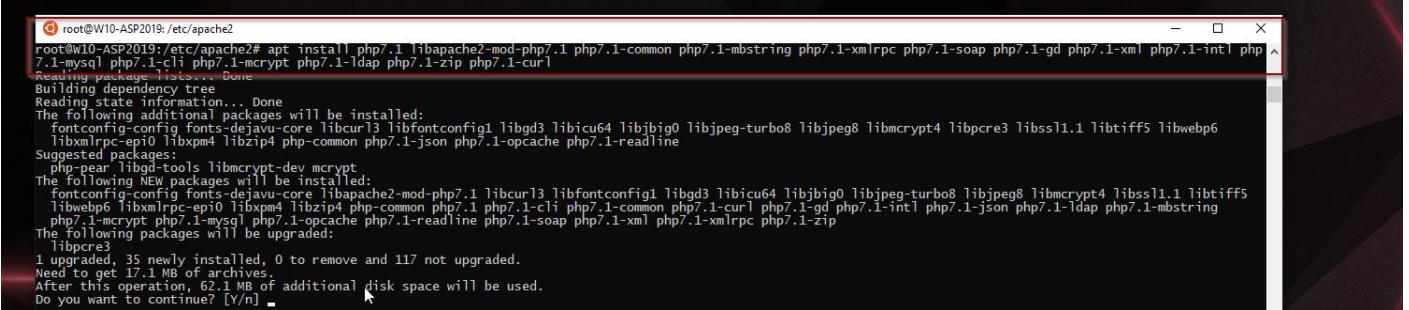
root@W10-ASP2019:~# apt update



```
root@W10-ASP2019: /etc/apache2
root@W10-ASP2019: /etc/apache2 # apt update
Get:1 http://ppa.launchpad.net/ondrej/php/ubuntu xenial InRelease [23.9 kB]
Hit:2 http://archive.ubuntu.com/ubuntu xenial InRelease
Hit:3 http://archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:4 http://security.ubuntu.com/ubuntu xenial-security InRelease
Hit:5 http://archive.ubuntu.com/ubuntu xenial-backports InRelease
Get:6 http://ppa.launchpad.net/ondrej/php/ubuntu xenial/main amd64 Packages [58.3 kB]
Get:7 http://ppa.launchpad.net/ondrej/php/ubuntu xenial/main Translation-en [30.2 kB]
Fetched 112 kB in 2s (46.9 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
118 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@W10-ASP2019: /etc/apache2 #
```

- Executi els següents comandos per a instal·lar PHP 7.1 i mòduls relacionats.

root@W10-ASP2019:~# apt install php7.1 libapache2-mod-php7.1 php7.1-common php7.1-mbstring php7.1-xmlrpc php7.1-soap
php7.1-gd php7.1-xml php7.1-intl php7.1-mysql php7.1-cgi php7.1-curl

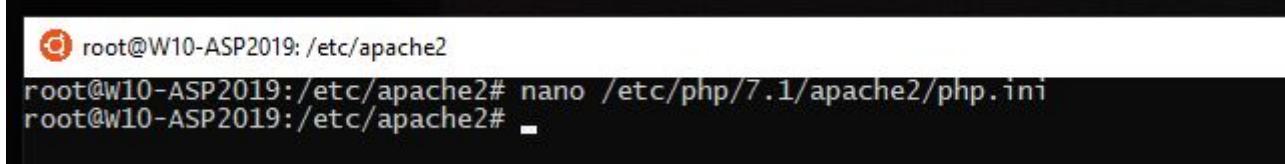


```
root@W10-ASP2019: /etc/apache2
root@W10-ASP2019: /etc/apache2 # apt install php7.1 libapache2-mod-php7.1 php7.1-common php7.1-mbstring php7.1-xmlrpc php7.1-soap php7.1-gd php7.1-xml php7.1-intl php7.1-cgi php7.1-curl
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libcurl3 libfontconfig1 libgd3 libicu64 libjbig0 libjpeg-turbo8 libjpeg8 libmcrypt4 libpcre3 libssl1.1 libtiff5 libwebp6
  libxmlrpc-epi0 libxmlpm4 libzip4 php-common php7.1-json php7.1-opcache php7.1-readline
Suggested packages:
  php-pear libgd-tools libmcrypt-dev mcrypt
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libcurl3 libfontconfig1 libgd3 libicu64 libjbig0 libjpeg-turbo8 libjpeg8 libmcrypt4 libssl1.1 libtiff5
  libxmlrpc-epi0 libxmlpm4 libzip4 php-common php7.1-cgi php7.1-common php7.1-curl php7.1-gd php7.1-intl php7.1-json php7.1-ldap php7.1-mbstring
  php7.1-mcrypt php7.1-mysql php7.1-opcache php7.1-readline php7.1-soap php7.1-xml php7.1-xmlrpc php7.1-zip
The following packages will be upgraded:
  libpcre3
1 upgraded, 35 newly installed, 0 to remove and 117 not upgraded.
Need to get 17.1 MB of archives.
After this operation, 62.1 MB of additional disk space will be used.
Do you want to continue? [Y/n] #
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Després d'instal·lar PHP, executi els següents comandos per a obrir l'arxiu PHP predeterminat de Apache2.

```
root@W10-ASP2019:~# nano /etc/php/7.1/apache2/php.ini
```



```
root@W10-ASP2019: /etc/apache2
root@W10-ASP2019:/etc/apache2# nano /etc/php/7.1/apache2/php.ini
root@W10-ASP2019:/etc/apache2#
```

- Modifiquem algunes línies en l'arxiu de configuració (php.ini)

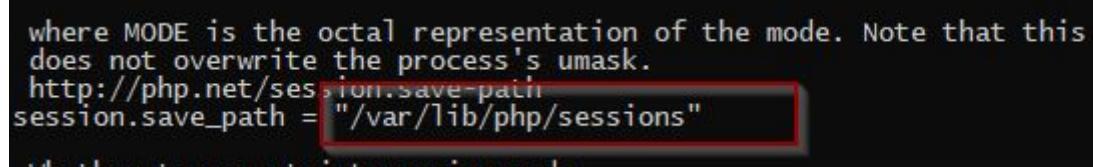


```
;-----;
File Uploads ;
;-----;

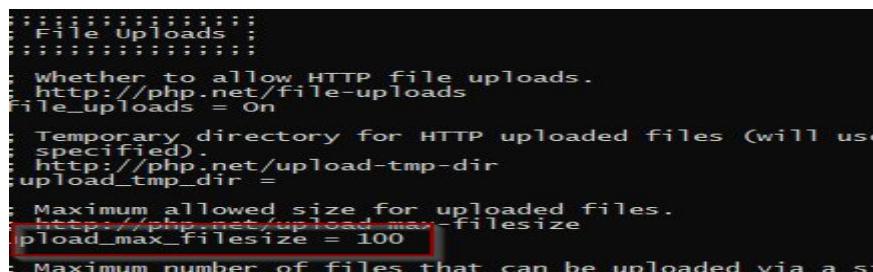
; Whether to allow HTTP file uploads.
; http://php.net/file-uploads
file_uploads = On
```

```
;-----;
Fopen wrappers ;
;-----;

; Whether to allow the treatment of URLs (like http:// or ftp://) as files.
; http://php.net/allow-url-fopen
allow_url_fopen = On
```



```
where MODE is the octal representation of the mode. Note that this
does not overwrite the process's umask.
http://php.net/session.save-path
session.save_path = "/var/lib/php/sessions"
```



```
;-----;
File Uploads ;
;-----;

; Whether to allow HTTP file uploads.
; http://php.net/file-uploads
file_uploads = On

; Temporary directory for HTTP uploaded files (will use
; specified).
; http://php.net/upload-tmp-dir
upload_tmp_dir =
```

```
Maximum allowed size for uploaded files.
; http://php.net/upload-max-filesize
upload_max_filesize = 100
```

```
Maximum number of files that can be uploaded via a s-
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
;;;;;;;;;;;;;
; Resource Limits ;
;;;;;;;;;;;;
; Maximum execution time of each script, in seconds
; http://php.net/max-execution-time
; Note: This directive is hardcoded to 0 for the CLI SAPI
max_execution_time = 300
```

```
;;;;;;;;;;;;;
; Module Settings ;
;;;;;;;;;;;;
[CLI Server]
; Whether the CLI web server uses ANSI color coding in its terminal output.
cli_server.color = On

[Date]
; Defines the default timezone used by the date functions
; http://php.net/date.timezone
date.timezone = Europe/Andorra

; http://php.net/date.default-latitude
```

NOTA: <https://www.php.net/manual/es/timezones.europe.php>

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.2.4. Creació d'una base SuiteCRM

Ara que s'han instal·lat tots els paquets necessaris, continuem amb la continuació dels servidors.

- Executi els següents comandos per a iniciar sessió en el servidor de la base de dades. Quan se li sol·liciti una contrasenya, escrigui la contrasenya arrel que va crear anteriorment

```
root@W10-ASP2019:~# mysql -u root -p
root@W10-ASP2019:/etc/apache2# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 32
Server version: 10.0.38-MariaDB-Ubuntu0.16.04.1 Ubuntu 16.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

- Crearem una base de dades anomenada `suitecrm`
`CREATE DATABASE suitecrm;`
- Crearem un usuari de la base de dades anomenat `suitecrmuser` amb un password
`CREATE USER 'suitecrmuser'@'localhost' IDENTIFIED BY 'password';`
- Otorguem al usuari accés complet a la base de dades
`GRANT ALL ON suitecrm.* TO 'suitecrmuser'@'localhost' IDENTIFIED BY 'password' WITH GRANT OPTION;`
- Finalment guardem els canvis i sortim
`FLUSH PRIVILEGES;`
`EXIT;`

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```

root@W10-ASP2019:/etc/apache2# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 32
Server version: 10.0.38-MariaDB-Ubuntu0.16.04.1 Ubuntu 16.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE suitecrm;
Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> CREATE USER 'suitecrmuser'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> GRANT ALL ON suitecrm.* TO 'suitecrmuser'@'localhost' IDENTIFIED BY 'password' WITH GRANT OPTION;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> EXIT;
Bye
root@W10-ASP2019:/etc/apache2#

```

Nom i Cognoms

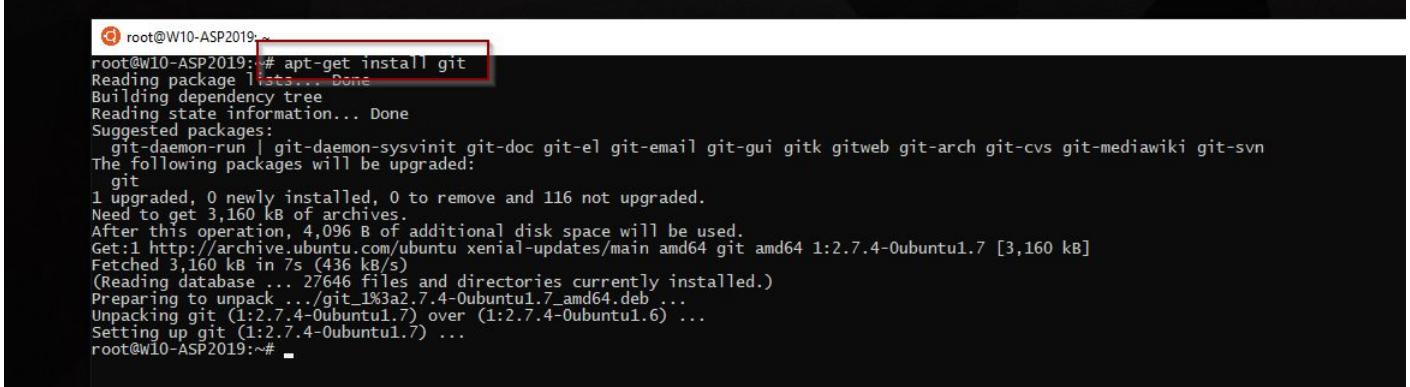
Data

Arnau Subirós Puigarnau

26/02/2020

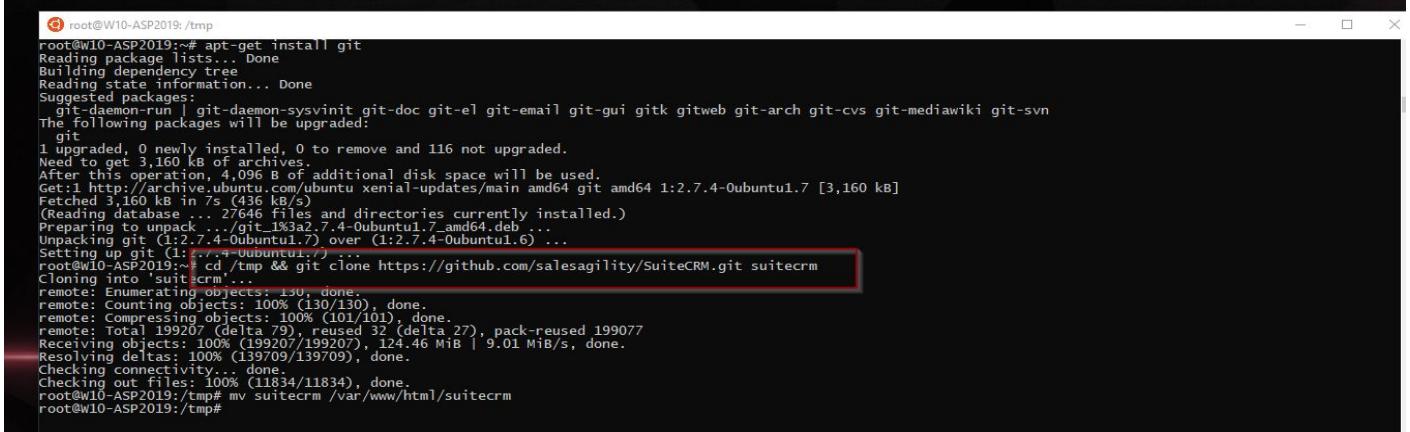
1.2.5. Descargar SuiteCRM

```
root@W10-ASP2019:~# apt-get install git
```



```
root@W10-ASP2019:~# apt-get install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-arch git-cvs git-mediawiki git-svn
The following packages will be upgraded:
  git
1 upgraded, 0 newly installed, 0 to remove and 116 not upgraded.
Need to get 3,160 kB of archives.
After this operation, 4,096 B of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 git amd64 1:2.7.4-0ubuntu1.7 [3,160 kB]
Fetched 3,160 kB in 7s (436 kB/s)
(Reading database ... 27646 files and directories currently installed.)
Preparing to unpack .../git_1%3a2.7.4-0ubuntu1.7_amd64.deb ...
Unpacking git (1:2.7.4-0ubuntu1.7) over (1:2.7.4-0ubuntu1.6) ...
Setting up git (1:2.7.4-0ubuntu1.7) ...
root@W10-ASP2019:~#
```

```
root@W10-ASP2019:~# cd /tmp && git clone https://github.com/salesagility/SuiteCRM.git suitecrm
```



```
root@W10-ASP2019:~/tmp#
root@W10-ASP2019:~# apt-get install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-arch git-cvs git-mediawiki git-svn
The following packages will be upgraded:
  git
1 upgraded, 0 newly installed, 0 to remove and 116 not upgraded.
Need to get 3,160 kB of archives.
After this operation, 4,096 B of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 git amd64 1:2.7.4-0ubuntu1.7 [3,160 kB]
Fetched 3,160 kB in 7s (436 kB/s)
(Reading database ... 27646 files and directories currently installed.)
Preparing to unpack .../git_1%3a2.7.4-0ubuntu1.7_amd64.deb ...
Unpacking git (1:2.7.4-0ubuntu1.7) over (1:2.7.4-0ubuntu1.6) ...
Setting up git (1:2.7.4-0ubuntu1.7) ...
root@W10-ASP2019:~# cd /tmp && git clone https://github.com/salesagility/SuiteCRM.git suitecrm
Cloning into 'suitecrm'...
remote: Enumerating objects: 130, done.
remote: Counting objects: 100% (130/130), done.
remote: Compressing objects: 100% (101/101), done.
remote: Total 199207 (delta 79), reused 32 (delta 27), pack-reused 199077
Receiving objects: 100% (199207/199207), 124.46 MiB | 9.01 MiB/s, done.
Resolving deltas: 100% (139709/139709), done.
Checking connectivity... done.
Checking out files: 100% (11834/11834), done.
root@W10-ASP2019:/tmp# mv suitecrm /var/www/html/suitecrm
root@W10-ASP2019:/tmp#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Modiquem els permisos del directori per adaptar-se a la configuració del servidor Web Apache2

```
root@W10-ASP2019:~# chown -R www-data:www-data /var/www/html/
root@W10-ASP2019:~# chmod -R 755 /var/www/html/
root@W10-ASP2019:/var/www/html# ls
index.html suitecrm
root@W10-ASP2019:/var/www/html# ls -ls
total 12
12 -rw-r--r-- 1 root root 11321 Feb 13 09:20 index.html
0 drwxrwxrwx 1 root root 512 Feb 19 11:29 suitecrm
root@W10-ASP2019:/var/www/html# chown -R www-data:www-data /var/www/html/
root@W10-ASP2019:/var/www/html# ls -ls
total 12
12 -rw-r--r-- 1 www-data www-data 11321 Feb 13 09:20 index.html
0 drwxrwxrwx 1 www-data www-data 512 Feb 19 11:29 suitecrm
root@W10-ASP2019:/var/www/html# chmod -R 755 /var/www/html/
root@W10-ASP2019:/var/www/html# ls -ls
total 12
12 -rwxr-xr-x 1 www-data www-data 11321 Feb 13 09:20 index.html
0 drwxr-xr-x 1 www-data www-data 512 Feb 19 11:29 suitecrm
root@W10-ASP2019:/var/www/html#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.2.6. Configuració del servidor web Apache2

- Finalment, configuri l'arxiu de configuració del lloc Apache2 per a SuiteCRM. Aquest arxiu controlarà com els usuaris accedeixen al contingut de Moodle. Executi els següents comandos per a crear un nou arxiu de configuració anomenat suitecrm.conf

```
root@W10-ASP2019:~# nano /etc/apache2/sites-available/suitecrm.conf
```

```
root@W10-ASP2019: /var/www/html
root@W10-ASP2019:/var/www/html# nano /etc/apache2/sites-available/suitecrm.conf
```

Després copiï i pegui el contingut a continuació en l'arxiu i guardi'l. Reemplaci la línia ressaltada amb el seu propi nom de domini i ubicació arrel del directori.

```
<VirtualHost *:80>
    ServerAdmin arnausubiros@gmail.com
    DocumentRoot /var/www/html/suitecrm/
    ServerName suitecrm01.com
    ServerAlias www.suitecrm01.com

    <Directory /var/www/html/suitecrm/>
        Options Indexes FollowSymLinks MultiViews
        AllowOverride All
        Order allow,deny
        allow from all
    </Directory>

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

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
root@W10-ASP2019:/var/www/html
GNU nano 2.5.3                                         File: /etc/apache2/sites-available/suitecrm.conf

<VirtualHost *:80>
    ServerAdmin arnausubiros@gmail.com
    DocumentRoot /var/www/html/suitecrm/
    ServerName suitecrm01.com
    ServerAlias www.suitecrm01.com

    <Directory /var/www/html/suitecrm/>
        Options Indexes FollowSymLinks MultiViews
        AllowOverride All
        Order allow,deny
        allow from all
    </Directory>

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

1.2.7. Habilitar el mòdul SuiteCRM

```
root@W10-ASP2019:~# a2ensite suitecrm.conf
root@W10-ASP2019:~# a2enmod rewrite
root@W10-ASP2019:~# service apache2 restart
```

```
root@W10-ASP2019:/var/www/html# nano /etc/apache2/sites-available/suitecrm.conf
root@W10-ASP2019:/var/www/html# a2ensite suitecrm.conf
Enabling site suitecrm.
To activate the new configuration, you need to run:
  service apache2 reload
root@W10-ASP2019:/var/www/html# a2enmod rewrite
Enabling module rewrite.
To activate the new configuration, you need to run:
  service apache2 restart
root@W10-ASP2019:/var/www/html# service apache2 restart
* Restarting Apache httpd web server: apache2
[Wed Feb 19 11:54:48.763557 2020] [core:warn] [pid 14818] (92)Protocol not available: AH00076: Failed to enable APR_TCP_DEFER_ACCEPT
[ OK ]
```

Nom i Cognoms

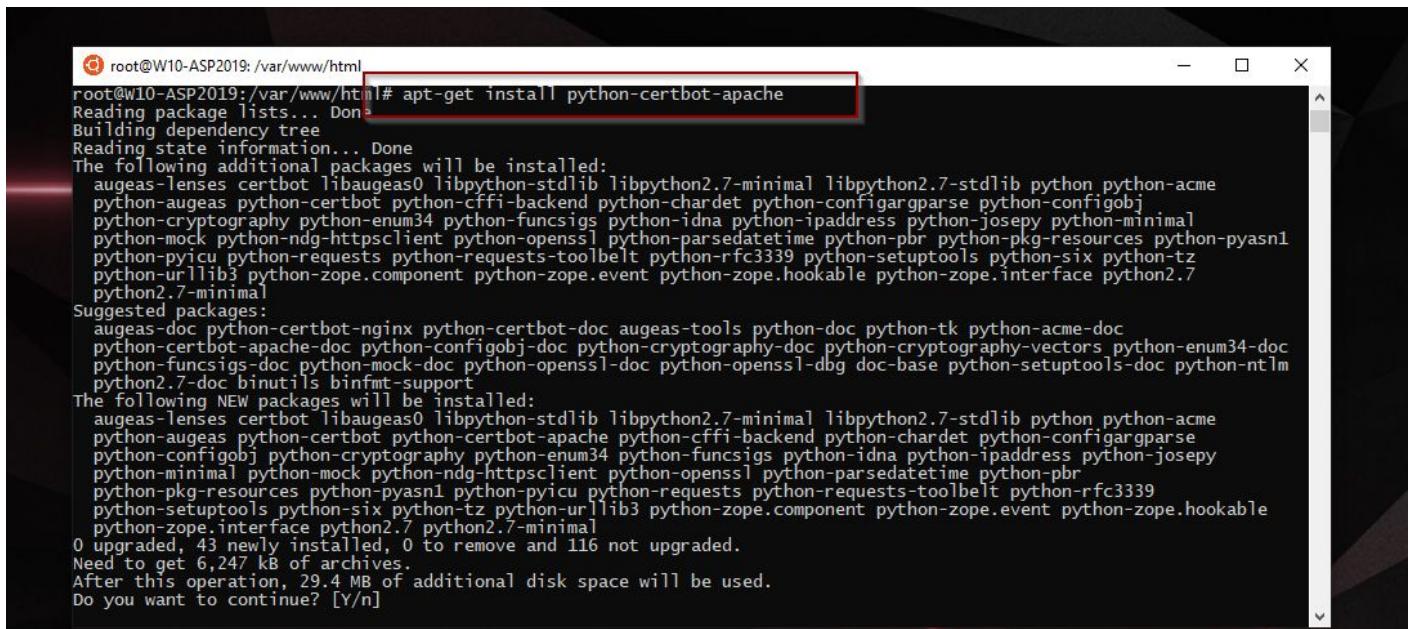
Data

Arnau Subirós Puigarnau

26/02/2020

1.2.8. Encriptar els certificats SSL

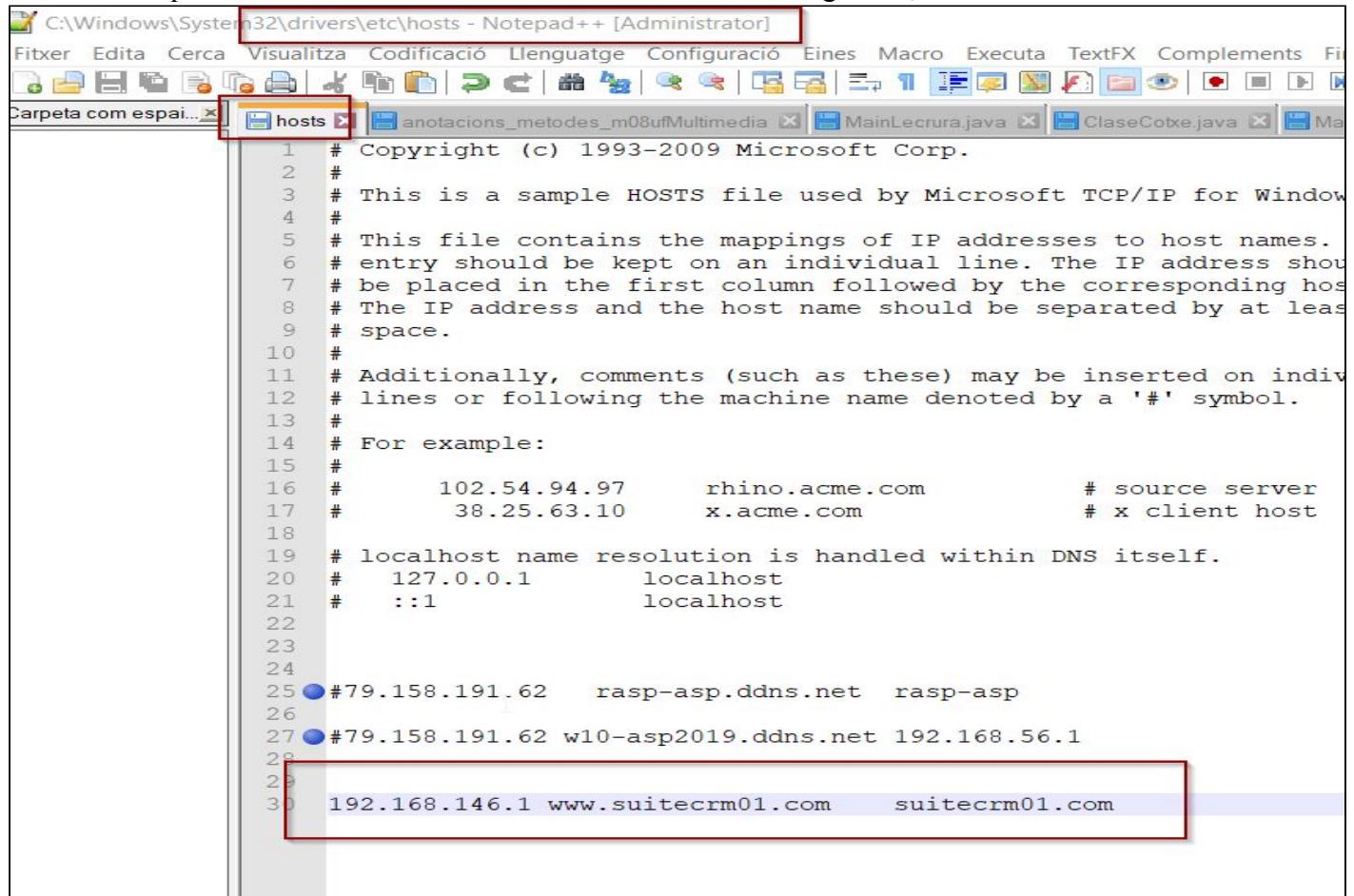
```
root@W10-ASP2019:/var/www/html# apt-get install python-certbot-apache
```



```
root@W10-ASP2019:/var/www/html# apt-get install python-certbot-apache
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  augeas-lenses certbot libaugeas0 libpython-stdlib libpython2.7-minimal libpython2.7-stdlib python python-acme
  python-augeas python-certbot python-cffi-backend python-chardet python-configargparse python-configobj
  python-cryptography python-enum34 python-funcsigs python-idna python-ipaddress python-josepy python-minimal
  python-mock python-ndg-httpsclient python-openssl python-parsedatetime python-pbr python-pkg-resources python-pyasn1
  python-pycu python-requests python-requests-toolbelt python-rfc339 python-setuptools python-six python-tz
  python-urllib3 python-zope.component python-zope.event python-zope.hookable python-zope.interface python2.7
  python2.7-minimal
Suggested packages:
  augeas-doc python-certbot-nginx python-certbot-doc augeas-tools python-doc python-tk python-acme-doc
  python-certbot-apache-doc python-configobj-doc python-cryptography-doc python-cryptography-vectors python-enum34-doc
  python-funcsigs-doc python-mock-doc python-openssl-doc python-openssl-dbg doc-base python-setuptools-doc python-ntlm
  python2.7-doc binutils binfmt-support
The following NEW packages will be installed:
  augeas-lenses certbot libaugeas0 libpython-stdlib libpython2.7-minimal libpython2.7-stdlib python python-acme
  python-augeas python-certbot python-certbot-apache python-cffi-backend python-chardet python-configargparse
  python-configobj python-cryptography python-enum34 python-funcsigs python-idna python-ipaddress python-josepy
  python-minimal python-mock python-ndg-httpsclient python-openssl python-parsedatetime python-pbr
  python-pkg-resources python-pyasn1 python-pycu python-requests python-requests-toolbelt python-rfc339
  python-setuptools python-six python-tz python-urllib3 python-zope.component python-zope.event python-zope.hookable
  python-zope.interface python2.7 python2.7-minimal
0 upgraded, 43 newly installed, 0 to remove and 116 not upgraded.
Need to get 6,247 kB of archives.
After this operation, 29.4 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Com que no tinc un servidor DNS i els dominis no estan registrats, intentaré simular-ho a nivell local.



```

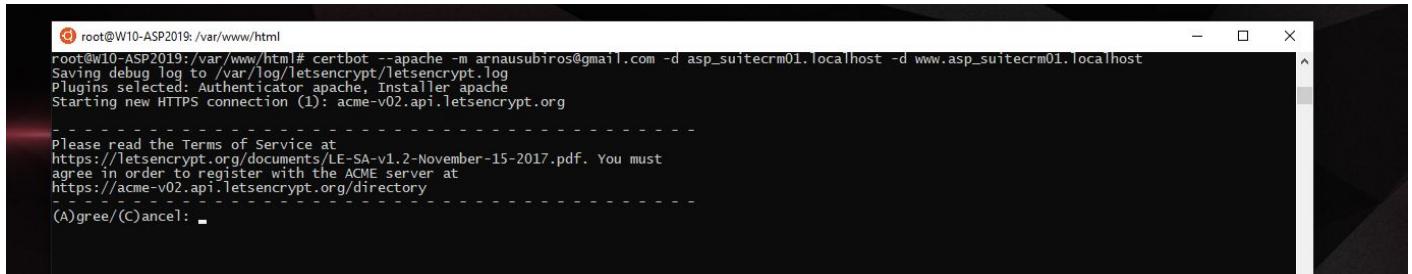
C:\Windows\System32\drivers\etc\hosts - Notepad++ [Administrator]
Fitxer Edita Cerca Visualitzar Codificació Llenguatge Configuració Eines Macro Executa TextFX Complements Fitxer
Carpeta com espai... hosts anotacions_metodes_m08ufMultimedia MainLecrura.java ClaseCotxe.java Ma...
1 # Copyright (c) 1993-2009 Microsoft Corp.
2 #
3 # This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
4 #
5 # This file contains the mappings of IP addresses to host names.
6 # An entry should be kept on an individual line. The IP address should
7 # be placed in the first column followed by the corresponding host name.
8 # The IP address and the host name should be separated by at least
9 # one space.
10 #
11 # Additionally, comments (such as these) may be inserted on individual
12 # lines or following the machine name denoted by a '#' symbol.
13 #
14 # For example:
15 #
16 #       102.54.94.97    rhino.acme.com          # source server
17 #               38.25.63.10    x.acme.com            # x client host
18 #
19 # localhost name resolution is handled within DNS itself.
20 #       127.0.0.1        localhost
21 #               ::1           localhost
22 #
23 #
24 #
25 #79.158.191.62    rasp-asp.ddns.net    rasp-asp
26 #
27 #79.158.191.62 w10-asp2019.ddns.net 192.168.56.1
28 #
29 #
30 192.168.146.1 www.suitecrm01.com suitecrm01.com

```

- Després d'això, executi els següents comandos per a obtenir el seu certificat Let's Encrypt SSL / TLS gratuït per al seu lloc.
 - o nota : com que ja em donava problemes poder accedir de forma no segura, ja no he volgut seguir i modificar la connexió via port 443 (https)

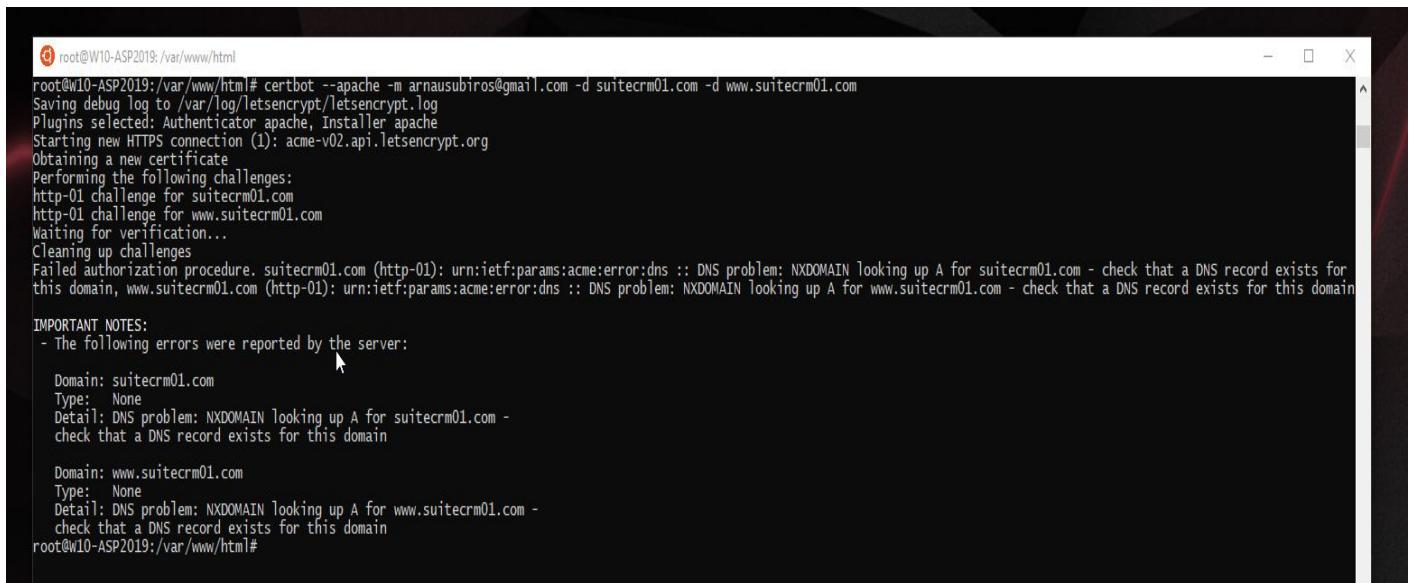
Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
root@W10-ASP2019:/var/www/html# certbot --apache -m arnausubiros@gmail.com -d suitecrm01.com -d www.suitecrm01.com
```



```
root@W10-ASP2019:/var/www/html# certbot --apache -m arnausubiros@gmail.com -d suitecrm01.localhost -d www.asp_suitecrm01.localhost
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Plugins selected: Authenticator apache, Installer apache
Starting new HTTPS connection (1): acme-v02.api.letsencrypt.org

Please read the Terms of Service at
https://letsencrypt.org/documents/LE-SA-v1.2-November-15-2017.pdf. You must
agree in order to register with the ACME server at
https://acme-v02.api.letsencrypt.org/directory
(A)gree/(C)ancel:
```



```
root@W10-ASP2019:/var/www/html# certbot --apache -m arnausubiros@gmail.com -d suitecrm01.com -d www.suitecrm01.com
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Plugins selected: Authenticator apache, Installer apache
Starting new HTTPS connection (1): acme-v02.api.letsencrypt.org
Obtaining a new certificate
Performing the following challenges:
http-01 challenge for suitecrm01.com
http-01 challenge for www.suitecrm01.com
Waiting for verification...
Cleaning up challenges
Failed authorization procedure. suitecrm01.com (http-01): urn:ietf:params:acme:error:dns :: DNS problem: NXDOMAIN looking up A for suitecrm01.com - check that a DNS record exists for this domain, www.suitecrm01.com (http-01): urn:ietf:params:acme:error:dns :: DNS problem: NXDOMAIN looking up A for www.suitecrm01.com - check that a DNS record exists for this domain

IMPORTANT NOTES:
- The following errors were reported by the server:

  Domain: suitecrm01.com
  Type: None
  Detail: DNS problem: NXDOMAIN looking up A for suitecrm01.com - check that a DNS record exists for this domain

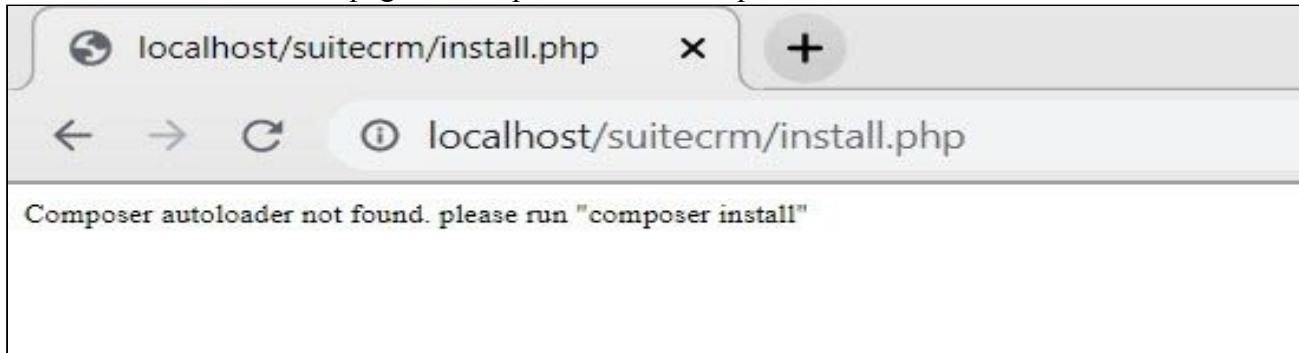
  Domain: www.suitecrm01.com
  Type: None
  Detail: DNS problem: NXDOMAIN looking up A for www.suitecrm01.com - check that a DNS record exists for this domain

root@W10-ASP2019:/var/www/html#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.2.9. Problemes amb la versió de PHP

- Intento accedir a la pàgina web però falta un component PHP



- Torno a intentar instal.lar composer però el problema es la versió de PHP 7.1 no es compatible.

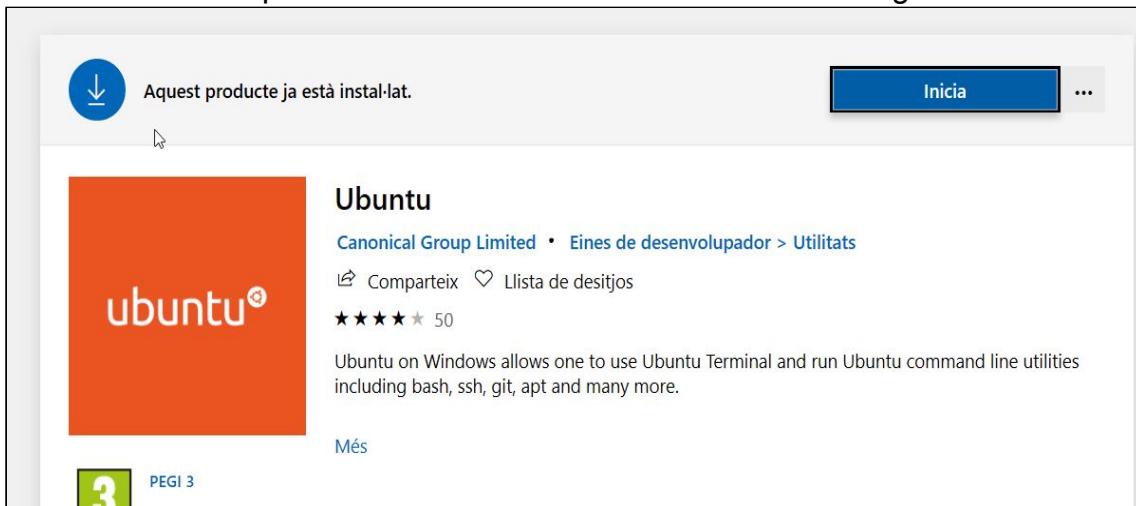
```
root@W10-ASP2019:/var/www/html/suitecrm
  invoke-rc.d: could not determine current runlevel
  Setting up libjs-excanvas (0.r3-4) ...
  Setting up mercurial-common (3.7.3-lubuntu1.2) ...
root@W10-ASP2019:/var/www/html/suitecrm# clear
/vaCreating config file /etc/mercurial/hgrc.d/hgext.rc with new version
root@W10-ASP2019:/var/www/html/suitecrm# composer install --no-dev
/suiLoading composer repositories with package information
Installing dependencies from lock file
Your requirements could not be resolved to an installable set of packages.

Problem 1
- The requested PHP extension ext-imap * is missing from your system. Install or enable PHP's imap extension.
Problem 2
- Installation request for kylekatarnls/update-helper 1.2.0 -> satisfiable by kylekatarnls/update-helper[1.2.0].
- kylekatarnls/update-helper 1.2.0 requires composer-plugin-api ^1.1.0 || ^2.0.0 -> no matching package found.
Problem 3
- kylekatarnls/update-helper 1.2.0 requires composer-plugin-api ^1.1.0 || ^2.0.0 -> no matching package found.
- nesbot/carbon 1.39.1 requires kylekatarnls/update-helper ^1.1 -> satisfiable by kylekatarnls/update-helper[1.1].
- Installation request for nesbot/carbon 1.39.1 -> satisfiable by nesbot/carbon[1.39.1].
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.3. Instal·lació Ubuntu

- En aquest punt em planteixo tornar a començar, eliminar Ubuntu 16.04LTS , instal·lar un altra versió i també instal·lar una altre versió de PHP. Farem els mateixos passos, però amb una versió superior de Ubuntu i PHP i de moment no afegirem SSL.

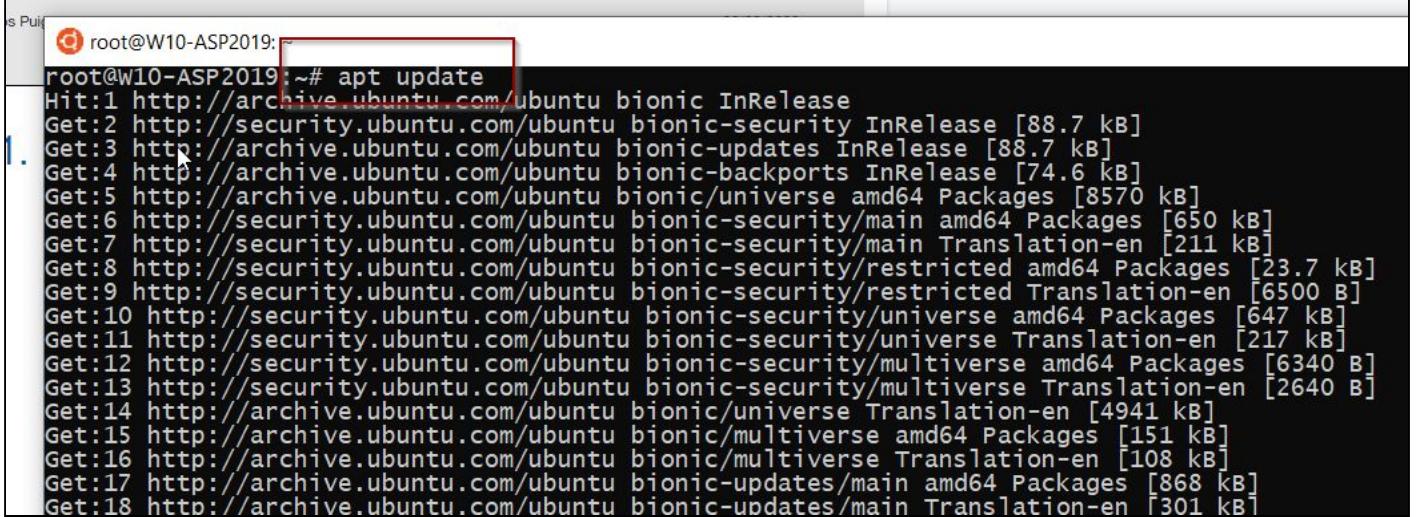


```
root@W10-ASP2019: ~
root@W10-ASP2019:~# lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 18.04.2 LTS
Release:        18.04
Codename:       bionic
root@W10-ASP2019:~#
root@W10-ASP2019:~#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

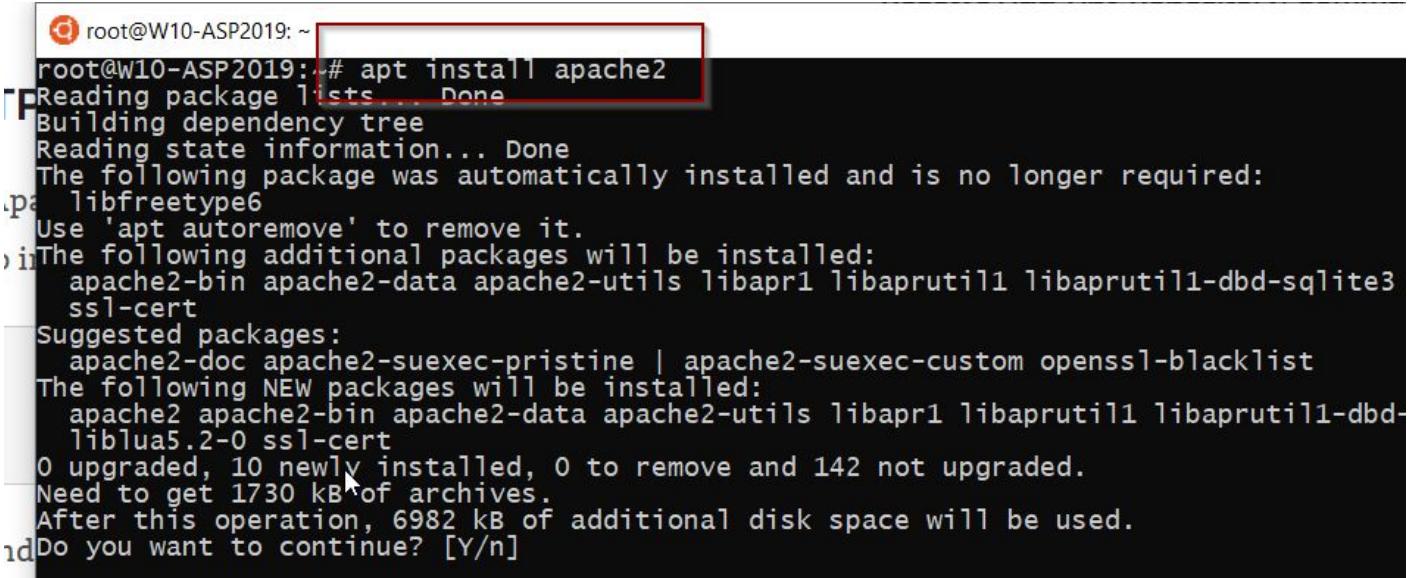
1.3.1. Instal·lació del servidor Web : Apache2

```
root@W10-ASP2019:~# apt-get update
```



```
root@W10-ASP2019:~# apt update
Hit:1 http://archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:5 http://archive.ubuntu.com/ubuntu bionic/universe amd64 Packages [8570 kB]
Get:6 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [650 kB]
Get:7 http://security.ubuntu.com/ubuntu bionic-security/main Translation-en [211 kB]
Get:8 http://security.ubuntu.com/ubuntu bionic-security/restricted amd64 Packages [23.7 kB]
Get:9 http://security.ubuntu.com/ubuntu bionic-security/restricted Translation-en [6500 B]
Get:10 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [647 kB]
Get:11 http://security.ubuntu.com/ubuntu bionic-security/universe Translation-en [217 kB]
Get:12 http://security.ubuntu.com/ubuntu bionic-security/multiverse amd64 Packages [6340 B]
Get:13 http://security.ubuntu.com/ubuntu bionic-security/multiverse Translation-en [2640 B]
Get:14 http://archive.ubuntu.com/ubuntu bionic/universe Translation-en [4941 kB]
Get:15 http://archive.ubuntu.com/ubuntu bionic/multiverse amd64 Packages [151 kB]
Get:16 http://archive.ubuntu.com/ubuntu bionic/multiverse Translation-en [108 kB]
Get:17 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [868 kB]
Get:18 http://archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [301 kB]
```

```
root@W10-ASP2019:~# apt-get install apache2
```



```
root@W10-ASP2019:~# apt install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfreetype6
Use 'apt autoremove' to remove it.
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3
  ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom openssl-blacklist
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-
  liblua5.2-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 142 not upgraded.
Need to get 1730 kB of archives.
After this operation, 6982 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

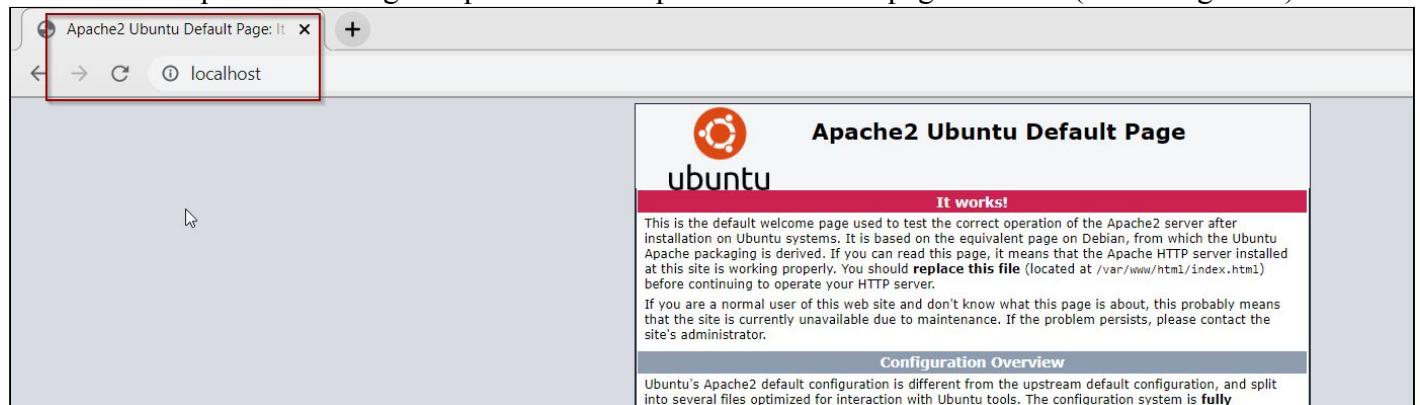
Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Confirmem que podem parar,engregar i habilitar el servidor a l'arrencada

Install Apache2 server, run the commands below:

```
root@W10-ASP2019: ~# service apache2 stop
 * Stopping Apache httpd web server apache2
 *
root@W10-ASP2019: ~# service apache2 start
 * Starting Apache httpd web server apache2
[wed Feb 19 19:38:31.753470 2020] [core:warn] [pid 916:tid 140517110844352] (92)Protocol not available:
to enable APR_TCP_DEFER_ACCEPT
*
root@W10-ASP2019: ~# service apache2 enable
Usage: apache2 {start|stop|graceful-stop|restart|reload|force-reload}
root@W10-ASP2019: ~# service apache2 status
 * apache2 is running
root@W10-ASP2019: ~#
```

- Obrim qualsevol navegador per confirmar que visualitzem la pàgina d'inici (no configurada)



Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.3.2. Instal·lació de MariaDB

root@W10-ASP2019:~# apt-get install mariadb-server mariadb-client

```
root@W10-ASP2019:~# apt-get install mariadb-server mariadb-client
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfreetype6
Use 'apt autoremove' to remove it.
The following additional packages will be installed:
  galera-3 libaio1 libcgi-fast-perl libcgi-pm-perl libconfig-inifiles-perl libdbd-mysql-pe
  libencode-locale-perl libfcgi-perl libhtml-parser-perl libhtml-tagset-perl libhtml-temp1
  libhttp-message-perl libio-html-perl libjemalloc1 liblwp-mediatypes-perl libmysqlclient2
  libterm-readkey-perl libtimedate-perl liburi-perl mariadb-client-10.1 mariadb-client-cor
  mariadb-server-10.1 mariadb-server-core-10.1 mysql-common socat
Suggested packages:
  libclone-perl libldb-perl libnet-daemon-perl libsql-statement-perl libdata-dump-perl 1
  libwww-perl mailx mariadb-test tinyca
The following NEW packages will be installed:
  galera-3 libaio1 libcgi-fast-perl libcgi-pm-perl libconfig-inifiles-perl libdbd-mysql-pe
  libencode-locale-perl libfcgi-perl libhtml-parser-perl libhtml-tagset-perl libhtml-temp1
  libhttp-message-perl libio-html-perl libjemalloc1 liblwp-mediatypes-perl libmysqlclient2
  libtimedate-perl liburi-perl mariadb-client mariadb-client-10.1 mariadb-client-core-10.1
  mariadb-server mariadb-server-10.1 mariadb-server-core-10.1 mysql-common socat
The following packages will be upgraded:
  libssl1.1
1 upgraded, 30 newly installed, 0 to remove and 141 not upgraded.
Need to get 25.4 MB of archives.
After this operation, 185 MB of additional disk space will be used.
Do you want to continue? [Y/n] -
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Confirmem que podem parar,engregar i habilitar el servidor a l'arrencada

```
root@W10-ASP2019:~# service mysql stop
 * Stopping MariaDB database server mysqld
root@W10-ASP2019:~# service mysql start
 * Starting MariaDB database server mysqld
root@W10-ASP2019:~# service mysql enable
Usage: /etc/init.d/mysql start|stop|restart|reload|force-reload|status|bootstrap
root@W10-ASP2019:~# service mysql status
 * /usr/bin/mysqladmin  ver 9.1.30-distrib 10.1.44-MariaDB, for debian-linux-gnu on x86_64
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Server version      10.1.44-MariaDB-Ubuntu0.18.04.1
Protocol version    10
Connection          Localhost via UNIX socket
UNIX socket         /var/run/mysqld/mysqld.sock
Uptime:              11 sec

Threads: 1  Questions: 61  Slow queries: 0  Opens: 32  Flush tables: 1  Open tables: 26  Quer
root@W10-ASP2019:~#
```

```
root@W10-ASP2019:~#
Threads: 1  Questions: 61  Slow queries: 0  Opens: 32  Flush tables: 1  Open tab
root@W10-ASP2019:~# clear
root@W10-ASP2019:~# 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!

By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB without having to have a user account created for
them. This is intended only for testing, and to make the installation
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
root@W10-ASP2019: ~
production environment.

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!

By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] Y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

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!
root@W10-ASP2019:~#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Confirmem que podem accedir a la base de dades

```
rs ① Seleccionar root@W10-ASP2019: ~
utroot@W10-ASP2019:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 42
Server version: 10.1.44-MariaDB-0ubuntu0.18.04.1 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

1.3.3. Instal·lació PHP 7.2 i els mòduls relacionats

```
① root@W10-ASP2019: ~
root@W10-ASP2019:~# apt-get install software-properties-common
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfreetype6
Use 'apt autoremove' to remove it.
The following additional packages will be installed:
  python3-software-properties
The following packages will be upgraded:
  python3-software-properties software-properties-common
2 upgraded, 0 newly installed, 0 to remove and 139 not upgraded.
Need to get 33.6 kB of archives.
After this operation, 13.3 kB of additional disk space will be used.
Do you want to continue? [Y/n] -
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
root@W10-ASP2019: ~
root@W10-ASP2019: ~# add-apt-repository ppa:ondrej/php
Co-installable PHP versions: PHP 5.6, PHP 7.x and most requested extensions are included. Please check https://launchpad.net/supported-versions.php for supported Ubuntu Releases (https://w...
P7
Debian oldstable and stable packages are provided as well: https://deb.sury.org/#debs
You can get more information about the packages at https://deb.sury.org

BUGS&FEATURES: This PPA now has a issue tracker:
https://deb.sury.org/#bug-reporting

CAVEATS:
1. If you are using php-gearman, you need to add ppa:ondrej/pkg-gearman
2. If you are using apache2, you are advised to add ppa:ondrej/apache2
3. If you are using nginx, you are advised to add ppa:ondrej/nginx-mainline
or ppa:ondrej/nginx

PLEASE READ: If you like my work and want to give me a little motivation, please consider a donation at https://sury.org/donate

WARNING: add-apt-repository is broken with non-UTF-8 locales, see https://github.com/oerdnj/deb.sury.org/issues/56 for workaround:
```

```
root@W10-ASP2019: ~
root@W10-ASP2019: ~# apt update
Hit:1 http://archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:3 http://ppa.launchpad.net/ondrej/php/ubuntu bionic InRelease
Hit:4 http://archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:5 http://archive.ubuntu.com/ubuntu bionic-backports InRelease
0% [3 InRelease gpgv 20.8 kB]
```

Nom i Cognoms

Data

Arnau Subirós Puigarnau

26/02/2020

```
root@W10-ASP2019:~# apt install php7.2 libapache2-mod-php7.2 php7.2-common php7.2-mysql php7.2-gmp php7.2-curl php7.2-intl php7.2-xdebug php7.2-gd php7.2-bcmath php7.2-imap php7.2-xml php7.2-cgi php7.2-zip
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libcurl4-openssl-dev libfontconfig1 libgd3 libicu64 libjbig2dec libjpeg-turbo8 libjpeg8 libpcr0 libtiff5 libwebp6 libxmlrpc-epi0 libxpm4 libzip4 mlock php-common php7.2-json php7.2-opcache php7.2-readline
  Suggested packages:
    php-pecl_uw-mailutils libgd-tools
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libapache2-mod-php7.2 libcurl4-openssl-dev libfontconfig1 libgd3 libicu64 libjbig2dec libjpeg8 libpcr0 libtiff5 libwebp6 libxmlrpc-epi0 libxpm4 libzip4 mlock php-common php7.2 php7.2-bcmath php7.2-cli php7.2-common php7.2-gd php7.2-gmp php7.2-imap php7.2-intl php7.2-json php7.2-mbstring php7.2-mysql php7.2-opcache php7.2-readline php7.2-xdebug php7.2-zip
The following packages will be upgraded:
  libpcr0
1 upgraded, 35 newly installed, 0 to remove and 141 not upgraded.
Need to get 16.2 MB of archives.
After this operation, 61.9 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

- Modifiquem l'arxiu de configuració [php.ini](#)

```
root@W10-ASP2019:~# nano /etc/php/7.2/apache2/php.ini
[PHP]
; About php.ini
; PHP's initialization file, generally called php.ini, is responsible for
; configuring many of the aspects of PHP's behavior.

; File Uploads ;
; Whether to allow HTTP file uploads.
; http://php.net/file-uploads
file_uploads = On
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

```
;;;;;;;;;;;;;
; Resource Limits ;
;;;;;;;;;;;;
; Maximum execution time of each script, in seconds
; http://php.net/max-execution-time
; Note: This directive is hardcoded to 0 for the CLI SAPI
max_execution_time = 360

; Maximum amount of time each script may spend parsing request data
; idea to limit this time on production servers in order to elide
;;;;;;;;;;;;
[CLI Server]
; Whether the CLI web server uses ANSI color coding in its terminal output
cli_server.color = On

[Date]
; Defines the default timezone used by the date functions
; http://php.net/date.timezone
date.timezone = Europe/Andorra

; http://php.net/date.default-latitude
```

- Un cop fetes les modificacions haurem de reiniciar el servidor web

```
root@W10-ASP2019:~# service apache2 restart
 * Restarting Apache httpd web server apache2
[Wed Feb 19 20:11:26.181593 2020] [core:warn] [pid 16537] (92)Protocol not available: AH00076:
root@W10-ASP2019:~#
```

Nom i Cognoms

Data

Arnau Subirós Puigarnau

26/02/2020

```
root@W10-ASP2019:~# service apache2 restart
 * Restarting Apache httpd web server apache2
 [Wed Feb 19 20:11:26.181593 2020] [core:warn] [pid 16537] (92)Protocol not available: AH00076:
root@W10-ASP2019:~# nano /var/www/html/phpinfo.php
```

```
root@W10-ASP2019:~#
GNU nano 2.9.3
/var/www/html/phpinfo.php
<?php phpinfo(); ?>
```

- Visualitzem i la pàgina phpinfo.php



The screenshot shows a web browser window with the title "phpinfo". The address bar indicates the URL is "localhost/phpinfo.php". The main content of the page is a detailed PHP configuration report titled "PHP Version 7.2.27-6+ubuntu18.04.1+deb.sury.org+1". The report includes sections for System, Build Date, Server API, Virtual Directory Support, Configuration File (php.ini) Path, Loaded Configuration File, and Scan this dir for additional .ini files. It also lists "Additional .ini files parsed". The page is rendered in a light blue and white color scheme.

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.3.4. Creació d'una base de dades SuiteCRM

```
root@W10-ASP2019:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 43
Server version: 10.1.44-MariaDB-Ubuntu0.18.04.1 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

```
root@W10-ASP2019:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 43
Server version: 10.1.44-MariaDB-Ubuntu0.18.04.1 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE suitecrm;
Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]> CREATE USER 'suitecrmuser'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.00 sec)

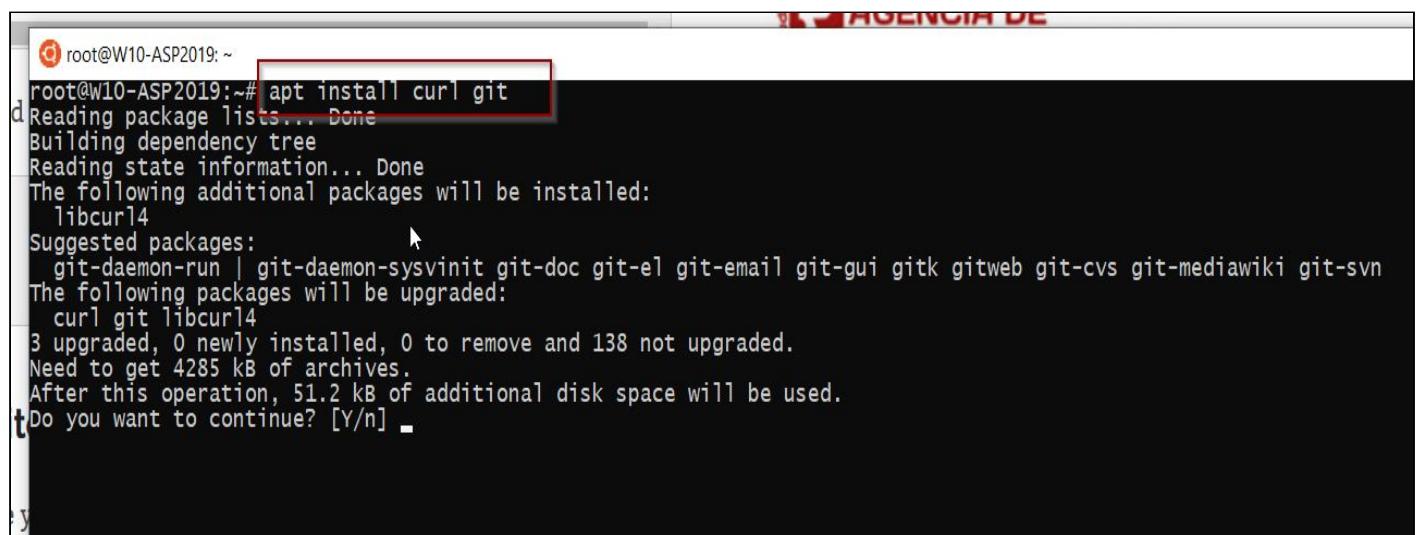
MariaDB [(none)]> GRANT ALL ON suitecrm.* TO 'suitecrmuser'@'localhost' IDENTIFIED BY 'password' WITH GRANT OPTION;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

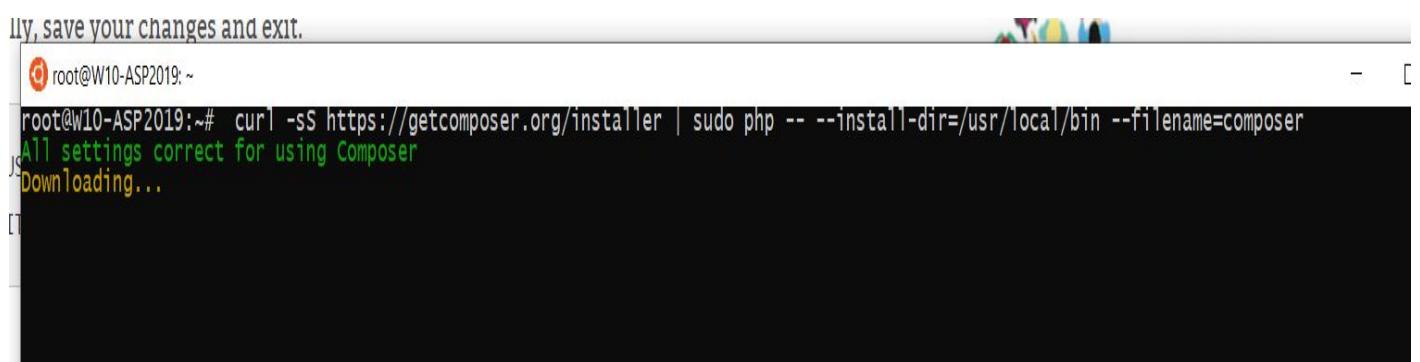
MariaDB [(none)]> EXIT;
Bye
root@W10-ASP2019:~#
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

1.3.5. Instal·lació de SuiteCRM



```
root@W10-ASP2019:~# apt install curl git
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libcurl4
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following packages will be upgraded:
  curl git libcurl4
3 upgraded, 0 newly installed, 0 to remove and 138 not upgraded.
Need to get 4285 kB of archives.
After this operation, 51.2 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```



```
root@W10-ASP2019:~# curl -sS https://getcomposer.org/installer | sudo php -- --install-dir=/usr/local/bin --filename=composer
All settings correct for using Composer
Downloading...
```

Nom i Cognoms	Data
Arnaud Subirós Puigarnau	26/02/2020

```

p d root@W10-ASP2019:/var/www/html
root@W10-ASP2019:~# curl -sS https://getcomposer.org/installer | sudo php -- --install-dir=/usr/local/bin --filename=composer
All settings correct for using Composer
Downloading...
n Composer (version 1.9.3) successfully installed to: /usr/local/bin/composer
Use it: php /usr/local/bin/composer
b root@W10-ASP2019:~# cd /var/www/html
root@W10-ASP2019:/var/www/html# git clone https://github.com/salesagility/SuiteCRM.git suitecrm
Cloning into 'suitecrm'...
remote: Enumerating objects: 130, done.
remote: Counting objects: 100% (130/130), done.
remote: Compressing objects: 100% (101/101), done.
Receiving objects: 13% (26493/199207), 21.19 MiB | 528.00 KiB/s

```

```

d root@W10-ASP2019:/var/www/html
root@W10-ASP2019:/var/www/html# ls
index.html phpinfo.php suitecrm
root@W10-ASP2019:/var/www/html# composer install --no-dev
Do not run Composer as root/super user! See https://getcomposer.org/root for details
Composer could not find a composer.json file in /var/www/html
To initialize a project, please create a composer.json file as described in the https://getcomposer.org/ "Getting Started"
root@W10-ASP2019:/var/www/html#

```

- En aquest punt com que es queixa d que estic utilitzant un usuari sudo o root decideixo crear un usuari anomenat [arnausubiros](#)

Nom i Cognoms

Data

Arnau Subirós Puigarnau

26/02/2020

```

root@W10-ASP2019:/var/www/html
root@W10-ASP2019:/var/www/html# ls
index.html  phpinfo.php  suitecrm
root@W10-ASP2019:/var/www/html# composer install --no-dev
Do not run Composer as root/super user! See https://getcomposer.org/root for details
Composer could not find a composer.json file in /var/www/html
To initialize a project, please create a composer.json file as described in the https://getcomposer.org/ "Getting Started" guide.
root@W10-ASP2019:/var/www/html# adduser arnausubiros
Adding user `arnausubiros' ...
Adding new group `arnausubiros' (1000) ...
Adding new user `arnausubiros' (1000) with group `arnausubiros' ...
Creating home directory `/home/arnausubiros' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for arnausubiros
Enter the new value, or press ENTER for the default
      Full Name []: Arnau Subiros
      Room Number []:
bu      Work Phone []:
      Home Phone []:
      Other []:
ss      Is the information correct? [Y/n] y
root@W10-ASP2019:/var/www/html#

```

```

arnausubiros@W10-ASP2019:/var/www/html/suitecrm
arnausubiros@W10-ASP2019:/var/www/html/suitecrm$ composer install --no-dev
Cannot create cache directory /home/arnausubiros/.composer/cache/repo/https---repo.packagist.org/, or directory is not writable without cache
Cannot create cache directory /home/arnausubiros/.composer/cache/files/, or directory is not writable. Proceeding without cache
Loading composer repositories with package information
Installing dependencies from lock file
Package operations: 85 installs, 0 updates, 0 removals
As there is no 'unzip' command installed zip files are being unpacked using the PHP zip extension.
This may cause invalid reports of corrupted archives. Besides, any UNIX permissions (e.g. executable) defined in the archive
Installing 'unzip' may remediate them.
- Installing kylekatarnls/update-helper (1.2.0): Downloading (100%)
- Installing wikimedia/composer-merge-plugin (v1.4.1): Downloading (100%)
- Installing symfony/process (v3.4.37): Downloading (100%)
- Installing symfony/finder (v3.4.37): Downloading (100%)
- Installing symfony/polyfill-ctype (v1.13.1): Downloading (100%)
- Installing symfony/filesystem (v3.4.37): Downloading (100%)
- Installing symfony/event-dispatcher (v3.4.37): Downloading (100%)
- Installing symfony/polyfill-mbstring (v1.13.1): Downloading (100%)
- Installing psr/log (1.1.2): Downloading (100%)
- Installing symfony/debug (v3.4.37): Downloading (100%)
- Installing symfony/console (v3.4.37): Downloading (100%)
- Installing psr/container (1.0.0): Downloading (100%)
- Installing container-interop/container-interop (1.2.0): Downloading (100%)
- Installing league/container (2.4.1): Downloading (100%)
- Installing symfony/yaml (v3.4.37): Downloading (100%)
- Installing dflydev/dot-access-data (v1.1.0): Downloading (100%)
- Installing grasmash/yaml-expander (1.4.0): Downloading (100%)
- Installing consolidation/self-update (1.1.5): Downloading (100%)
- Installing consolidation/output-formatters (3.5.0): Downloading (100%)
- Installing consolidation/log (1.1.1): Downloading (100%)
- Installing grasmash/expander (1.0.0): Downloading (100%)
- Installing consolidation/config (1.2.1): Downloading (100%)
- Installing consolidation/annotated-command (2.12.0): Downloading (100%)
- Installing consolidation/robo (1.4.11): Downloading (35%)

```

Nom i Cognoms	Data
Arnaud Subirós Puigarnau	26/02/2020

```

[arneau@carbon:~]# composer update
Package container/intel/openccl@1.0 is abandoned, you should avoid using it. Instead, use psr/container instead.
Package guzzlehttp/ringphp is abandoned, you should avoid using it. No replacement was suggested.
Package guzzlehttp/streams is abandoned, you should avoid using it. No replacement was suggested.
Generating optimized autoload files
Carbon 1 is deprecated, see how to migrate to Carbon 2.
https://carbon.nesbot.com/docs/#api-carbon-2
    You can run './vendor/bin/upgrade-carbon' to get help in updating carbon and other frameworks and libraries that depend on it.
> rm -R -f vendor/elasticsearch/elasticsearch/tests/Elasticsearch/Tests
> rm -R -f vendor/elasticsearch/elasticsearch/tests/Elasticsearch/Tests
arnausubiros@W10-ASP2019:/var/www/html/suitecrm$ -

```

- Modiquem els permisos del directori per adaptar-se a la configuració del servidor Web Apache2

```

arnausubiros@W10-ASP2019:~# chown -R www-data:www-data /var/www/html/
arnausubirost@W10-ASP2019:~ chmod -R 755 /var/www/html/

```

```

arnausubiros@W10-ASP2019: /var/www/html
arnausubiros@W10-ASP2019: /var/www/html$ ls -ls
total 12
12 -rw-r--r-- 1 root root 10918 Feb 19 19:38 index.html
0 -rw-rw-rw- 1 root root 21 Feb 19 20:13 phpinfo.php
0 drwxrwxrwx 1 root root 512 Feb 19 20:37 suitecrm
arnausubiros@W10-ASP2019: /var/www/html$ sudo chown -R www-data:www-data /var/www/html/suitecrm/
[sudo] password for arnausubiros:
arnausubiros@W10-ASP2019: /var/www/html$ sudo chmod -R 755 /var/www/html/suitecrm/
arnausubiros@W10-ASP2019: /var/www/html$ ls -ls
total 12
12 -rw-r--r-- 1 root      root      10918 Feb 19 19:38 index.html
0 -rw-rw-rw- 1 root      root      21 Feb 19 20:13 phpinfo.php
0 drwxr-xr-x 1 www-data  www-data  512 Feb 19 20:37 suitecrm
giarnausubiros@W10-ASP2019: /var/www/html$ -

```

Nom i Cognoms	Data
Arnaud Subirós Puigarnau	26/02/2020

1.3.6. Configuració servidor Web Apache2

```
arnausubiros@W10-ASP2019:~# nano /etc/apache2/sites-available/suitecrm.conf
```

```
arnausubiros@W10-ASP2019: /var/www/html
  GNU nano 2.9.3
/etc/apache2/sites-available/suitecrm.conf

<VirtualHost *:80>
    ServerAdmin admin@localhost.com
    DocumentRoot /var/www/html/suitecrm
    ServerName suiteCRM01.com
    ServerAlias www.suiteCRM01.com

    <Directory /var/www/html/suitecrm/>
        Options FollowSymlinks
        AllowOverride All
        Require all granted
    </Directory>

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

    <Directory /var/www/html/suitecrm/>
        RewriteEngine on
        RewriteBase /
        RewriteCond %{REQUEST_FILENAME} !-f
        RewriteRule ^(.*)$ index.php [PT,L]
    </Directory>
</VirtualHost>
```

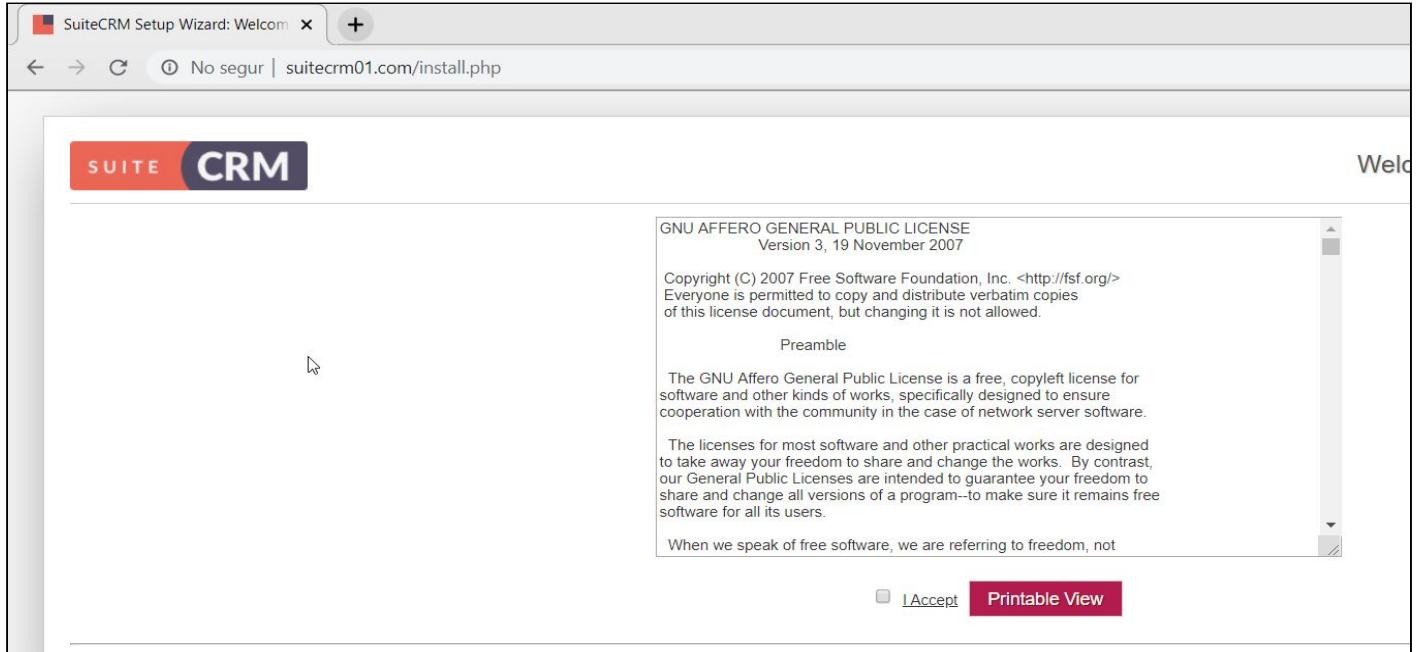
1.3.7. Activació del mòdul Suite CRM i del mòdul Rewrite

```
arnausubiros@W10-ASP2019: /var/www/html
arnausubiros@W10-ASP2019: /var/www/html $ sudo a2ensite suitecrm.conf
Enabling site suitecrm.
To activate the new configuration, you need to run:
  service apache2 reload
arnausubiros@W10-ASP2019: /var/www/html $ sudo a2enmod rewrite
Enabling module rewrite.
To activate the new configuration, you need to run:
  service apache2 restart
arnausubiros@W10-ASP2019: /var/www/html $ sudo service apache2 restart
 * Restarting Apache httpd web server apache2
[wed Feb 19 20:47:11.676946 2020] [core:warn] [pid 17148] (92)Protocol not available: AH00076: Failed to enable module rewrite: ensure that it is loaded
[warn]
arnausubiros@W10-ASP2019: /var/www/html $ sudo service apache2 status
 * apache2 is running
arnausubiros@W10-ASP2019: /var/www/html $
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- Desde el navegador podem accedir utilitzant el nom que hem configurat al VirtualHost (o el seu alias): suitecrm01.com o www.suitecrm01.com o amb la ruta completa localhost/suitecrm01.com

<http://suitecrm01.com/install.php>

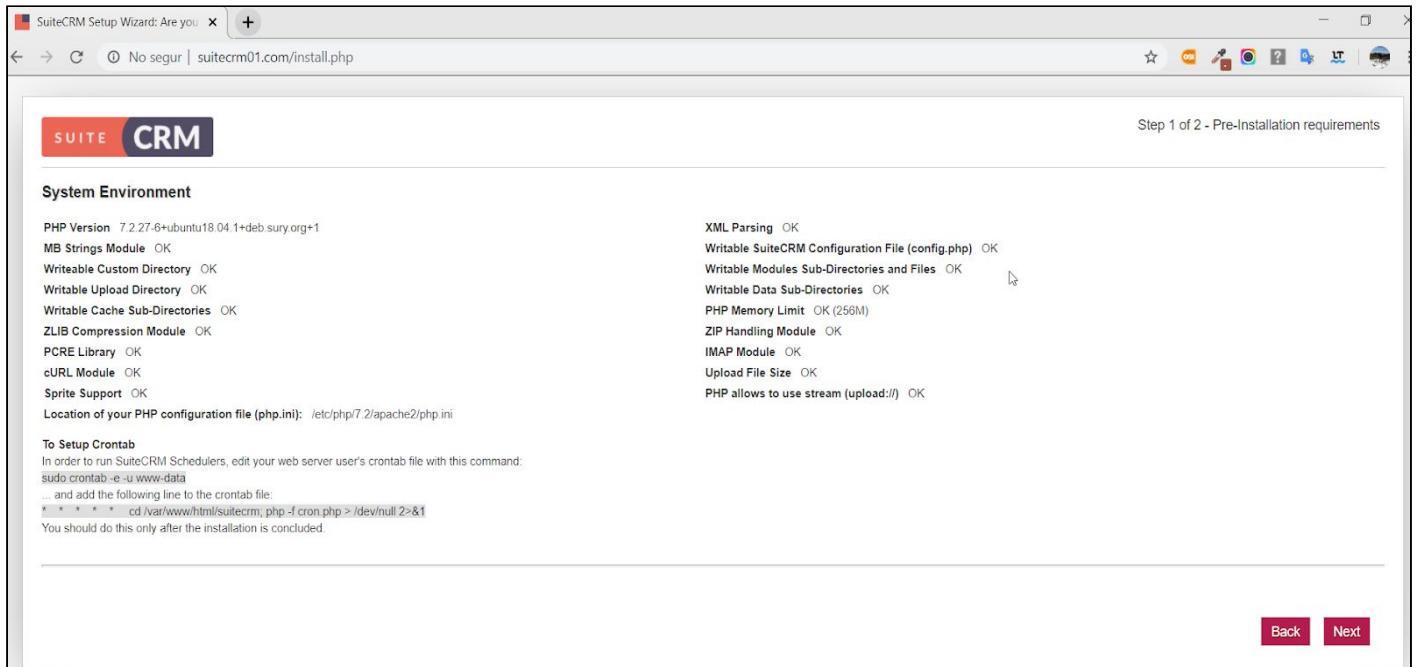


Nom i Cognoms

Data

Arnau Subirós Puigarnau

26/02/2020



The screenshot shows the SuiteCRM Setup Wizard at Step 1 of 2. The title bar says "SuiteCRM Setup Wizard: Are you ready?". The main content area is titled "System Environment" and lists various PHP extensions and modules with their status (OK). It also includes instructions for setting up cron jobs.

System Environment

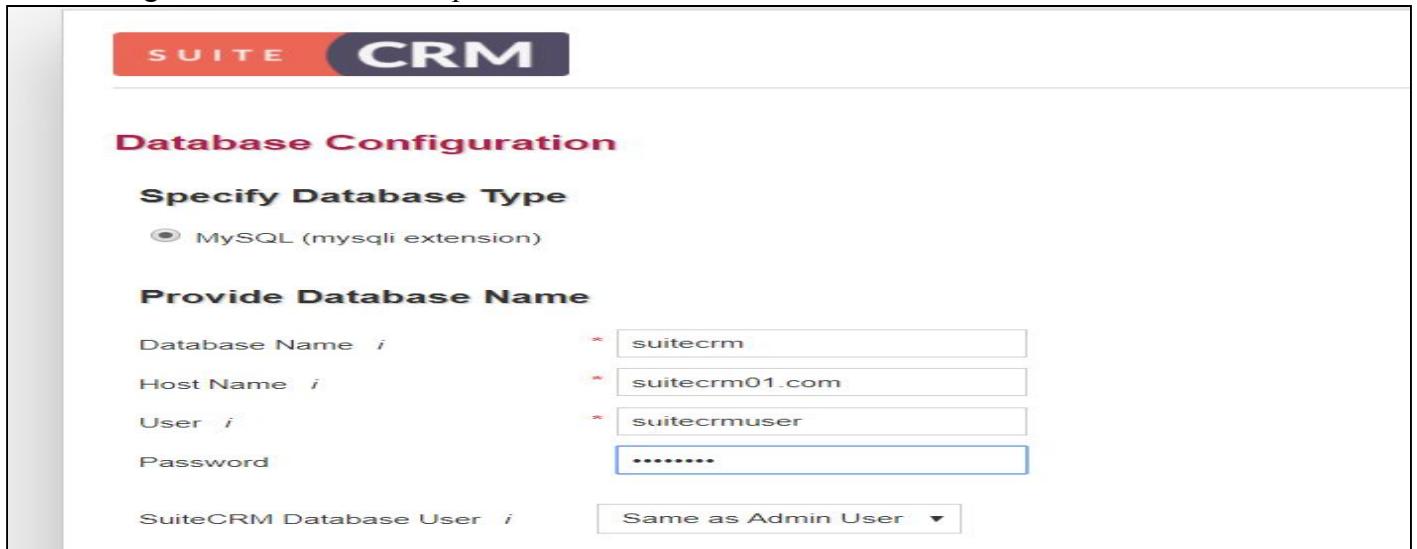
- PHP Version 7.2.27-6+ubuntu18.04.1+deb.sury.org+1 OK
- MB Strings Module OK
- Writable Custom Directory OK
- Writable Upload Directory OK
- Writable Cache Sub-Directories OK
- ZLIB Compression Module OK
- PCRE Library OK
- cURL Module OK
- Sprite Support OK
- Location of your PHP configuration file (php.ini): /etc/php/7.2/apache2/php.ini
- XML Parsing OK
- Writable SuiteCRM Configuration File (config.php) OK
- Writable Modules Sub-Directories and Files OK
- Writable Data Sub-Directories OK
- PHP Memory Limit OK (256M)
- ZIP Handling Module OK
- IMAP Module OK
- Upload File Size OK
- PHP allows to use stream (upload://) OK

To Setup CronTab

In order to run SuiteCRM Schedulers, edit your web server user's crontab file with this command:
sudo crontab -e -u www-data
... and add the following line to the crontab file:
* * * * * cd /var/www/html/suitecrm; php -f cron.php > /dev/null 2>&1
You should do this only after the installation is concluded.

[Back](#) [Next](#)

- Haig de escriure l'usuari el password de la base de dades suitecrm



The screenshot shows the "Database Configuration" step of the SuiteCRM setup. It asks to specify the database type (MySQL selected), provide the database name, host name, user, and password, and set the SuiteCRM database user to be the same as the admin user.

Specify Database Type

MySQL (mysqli extension)

Provide Database Name

Database Name	suitecrm
Host Name	suitecrm01.com
User	suitecrmuser
Password

SuiteCRM Database User

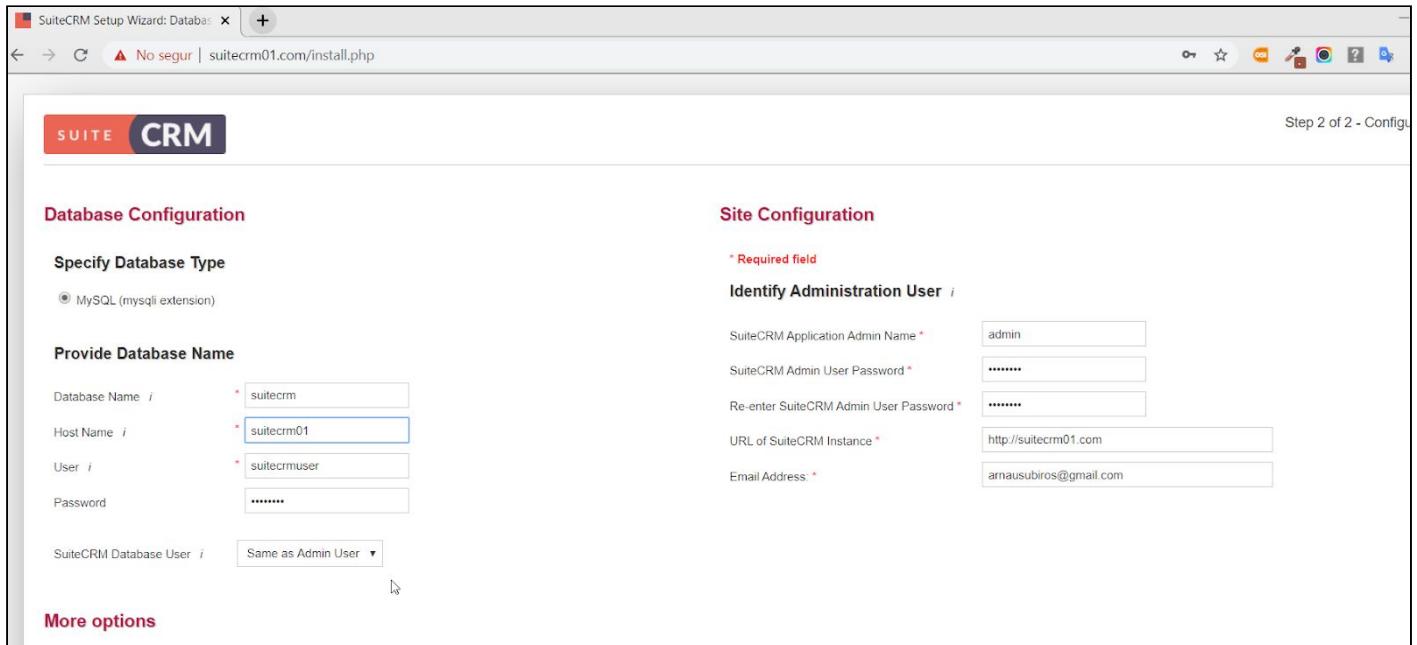
Same as Admin User

Nom i Cognoms

Arnaud Subirós Puigarnau

Data

26/02/2020



Suite CRM

Database Configuration

Specify Database Type

MySQL (mysqli extension)

Provide Database Name

Database Name: suitecrm
Host Name: suitecrm01
User: suitecrmuser
Password:
SuiteCRM Database User: Same as Admin User

Site Configuration

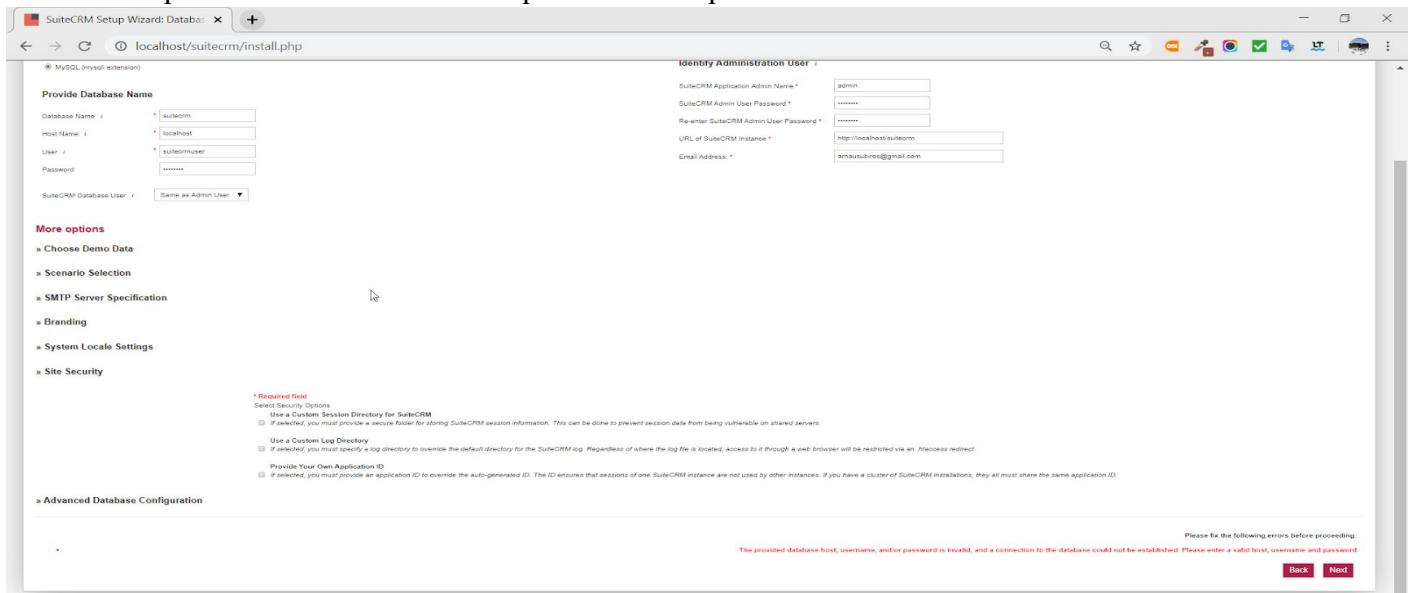
*** Required field**

Identify Administration User

SuiteCRM Application Admin Name: admin
SuiteCRM Admin User Password:
Re-enter SuiteCRM Admin User Password:
URL of SuiteCRM Instance: http://suitecrm01.com
Email Address: arnausubiros@gmail.com

More options

- Tinc problemes amb l'usuari i el password i no puc validar



SuiteCRM Setup Wizard: Database Configuration Step 2 of 2 - Configuration

Provide Database Name

Database Name: suitecrm
Host Name: localhost
User: suitecrmuser
Password:
SuiteCRM Database User: Same as Admin User

Identity Administration User

SuiteCRM Application Admin Name: admin
SuiteCRM Admin User Password:
Re-enter SuiteCRM Admin User Password:
URL of SuiteCRM Instance: http://localhost/suitecrm
Email Address: arnausubiros@gmail.com

More options

*** Required field**

Select Security Options

Use a Custom Session Directory for SuiteCRM
 If selected, you must provide a secure folder for storing SuiteCRM session information. This can be done to prevent session data from being vulnerable on shared servers.

Use a Custom Log Directory
 If selected, you must specify a log directory to override the default directory for the SuiteCRM log. Regardless of where the log file is located, access to it through a web browser will be restricted via an .htaccess redirect.

Provide Your Own Application ID
 If selected, you must provide an application ID to override the auto-generated ID. The ID ensures that sessions of one SuiteCRM instance are not used by other instances. If you have a cluster of SuiteCRM installations, they all must share the same application ID.

Advanced Database Configuration

Please fix the following errors before proceeding:
The provided database host, username, and/or password is invalid, and a connection to the database could not be established. Please enter a valid host, username and password.

Back **Next**

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

- En aquest moment decideixo crear un altre usuari a la base de dades anomenat [arnau](#)

```
arnausubiros@W10-ASPB2019:/var/www/html$ sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 33
Server version: 10.1.44-MariaDB-Ubuntu0.18.04.1 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

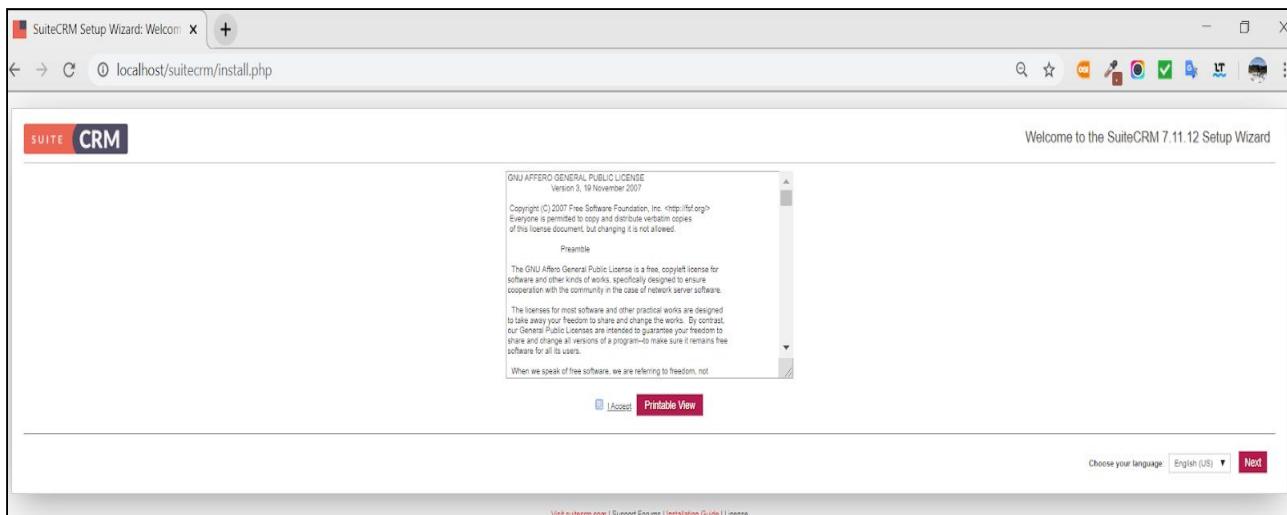
MariaDB [(none)]> CREATE USER 'arnau'@'localhost' IDENTIFIED BY '1234';
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> GRANT ALL ON suitecrm.* TO 'arnau'@'localhost' IDENTIFIED BY '1234' WITH GRANT OPTION;
Query OK, 0 rows affected (0.00 sec)

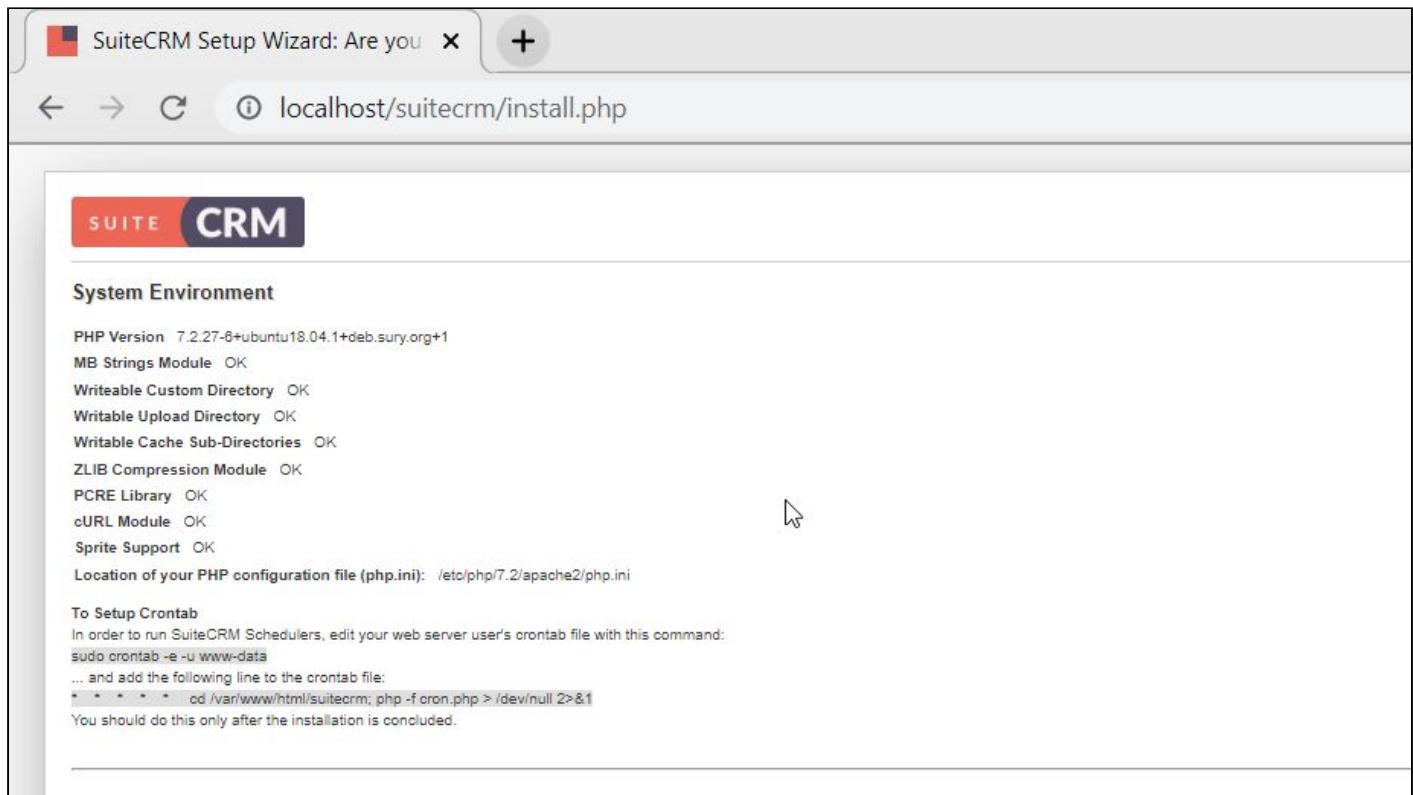
MariaDB [(none)]>
```

```
MariaDB [(none)]> GRANT ALL ON suitecrm.* TO 'arnau'
Query OK, 0 rows affected (0.00 sec)
E MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> EXIT;
Bye
```

- Reinicio el servidor Web
- També provo alternatives i accedeixo amb el path exacte (sense utilitzar el alias del virtualhost) i tornar a començar.
 - <http://localhost/suitecrm.com/install.php>



Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020



The screenshot shows a web browser window titled "SuiteCRM Setup Wizard: Are you ready to install SuiteCRM?". The URL in the address bar is "localhost/suitecrm/install.php". The main content area is titled "System Environment" and lists various PHP extensions and modules with their status: MB String Module (OK), Writeable Custom Directory (OK), Writeable Upload Directory (OK), Writeable Cache Sub-Directories (OK), ZLIB Compression Module (OK), PCRE Library (OK), cURL Module (OK), and Sprite Support (OK). Below this, it shows the location of the PHP configuration file as "/etc/php/7.2/apache2/php.ini". A section titled "To Setup Crontab" provides instructions for setting up scheduled tasks, including a command to edit the crontab file for the www-data user and a sample cron entry to run a cron.php script.

Nom i Cognoms	Data
Arnaud Subirós Puigarnau	26/02/2020

SuiteCRM Setup Wizard: Database Step 2 of 2 - Configuration

Database Configuration

Specify Database Type: MySQL (mysql extension)

Provide Database Name

Database Name: suitecrm
Host Name: localhost
User: arnaud
Password: ****

SuiteCRM Database User: Same as Admin User

Site Configuration

* Required field

Identify Administration User

SuiteCRM Application Admin Name: admin
SuiteCRM Admin User Password: *****
Re-enter SuiteCRM Admin User Password: *****
URL of SuiteCRM Instance: http://localhost/suitecrm
Email Address: arnaudsubiros@gmail.com

More options

- » Choose Demo Data
- » Scenario Selection
- » SMTP Server Specification
- » Branding
- » System Locale Settings
- » Site Security
- » Advanced Database Configuration

Buttons: Back | Next

SuiteCRM Setup Wizard: Database Step 2 of 2 - Configuration

Install...

Configuration relationships... [ok]
Create database.

Buttons: Back | Next

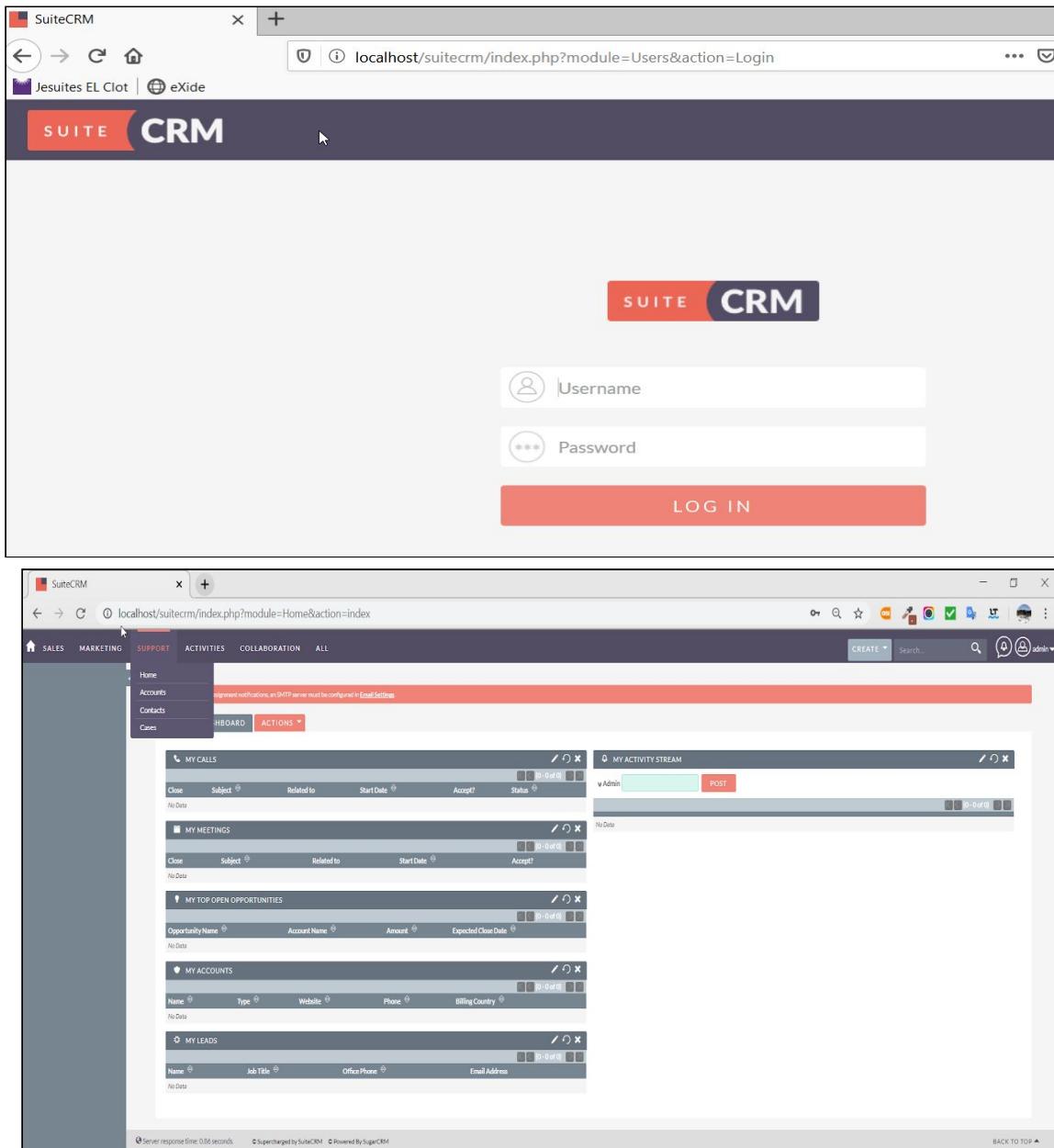
Nom i Cognoms

Data

Arnau Subirós Puigarnau

26/02/2020

- Accedeixo a la pàgina inicial



The image contains two screenshots of the SuiteCRM application. The top screenshot shows the login page with fields for 'Username' and 'Password', and a large orange 'LOG IN' button. The bottom screenshot shows the main dashboard with various modules: MY CALLS, MY MEETINGS, MY TOP OPEN OPPORTUNITIES, MY ACCOUNTS, and MY LEADS. There is also a sidebar with navigation links like Home, Accounts, Contacts, Cases, and a central activity stream.

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

2. DOCUMENTACIÓ

Un cop instal·lada l'aplicació i comprovat el seu funcionament creeu un document que expliqui tot el procés d'instal·lació:

2.1. Característiques del maquinari

Tauler de positus	Visualitza informació bàsica sobre l'ordinador	 Windows 10 
la del	Edició del Windows Windows 10 Home © 2019 Microsoft Corporation. Todos los derechos reservados.	
Sistema	Fabricant: Acer Model: Predator PH315-51 Processador: Intel(R) Core(TM) i7-8750H CPU @ 2.20GHz 2.21 GHz Memòria instal·lada (RAM): 16.0 GB (es pot utilitzar: 15.8 GB) Tipus de sistema: Sistema operatiu de 64 bits, processador basat en x64 Entrada manuscrita i entrada tàctil: L'entrada tàctil o manuscrita no està disponible per a aquesta pantalla	
Compatibilitat amb Acer		

2.2. Sistema operatiu emprat (arquitectura, distribució, versió, ...)

```
2.1. Característiques del maquinari
arnausubiros@W10-ASP2019: ~
arnausubiros@W10-ASP2019:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 18.04.2 LTS
Release:        18.04
Codename:       bionic
arnausubiros@W10-ASP2019:~$
```

Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

2.3. Versió i procés d'instal·lació del servidor Apache

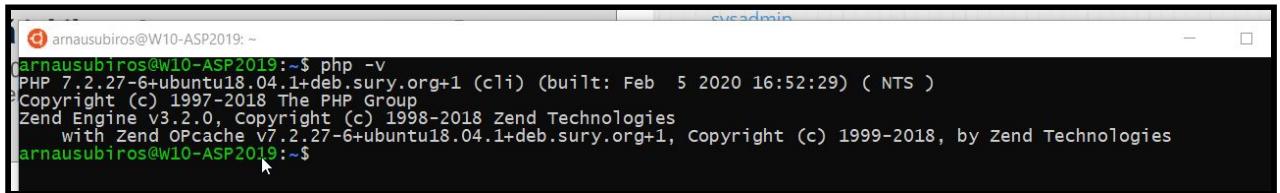
```
arnausubiros@W10-ASP2019: ~
arnausubiros@W10-ASP2019:~$ apache2ctl -v
Server version: Apache/2.4.29 (Ubuntu)
Server built:   2019-09-16T12:58:48
arnausubiros@W10-ASP2019:~$ _
```

2.4. Versió i procés d'instal·lació de la base de dades(MariaDB)

```
arnausubiros@W10-ASP2019: ~
arnausubiros@W10-ASP2019:~$ mysql --version
mysql Ver 15.1 Distrib 10.1.44-MariaDB, for debian-linux-gnu (x86_64) using readline 5.2
arnausubiros@W10-ASP2019:~$ _
```

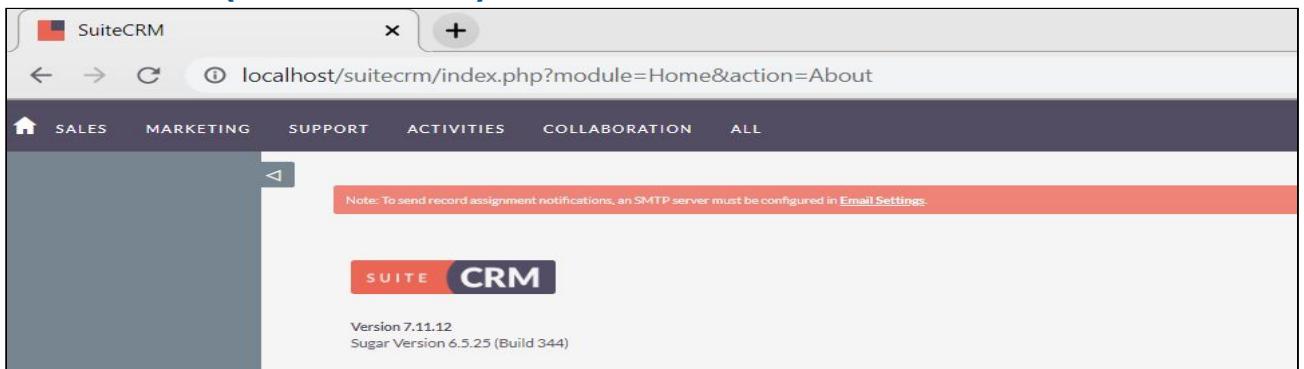
Nom i Cognoms	Data
Arnaud Subirós Puigarnau	26/02/2020

2.5. Versió i procés d'instal·lació del llenguatge de suport (PHP)



```
arnausubiros@W10-ASP2019:~$ php -v
PHP 7.2.27-6+ubuntu18.04.1+deb.sury.org+1 (cli) (built: Feb 5 2020 16:52:29) ( NTS )
Copyright (c) 1997-2018 The PHP Group
Zend Engine v3.2.0, Copyright (c) 1998-2018 Zend Technologies
    with Zend OPcache v7.2.27-6+ubuntu18.04.1+deb.sury.org+1, Copyright (c) 1999-2018, by Zend Technologies
arnausubiros@W10-ASP2019:~$
```

2.6. Versió i procés d'instal·lació del sistema CRM (SuiteCRM)



Nom i Cognoms	Data
Arnau Subirós Puigarnau	26/02/2020

SuiteCRM 7.11.12				
Servidor Apache	MariaDB	PHP	S.O. (wsl)	Característiques del maquinari
versió 2.4.29	versió 10.1.44	versió 7.2.27	Ubuntu 18.04.2 LTS	procesador : Intel® Core™ i7-8750 CPU @ 2.20 GHz 2.21GHz
				memòria RAM : 16GB
				Fabricant : Acer

3. BIBLIOGRAFIA

- Primera versio amb PHP 7.1

<https://websiteforstudents.com/install-suitecrm-on-ubuntu-16-04-lts-with-apache2-mariadb-php-7-1-and-lets-encrypt-free-ssl-tls/>

- Primera versio amb PHP 7.2

<Install SuiteCRM on Ubuntu 16.04 | 18.04 with Apache2, MariaDB and PHP 7.2>