

Cacti 1.1.x CentOS7 安裝手冊

201708 台大網路組 游子興

安裝 nano 文字編輯器:

```
~# yum install nano
```

VM Player 時間修正:

```
~# date
```

```
~# vmware-toolbox-cmd timesync enable
```

```
~# date
```

關閉 SELINUX:

```
~# nano /etc/selinux/config
```

```
SELINUX=disabled
```

重新開機:

```
~# reboot
```

停止防火牆:

```
~# systemctl stop firewalld
```

開機不自動啟動防火牆:

```
~# systemctl disable firewalld
```

安裝 MariaDB 資料庫

MariaDB 是 MySQL 一個分支，主要由開源社群在維護。

因 MySQL 被知名大廠『甲骨文』收購，許多人都猜測 MySQL 會慢慢變成需要付費才能更新或使用的資料庫系統。

但 MariaDB 保證永遠公開源碼、永遠不收費，Google 也在不久前將數千台的 MySQL 資料庫伺服器更改為 MariaDB。

```
~# yum install mariadb-server
```

my-huge.cnf: 適合 1GB - 2GB RAM

my-large.cnf: 適合 512MB RAM

my-medium.cnf: 只有 32MB - 64MB RAM

my-small.cnf: 記憶體少於 64MB

```
~# cp /usr/share/mysql/my-huge.cnf /etc/my.cnf
```

```
~# nano /etc/my.cnf
[mysqld]
character_set_server=utf8
character_set_client=utf8
max_heap_table_size=90M
tmp_table_size=64M
join_buffer_size=64M
innodb_file_per_table=ON
innodb_buffer_pool_size=449M
innodb_doublewrite=OFF
innodb_additional_mem_pool_size= 80M
innodb_flush_log_at_trx_commit=2
修改:
max_allowed_packet=16777216
```

重新啟動 MariaDB:

```
~# systemctl restart mariadb
```

開機自動啟動 MariaDB:

```
~# systemctl enable mariadb
```

MariaDB Log Review:

```
~# journalctl -u mariadb
```

```
~# less /var/log/mariadb/mariadb.log
```

MariaDB 初始安裝:

```
~# 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]

New password: dbroot2017 -- root 密碼

Re-enter new password: dbroot2017 -- root 密碼

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.

Remove anonymous users? [Y/n]

... 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] n

... skipping.

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]

- 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]

... 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!

CentOS 官方套件庫沒有收錄 Cacti，需從 EPEL 套件庫安裝。

```
~# yum install epel-release
```

```
~# yum install cacti
```

安裝其他套件:

```
~# yum install httpd php php-mysql php-pear php-gd php-mbstring net-snmp  
net-snmp-utils rrdtool
```

```
~# yum install git
```

使用 root 登入 MariaDB

```
~# mysql -u root -p
```

```
dbroot2017 -- 輸入 root 密碼
```

切換至 mysql database:

```
> use mysql;
```

匯入 timezone:

```
> \. /usr/share/mysql/mysql_test_data_timezone.sql
```

建立 cacti database:

```
> create database cacti;
```

切換至 cacti database:

```
> use cacti;
```

匯入 Cacti 所需 table:

```
> \. /usr/share/doc/cacti-1.1.16/cacti.sql
```

離開 MariaDB:

```
> exit
```

顯示 Apache version:

```
~# httpd -v
```

```
Server version: Apache/2.4.6 (CentOS)
```

```
Server built: Apr 12 2017 21:03:28
```

編輯 Cacti Web UI 設定檔, 因 Apache/2.4.6, 所以在 2.4 段落修改, 允許所有 IP 連線

```
~# nano /etc/httpd/conf.d/cacti.conf
```

```
Alias /cacti /usr/share/cacti
```

```
<Directory /usr/share/cacti/>
```

```
    <IfModule mod_authz_core.c>
```

```
        # httpd 2.4
```

```
        # Require host localhost
```

```
        Require all granted
```

```
    </IfModule>
```

編輯 Cacti 登入 database 設定檔:

```
~# nano /etc/cacti/db.php
```

```
$database_default = 'cacti';
```

```
$database_username = "root";
```

```
$database_password = "dbroot2017";
```

編輯 Cacti PHP timezone:

```
~# nano /etc/php.ini
```

```
date.timezone = "Asia/Taipei"
```

重新啟動 Apache:

```
~# systemctl restart httpd
```

開機自動啟動 Apache:

```
~# systemctl enable httpd
```

Enable Cacti Cron Job:

```
~# nano /etc/cron.d/cacti
```

```
##/5 * * * * cacti /usr/bin/php /usr/share/cacti/poller.php > /dev/null
```

2>&1

^

移除 comment

登入 Cacti:

<http://192.168.x.x/cacti>

Pre-installation Checks

MySQL TimeZone Support

ERROR: Your MySQL TimeZone database is not populated. Please populate this database before proceeding.

需要匯入 /usr/share/mysql/mysql_test_data_timezone.sql

Installation Type

- New Primary Server - Choose this for the Primary site.

Critical Binary Locations and Versions

Spine Binary File Location: The path to Spine binary.

/usr/local/spine/bin/spine

C Based Poller for Cacti: 增進 cacti 效能的套件(可裝可不裝)

<http://yccitman.blogspot.tw/2017/03/cent-os-7-cacti-110-install-mysql-5717.html>

<https://forums.cacti.net/viewtopic.php?f=6&t=56843>

Required Writable at Install Time Only

/usr/share/cacti/resource/snmp_queries is Not Writable

/usr/share/cacti/resource/script_server is Not Writable

/usr/share/cacti/resource/script_queries is Not Writable

解決方法: 關閉 SELINUX

```
~# nano /etc/selinux/config
```

```
SELINUX=disabled
```

Templates: 全選

Cisco Router
Generic SNMP Device
Local Linux Machine
Net-SNMP Device
Windows Device

登入 Cacti:

<http://192.168.x.x/cacti>

login: admin

passwd: admin