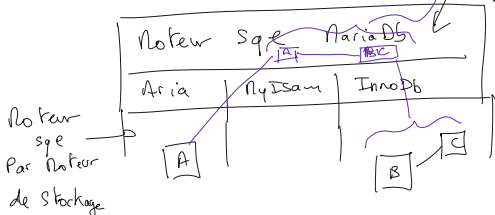


Lien vers la documentation :

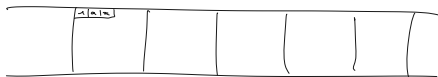
<https://mariadb.com/kb/en/library/documentation/>

Bon ou tout le monde

Passer root : sudo su ABC Requise

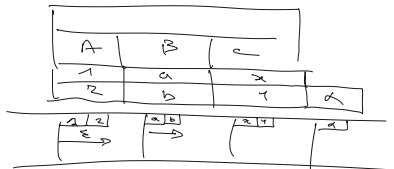


Row Store → stockage en ligne
Conventionnel

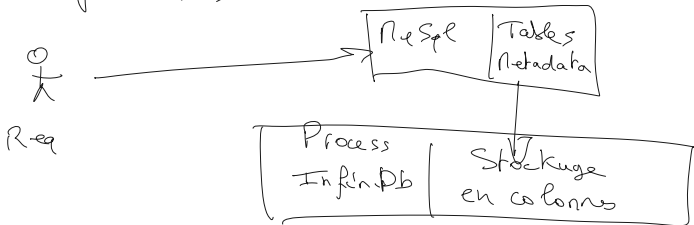


Page → unite' d'I/O disque ↔ memoire

Column Store → stockage Colonne
Par Page/ par fichier

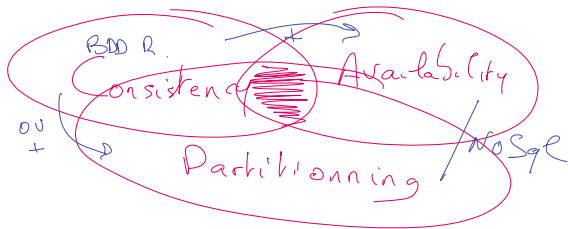


Infini' DB



Rowid	id	Valeur	Version
	1	A a	1
	2	B	1
	1	a	2

Multi Version Concurrency check



maria Column store → Transactionnel
 Cassandra → non Transactionnel
 NoSQL

Bonne pratique pour un déploiement multi instances

```
/opt/mariadb/<version>/bin/mysqld  
--defaults-file=/var/mariadb/bd1/  
mysql.cnf
```

↓
dossier racine
de l'instance

```
/var/mariadb/bd1/my.cnf
```

```
[server]
```

```
[mysqld]
```

```
port = 3306 [mariadb]
```

```
datadir =
```

```
socket = /var/mariadb/bd1/mysql.sock
```

```
[client]
```

```
[client-server]
```

Server Option Groups

MariaDB programs reads server options from the following server option groups:

Group Description

[client-server] Options read by all MariaDB client programs and the MariaDB Server. This is useful for options like socket and port, which is common between the server and the clients.

[server] Options read by MariaDB Server.

[mysqld] Options read by mysqld, which includes both MariaDB Server and MySQL Server.

[mariadb] Options read by MariaDB Server.

[mysqld-X.Y] Options read by a specific version of mysqld, which includes both MariaDB Server and MySQL Server. For example, [mysqld-5.5]

[mariadb-X.Y] Options read by a specific version of MariaDB Server. For example, [mariadb-10.3]

[galera] Options read by MariaDB Server, but only if it is compiled with Galera Cluster support. In MariaDB 10.1 and later, all builds on Linux are compiled with Galera Cluster support. When using one of these builds, options from this option group are read even if the Galera Cluster functionality is not enabled.

Installation :

```
groupadd mysql  
useradd -g mysql mysql
```

```
scripts/mysql_install_db --user=mysql --datadir=/var/mariadb/db1
```

--user=mysql : l'utilisateur propriétaire des fichiers et le user owner du process

root / sans mot de passe = login / pass de l'admin par défaut

mysql = nom de la bdd système par défaut

édition du fichier de conf :

```
nano /var/mariadb/db1/my.cnf
```

préparation au lancement du serveur :

bin/mysqld --verbose --help | more (pour récupérer la liste des options et leurs valeurs, pour injecter dans my.cnf par exemple et remplacer....)

Lancement :

```
bin/mysqld --defaults-file=/var/mariadb/db1/my.cnf
```

Le my.cnf :

```
[mysqld]  
data=/var/mariadb/db1
```

```
[client-server]  
socket=/var/mariadb/db1/mysql.sock  
port=3306
```

Lancer notre serveur :

```
bin/mysqld_safe --defaults-file=/var/mariadb/db1/my.cnf --user=mysql
```

Lancement du client :

```
mysql --defaults-file=/var/mariadb/db1/my.cnf
```

Paramétrage en mode service : (voir Auto start of mysqld)

<https://mariadb.com/kb/en/library/installing-mariadb-binary-tarballs/>

pour simplifier :

créer un fichier de lancer de serveur :

nano mysql.sh

```
alias mysqld="mysqld_safe --defaults-file=/var/mariadb/db1/my.cnf --user=mysql"
```

```
chmod +x mysqld.sh
```

nano mysql.sh

```
alias mysql="mysql --defaults-file=/var/mariadb/db1/my.cnf"
```

```
chmod +x mysql.sh
```

```
source mysqld.sh
```

```
source mysql.sh
```

Arrêt du serveur :

```
mysqladmin -u root shutdown
```

exemple :

```
mysqladmin --defaults-file=/var/mariadb/db1/my.cnf -u root shutdown
```

sécuriser le système :

```
mysql_secure_installation --defaults-file=/var/mariadb/db1/my.cnf
```

se connecter :

```
mysql --defaults-file=/var/mariadb/db1/my.cnf -u root -p ( demande le mot de passe )
```

```
ou : --password=<mot de passe en ligne de commande>
```

```
[mysqld_multi]
mysqld = /opt/mariadb/mariadb-10.3.13-linux-x86_64/bin/mysqld_safe
mysqldadmin = /opt/mariadb/mariadb-10.3.13-linux-x86_64/bin/mysqldadmin
user = root
password = Pa$$w0rd
```

```
[mysqld1]
datadir=/var/mariadb/db1
socket=/var/mariadb/db1/mysql.sock
port=3306
```

```
[mysqld2]
datadir=/var/mariadb/db2
socket=/var/mariadb/db2/mysql.sock
port=3307
```

```
[client-server]
```

mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip report 2

report : start, stop, ou report
2 : numéro du groupe

le contenu du fichier my.cnf doit avoir pour sections :

```
[mysqld###]
avec ###=1, 2, ou 3, ...
```

```
root@u18:/var/mariadb# mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip stop 1-2
root@u18:/var/mariadb# mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip report 1-2
Reporting MariaDB servers
MariaDB server from group: mysqld1 is not running
MariaDB server from group: mysqld2 is not running
root@u18:/var/mariadb# mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip start 1-2
root@u18:/var/mariadb# mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip report 1-2
Reporting MariaDB servers
MariaDB server from group: mysqld1 is running
MariaDB server from group: mysqld2 is running
root@u18:/var/mariadb# mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip stop 2
root@u18:/var/mariadb# mysqld_multi --defaults-file=/var/mariadb/my.cnf --tcp-ip report 1-2
Reporting MariaDB servers
MariaDB server from group: mysqld1 is running
MariaDB server from group: mysqld2 is not running
```