

## Before we start

- Launch tutorial docker container:

Unset

```
docker run -d -t -i --privileged --name percona_live  
altmannmarcelo/pxb_pl:latest
```

- Check container is up and running:

Unset

```
docker logs -n 1 percona_live
```

We expect to see: **Everything is up and running.**

- Enter container ( launch at least two sessions):

Unset

```
docker exec -it percona_live bash
```

- MySQL **root** user is installed with **auth\_socket** (no password)
- There is a **run\_load.sh** script to simulate load during backups

## Full Backup

- Check there is no employee named **Roy**:

Unset

```
mysql> SELECT * FROM employees.employees WHERE first_name = 'Roy'\G  
Empty set (0.09 sec)
```

- Start to simulate load:

Unset

```
run_load.sh run
```

- Take a full backup:

Unset

```
xtrabackup --backup --target-dir=/backups/full  
--register-redo-log-consumer --debug_sync='log_status_get'
```

We should see the backup has been stopped at **log\_status\_get** sync point and a kill command to resume the backup:

```
2023-04-28T15:22:40.613320-00:00 0 [Note] [MY-011825] [Xtrabackup] Selecting LSN and  
binary log position from p_s.log_status  
2023-04-28T15:22:40.613388-00:00 0 [Note] [MY-011825] [Xtrabackup] DEBUG: Suspending  
at debug sync point 'log_status_get'Resume with 'kill -SIGCONT 173'
```

```
[1]+  Stopped                  xtrabackup --backup --target-dir=/backups/full
--debug_sync='log_status_get'
```

- Check table employees has already been copied:

Unset

```
ls -l /backups/full/employees/employees.ibd
```

- Roy was hired. Add him to the database:

Unset

```
mysql> INSERT INTO employees.employees VALUES (500000, '1988-05-21',
'Roy', 'Trenneman', 'M', '2023-05-22');
```

- Resume backup:

Unset

```
kill -SIGCONT 173
```

- Stop load script
- Stop MySQL and remove datadir:

Unset

```
mysql -e shutdown
rm -rf /var/lib/mysql
```

- Prepare backup

Unset

```
xtrabackup --prepare --target-dir=/backups/full
```

- Copy backup to datadir and adjust folder ownership:

Unset

```
xtrabackup --copy-back --target-dir=/backups/full  
chown -R mysql:mysql /var/lib/mysql
```

- Start MySQL

Unset

```
mysqld --user=mysql &
```

- Check if Roy is an employee:

Unset

```
mysql> SELECT * FROM employees.employees WHERE first_name = 'Roy'\G  
***** 1. row *****  
      emp_no: 500000  
birth_date: 1988-05-21  
first_name: Roy  
  last_name: Trenneman  
      gender: M  
  hire_date: 2023-05-22  
1 row in set (0.09 sec)
```

## Incremental Backup

- Install page tracking component

Unset

```
mysql> INSTALL COMPONENT "file://component_mysqlbackup";
```

- Check there is no employee named **Maurice**

Unset

```
mysql> SELECT * FROM employees.employees WHERE first_name =  
'Maurice'\G  
Empty set (0.09 sec)
```

- Start to simulate load:

Unset

```
run_load.sh run
```

- Take a full backup

Unset

```
xtrabackup --backup --page-tracking --target-dir=/backups/inc_full
```

Wait for backup to complete

- Maurice was hired. Add him to the database:

Unset

```
mysql> INSERT INTO employees.employees VALUES (500001, '1988-05-21',  
'Maurice', 'Moss', 'M', '2023-05-22');
```

- Take an incremental backup