

# Percona Toolkit

Experimenting each percona toolkit tools to efficiently replicate from the master to slave server

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# 1. Prerequisites

## Test Database

- Download sakila db

```
https://dev.mysql.com/doc/index-other.html
```

- Extract the installation archive to a temporary location
- Connect to the MySQL server

```
mysql -uroot -p
```

- Execute the sakila-schema.sql script to create the database structure, and execute the sakila-data.sql script

```
SOURCE /home/<usr>/Downloads/sakila-db/sakila-schema.sql;  
SOURCE /home/<usr>/Downloads/sakila-db/sakila-data.sql;
```

## 2. pt-archive

In this test case, data exchange from one table to another in the same db on the same server

- Connect to the MySQL server

```
mysql -uroot -p
```

- Create a new table

```
USE sakila;  
CREATE TABLE old_rental LIKE rental;  
SELECT COUNT(*) FROM rental WHERE rental_date < "2006-01-01";  
SELECT * FROM old_rental;
```

- Locate **pt-archiver**

```
find / -name pt-archiver 2>/dev/null
```

- This will show the location of the pt-archiver

```
/usr/bin/pt-archiver
```

- using pt-archiver command

```
/usr/bin/pt-archiver --source D=sakila,t=rental --dest D=sakila,t=old_rental --where "rental_date <  
'2006-01-01'" --statistics --user <user> --password <password> --host <host>
```

- user and hosts examples

User	From Host
cosm	%
cusm	%
debian-sys-ma	localhost
dsm	%
lmsv1	%
mysql.infosche	localhost
mysql.session	localhost
mysql.sys	localhost
replica_user	%
root	localhost
sakila	%
srr	%

- output of the above pt-archiver command

Started at 2024-10-08T10:02:00, ended at 2024-10-08T10:07:33

Source: D=sakila,p=...,t=rental,u=sakila

Dest: D=sakila,p=...,t=old\_rental,u=sakila

SELECT 15861

INSERT 15861

DELETE 15861

Action	Count	Time	Pct
commit	31724	311.6698	93.55
select	15862	6.5446	1.96
deleting	15861	6.3438	1.90
inserting	15861	5.2972	1.59
other	0	3.3111	0.99

- **This will remove the data from the source table and insert them in the target table**

# pt-summary

- Summarizes the status and configuration of a server
- Locate the pt-summary

```
find / -name pt-summary 2>/dev/null
```

```
usr/bin/pt-summary
```

- Usage

```
sudo /usr/bin/pt-summary | less
```

- Output

```
# Percona Toolkit System Summary Report #####
    Date | 2024-10-08 05:36:02 UTC (local TZ: +0530 +0530)
    Hostname | dev2-Latitude-E7270
    Uptime | 2:57, 2 users, load average: 0.89, 1.44, 1.61
    System | Dell Inc.; Latitude E7270; vNot Specified (Laptop)
    Service Tag | BFKTR72
    Platform | Linux
    Release | Ubuntu 22.04.5 LTS (jammy)
    Kernel | 6.8.0-45-generic
    Architecture | CPU = 64-bit, OS = 64-bit
    Threading | NPTL 2.35
    SELinux | No SELinux detected
    Virtualized | No virtualization detected

# Processor #####
    Processors | physical = 1, cores = 2, virtual = 4, hyperthreading = yes
    Speeds | 1x2898.822, 1x2900.040, 1x2914.082, 1x2986.415
    Models | 4xIntel(R) Core(TM) i5-6300U CPU @ 2.40GHz
    Caches | 4x3072 KB

    Designation      Configuration      Size  Associativity
    =====
=====
    L1 Cache        Enabled, Not Socketed, Level 1 64 kB  8-way Set-associative
    L1 Cache        Enabled, Not Socketed, Level 1 64 kB  8-way Set-associative
    L2 Cache        Enabled, Not Socketed, Level 2 512 kB  4-way Set-associative
    L3 Cache        Enabled, Not Socketed, Level 3 3 MB   12-way Set-associative
```

# Memory #####

Total | 15.4G

Free | 1.5G

Used | physical = 5.9G, swap allocated = 2.0G, swap used = 0.0, virtual = 5.9G

Shared | 1.1G

Buffers | 8.1G

Caches | 8.1G

Dirty | 1344 kB

UsedRSS | 13.7G

Swappiness | 60

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