MAATKIT

Open source database helper utilities

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- Maatkit is a collection of scripts which help with database administration and troubleshooting.

- `http://www.maatkit.org`

- The tools are divided into categories:

  - Replication

  - Archiving

  - Log analysis

  - Simplifying common tasks

MAATKIT REPLICATION TOOLS

- **mk-table-checksum**: Compute table checksums to verify slave/master synchronization.

- **mk-table-sync**: Determine data inconsistencies and synchronize slaves to their masters.

- **mk-slave-delay**: Delay a slave for safety, so that it runs behind the master.

- **mk-slave-prefetch**: Speeds up a slave by reading slightly ahead of the SQL thread and executing SELECT-converted statements of incoming UPDATES/DELETES, thereby pre-dosing the cache.

MAATKIT REPLICATION TOOLS

- **`mk-heartbeat`**: Check how far behind a slave is using a simple replicating heartbeat design.

- **`mk-slave-restart`**: Automatically restart a slave that has stopped due to an error. Intelligent operation.

- **`mk-slave-find`**: Simple tool to list all slaves attached to a given master.

- **`mk-slave-move`**: Move servers around in the replication hierarchy. Only really useful in large, advanced replication environments with many masters, slaves, grand-slaves and more.

LAB

1) Work with a partner and establish a replication relationship between your servers.

2) Create a simple database with one table. Make sure the table has a primary key, then add a record to it. Verify replication to slave.

3) Forcibly break replication by adding a record on the slave with a certain primary key value, then try adding the same record to the master. Replication will fail. Repair using manual technique.

4) Repeat replication failure, this time repair using Maatkit tools.

5) Try out some of the other tools: `mk-query-digest`, `mk-visual-explain`, `mk-show-grants`, `mk-error-log`

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