







# Database Components: MHA

Easy to install automated failover and slave promotion

### 1. What is it?

MHA (Master High Availability) is an automated master failover and slave promotion software package that drops in and runs on top of existing MySQL and MariaDB installations. It uses standard MySQL or MariaDB replication both asynchronous and semi-synchronous.

The main features are:

- · Automatic failover
- Short downtime
- MySQL-Replication consistency
- Easy installation
- No change to existing deployments

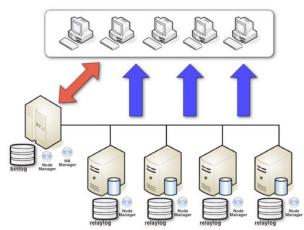
- Low total cost of ownership (no standby servers)
- Easier implementation of application level read/write splitting strategy.

## 2. How does it work?

MHA is composed of 2 elements: MHA manager and MHA node.

The MHA Manager can run on a separate server and can manage multiple master-slave clusters. It polls the nodes of the clusters and, on finding a non-functioning master it promotes the most up-to-date slave to be the new master and then redirects all the other slaves to it. The failover is transparent to the application.





An MHA node runs on each MySQL server and facilitates failover with scripts that monitor the parsing & purging of logs.

MHA support is available as an optional extra in SkySQL's Advanced Support Subscription.

## 3. When to use it?

- To combine high availability with horizontal (read) scalability
- When a master-slave architecture already exists
- · When low cost high-availability is required
- When the existing deployment cannot be changed
- When the application can be adapted to read/write splitting

### 4. Resources

- Download MHA www.mariadb.com
- MHA wiki: <u>code.google.com/p/mysql-master-ha/wiki/TableOfContents?tm=6</u>