Zmanda Back-up and Recovery

1. What is it?

The SkySQL Backup and Recovery Manager is a backup and recovery solution for the MariaDB and MySQL database powered by Zmanda, the industry’s leading provider of enterprise and cloud-based backup and disaster recovery solutions.

This product provides easy-to-use, highly flexible, robust backup and recovery solutions for MySQL and MariaDB databases.

The main features are:

- Flexible backup plans; full, incremental, raw or logical
- Continuous data protection
- Backup live without impacting applications and users
- One-click point-in-time recovery
- Centralized Global Backup Management
- Automated alerts and reports
2. How does it work?

Zmanda (ZRM) architecture is modular and pluggable, which simplifies customization and addition of new features.

The ZRM scheduler starts all backup processes. Depending on the MySQL server, storage engine, and underlying storage technology (for example, whether snapshots are available), ZRM intelligently decides what kind of backup to perform. The primary consideration is impact on the database. ZRM bases its scheduling decisions on the following criteria:

- Are snapshots possible?
- Is a raw backup possible?
- Is replication available?

If all other options are not feasible or, for example, if snapshot fails because there is not enough space in the reserved area, ZRM performs a logical backup.

It is always possible to override ZRM’s recommendations. For example, instead of using a snapshot you can force ZRM to perform a logical backup.

ZRM will index all backups to track the metadata required for a successful restore. Every day ZRM checks if any backups are older than the retention policy (the number of days or months that backups should be kept). The expired backups are purged from the ZRM backup index and removed from the disk. A reporting engine provides customizable reports in either text or HTML format. For ZRM installed on Linux or Solaris reports can be distributed by e-mail or by RSS feed. For ZRM installed on Windows all backup information is logged in a Windows event log.
A console, the Zmanda Management Console (ZMC), is available as browser-based user interface for setting up and managing all backup and recovery activities.

3. Why use it?

- Maximize data security
- Easily deploy a backup manager solution
- Control your data without a vendor lock-in
- Centralize the Global Backup Management

4. Resources

- Zmanda blog: [www.zmanda.com/blogs](http://www.zmanda.com/blogs)
- MariaDB whitepaper on HA solutions: [www.mariadb.com](http://www.mariadb.com)