

MySQLOnline Backup and ZRM for MySQL

Paddy Sreenivasan (paddy@zmanda.com)

<http://www.zmanda.com>

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- Consistent full backups between storage engines and within a storage engine
- Storage engine agnostic
- Non-Blocking for DML and blocking for DDL statements
- Backup archive format designed to work for incremental and differential backups (support will be added in future release)
- Local as well as remote backups
- Backups to filesystem (Disk, NAS storage) or tapes

MySQL Online Backup - Consistency



- Backup image will contain data from all committed transactions
- Backup image will contain data from all completed statements
- Referential integrity will be maintained between tables backed up in a single command

MySQL Online Backup - Interfaces



- Interface within the MySQL server to “Core backup”
- Backup interfaces in Storage engine interface
 - Setting/Resetting the backup mode; list if tables are passed as parameters
 - Perform backup
- SQL statement interface
 - BACKUP
 - RESTORE
- External interface – XBSA (future release)

- Zmanda recovery manager supports all current MySQL backup methods and will support Online Backup when it is available.
- It will provide
 - Incremental backups
 - Backup compression, encryption
 - Backup monitoring and notification
 - Backup reporting
 - Custom plugin
- Home page : <http://www.zmanda.com/backup-mysql.html>
- Wiki: <http://mysqlbackup.zmanda.com>

Summary of MySQL Backup methods



Method	No Locking	DDL	Snapshot	Remote	Free	All Engines	All Tables	Text File	Recover Corruption
SELECT . . INTO OUTFILE	Engine Dependent	No	No	Yes	Yes	Yes	No	Yes	Yes
mysqldump	No	Option	No	Yes	Yes	Yes	Yes	Yes	Yes
Replication	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No
OS level copy	No	Yes	No	No	Yes	No	Yes	No	Yes
mysqlhotcopy	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes
InnoDB HotBackup	Yes	Yes	Yes	No	No	No	Yes	No	Yes
MySQL Online Backup	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

MySQL Online Backup – More information



- MySQL forge: <http://forge.mysql.com/wiki/OnlineBackup>
- Source code : <http://mysql.bkbits.com/> (mysql-5.1-backup-prototype)
- Current status
 - Initial implementation of ARCHIVE storage engine is available