

MySQL Replication

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MySQL at Sonic.net

- Around 20 instances running.
- Replication is used for data backup and data distribution.
- Various Linux flavors.
- Commodity hardware.
- Back end to PowerDNS.

What is replication?

- Master writes updates to binary log.
- Slave reads and executes binary log.
- Asynchronous.
- Slave waits for master to send event.
- Selective replication.

Why replication?

- Redundancy.
- Live Backups.
- Distribute load.

Replication setup.

- ACLs
- Master and Slave configuration.
- Initial data population.
- Start replication.

Initial Data Population.

- FLUSH TABLES WITH READ LOCK;
- InnoDB Hot Backup.
- killall mysqld.
- Existing Slave.

Cloning an existing slave.

- STOP SLAVE;
- SHOW SLAVE STATUS;
- tar cvf mysql.tar /path/to/mysql
- CHANGE MASTER TO ... ;
- START SLAVE;
- SHOW PROCESSLIST;

Types of Replication.

- Master with single slave.
- Master with multiple slaves.
- Dual master.
- Multi-Master (ring).
- Master / Slave chain.

Replication Files.

- Relay log.
- Relay index.
- Master info.
- Relay log info.

Filtering.

- `--replicate-do-db=db_name`
- `--replicate-wild-do-table=db_name.%`
- `--replicate-do-table=db_name.tbl_name`
- `--replicate-ignore-db=db_name`
- `--replicate-ignore-table=db_name.tbl_name`
- `--replicate-wild-ignore-table=
db_name.tbl_name`

Monitoring and Stats.

- `check_replicaiton.pl`
 - <http://opensource.fotango.com/svn/trunk/systems>
- `SHOW SLAVE STATUS;`
- `SHOW STATUS;`

Questions and Answers