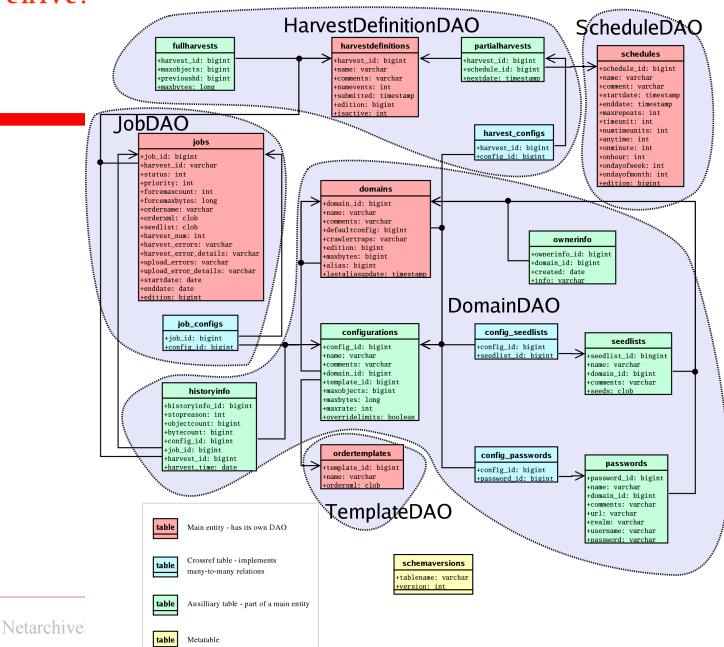
Database

Lars Clausen Netarkivet

Physical layout of harvest definition database



DAOs





Scheduling

- Snapshot harvest hard on scheduler
- Tweaks have improved performance
- Complex algorithm partly to blame
 - Tries to make jobs with similar-size domains
 - Guesses based on prior harvests
 - Allows for sudden jumps
- Likely to become a plug-in



Derby vs. MySQL vs. ...

- We currently have plugins for MySQL and Derby (embedded and server)
- No tests yet of relative speed
- SQL tweaking has solved major bottlenecks
- Code should work with most SQL DBs
- Indexes may work differently in other DBs

DBSpecifics plug-in

static DBSpecifics getInstance(); String getDriverClassName(); void dropJobConfigsTmpTable(Connection c, String tableName); String getJobConfigsTmpTable(Connection c); void backupDatabase(File backupDir); void shutdownDatabase(); void updateTable(String tableName, int toVersion);



Creation scripts

- Must be a way to create the DB
- Typically an SQL script
- Initial DB must include one template
 - Setting: defaultOrderXml



Updating existing DBs

- Not currently in the code
- Plug-in has stub for update
- Updates on a table-by-table basis
- Version of each table kept in DB



Scheduling

- Scheduler is pressed at start of snapshot
- Tweaks have improved performance
- Complex algorithm partly to blame
 - Tries to make jobs with similar-size domains
 - Guesses based on prior harvests
 - Allows for sudden jumps
- Likely to become a plug-in