Firebird replication with CopyCat

CopyCat Replication Engine

http://www.copycat.fr

Jonathan Neve
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About myself

- Jonathan Neve, Microtec Communications
- Software development company in France
- Using Firebird since IB 5
- Developer of a database replication solution, CopyCat, since 2004
Firebird replication

- No built-in replication for Firebird
- Various third-party offerings
- Our solution: CopyCat
  - CopyCat Developer
  - CopyCat LiveMirror
  - Coming soon: CopyCat DataMerge
CopyCat Developer

- Delphi component library

Main features:

- Multi-database replication
  - Supports Firebird, Interbase, MySQL, Microsoft SQL, Oracle, PostgreSQL, SQLite and NexusDB
  - Can mix and match between all combinations

- Easy to configure and personalize

- Flexible conflict management
CopyCat Developer

- Reliable and secure replication using various transport layers:
  - XMLRPC
  - RTC (http://www.realthinclient.com)
  - DataSnap
- Server-side backends for Delphi, PHP, Java and objective-c
New in 2014

- Support for new database types:
  - Oracle
  - PostgreSQL
  - NexusDB
- FireMonkey support (iOS / Android)
- Lots of minor improvements and bug fixes
Case study

- Stock / quality management system for apple orchards
- Delphi FireMonkey application running on Android tablets

Specifications:
- Stock information and photos taken on tablets and stored in SQLite database on the device
- General information (lists of apple varieties, producers, etc) typed in and stored on server in FB database
Case study

- General information comes down from the server to the tablets
- Information about stock replicates up from tablets to server
- Some tables are replicated both ways and so conflicts can potentially occur
- Replication takes place using DataSnap, thus enabling over-the-wire compression and/or encryption
Demo !
Coming in 2015

- FreePascal / Lazarus support
- Meta-data replication
- Database versioning system
- Delphi XE7 support
- Lots of new features!
CopyCat LiveMirror

- New product based on the CopyCat replication engine
- Released in 2014
- Designed specifically for setting up hot backups of Firebird DBs for fail-over or load-balancing
  - One-way replication
  - High frequency
  - Reliable up-to-minute backups
  - Very easy to setup and administer
LiveMirror demo
Coming in 2015

• Linux support FPC (and maybe MacOS)
• Meta-data replication
• Support for other database types
• Advanced replication monitoring:
  • Automated, customizable, periodic checks
  • Configurable alerts and error reporting
CopyCat DataMerge

- New product to be released in 2015
- Fully-featured database replication tool for DBAs
  - Bidirectional replication
  - Simple replication setup and administration
  - Customizable conflict management
  - Replication monitoring
- Support for all database types handled by CopyCat
Q & A

If you have any questions

... now's the time to ask!!
Thanks!

To thank you for attending this talk, we're offering you a 15% discount on all our products!

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