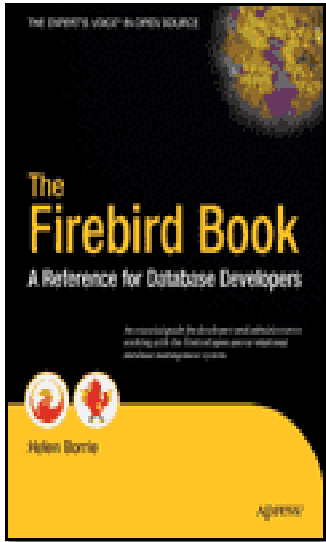


The Firebird Book by Helen Borrie

reviewed by Ray Hall

I was mildly surprised at a recent DG meeting to see how few people admitted to using InterBase or Firebird. It is true that Borland have played fast and loose with both, and that in the past there was inadequate documentation. This last is now emphatically not true - Helen Borrie is an important member of the Firebird team and, unlike many software experts, she writes well. I do not have the expertise to give a thoroughgoing review of this book; this note is simply to flag up availability and to recommend it.

For the record, Firebird 1.1 is the linear, cleaned up, descendant of the code base that was initially common to InterBase and Firebird. It is a perfectly good database in its own right and compatible with IB6.1. Firebird 1.5 has been totally rewritten by the IBPhoenix development team, and can be used as an embedded server on Windows (both versions OK for Linux). The Firebird SQL language adheres closely to SQL-92 and FB1.5 follows the SQL-99 standard as closely as possible.



This is totally open source (i.e. free!), database size is generally system constrained (to a theoretical limit of 7TB), and moving databases between platforms (Windows many flavours of Unix &c) is a simple backup and restore.

The InterBase family started when SQL databases were otherwise rare and has for a long time contained features that other databases trumpet as innovations. So despite a small footprint (considerably less than MS Word as I type), it is feature rich, and this makes for a large book. Its 40 chapters account for 880 pages: appendixes, very detailed index and prefatory matter take the page count over 1100; not unnaturally it weighs in at 1.8kg

Well now, it is undoubtedly easier to write a large book than to write a small one, but there seems to be little flab here. The few sections I have needed to consult intensively are sensibly written and, most importantly, contain good SQL examples which are different in each case.

In the past I have been annoyed when a single obscure example in InterBase Help is used to “clarify” several features. There is no such complaint here. I recently ran into problems about the way in which Union clauses combined and ordered the output. My previously available sources failed to clarify what happened in detail, but the Firebird Book sorted this out, boosting my confidence in the process. And so on. This is good value for money.

The Firebird Book: a reference for Database Developers, Helen Borrie ISBN 1-59059-279-4. Available from <http://www.ibphoenix.com> at £45 including European p&p (add another £5 for rest of the world). Code examples are available from www.apress.com.

[http://www.amazon.co.uk/exec/obidos/ASIN/1590592794/qid=1142934217/sr=2-1/ref=sr_2_3_1/026-1649628-5756451 will buy it for you for £24.75 from Amazon via our web site. They are also offering it as a package with Xavier Pacheco’s Delphi.NET Developer’s RS Guide at £53.12 for the two. Here’s the dilemma – IBPhoenix say “Buying this book directly from IBPhoenix rather than from Amazon etc benefits the Firebird project, as money made on sales is used to fund further development of Firebird”. The choice is yours! Ed.]

Table of Contents

Introduction to Firebird

Part One: Firebird Boot Camp

- Chapter 1: Installation
- Chapter 2: Network Setup
- Chapter 3: Configuring Firebird
- Chapter 4: Operating Basics

Part Two: Understanding Client/Server

- Chapter 5: Introduction to Client/server Architecture
- Chapter 6: Firebird Server
- Chapter 7: Firebird clients

Part Three: Data Types and Domains

- Chapter 8: About Firebird Data Types
- Chapter 9: Number types
- Chapter 10: Date and Time Types
- Chapter 11: Character Types
- Chapter 12: BLOBs and Arrays
- Chapter 13: Domains

Part Four: A Firebird Database and its Objects

- Chapter 14: From Drawing board to Database
- Chapter 15: Creating and Maintaining a Database
- Chapter 16: Tables
- Chapter 17: Referential Integrity
- Chapter 18: Indexes

Part Five: Firebird SQL

- Chapter 19: Types of SQL Statements
- Chapter 20: Queries
- Chapter 21: Expressions and Predicates
- Chapter 22: Querying Multiple Tables
- Chapter 23: Ordered and Aggregated Sets
- Chapter 24: Views and Other Derived Tables

Part Six: Transactions and Concurrency

- Chapter 25: Overview of Firebird Transactions
- Chapter 26: Record Versions, Concurrency & Isolation Levels
- Chapter 27: Programming with Transactions

Part Seven: Programming on the Server

- Chapter 28: Introduction to Firebird Programming
- Chapter 29: Developing PSQL Modules
- Chapter 30: Stored Procedures
- Chapter 31: Triggers
- Chapter 32: Error Trapping and Handling
- Chapter 33: Events
- Chapter 34: External Code Modules

Part Eight: Security

- Chapter 35: Securing the Operating Environment
- Chapter 36: Server Access Protection
- Chapter 37: Database-level Security

Part Nine: Tools

- Introduction: Summary of Firebird's Command-line Tools
- Chapter 38: Interactive SQL Utility (isql)
- Chapter 39: Database Backup and Restore (gbak)
- Chapter 40: Housekeeping Tool (gfix)
- Chapter 41: Server Statistics Tools

Glossary

Appendices

- Appendix I: SQL Statements Summary
- Appendix II: Migrating to Firebird
- Appendix III: Implementing Auto-incrementing Keys
- Appendix IV: Solving Network Problems
- Appendix V: Application Interfaces
- Appendix VI: Database Repair How-To
- Appendix VII: Administration Tools
- Appendix VIII: Sample Databases
- Appendix IX: Character Sets and Collations
- Appendix X: System Tables
- Appendix XI: Error Codes
- Appendix XII: Reserved Words
- Appendix XIII: Firebird Limits

About Helen Borrie

Helen Borrie is a database and application developer, a member of the Firebird project team, and a former journalist who doubles as a technical writer. She is a frequent contributor to support lists for Firebird, InterBase, and Delphi database programming.