Foreword

When I first began coding SQLite in the spring of 2000, I never imagined that it would be so enthusiastically received by the programming community. Today, there are millions and millions of copies of SQLite running unnoticed inside computers and gadgets made by hundreds of companies from around the world. You have probably used SQLite before without realizing it. SQLite might be inside your new cell phone or MP3 player or in the set-top box from your cable company. At least one copy of SQLite is probably found on your home computer; it comes built in on Apple's Mac OS X and on most versions of Linux, and it gets added to Windows when you install any of dozens of third-party software titles. SQLite backs many websites thanks in part to its inclusion in the PHP5 programming language. And SQLite is also known to be used in aircraft avionics, modeling and simulation programs, industrial controllers, smart cards, decision-support packages, and medical information systems. Since there are no reporting requirements on the use of SQLite, there are without doubt countless other deployments that are unknown to me.

Much credit for the popularity of SQLite belongs to Michael Owens. Mike's articles on SQLite in The Linux Journal (June 2003) and in The C/C++ Users Journal (March 2004) introduced SQLite to countless programmers. The traffic at the SQLite website jumped noticeably after each of these articles appeared. It is good to see Mike apply his expository talents in a larger work: the book you now peruse. I am sure you will not be disappointed. This volume contains everything you are likely to ever need to know about SQLite. You will do well to keep it within arm's reach.

SQLite is free software. *Free* as in *freedom*. Though I am its architect and principal coder, SQLite is not my program. SQLite does not belong to anyone. It is not covered by copyright. Everyone who has ever contributed code to the SQLite project has signed an affidavit releasing their contributions to the public domain and I keep the originals to those affidavits in the firesafe at my office. I have also taken great care to ensure that no patented algorithms are used in SQLite. These precautions mean that you are free to use SQLite in any way you wish without having to pay royalties or license fees or abide by any other restrictions.

SQLite continues to improve and advance. But the other SQLite developers and I are committed to maintaining its core values. We will keep the code small—never exceeding 250KB for the core library. We will maintain backward compatibility both in the published API and the database file format. And we will continue to work to make sure SQLite is thoroughly tested and as bug-free as possible. We want you to always be able to drop newer versions of SQLite into your older programs, in order to take advantage of the latest features and optimizations, with little or no code change on your part and without having to do any additional debugging. We did break backward compatibility on the transition from version 2 to version 3 in 2004, but since then we have achieved all of these goals and plan to continue doing so into the future. There are no plans for a SQLite version 4.

I hope that you find SQLite to be useful. On behalf of all the contributors to SQLite, I charge you to use it well: make good and beautiful things that are fast, reliable, and simple to use. Seek forgiveness for yourself and forgive others. And since you have received SQLite for free, please give something for free to someone else in return. Volunteer in your community, contribute to some other software project, or find some other way to pay the debt forward.

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