

Foreword

What a difference two years make. When the first edition of this book came out in 2005, DB2 Universal Database® (UDB) for Linux®, UNIX®, and Windows® version 8.2 was the hot new entry on the database management scene. As this book goes to press, DB2 9.5 is making its debut. While this latest DB2 release builds on the new features introduced in 8.2, it also continues along the new direction established by DB2 9: native storage and management of XML by the same engine that manages traditional relational data.

Why store and manage relational and XML data in the same data server, when specialized management systems exist for both? That's one of the things you'll learn in this book, of course, but here's the high-level view. As a hybrid data server, DB2 9 makes possible combinations of relational and XML data that weren't previously feasible. It also lets companies make the most of the skills of their existing employees. SQL experts can query both relational and XML data with an SQL statement. XQuery experts can query both XML and relational data with an XML query. And both relational and XML data benefit from DB2's backup and recovery, optimization, scalability, and high availability features.

Certainly no newcomer to the IT landscape, XML is a given at most companies today. Why? Because as a flexible, self-describing language, XML is a sound basis for information exchange with customers, partners, and (in certain industries) regulators. It's also the foundation that's enabling more flexibility in IT architecture (namely service-oriented architecture). And it's one of the key enabling technologies behind Web 2.0. That's the high-level view. This book's authors provide a much more thorough explanation of XML's importance in IT systems in Chapter 2, DB2 at a Glance: The Big Picture, and Chapter 10, Mastering the DB2 pureXML™ Support.

DB2 9.5 addresses both changes in the nature of business over the past two years as well as changes that are poised to affect businesses for years to come. XML falls into both categories. But XML isn't the only recent change DB2 9.5 addresses.

A seemingly endless stream of high-profile data breaches has put information security front and center in the public's mind—and it certainly should be front and center in the minds of companies that want to sell to this public. Not only do security controls have to be in place, but many companies have to be able to show in granular detail which employees have access to (and have accessed) what information. Chapter 11, Implementing Security, covers the DB2 security model in great detail, including detailed instructions for understanding and implementing Label-Based Access Control (new in DB2 9), which enables row- and column-level security.

When new business requirements come onto the scene, old concerns rarely go away. In fact, they sometimes become more important than ever. As companies look to become more efficient in every sense, they're placing more demands on data servers and the people who support them. For that reason, performance is as important as it has ever been. Chapter 17, Database Perform-

mance Considerations, covers DB2 tuning considerations from configuration, to proper SQL, to workload management, and other considerations. It also explains some of DB2's self-managing and self-tuning features that take some of the burden of performance tuning off the DBA's back.

Though thoroughly updated to reflect the changes in DB2 in the last two years, in some important ways, the second edition of this book isn't vastly different from the first. Readers loved the first edition of this book for its step-by-step approach to clarifying complex topics, its liberal use of screenshots and diagrams, and the completeness of its coverage, which appealed to novices and experts alike. Browsing the pages of this second edition, it's clear that the authors delivered just what their readers want: more of the same, updated to cover what's current today and what's coming next.

—Kim Moutsos

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