Contents

About the Authors iii

Preface *by Surekha Parekh* vii

Why Read This Book? viii

Introduction *by Roger Miller* 1

DB2 10 for z/OS: A Smarter Database for a Smarter Planet
by Julian Stuhler 7
Executive Summary 7
Section I: Introduction 9
Section II: DB2 10: A Smarter Database 10
Efficiency 10
Resilience 34
Growth 41
Business Analytics 47
Section III: Upgrading to DB2 10 51
Skip Migration 51
DB2 V8 Support 53
Section IV: DB2 10 Customer Case Studies 55
Case Study #1: Banco do Brasil 55
Case Study #2: BMW Group 56
Section V: Summary 58
Appendix: DB2 9 Review 59
Notes 65

DB2 10 for z/OS: CPU Savings . . . Right Out of the Box

by Dave Beulke 67

Executive Summary 67

Section I: Performance Availability 70

Many Performance Enhancements 70

New and Improved Online Schema Changes 75

INCLUDE Non-Unique Columns Within a Unique Index 77

New Hash Space and Access Method 77

DB2 Catalog Enhancements 78

Section II: Scalability, Simplification, Security 79

Full 64-bit Runtime Environment Exploited 79

Plan Stability: Package Preservation 79

RUNSTATS Improvements and Auto Stats 80

Improved and Finer-Grained Access Control 80

Section III: Application Enablement 82

pureXML Enhancements 82

Temporal Queries and Their Business Advantages 84

Timestamp, TIME ZONE, and Other Data Type Enhancements 86

Access to Currently Committed Data 87

SQL Compatibility Improvements 88

Section IV: Data Warehousing 91

Support for Temporal Tables and Versioning 91

OLAP Functionality Built Directly into DB2 91

Advanced Business Analytics 92

Section V: Reduced Total Cost of Ownership 93

Useful URLs 94