# Brief Contents

## Part 1 Architecture

1. Where are my keys?  
2. "Yes, we are all individuals"  
   A look at uniqueness in the world of SQL  
3. Architectural growth pains  
4. Characteristics of a great relational database  
5. Storage design considerations  
6. Generalization: the key to a well-designed schema

## Part 2 Database Administration

7. Increasing availability through testing  
8. Page restores  
9. Capacity planning  
10. Discovering your servers with PowerShell and SMO  
11. Will the real Mr. Smith please stand up?  
12. Build your own SQL Server 2008 performance dashboard  
13. SQL Server cost recovery  
14. Best practice compliance with Policy-Based Management  
15. Using SQL Server Management Studio to the fullest  
16. Multiserver management and Utility Explorer—best tools for the DBA
17  ▪ Top 10 SQL Server admin student misconceptions    157
18  ▪ High availability of SQL Server in the context of Service Level Agreements  167

PART 3 DATABASE DEVELOPMENT ........................................ 175

19  ▪ T-SQL: bad habits to kick    177
20  ▪ Death by UDF    185
21  ▪ Using regular expressions in SSMS    195
22  ▪ SQL Server Denali: what's coming next in T-SQL    200
23  ▪ Creating your own data type    211
24  ▪ Extracting data with regular expressions    223
25  ▪ Relational division    234
26  ▪ SQL FILESTREAM: to BLOB or not to BLOB    245
27  ▪ Writing unit tests for Transact-SQL    255
28  ▪ Getting asynchronous with Service Broker    267
29  ▪ Effective use of HierarchyId    278
30  ▪ Let Service Broker help you scale your application    287

PART 4 PERFORMANCE TUNING AND OPTIMIZATION .... 297

31  ▪ Hardware 201: selecting and sizing database server hardware    299
32  ▪ Parameter sniffing: your best friend...except when it isn’t    309
33  ▪ Investigating the plan cache    320
34  ▪ What are you waiting for? An introduction to waits and queues    331
35  ▪ You see sets, and I see loops    343
36  ▪ Performance-tuning the transaction log for OLTP workloads    353
37  ▪ Strategies for unraveling tangled code    362
38  ▪ Using PAL to analyze SQL Server performance    374
39  ▪ Tuning JDBC for SQL Server    384

PART 5 BUSINESS INTELLIGENCE ................................. 395

40  ▪ Creating a formal Reporting Services report part library    397