

# Introduction to SQL Server 2008 System Administration

What You Will Learn.....	1
SQL Server 2008 Components .....	2
Planning Your SQL Server Installation .....	4
Assessing Your Needs .....	4
Choosing a SQL Server Edition.....	5
Operating System and Other Software Requirements .....	6
SQL Server 2008 Instance Configuration.....	17
Default Instance .....	17
Named Instance.....	17
Instance ID .....	18
Multiple Instances.....	18
Default versus Named Instance .....	19
Service Packs, Upgrades and SQL Server Instances .....	19
File System Considerations.....	19
Protocols .....	20
Operating System Version Considerations .....	20
Installing SQL Server on a Domain Controller Considerations .....	21
Installing SQL Server 2008 .....	22
To Install SQL Server 2008 .....	22
Post-Installation Considerations .....	33
Other URLs of Interest.....	33
Troubleshooting an Unsuccessful Installation .....	34
The Error Log Files.....	35
Using the SQL Server Error Log and Windows Server Application Log Files.....	36
AdventureWorks Sample Databases.....	37
SQL Server 2008 Sample Databases Installation Prerequisites.....	37
Installing the Prerequisites on an Existing Installation of SQL Server .....	38
Installing the Prerequisites on a New Installation of SQL Server .....	40
How to Uninstall an Instance of SQL Server 2008.....	41
Exercise 1: Installing an Instance of SQL Server 2008 .....	42
Controlling (Starting and Stopping) SQL Server Services .....	43
Using the Windows Services Snap-In.....	43
Using the SQL Server Configuration Manager to Control the Services.....	45
Using the Windows NET Commands.....	46
Shutting Down the Server.....	48

Using the SQL Server Management Studio.....	48
Using the sqlservr Command for Debugging .....	49
Issuing the SHUTDOWN Command from a Query Window .....	52
Controlling the Server Instance Using the SQL Server Management Studio.....	52
Using the SQL Server Management Studio.....	53
Connecting to the Server.....	53
Navigating SQL Server Management Studio .....	56
Running Queries and Stored Procedures in SQL Server Management Studio.....	57
Registering a SQL Server .....	59
Exercise 2: Controlling and Connecting to an Instance of SQL Server 2008 .....	68
Configuring Network Protocols.....	69
SQL Server 2008 Supported Protocols .....	69
Configuring Server Protocols .....	70
Configuring Client Protocols .....	70
SQL Server Native Client Protocols.....	72
Configuring SQL Server 2008.....	73
Using SQL Server Management Studio.....	73
Running the sp_configure Stored Procedure .....	80
The Activity Monitor .....	83
Monitoring System Performance Using the Windows Performance Monitor.....	86
Using the SQL Server Profiler.....	88
Exercise 3: Configuring SQL Server Options .....	89
SQL Server 2008 Security: Overview .....	90
Creating and Managing SQL Server Logins (Using SQL Server Management Studio) .....	98
Setting Up Windows Domain Users and Groups .....	98
Viewing SQL Server Logins in SQL Server Management Studio .....	100
Creating SQL Server Logins.....	100
Viewing and Modifying SQL Server Login Properties .....	103
Granting Database Access—The Database User Concept.....	103
Deleting a SQL Server Login .....	106
Deleting a Database User from the Database .....	107
Exercise 4: Managing SQL Server Logins .....	108
SQL Server Roles .....	109
Server Roles .....	109
Database Roles.....	111
Exercise 5: Working with Roles .....	119

Managing Permissions .....	120
Securables Hierarchy and Scope.....	121
Permissions (Database Engine Specific) .....	122
Assigning Permissions .....	123
Understanding Ownership Chaining.....	128
SQL Server 2008 Policy-Based Management .....	129
Exercise 6: Managing Permissions .....	132
Using Transact-SQL .....	133
Transact-SQL Syntax Conventions.....	133
CREATE LOGIN Statement.....	134
Modifying Login Properties (ALTER LOGIN).....	135
Creating Database Users (CREATE USER).....	138
Removing Database Users (DROP USER).....	139
Granting Permissions (GRANT).....	140
Dropping a Login (DROP LOGIN) .....	142
Finding User and Permission Information.....	142
Exercise 7: Using Transact-SQL to Manage Security .....	147
Appendix A: New Features.....	148
Appendix B: Execute Context/Execute As .....	151
Appendix C: Solutions to Exercises .....	152