SQL 2012 Admin, Part 2 of 5: Automating, Management, and Config

page 1

Meet the expert: Chris Bell, MCITP, is an 18-year SQL Server veteran for both business intelligence and application development providing solutions for businesses, organizations, and individuals. He is the founder and CEO of WaterOx Consulting, Inc., a provider of remote SQL Server consulting and services. Chris is also the founder and current President of the Washington DC chapter of PASS and a member of the Board of Directors for CPCUG. Chris also frequently attends and presents at PASS events around the country, sharing his passion for all things SQL Server. In 2012, Chris was one of 5 finalists in the world for Red Gate’s Exceptional DBA Award.

Prerequisites: This course assumes that students have working experience with SQL Server 2005 or 2008; basic relational database concepts (e.g., tables, queries, and indexing); general knowledge of XML, Transact-SQL, and a fundamental understanding of networking and security concepts.

Runtime: 01:32:54

Course description: During this course we will look into various methods to automate processes in SQL Server. We will go through configuring Database Mail so that you, as the DBA, can receive automated alerts from the server when something goes wrong. We'll set up Operators to receive general alerts, custom alerts and then we'll create, based on performance conditions, queries that run for long periods of time. We'll review the DBCC commands that are critical to ensuring database integrity and providing valuable insight into what's going on inside the SQL Server system. Then we will take advantage of the new SQL 2012 AlwaysOn Availability Group ability to let us offload some maintenance tasks from our primary servers to secondary servers. Next we are going to look at File Groups and show how we can use them to manage our data files and potentially improve the performance of queries and requests to SQL databases. Next we will create a new SQL 2012 Contained database and move it to a new server showing you just how easy it is to relocate databases using this feature. We will finish up by going over a large number of configuration options available to us in SQL Server. We will cover general and advanced settings and detail how each affects SQL Server.

Course outline:

Database Mail
- Introduction
- Database Mail
- Database Mail - Reliability
- Database Mail - Security
- Demo: Database Mail Config
- Demo: Config Using Scripts
- Summary

Operators and Alerts
- Introduction
- Database Operators
- Demo: Creating an Operator
- Alerts - Types
- Demo: Alerts
- Demo: Longest Transaction Alert
- Summary

DBCC Commands
- Introduction
- Automating DBCC CHECKDB
- Demo: Automating CHECKDB
- Summary

Availability Group Backups
- Introduction
- Automating Backups
- Backups - Always On
- Demo: Automating Backups
- Demo: Transaction Logs
- Demo: Testing Backups
- Demo: Transaction Testing
- Summary

Using File Groups
- Introduction
- File Groups
- Demo: File Groups
- Demo: File Group Index
- Summary

Contained Databases
- Introduction
- Contained Databases
- Contained Databases - Pros
- Contained Databases - Cons
- Demo: Contained Databases
- Demo: Logging In
- Demo: Restoring a Database
- Summary

Configuration Options
- Introduction
- SQL 2012 Configuration Options
- Demo: Advanced Options
- SQL 2012 Configuration Options (2)
- Summary