WorkshopPLUS – SQL Server: Hands-on Troubleshooting

WorkshopPLUS

Duration: 3 Day   [Remote / Onsite]
Difficulty Level: 300 - Advanced

Description

Learn methods to troubleshoot, identify and solve issues on a Microsoft Azure VM (IaaS) or on-premises SQL Server instance. Through lecture, white-board discussions, and scenario-based instruction, cover approaches for troubleshooting problems and explores the tools available to monitor, troubleshoot and identify root causes. Review scenarios designed to provide participants with expertise, tools and hands-on experience to help troubleshoot specific SQL Server issues

Objectives

- Understand the tools that can help troubleshoot SQL Server.
- Understand how to approach different troubleshooting scenarios.
- Identify and correct common administrative problems.
- Collect and analyze performance data to form an educated hypothesis about reasons for SQL Server issues.
- Identify action plans to troubleshoot different components and areas of SQL Server.
- Implement action plan/fixes and confirm the changes made repair the issue.

Outcomes

- Gain a comprehensive understanding of the features and capabilities of SQL Server
- Learn reliable methods of SQL Server administration.

Methodology

Learn by example - Learn with presentations, demonstrations and group discussion.

Requirements

Participants
- Database Administrators
- Data Engineers
- Business Analysts

Skill Requirements - Recommended
- General experience with data
- Basic concepts and knowledge of SQL Server

Delivery Requirements
- Computer with Windows 10 or later, audio equipment, internet access.
- Modern browser and at least 1-Mbps bandwidth per participant.
- Microsoft/Windows Live ID to connect to the virtual environment.
- Microsoft Teams for remote delivery.

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Delivery Outline

The scope of this engagement will be agreed based on your specific needs. Final agenda will be determined in the scoping call.

Delivery Details

Performance Troubleshooting

A wide variety of common performance issues will be encountered in the class. Students can expect to learn the tools and methods for identifying poorly performing queries. Once the problem statements have been identified, students will learn execution plan analysis and techniques for query optimization. Common scenarios the students will encounter includes (but is not limited to):

- Parameter sniffing
- Missing indexes
- Cursor analysis
- User-defined function rewrites
- Cardinality mis-estimations
- Index design
- Blocking

Administration Troubleshooting

Troubleshooting and solving common SQL Server administration issues is at the core of what most Database Administrators do daily. This class explores several common SQL Server Administration issues. Once the administrative issues have been identified, students will learn the tips and tricks for solving them quickly and effectively. Common administrative scenarios the students will encounter includes (but is not limited to):

- Point-in-time database restores
- Perfmon analysis
- Database space savings
- Encryption
- Security issues
- Solving Corruption
- Configuration problems
- Connectivity issue

For more information: Contact your Microsoft Representative for more details.

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