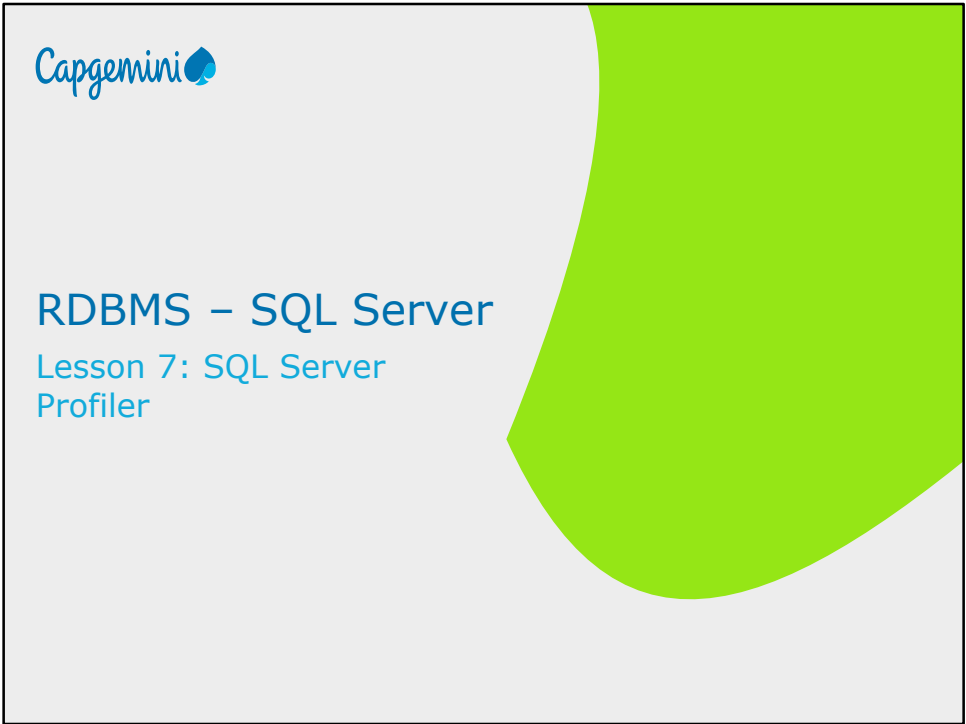


Instructor Notes:

Add instructor notes here.



RDBMS – SQL Server
Lesson 7: SQL Server
Profiler

Instructor Notes:

Explain the lesson coverage

Lesson Objectives

➤ In this lesson, you will learn:

- SQL Server Profiler
- Working with SQL Server Profiler in SQL Server Management Studio



Instructor Notes:

SQL Server Profiler



- Every DBA require tools to analyze the activity in the SQL Server database. Whether it's to troubleshoot a possible application or database issue or simply to monitor the overall health of their system.
- SQL Server Profiler is a tool that provides an user interface to create and manage traces and analyze and replay trace results.
- Events are saved in a trace file that can later be analyzed or used to replay a specific series of steps when trying to diagnose a problem.
- It gives you the ability to monitor everything that is going on inside your SQL Server instance.

What is trigger?

A trigger is a special type of stored procedure that is fired on an event-driven basis rather than by a direct call.

You can set up a trigger to fire when a data modification statement is issued—that is, an INSERT, UPDATE, or DELETE statement. SQL Server 2008 provides two types of triggers: *after triggers* and *instead-of triggers*

- By default triggers are after trigger i.e. executed after the event and NOT before
- Views have a special type of Triggers called instead of triggers
- You can define multiple after triggers on a table for each event, and each trigger can invoke many stored procedures as well as carry out many different actions based on the values of a given column of data.

However, you have only a minimum amount of control over the order in which triggers are fired on the same table.

- No trigger can be written for select statement because select does not modify table data

Instructor Notes:

SQL Server Profiler (Contd...)



- SQL Server Profiler is used for activities such as:
 - Stepping through problem queries to find the cause of the problem.
 - Finding and diagnosing slow-running queries.
 - Capturing the series of Transact-SQL statements that lead to a problem. The saved trace can then be used to replicate the problem on a test server where the problem can be diagnosed.
 - Monitoring the performance of SQL Server to tune workloads.
 - Correlating performance counters to diagnose problems.
 - SQL Server Profiler also supports auditing the actions performed on instances of SQL Server. Audits record security-related actions for later review by a security administrator.

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Instructor Notes:

SQL Server Profiler (Contd...)



- SQL Server Profiler shows how SQL Server resolves queries internally.
- This allows administrators to see exactly what Transact-SQL statements or Multi-Dimensional Expressions are submitted to the server and how the server accesses the database or cube to return result sets.
- Using SQL Server Profiler, you can do the following:
 - Create a trace that is based on a reusable template
 - Watch the trace results as the trace runs
 - Store the trace results in a table
 - Start, stop, pause, and modify the trace results as necessary
 - Replay the trace results

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Instructor Notes:

To start SQL Server Profiler in SQL Server Management Studio



- You can start SQL Server Profiler from several locations in SQL Server Management Studio.
- When SQL Server Profiler starts, it loads the connection context, trace template, and filter context of its launch point.
- SQL Server Management Studio starts each SQL Server Profiler session in its own instance, and Profiler continues to run if you shut down SQL Server Management Studio.
- To start SQL Server Profiler from the Tools menu
 - In the SQL Server Management Studio Tools menu, click SQL Server Profiler.
- To start SQL Server Profiler from the Query Editor
 - In Query Editor, right-click and then select Trace Query in SQL Server Profiler.

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Instructor Notes:

None

Summary



- In this lesson, you have learnt:
- What is SQL Server Profiler?
 - How to start SQL Server Profiler in SQL Server Management Studio

