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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



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 eventdriven 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

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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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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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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None

Summary



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

