Plan Explorer Deadlock Files

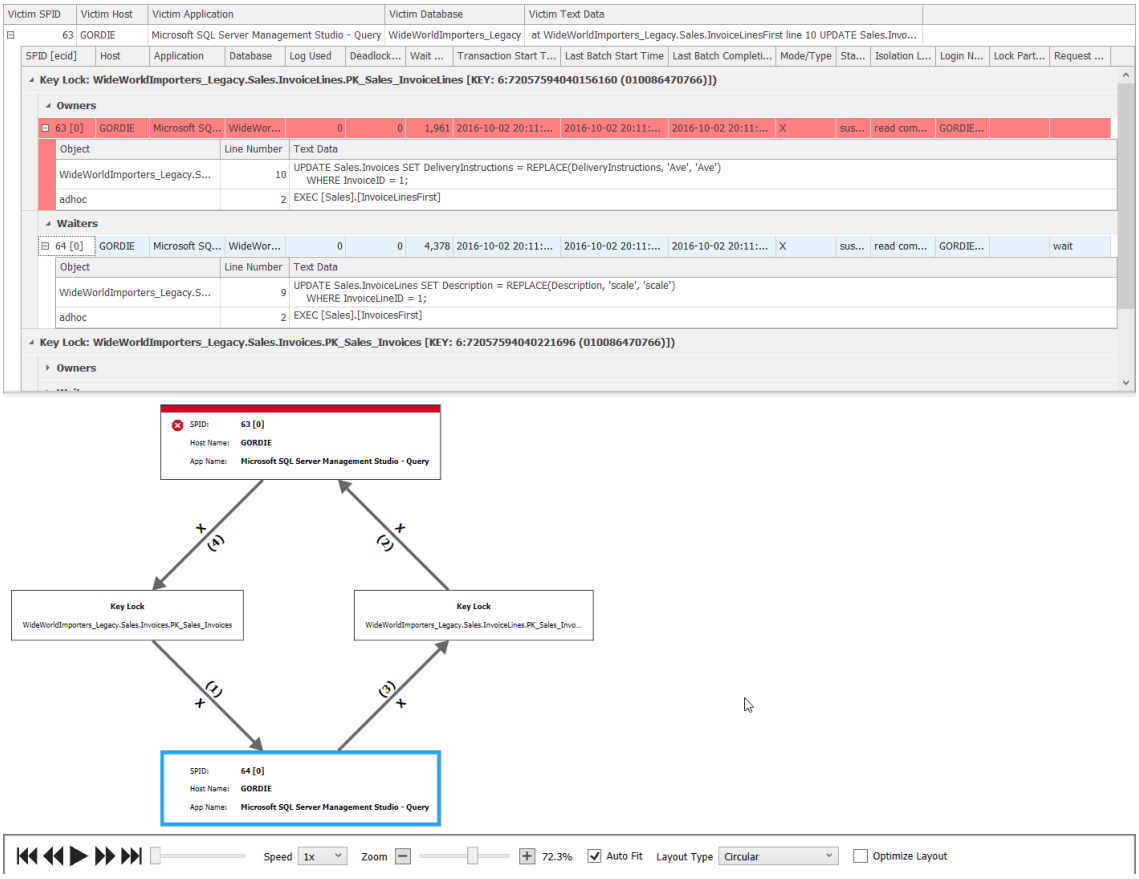
Last Modified on 28 June 2021

Plan Explorer allows you to open deadlock files. Deadlock (.xdl) files can be captured or collected from several places, including the following:

- **SQL Sentry Performance Analysis**—Captures deadlocks happening in your monitored environment. These .xdl files can be exported and then shared.
- **SQL Server Profiler**—Allows you to create a trace that captures deadlock events.

> **Additional Information:** For more information about **SQL Server Profiler**, see the Save Deadlock Graphs MSDN article.

Opening a Deadlock File



After you've captured a deadlock file (.xdl), open it with **Plan Explorer** just as you would a plan file. A deadlock displays in two main sections:

- The top section contains a **Deadlock Grid view** that breaks down the deadlock by SPID and lock resource.
- The bottom section contains the **Deadlock Graph** with representations for each process and resource involved in the deadlock.

Deadlock Grid View

In the **Deadlock Grid view** each record is expandable to view the details regarding the processes that were involved in the deadlock. For more information about the metrics displayed, see the **Deadlock Metrics** section, following.

- The deadlock victim is highlighted with a red background.

Deadlock Graph

The **Deadlock Graph** is formed according to the deadlock XML. **Process** and **Resource** nodes are independently represented, along with any relationships that exist between them.

- The deadlock victim is highlighted with a red background.
- The numbers (one) and associated arrows, between each node, indicate the actual sequence of events that took place leading to the deadlock.
- The letters indicate the requested **Lock** mode.
- Selecting object nodes in the graphical representation sets focus to that object in the **Grid** view.
- Zoom in and out on the **Deadlock Graph** using **Ctrl + mouse wheel**, or through the right-click context menu.
- Drag and rearrange nodes as desired.

Deadlock Metrics

Deadlock Overview

Name	Description
Victim SPID	The session process ID of the victim involved in the deadlock.
Victim Host	The workstation belonging to the victim thread.
Victim Application	The application name belonging to the victim thread.
Victim Database	The name of the database on which the process took place.
Victim Text Data	The associated text data of the victim.
Deadlock XML	The actual captured **Deadlock XML**.

Lock Details

The **Lock Details** area breaks down the deadlock by specific lock types, including the owners and waiters involved in each lock.

Name	Description
SPID [ecid]	The session process ID of the associated owner/waiter.
Host	The workstation name.
Application	The associated application.
Database	The associated database.
Log Used	The amount of log space used by the process.
Deadlock Priority	Specifies the deadlock priority. Zero (0) or Normal is the default priority. In cases where each session has the same deadlock priority, SQL Server chooses the victim based on the least expensive session to roll back. **Additional Information:** For more information, see the SET DEADLOCK_PRIORITY MSDN article.
Wait Time	Time in (ms) milliseconds spent waiting on the resource.
Transaction Start Time	Time that the transaction began.
Last Batch Start Time	The last time a client process started batch execution.
Last Batch Completion Time	The last time a client process completed batch execution.
Mode/Type	The mode/type designates the resource lock mode. **Additional Information:** For more information about lock mode, see the SQL Server Transaction Locking and Row Versioning Guide MSDN article.
Status	State of the task.
Isolation Level	The current transaction isolation level. **Additional Information:** For more information on isolation levels, see the SQL Documentation MSDN article.

Name	Description
Login Name **Name**	The **Login Name** associated with the session. **Description**
Lock Partition	The table partition(s) involved in the deadlock.
Request Type	The type of request, including wait, lock, or convert.

Owner/Waiter Details

Name	Description
Object	Indicates the associated object name.
Line Number	The line number that was being executed when the lock occurred.
Text Data	The associated text data.