

SQL Server Tutorial

Part 82 - Capturing deadlocks in SQL Profiler

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In this session we will learn

- How to capture deadlock graph using SQL profiler

Link to Dot Net Basics, ASP.NET, C#, ADO.NET and SQL Server video series

<http://www.youtube.com/user/kudvenkat/playlists>

Suggested Videos

Part 79 - SQL Server deadlock victim selection

Part 80 - Logging deadlocks in sql server

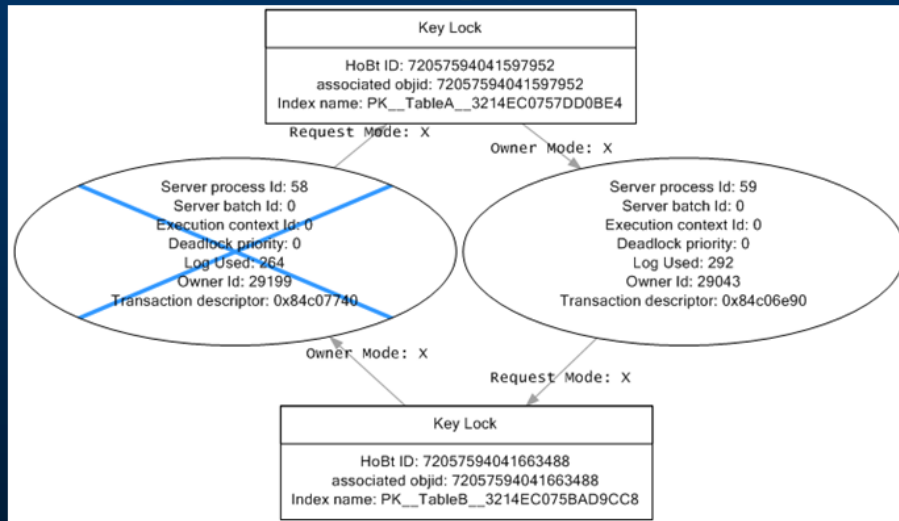
Part 81 - SQL Server deadlock analysis and prevention

Capturing Deadlocks in SQL Profiler

If you are in need of the DVD with all the videos and PPT's, please visit

<http://pragimtech.com/order.aspx>

To capture deadlock graph, add Deadlock graph event to the trace in SQL profiler



The deadlock graph data is captured in XML format which can be extracted to a physical file for later analysis. This is similar to data captured using trace flag 1222.

Analyzing Deadlock Graph

1. The oval on the graph, with the blue cross, represents the transaction that was chosen as the deadlock victim by SQL Server.
2. The oval on the graph without blue cross represents the transaction that completed successfully.
3. When you move the mouse pointer over the oval, you can see the SQL code that was running that caused the deadlock.
4. The oval symbols represent the process nodes
 - **Server Process Id** : If you are using SQL Server Management Studio you can see the server process id on information bar at the bottom
 - **Deadlock Priority** : If you have not set DEADLOCK PRIORITY explicitly using SET DEADLOCK PRIORITY statement, then both the processes should have the same default deadlock priority NORMAL (0)
 - **Log Used** : The transaction log space used. If a transaction has used a lot of log space then the cost to roll it back is also more. So the transaction that has used the least log space is killed and rolled back

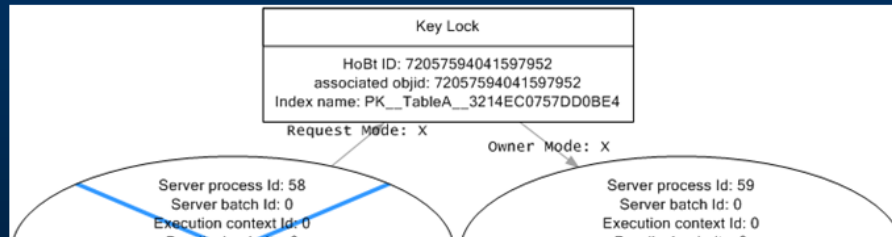
Analyzing Deadlock Graph

5. The rectangles represent the resource nodes.

a) HoBt ID : Heap Or Binary Tree ID. Using this ID query sys.partitions view to find the database objects involved in the deadlock.

```
SELECT object_name([object_id])
FROM sys.partitions
WHERE hobt_id = 72057594041663488
```

6. The arrows represent types of locks each process has on each resource node.



Additional Resources

PRAGIM Home Page:

www.PragimTech.com

Resources:

C#, ADO.NET, ASP.NET, SQL Server & MVC youtube Playlists

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