Troubleshooting SQL Server Enterprise Geodatabase Performance Issues
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Agenda

- SDE Intercept (client-side trace)
- SQL Server Extended Events (database server trace)
- New Storage Method for SQL Server Geometry Attribute in ArcGIS 10.5
- Demos
- Q & A
SDE Intercept

• How do we set it up?
  - System Environment Variables
  - Two variables:
    - SDEINTERCEPT
      - crwtf (or crwTf)
    - SDEINTERCEPTLOC
      - C:\TEMP\sdeintercept_file

• What is inside?
  - Esri ArcObjects commands performed by client
  - Time stamp
SDE Intercept
TablelistTables command took 13 seconds.
SQL Server Extended Event

How to set it up?

- Management Studio> Management folder
- Select the most relevant events
- Apply filter to specific events

- rpc_completed
- rpc_starting
- sql_statement_completed
- sql_statement_starting
- query_post_execution_showplan
SQL Server Extended Event
Typical Events Used in Troubleshooting Geodatabase Issues
SQL Server Extended Event

Apply Filter to Specific Events
SQL Server Extended Event

- How to interpret extended event trace
  - Sorted events by duration
  - Execution plan
SQL Server Extended Event
Trace Result
New Geometry Attribute Storage in ArcGIS 10.5

• Geometry attribute will be stored directly in business table.

• Better performance without join.

• 10.3 client connection is not supported.
“My Views are performing slowly”
Demo - “My views are performing slowly”

- ArcGIS Client vs. SQL Server Management Studio
- What tools will be most helpful in understanding this?
  - Trace
  - Execution
  - Client Statistics
Demo

New storage for improved performance in 10.5
Conclusion

- SDE Intercept
- SQL Server Extended Event
- New storage for improved performance in 10.5
- Contact Esri Technical Support for assistance
Additional Resources

How To: Diagnose ArcSDE connection and performance issues using SDEINTERCEPT
http://support.esri.com/technical-article/000010355

What's new in ArcGIS Server 10.5.1

FAQ: How can ArcSDE performance be improved?
http://support.esri.com/technical-article/000006051

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