

Troubleshooting Collector through the Enterprise Geodatabase

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Assumptions

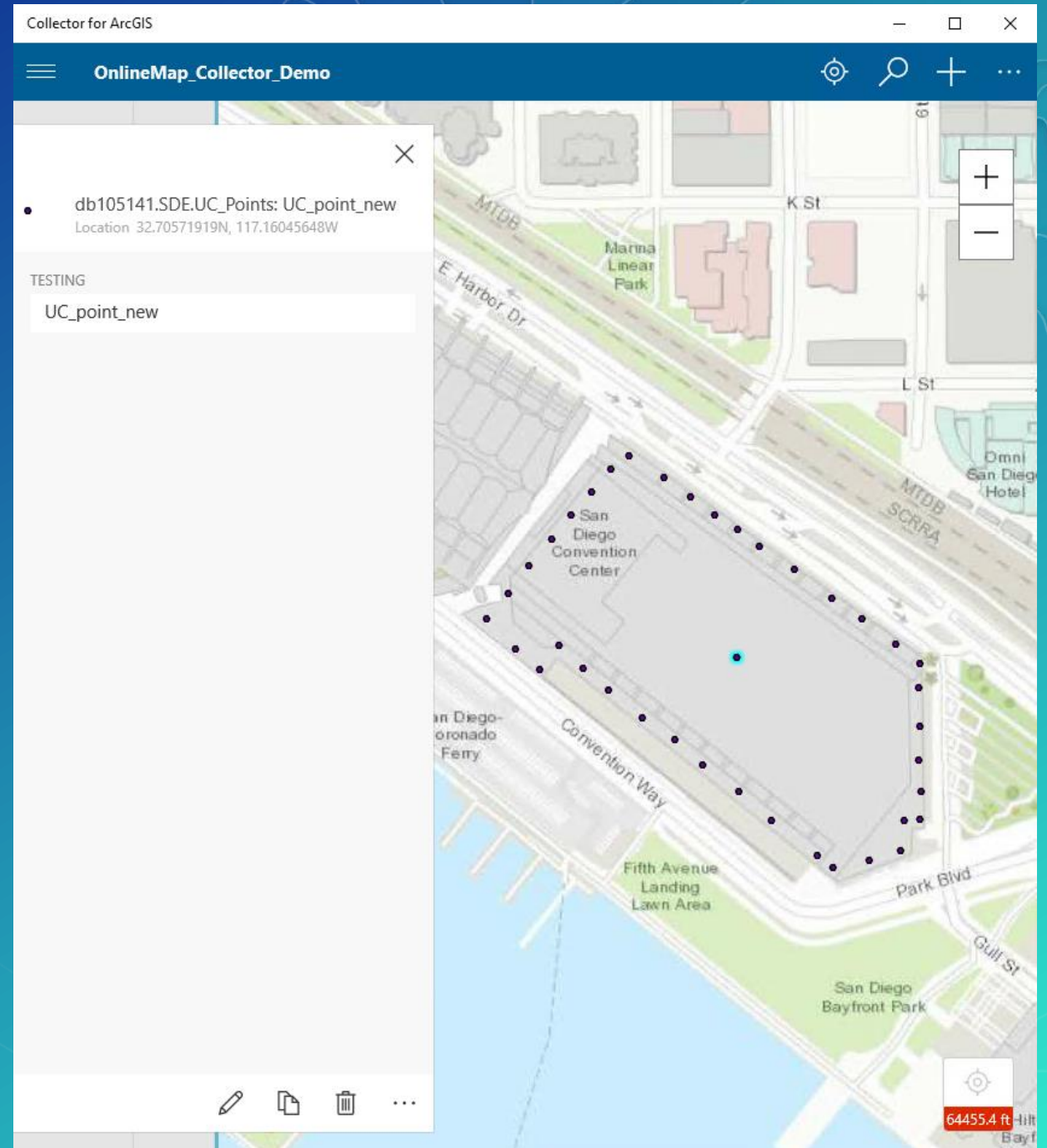
- Collector workflow
- Versioning
 - Delta tables
- Replication synchronization
- For more information on Collector workflow:
 - Synchronizing & Disconnected Editing in Collector – Thursday, 11:30 am

Agenda

- Case Study
- General troubleshooting tips
- Disconnected editing workflow
- Part 1 – Troubleshooting in Collector and ArcGIS Server
- Part 2 – Troubleshooting in an Enterprise Geodatabase
- Wrap up/Questions

Case Study

- GIS Analyst
- Editing in user version
- Set up offline feature service for Collector
- Downloaded to device
- Made offline edits
- Synchronization on device was successful
- Unable to see edits in original MXD



General Troubleshooting Tips

Simplify · Analyze · Intention

Offline Maps User Workflow



Troubleshooting in Collector & ArcGIS Server

Methods on finding edits made in Collector

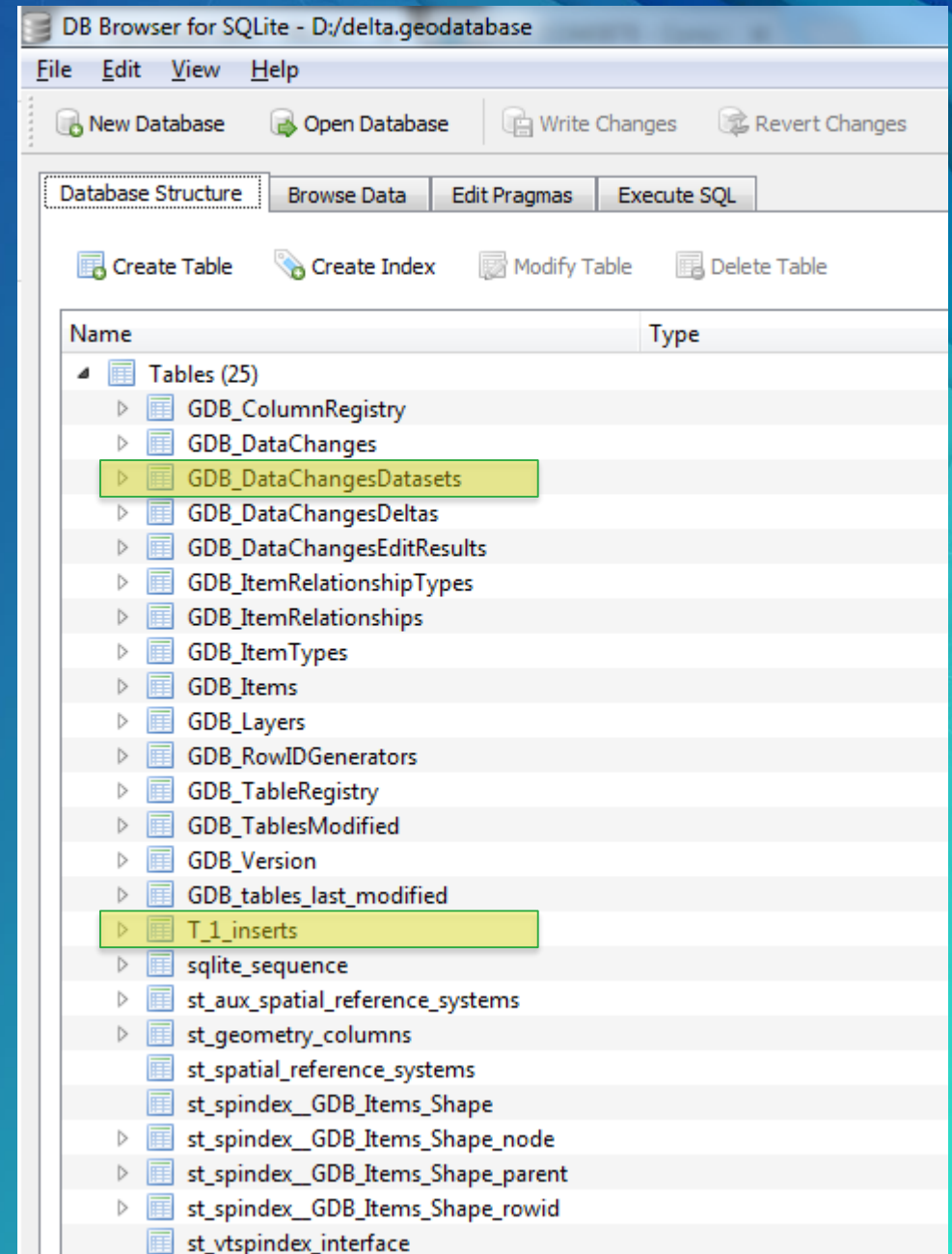


Collector for ArcGIS

Troubleshooting Tips

- What happens when a map is downloaded?
 - SQLite database created
 - Has .geodatabase extension
- Why?
 - Read-only
- Methods to obtain the .geodatabase file
 - Device
 - ArcGIS Server Administrator

[KB000012460: How To: Access offline edits from Collector for ArcGIS directly from an Android or iOS device](#)



ArcGIS Server Manager

Using Server Logs to Find the Sync

- ArcGIS Server Logs
 - Warning is the default level
 - Log Levels (Severe → Debug)
 - Turn off Verbose/Debug
- What to Look for?
 - Sync successful?
 - Edits transferred?
 - Errors/Warnings?

esri.com | Web GIS | Sign Out | Help

ArcGIS Server Manager

Services Site Security Logs

View Logs Error Reports Statistics

Printer Friendly View | Help Columns Delete Logs Settings

View Log Messages

View log messages by querying based on the level, age and source of the messages and clicking Query.

Change the level of detail that the log messages are generated at by clicking Settings.

Log Filter: Verbose Age: Last Hour Source: All Machine: All Machines Query

Level	Time	Message	Source
VERBOSE	Jun 28, 2017, 12:00:37 PM	Exporting changes for dataset: DB105141.SDE.UC_POINTS for change type: esriDataChangeTypeDelete into T_1_Deletes for Replica with GlobalId: 4016869C-24A4-49EC-8E4F-5F03EF832DED. Replica: "SKHADKE\ARCGIS".Ags_Fs.	System/SyncTools.GPServer
VERBOSE	Jun 28, 2017, 12:00:37 PM	Exporting changes for dataset: DB105141.SDE.UC_POINTS for change type: esriDataChangeTypeUpdate into T_1_Updates for Replica with GlobalId: 4016869C-24A4-49EC-8E4F-5F03EF832DED. Replica: "SKHADKE\ARCGIS".Ags_Fs.	System/SyncTools.GPServer
VERBOSE	Jun 28, 2017, 12:00:37 PM	Exporting changes for dataset: DB105141.SDE.UC_POINTS for change type: esriDataChangeTypeInsert into T_1_Inserts for Replica with GlobalId: 4016869C-24A4-49EC-8E4F-5F03EF832DED. Replica: "SKHADKE\ARCGIS".Ags_Fs.	System/SyncTools.GPServer
VERBOSE	Jun 28, 2017, 12:00:37 PM	Writing data changes metadata records in the change tables for Replica with GlobalId: 4016869C-24A4-49EC-8E4F-5F03EF832DED. Replica: "SKHADKE\ARCGIS".Ags_Fs.	System/SyncTools.GPServer
VERBOSE	Jun 28, 2017, 12:00:37 PM	Firing events before exporting data changes for Replica with GlobalId: 4016869C-24A4-49EC-8E4F-5F03EF832DED. Replica: "SKHADKE\ARCGIS".Ags_Fs.	System/SyncTools.GPServer
VERBOSE	Jun 28, 2017, 12:00:37 PM	Writing replica metadata in the delta database for Replica with GlobalId: 4016869C-24A4-49EC-8E4F-5F03EF832DED. Replica: "SKHADKE\ARCGIS".Ags_Fs.	System/SyncTools.GPServer
		Found a Replica object in the Workspace for name:	

Showing logs from: Jun 28, 2017, 12:00:43 PM to Jun 28, 2017, 12:00:13 PM

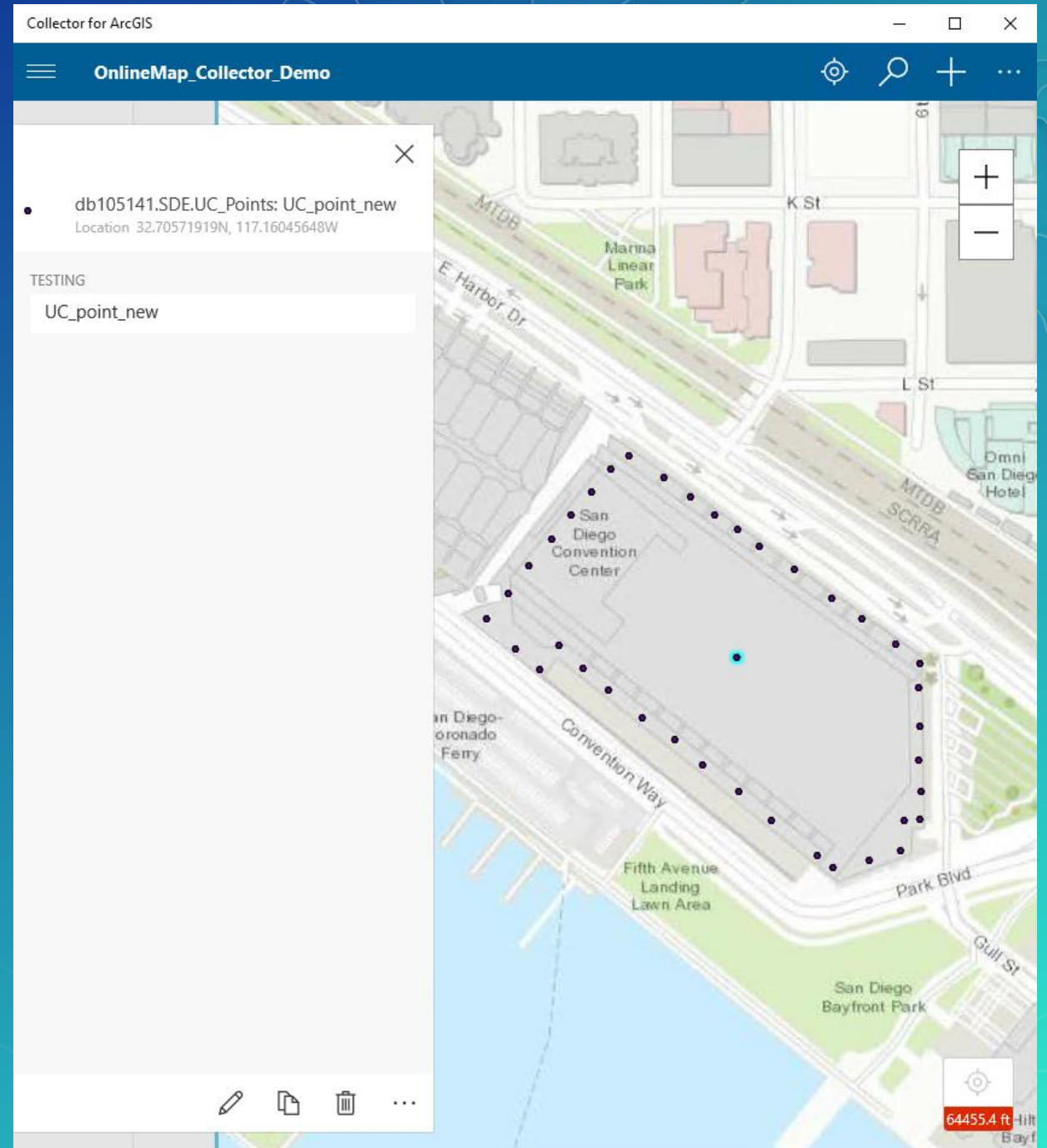
Newer Older

Demo - SQLite & ArcGIS Server

Troubleshooting Tips

Case Study

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DBMS Trace & SDE Intercept

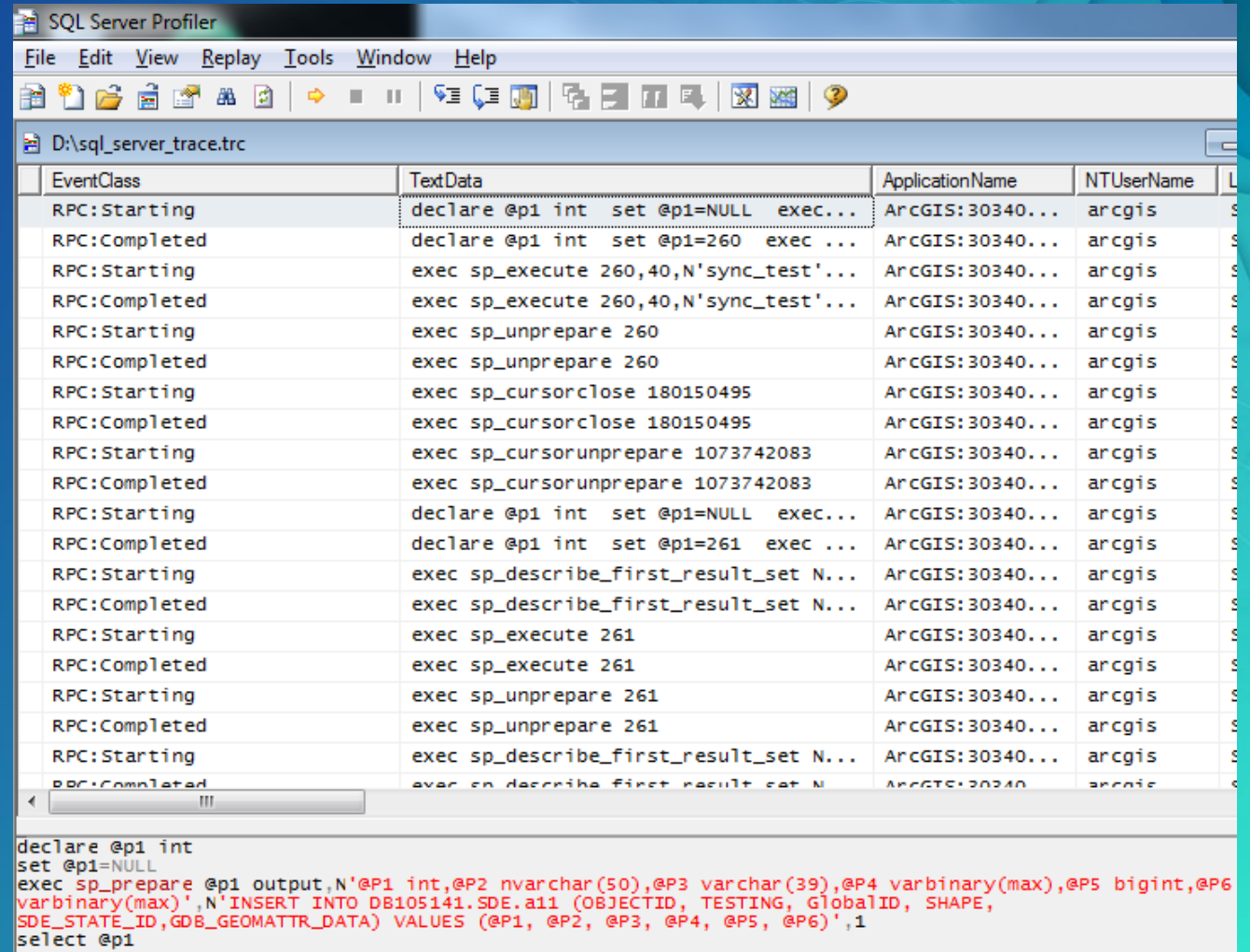
Troubleshooting in an enterprise geodatabase



Database Management System (DBMS) Trace

Set Up

- Setup varies depending on the RDBMS that you are using
- SQL Server Profiler
 - Sysadmin
 - ALTER TRACE
- Start the trace only when you are ready to begin



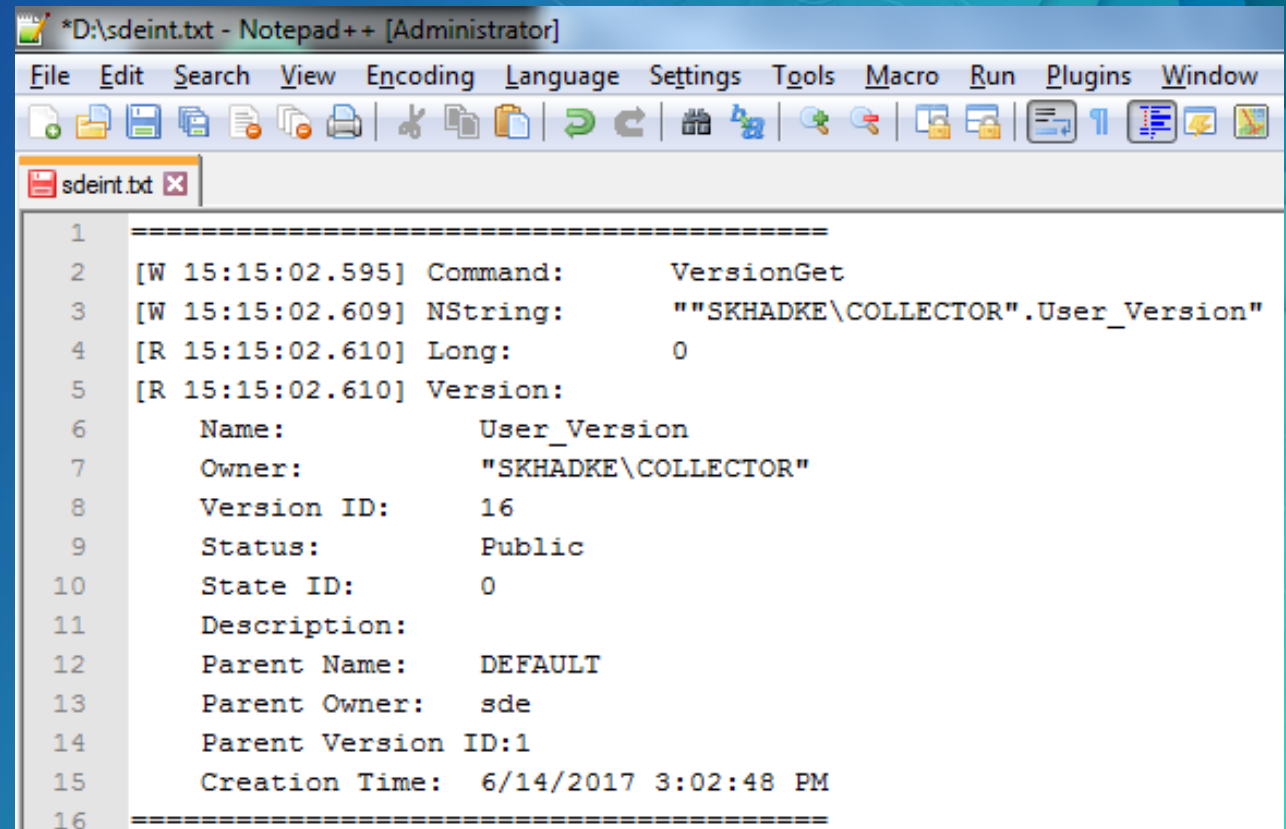
EventClass	TextData	ApplicationName	NTUserName
RPC:Starting	declare @p1 int set @p1=NULL exec...	ArcGIS:30340...	arcgis
RPC:Completed	declare @p1 int set @p1=260 exec ...	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_execute 260,40,N'sync_test'...	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_execute 260,40,N'sync_test'...	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_unprepare 260	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_unprepare 260	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_cursorclose 180150495	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_cursorclose 180150495	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_cursorunprepare 1073742083	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_cursorunprepare 1073742083	ArcGIS:30340...	arcgis
RPC:Starting	declare @p1 int set @p1=NULL exec...	ArcGIS:30340...	arcgis
RPC:Completed	declare @p1 int set @p1=261 exec ...	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_describe_first_result_set N...	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_describe_first_result_set N...	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_execute 261	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_execute 261	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_unprepare 261	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_unprepare 261	ArcGIS:30340...	arcgis
RPC:Starting	exec sp_describe_first_result_set N...	ArcGIS:30340...	arcgis
RPC:Completed	exec sp_describe_first_result_set N...	ArcGIS:30340...	arcgis

```
declare @p1 int
set @p1=NULL
exec sp_prepare @p1 output,N'@P1 int,@P2 nvarchar(50),@P3 varchar(39),@P4 varbinary(max),@P5 bigint,@P6
varbinary(max)',N'INSERT INTO DB105141.SDE.a11 (OBJECTID, TESTING, GlobalID, SHAPE,
SDE_STATE_ID,GDB_GEOMATTR_DATA) VALUES (@P1, @P2, @P3, @P4, @P5, @P6)',1
select @p1
```

SDE Intercept

What is it and how to Configure

- Used to profile ArcGIS client
- Environment Variables
 - SDEINTERCEPTLOC=%TEMP%\sdeint
 - SDEINTERCEPT=cwrtf
- Restart ArcGIS service
- Permissions to directory
 - ArcGIS server account
- Be careful what you do when an intercept is running
- Remove when done



```
*D:\sdeint.txt - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window
sdeint.txt x
1 =====
2 [W 15:15:02.595] Command:      VersionGet
3 [W 15:15:02.609] NString:      "SKHADKE\COLLECTOR".User_Version"
4 [R 15:15:02.610] Long:        0
5 [R 15:15:02.610] Version:
6     Name:      User_Version
7     Owner:      "SKHADKE\COLLECTOR"
8     Version ID: 16
9     Status:     Public
10    State ID:   0
11    Description:
12    Parent Name: DEFAULT
13    Parent Owner: sde
14    Parent Version ID:1
15    Creation Time: 6/14/2017 3:02:48 PM
16 =====
```

[KB000010355: How To: Diagnose ArcSDE connection and performance issues using SDEINTERCEPT](#)

Demo - DBMS Trace & SDE Intercept

Troubleshooting Tips

Wrap Up

- SQLite database is created to store edits when offline
- Server Logs & Traces
- Windows operating system user used to create the feature service
- A version is created for edits
 - Owned by the \arcgis user
 - Set to private
- Reconcile & Post as the \arcgis user
- For more information on Collector:
 - Synchronizing & Disconnected Editing in Collector - Thursday, 11:30 am



Questions?

Wrap Up

- [KB000012460: How To: Access offline edits from Collector for ArcGIS directly from an Android or iOS device](#)
- [KB000010355: How To: Diagnose ArcSDE connection and performance issues using SDEINTERCEPT](#)
- Platform Error Codes: <https://developers.arcgis.com/net/latest/wpf/guide/platform-error-codes.htm>
- System tables of a geodatabase in SQL Server: <http://desktop.arcgis.com/en/arcmap/latest/manage-data/gdbs-in-sql-server/system-tables-sqlserver.htm>
- Replicas in a geodatabase in SQL Server: <http://desktop.arcgis.com/en/arcmap/latest/manage-data/gdbs-in-sql-server/replica-storage-sqlserver.htm>
- DB Browser for SQLite: <http://sqlitebrowser.org/>
- Notepad++: <https://notepad-plus-plus.org/>



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