Upgrade to ArcGIS 10.1 Geodatabase

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Workshop outline

• Enterprise Geodatabase Configuration
  - Geodatabase Components
  - Connection Type
  - Client Server Compatibility

• Upgrade to Geodatabase 10.1
  - When do I need to upgrade
  - How to upgrade
  - Tips and good practices

• What’s new at 10.1
Components of Enterprise Geodatabase

- **ArcGIS Client**
  - Access spatial data

- **Geodatabase Software**
  - Enable Esri Spatial data Storage
  - Application Server

- **Enterprise DBMS**
  - Oracle, SQL Server, DB2 ….
Geodatabase: Direct Connect

- Direct Connect Drivers
  - ArcGIS Client
- Enterprise DBMS
Geodatabase: Application Server Connection

- ArcGIS Client
- Application Server
- Enterprise DBMS
Components to Be Upgraded

- ArcGIS Client
  - Geodatabase Direct Connect Driver

- Geodatabase Software
  - Application Server (ArcSDE)

- Geodatabase Schema
  - Tables, Stored Procedures, ST_Geometry Type ….
Client Server Compatibility

- Backward/Forward Compatibility

- Upgrade Strategy
  - Always Upgrade ArcGIS clients first
Prepare for Upgrade

• Make a Full Backup of Your Database

• Check New System Requirements
  [http://resources.arcgis.com/content/arcgis-server-system-requirements](http://resources.arcgis.com/content/arcgis-server-system-requirements)

• Read ArcGIS Server 10.1 online help
  
  *Topic*: Enterprise geodatabase upgrade
Getting Ready to Schema Upgrade

• Install ArcGIS 10.1 client

• Disconnect All Active Connections

• Connect From 10.1 Client
  - Direct connect
  - Connect as a required user
Geodatabase Schema Upgrade

- Two options
  - Upgrade button in ArcCatalog
  - Python Script with Geoprocessing API

UpgradeGDB_management(…)
Geodatabase Upgrade: ArcCatalog

Upgrade Geodatabase

Input geodatabase

Database Connections\gdbent3_ora_931.sde

- Perform Pre-requisite check
- Upgrade geodatabase

[OK] [Cancel] [Environments...] [Show Help >>]
Upgrade Geodatabase: GP Command

`UpgradeGDB_management (input_workspace, input_prerequisite_check, input_upgrade_check)`

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>input_workspace</code></td>
<td>Connection file of the geodatabase to be upgraded.</td>
</tr>
<tr>
<td><code>input_prerequisite_check</code></td>
<td>• NO_PREREQUISITE_CHECK —Prerequisite check is not run.</td>
</tr>
<tr>
<td></td>
<td>• PREREQUISITE_CHECK (default)—Prerequisite check is run.</td>
</tr>
<tr>
<td><code>input_upgrade_check</code></td>
<td>• NO_UPGRADE —The Upgrade is not run.</td>
</tr>
<tr>
<td></td>
<td>• UPGRADE (default)—The Upgrade is run.</td>
</tr>
</tbody>
</table>
Prerequisite Checks

• No active user connections
• Correct user to perform upgrade
• Required privileges for upgrade
• DBMS XML Support
• Geodatabase schema integrity
• Geodatabase configuration check
  - ST shape library
  - Multiple user schema geodatabases
Diagnostic files

• Log files under system TEMP directory
  - *sde_setup.log* – Detailed schema upgrade output and error message log
  - *GDBUpgradeN.log* – Overall GP tool output log with details on geodatabase schema migration
  - *sdedc_<dbms>.log* direct connect log

• DBMS and Operating system
  - DBMS specific log for DBMS errors
  - Windows: Event log
DEMO: Geodatabase Upgrade
New Features in ArcGIS 10.1

• Create Enterprise Geodatabase from ArcCatalog

• Create Geodatabase User

• Install Standalone ST_Geometry Type

• Simplified Direct Connect to Database
Additional Resources

• ArcSDE Install Guides

• KB articles
  
  http://resources.arcgis.com/content/kbase

• Online help
  

• ArcSDE geodatabase user forum
  
Steps to evaluate UC sessions

• My UC Homepage > “Evaluate Sessions”

• Choose session from planner
  OR

• Search for session

www.esri.com/ucsessionssurveys
• Thank you for attending
• Have fun at UC2012
• Open for Questions

• Please fill out the evaluation:

  www.esri.com/ucsessionssurveys

  First Offering ID: 1325