



Esri International User Conference | San Diego, CA
Technical Workshops |

Automating Geodatabase Creation Through Model Builder

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Assumptions for this session

- **Geodatabase Fundamentals**
 - **Experience with geoprocessing**
 - **Understanding of geodatabase design.**
-
- **Please save questions until the end of the presentation.**
 - **Please turn off cell phones.**

Agenda

- **Deploying a geodatabase**
- **Basic deployment strategies**
- **Using Script tools**
- **Schema Changes**
- **Enterprise considerations**
- **Road ahead**

Introduction

- **Multiple ways to create a geodatabase.**
 - **Geoprocessing**
 - **ArcCatalog - clicking**
 - **ArcObjects**
 - **CASE Tools**

DEMO: Deploying a geodatabase

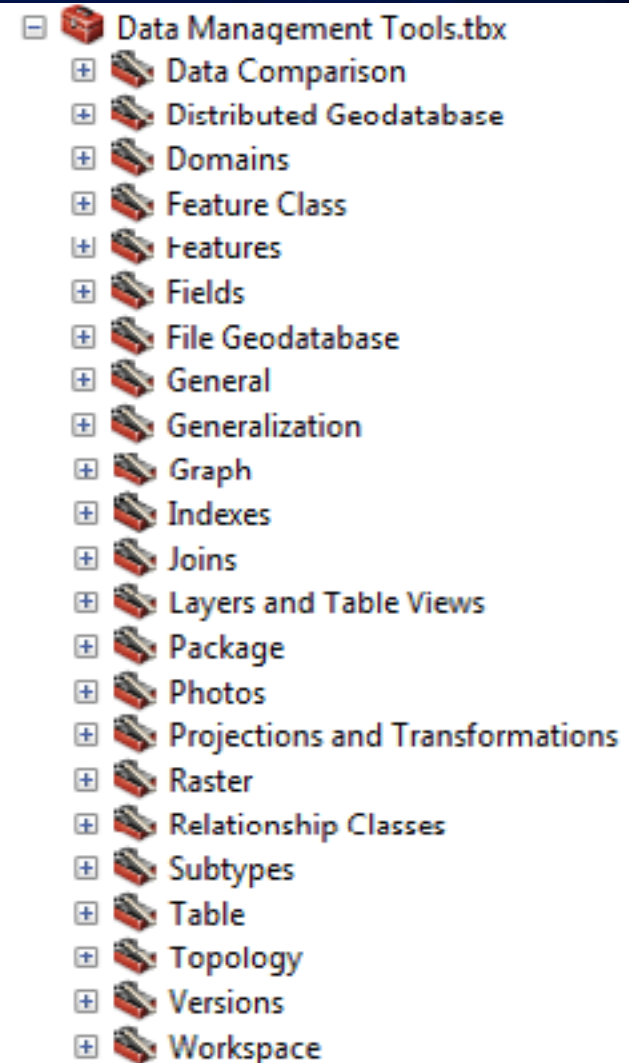


Geoprocessing Environment

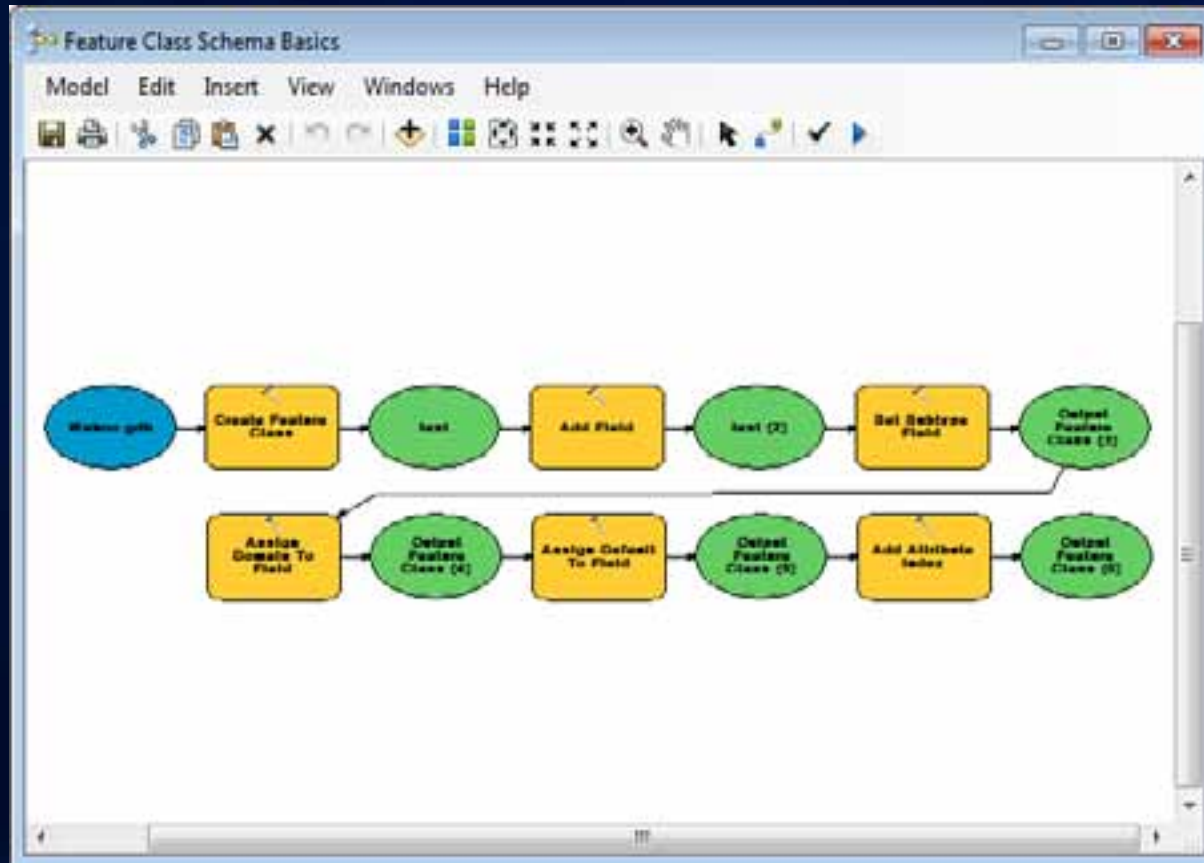
- Can be accessed using:
 - Geoprocessing tools
 - Model Builder
 - Python
 - ArcObjects

Geodatabase Tools

- Most tools are found in the Data Management toolset.
- Many tools to create geodatabase objects



Model builder geoprocessing environment



Demo: Basic Deployment Strategies

Creating Sub Models

Using a Template Feature Class

Creating Custom Model Tools



Script Tools

- **Python is accessible in Model Builder.**
- **Identify tools which are being run multiple times.**
- **Identify tools being run with redundant information.**

Demo: Advanced Deployment Strategies

What is a script tool?

Leveraging Python



What about schema changes?

- Over time your data model may change.
- Use additional models or scripts to push out updates.
- Planned and scripted and deployed at an appropriate time.

DEMO: Schema Changes

Using submodels

Setting parameters

Scheduling



Considerations for enterprise databases

- **Who owns the data will affect...**
 - who can make schema changes
 - who can grant privileges
- **Need to assign privileges**
 - Change privileges tool
- **Creating versions and replicas**
 - Create Version tool
 - Create Replica Tool
- **Registering data as versioned**
 - Register as Versioned tool

DEMO: Organization

One stop shop



Limitations

- **Create Network Datasets, Parcel Fabrics**
- **Create Annotation**
- **Create Schematic Dataset**
- **Geometric Network (available at 10.1)**
- **Enable Archiving**

Road ahead... ArcGIS 10.1

- **Improved sharing capabilities**
- **Create Enterprise Geodatabase**
- **Create Geometric Network (among other GN tools)**
- **Sort Coded Value Domain**
- **Enable Attachments**
- **Enable Enterprise Geodatabase**
- **Add topology rules to versioned data.**
- **Create Database View**
- **Create Versioned View**

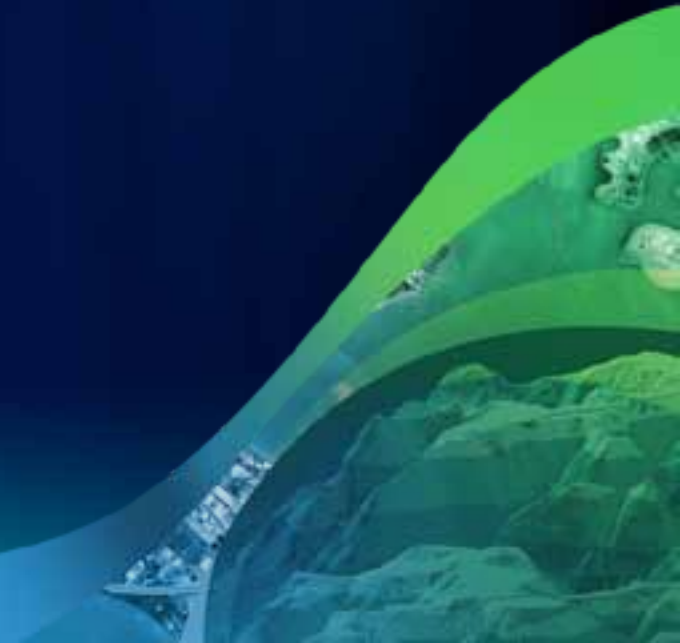
Road ahead... (post 10.1)

- We will be looking at providing more options for batch processing.
- Create a model from an existing geodatabase.
- Options for creating geodatabase schema diagram from your model.

Final Thoughts

- Fully featured geodatabases
- Schema changes are easy
- Python

Questions



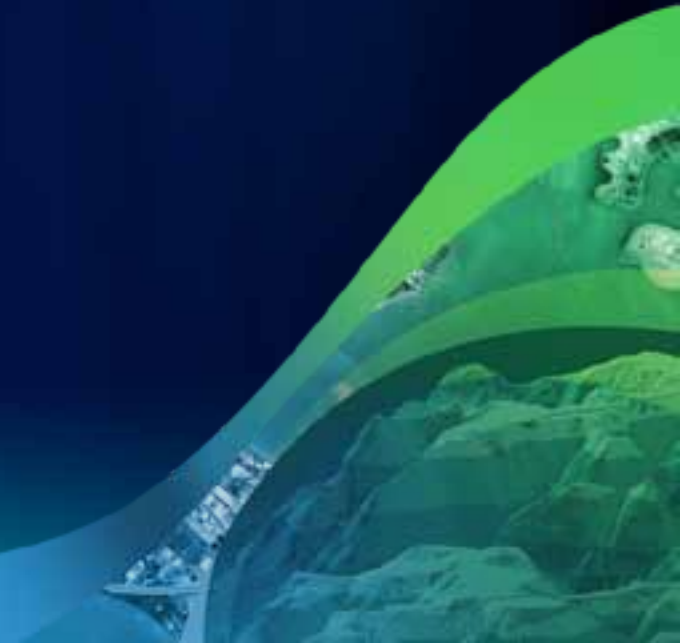
Related Sessions

- **Road Ahead – GDB Admin**
 - **Thursday 3:40 Room 27B**
- **Getting Started With Model Builder**
 - **Wednesday 1:30-2:45 Room 6 A/B**
- **Building tools with Model Builder**
 - **Wednesday 10:15-11:30 Room 14B**
 - **Thursday 3:15-4:30 Room 4**

Related Sessions

- **Python – Automating Geodatabase Administration**
 - Thursday 11:05am Room 24A
- **Getting Started with Python**
 - Thursday 8:30-9:45 Room 2
- **Building Tools with Python**
 - Thursday 10:15-11:30 Room

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Feedback

- <http://www.esri.com/sessionevals>



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