Automating Geodatabase Administration with Python

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Python and Geodatabases

- **Python**
  - Is the programming language for geoprocessing.
  - ArcPy site package is used to access geoprocessing functionality.

- **Geodatabase**
  - Core ArcGIS Data model
    - A comprehensive model for representing and managing GIS data
  - A physical store of geographic data.
  - A transactional model for managing GIS workflows.

Things you need to know

- **Familiar with using Python for geoprocessing**
  - **Arcpy, Python lists, looping, string manipulation, data types.**

- **Familiar with Enterprise geodatabase concepts**
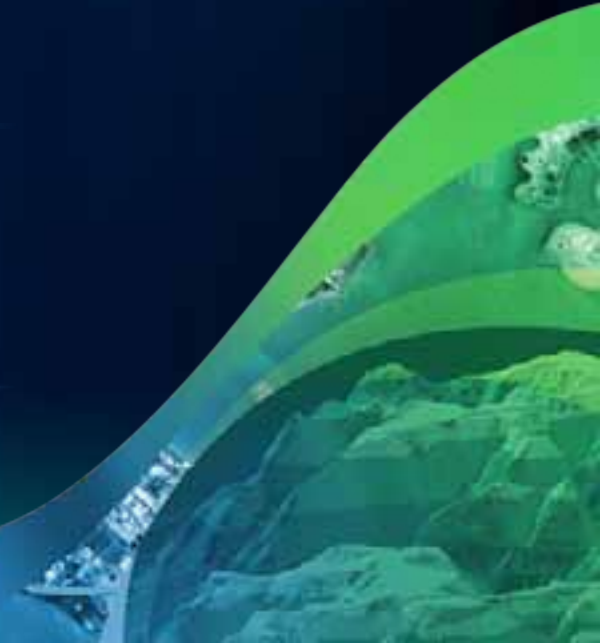 - **Versions, replicas, connection files, data ownership.**

Agenda

- **Demo 1**
  - Geodatabase maintenance.
    - Reconcile/post/delete versions, synchronize replicas, error reporting and automatic notifications
- **Demo 2**
  - Scheduling your scripts to run (Windows)
- **Brief discussion of new admin 10.1 features**

Version Maintenance

- **Synchronize replicas**

- **Reconcile versions**

- **Post versions**
  - **Delete versions – this will depend on your organization's workflow and version structure.**

- **Compress database**

- **Email notifications**

DEMO

Rec, Post, Compress

Scheduling your script to run

- **Using Windows task scheduler you can automate when your script will be run.**

- **This is especially useful for tasks that need to be run on a regular basis.**

DEMO

Scheduling

What's new at 10.1

- **Tools:**
  - **Analyze Datasets**
  - **Rebuild Indexes**
  - **Reconcile Versions**
- **Python functions:**
  - **ListVersions**
  - **ListReplicas**
  - **ListUsers (lists connected users)**
  - **DisconnectUsers**
  - **Describe will return the current release of a geodatabase**

This script is available online:

- **Should be page 5 or 6 of the Geoprocessing tool gallery.**

- **URL**
  - **http://resources.arcgis.com/gallery/file/geoprocessing/details?entryID=A709782C-1422-2418-7FD5-E83695D0381E**

Related Sessions

- **Road Ahead – GDB Admin**
    - **Thursday 3:40 Room 27B**

Esri Training for Desktop Developers

http://www.esri.com/training

- **Instructor-Led Courses**
  - [Introduction to Geoprocessing Scripts Using Python](#)
  - [Programming ArcGIS Desktop Using Add-Ins](#)

- **Web Course**
  - [Using Python in ArcGIS Desktop 10](#)

Questions?

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