ArcGIS Workflow Manager: Advanced Workflows and Concepts
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Session Topics

- Overview
- Configure & Design
- Notify & Relationships
- Integrate & Geoprocess
Overview
What is ArcGIS Workflow Manager?

A framework for continuous process improvement

Plan & Create

Evaluate & Improve

Execute & Manage

A framework for continuous process improvement
ArcGIS Supports the Enterprise

Making Mapping and GIS Available Across Your Organization

Transforming the Role of GIS
Introduction
Demo Scenario

• Is vegetation growth encroaching on a rail line?

Survey manager
• Create a workflow to update a vegetation boundary
• Create a job and assign it to a GIS specialist

GIS specialist
• Update a versioned Vegetation feature class
• Notify field crews of pending work
• Send locations that need to be trimmed (including data)

Field crew
• Perform field work
• Verify job is complete
Configure
Workflow Manager Administrator Roles

- **Basic Administrator**
  - Manage configuration items
- **Workflow Author**
  - Designs and authors Workflows
- **Workflow Developer**
  - Extends workflow with custom scripts/code
Basic Administrator

- Workflows
- Geodatabases
- Security role management
- SQL
Workflow Author

- Business domain
- GIS knowledge
- Workflow Manager steps
Workflow Developer

- Python and ArcPy
- Building libraries in a COM language
- JavaScript/Flex/Silverlight
Designing Workflows

- Drag-n-drop workflow designer
- Step type library
  - Procedural
  - Ask question
  - Run executable
  - Open file
  - Launch URL
  - Custom
- Execution paths
Designing Workflows
Create Step Types

Procedural
- Start
- Prepare
- Documentation

Custom
- Check Version
- Create version
- Clip Imagery
- Inventory Update
- Edit Data
- QC Data
- Notify

ArcGIS Workflow Manager Advanced Workflows and Concepts
Designing Workflows
Create Workflow

Start

Check Version

Version Exists
Create version

Version Exists

Clip Imagery

Prepare

Inventory Update

Documentation

Edit Data

QC Data

Notify
Designing Workflows
Configuring Job Types

Workflow
Job Type
Maps
Properties
Reporting

- Monitor Progress
- Balance schedule, time and cost
- Evaluate past projects
Sharing Workflow Manager

Desktop

Server
Configuring ArcGIS Workflow Manager

Designing Workflows
Notify & Relate
Utilizing Tokens

[EMAILOF([JOB:ASSIGNED_TO])]

john43484@esri.com
Token Parsers

- Job Properties
- Extended Properties
- System Properties
- Function
- Environment variables
- Spatial Notification
Advanced Workflow Modeling
Child Jobs and Dependencies

- Parent/child relationships between jobs
- Dependencies restrict workflow based on state of another job
Modeling Relationships Between Jobs
Child Jobs and Dependencies

- **CreateJobAdvanced** step can create child jobs
  - Can also create a dependency
  - Split parent job by geographic area
Integrating User Data

- Integrate with Active Directory
  - Import users and groups from Active Directory
  - Can repeat to get up-to-date information
Configuring ArcGIS Workflow Manager

Notifications
Tokens
Job Relationships
Integrate & GeoProcess
Integrating Business Data

- Business-specific data
- *One-to-One or One-to-Many* relationships
Extended Properties

- Separate geodatabase tables
- Long integer field joins to job ID

<table>
<thead>
<tr>
<th>JobID</th>
<th>Requestor</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Planning</td>
</tr>
<tr>
<td>1</td>
<td>Zoning</td>
</tr>
</tbody>
</table>

Jobs Table

<table>
<thead>
<tr>
<th>job_id</th>
<th>job_name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JOB_1</td>
</tr>
<tr>
<td>22</td>
<td>JOB_22</td>
</tr>
</tbody>
</table>
Integrating Business Data
Configuring Extended Properties

- Create table in Workflow Manager geodatabase
- Add as an extended property table
- Configure Job Type

Extended Property Display Types

- Date
- Text
- GIS Dataset
- Files
- Folders
- Value List
Advanced Workflow Modeling
Geoprocessing (GP) Automation

• Steps
  - LaunchGPTool step
  - ExecuteGPTool step
  - Invoke GP services

• Workflow Manager Tools
Configuring ArcGIS Workflow Manager

Extended Properties
Integrated Geoprocessing
Session Recap

- Overview
- Design and Configure Workflows
- Notifications
- Advance Job Modeling
- Integrating Business Data
- Geoprocessing in Workflows
Resources

• **Product Page**
  - [http://esri.com/workflowmanager](http://esri.com/workflowmanager)

• **Resource Center**

• **Training**
  - [http://training.esri.com/](http://training.esri.com/)

• **Forums**
Where to find us?

• Esri Showcase
  - Today until 1:30 PM
  - Geodatabase Management and Web & Server GIS Islands

• ArcGIS Workflow Manager - Integrating Geoprocessing into Your Business Processes
  - Today 12:30 – 1 PM
  - Geodatabase Demo Theater
Thank you...

• Please fill out the session survey:

  Offering ID:  1397

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Paper – pick up and put in drop box