ArcGIS Workflow Manager
Introduction
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Why are you here?

• Importance of standardizing GIS and non-GIS workflows.
• ArcGIS Workflow Manager allows you
  - Organize
  - Centralize
  - Execute workflows
• Additional ArcGIS Workflow Manager resources*
Importance of managing work
Automate Processes

• Process Documentation
  - Ensure work is done the right way
  - Enforce standards
Automate Processes

• Reduce Errors Processes and Data
  - Geometry
  - Attributes

• Increase productivity and Reduce Cost
Optimize Resources

- Limited Resources
- Variation in skills

*Law enforcement, epidemiologist, urban planners, scientists, engineers*
Optimize Resources

- Geographically dispersed offices
Enhance Communication

- Alerts and notifications
- Status updates
- Transparent processes
- Reporting to stakeholders
What is ArcGIS Workflow Manager?

Allows users to:

• Plan and create workflows efficiently

• Execute and manage standardized workflows

• Evaluate and improve performance continuously

A framework for continuous process improvement
ArcGIS Workflow Manager

Orchestrating business processes

- Executive
- Public Engagement
- Field Crew
- Subject Matter Experts
- GIS Professionals
- Enterprise Systems
- Admin Staff
Workflow Manager System Framework

Server
- Flex
- JavaScript
- REST/SOAP

Desktop
- Administrator
- Application

System Tables

Other GIS data sources

Enterprise Geospatial data

...Standard or higher
Top 10 Capabilities
1a. Workflows

Documentation

- Document and automate processes
  - Outline steps
  - Connect steps with paths
  - Update step and path properties
- Graphical representation of the work

ArcGIS Workflow Manager: Introduction
1b. Workflows

Workflow Organization

- Workflows are organized as jobs!
- Examples:
  - Create data packet for field data collection
  - Updating data for vegetation boundaries
  - Creating maps of specific scale in various areas.
2. Job Discovery

- Queries
- Search
- Grid/Map view
3. Work Allocation

- Automatically route work
- Manage large workforces
- Target specific groups
- Varying staff skills
Create a workflow

Job Discovery, Workflows and Assignment
Demo Scenario – Power line Height

GIS Specialist tasked by a Survey Manager to:

- Compute preliminary power line crossing height
- Notify Field Crews to survey the crossing directly if the data is unsatisfactory
- Pass the final result to the QA/QC team for review
4. Area of Interest

- Spatial orientation of all work
- Restrict work to a spatial extent
5a. Documentation

Descriptive information

• Convey work importance
  - Due date, priority, status, etc.

• Capture business specific properties
  - Extended properties
5b. Documentation

Descriptive information

- Support documents
  - Attachments
  - Notes
- Step descriptions
5c. Documentation

Relationships – holds and dependencies

- Restrict or suspend workflow execution
- Models relationships between jobs
  - parent/child jobs

Job B cannot be started until job A is closed.
6. Communication
Notifications and History

- **Enhance communication**
  - Emails
  - Automation of tasks
- **Increase accountability**
  - Log actions on job
- **Real time updates**
7. Geographically Dispersed Workforces
Filters and Replication

- Distribute workflows
- Create and manage work
Using a workflow

Properties, AOI concept, Notifications
8a. GIS Task Automation

Step types – Geoprocessing

- Automate and integrate spatial analysis
8b. GIS Task Automation

Step types – Version Management

• Automate version management
  - Create version
  - Reconcile and post changes
  - Cleanup versions
8c. GIS Task Automation
Step Types – Open Map

- Step to launch ArcMap in preconfigured state
  - Predefined layers and cartography
  - Zooms to job’s area of interest
  - Tools for geospatial audits
8d. GIS Task Automation

Step Types – Task Assistant Manager (TAM)

- Standardize steps in ArcMap
  - Author, share and use tasks
- Promotes sharing of knowledge
  - Communicate best practices
- Automated tasks
- Provides consistency and efficiency
8e. GIS Task Automation
ArcMap Productivity Tools

- Set current job
- Access to entire workflow
  - Manage steps
- Job Information window
  - Update properties
  - Add notes, attachments
  - Execute current steps
  - View history
GIS automation
Maps, geoprocessing, versioning…
9. Reporting
Per job or entire system

- Tracking
- Reporting on work
9. Reporting
Centralized repository

- One stop shop for all job information
- Built-in reporting capabilities
- Database tables
  - Support additional reporting tools
10a. Enterprise Offering

- Non-GIS staff
- Ready to use web apps
- No programming

Organization-wide Workflow System
10b. Enterprise Offering
Extensibility

- Integrate with other systems
  - Web APIs
  - Extended properties
- Dashboards for GIS work
Tracking a workflow in a web application

History, Reporting, Auditing
Summary

- Manage your work
- Standardize and automate your processes
- Integrate your GIS workflows with your existing systems
Where can you find us?

• Esri Showcase
  - Today until 6:00, Tomorrow 9:00 – 1:30 @ Geodatabase Management and Web & Server GIS Islands

• ArcGIS Workflow Manager: Advanced Workflows and Concepts
  - Wednesday 3:15 – 4:30 in Room 14A
Where can you find us?

• **Geodatabase Management Exhibit Hall C**
  - Integrating ArcGIS Data Reviewer & ArcGIS Workflow Manager to automate Data Quality Control Workflows
    - Wednesday 1:30PM – 2:00PM

• **Web & Server GIS Exhibit Hall C**
  - ArcGIS Workflow Manager for Server - Extending the Sample Web Applications
    - Wednesday 10:00AM – 10:30AM
  - ArcGIS Workflow Manager for Server - Understanding the Web APIs
    - Thursday 11:00AM – 11:30AM
Resources

• Product Page
  - http://www.esri.com/workflowmanager

• Resource Center

• Training
  - http://training.esri.com/

• Forums
  - http://forums.arcgis.com/
Thank you…

Please fill out the session evaluation

Offering ID: 1339

Online – www.esri.com/ucsessionsurveys

Paper – pick up and put in drop box