Why are you here?

- Importance of standardizing GIS and non-GIS workflows
- ArcGIS Workflow Manager allows you
  - Organize
  - Centralize
  - Execute Workflows
- Additional Resources
Overview

Work Management

Why is it important to manage work?
Benefits of Work Management

- Improve Data Quality and accuracy
- Simplify Process
- Optimize Resource allocation
- Reduce Production Cost
- Enhance Communication
Common Methods of Managing Work

- Individual approach
- Mock-up workflows
- Ticketing systems
- Whiteboards
- Spreadsheets
What is ArcGIS Workflow Manager

A framework for continuous process improvement
ArcGIS Supports the Enterprise

Transforming the Role of GIS

Making Mapping and GIS Available Across Your Organization
System Framework

ArcGIS Workflow Manager: An Introduction
Workflow Manager Administrator Roles

• **Basic Administrator**
  - Manage configuration items

• **Workflow Author**
  - Designs and authors Workflows

• **Workflow Developer**
  - Extends workflow with custom scripts/code
Key Features
Workflow Management System

- Graphical Representation
- Data Entry Form
- Role Based Access
- User Reassignment
- Report Generation
- Document Integration
- Geospatial Integration
- Email Notifications

...and more
Workflows

• **Document and automate processes**

• **Graphical representation of the work**
  - Canvas with shapes

• **Organized as Jobs**
  - Create data packet for field data collection
  - Updating data for vegetation boundaries
  - Creating maps of specific scale in various areas.
Anatomy of a Workflow

- **Step**
  - Start
  - Check Version
  - Create version
  - Clip Imagery
  - Prepare
  - Inventory Update
  - Documentation
  - Edit Data
  - QC Data
  - Notify

- **Path**
  - Conditional path

- **Merge Point (Dependence)**

- **Starting step**

- **Concurrent steps**
Workflow Assignment

- Automatically route work
- Target specific groups
- Varying staff skills
- Manage large workforces
Default and Custom Properties

Default Properties

Data
Priority
Assignee
Dates
Owner
Application Access Control

- Control User actions
  - Creating jobs
  - Assigning jobs
  - Closing jobs
- Show/hide functionality
  - History
  - Map view tab
  - Reports
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
Key Features

.....continued
Geographic Area of Interest

• Spatial orientation of all work
• Restrict work to a spatial extent
Geoprocessing
Launch GP Step Type

More Edits?

Check In Replica

Clean Up

Data Processing
Clip data
Check out/in data

Spatial Analysis
Spatial overlay
Calculate field
Version Management

- Automate version management
  - Create version per job/user
  - Reconcile and post changes
Version Management

- Automate version management
  - Create version per job/user
  - Reconcile and post changes
  - Cleanup versions
Task Assistant

- Standardize steps in ArcMap
  - Author, share and use tasks
- Promotes sharing of knowledge
  - Communicate best practices
- Automated tasks
Map Document Management

- Step to launch ArcMap in preconfigured state
  - Predefined layers and cartography
  - Zooms to job’s area of interest
  - Update layer source
ArcMap Tools

Set current Job
- Manage Steps
- Workflow Diagram

Spatial auditing
- Reconcile and post version
- Add data from version
- Rollback edits

Job Information
- Properties
- Notes
- Attachments
- Step description
- History

ArcGIS Workflow Manager: An Introduction
Software Demonstration

• 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
Key Features

.....continued
Document Management

• Attachments are key
  - Linked to existing DMS
  - Linked to existing website
  - Embed in workflow database

• Notes captured
Alerts and Notifications

- **Job Notifications**
  - Assign Job
  - Create Job
  - Close Job

- **Workflow Notifications**
  - QC step alert
  - Data received

- **Spatial Notifications**
  - Feature modification
Reports

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

- Non-GIS staff
- Ready to use web apps
- No programming
Extensibility
Developer Options

- Integrate with other systems
  - Desktop APIs
  - Web APIs
  - Extended Properties

- Dashboards for GIS Work
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
What’s coming
A New Application for Desktop

- Ribbon Based UI
- Better integration
- 64 bit
ArcGIS Pro

Project Based System

- Workflow Connection
- Jobs
- Maps
- Data
- GP Tools
ArcGIS Pro

Context Driven UI

- Workflow View
- Job Views
- Map Views
- Access Jobs off the network
- Track all job related actions offline
- Check in jobs back to production
Requirements of a Workflow management system...

Key capabilities of workflow manager..

ArcGIS Pro!

Summary
Sessions – Wednesday July 16th
Demo Theaters (Geodata Management Exhibit Hall C)

- **ArcGIS Data Reviewer**: Integrating ArcGIS Data Reviewer and ArcGIS Workflow Manager to Automate Data Quality Control Workflows (11:30am – 12:00pm)

- **ArcGIS Workflow Manager**: Getting Started with Out-of-the-Box Templates (1:30pm – 2:00pm)

- **ArcGIS Workflow Manager**: Creating Holds and Dependencies on Projects (3:30pm – 4:00pm)

- **ArcGIS Workflow Manager**: Using Custom Properties to Automate Workflows (5:30pm – 6:00pm)
Sessions – Thursday July 17th

- **ArcGIS Workflow Manager: Advanced Workflows and Concepts (10:15am – 11:30am) Room 15 A**

- **ArcGIS Workflow Manager: Integrating Geoprocessing into Your Business Processes (12:30pm – 1:00pm)**
  - Demo Theater - Geodata Management Exhibit Hall C
Resources

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

- **Resource Center**

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

- **Forums**
Thank you…

• Please fill out the session survey:

First Offering ID:  1298

Online – www.esri.com/ucsessionsurveys
Paper – pick up and put in drop box