Configuring the ArcGIS for State and Local Government Solutions

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ArcGIS as a Platform
Simple, Open, and Configurable

- Knowledge Workers
- Executive Access
- Public Engagement
- Work Anywhere
- Enterprise Integration

Professional GIS

Web GIS

Making Mapping and GIS Available Across Your Organization
Transforming the Role of GIS
ArcGIS for State and Local Government

Solutions for Esri’s government customers

• Series of useful maps and apps focused on government work
  • Configurable and extensible
  • Freely available and fully supported

• Community of users
  • Best Practices / Implementation Support

• Network of Esri Services and Partner offerings
  • Help users implement, sustain and enhance

…..Available on-premise or in the cloud
Our Mission
To help government organizations…

• Deliver maps and applications quickly throughout their organization

• Stay current with future releases / avoid legacy technology

• Deploy a geospatial platform that can be leveraged by many

• Leverage the collective knowledge of the entire community

• And do this with….less staff, budget, and technical expertise
ArcGIS for State Government

Transportation
- Railroad Crossing Inspection
- Road Closures
- Bridge Inventory
- Environmental Impact
- Crash Analysis
- Guardrail Inventory
- Pavement Marking Inventory
- Sign Inventory
- Signal Inventory

Public Health
- Beach Monitoring
- Water Quality Monitoring
- Restaurant Inspection
- Restaurant Inspection Results
- My Health Services
- Birth Outcomes
- Model Organization

Emergency Management
- Situational Awareness
- Flood Planning
- Special Event Planning
- Emergency Assistance
- Evacuation Zones
- Road Closures
- Damage Assessment
- My Hazard Information
- EM Maps
- Model Organization
- Public Information Map
- Local Impact Map
- Road Closures
- CAMEO Tools
- Incident Briefing
- Health and Safety Reports
- Damage Assessment Dashboard
- Floodplain Inquiry
- Emergency Assistance
- Evacuation Zone

Environment and Fish and Wildlife
- Permit Status
- Permit Inspection
- Hunting License Locator
- Water Access Locator
- Wildlife Management Area Locator
- Environmental Impact Assessment
- Trail Locator
- Citizen Science
- Model Organization
- Impact Briefing
- Water Quality Inspections/Results

Economic Development
- Live, Work, and Locate
- Incentive Zones
- Site Selector
- Event Locator

GIS/IT
- Executive Dashboard
- Briefing Book
- Community Parcels
- Community Addresses
- Maps and Apps Gallery
- Crowdsource Manager
- Crowdsource Reporter
- Service Catalog/Hosted Services
- Model Organization
- PLSS
A System View
Deploying ArcGIS for State and Local Government

Citizens

Fire Department
- Embedded maps
- Mobile apps
- Web apps
- Open data

Assessor’s Office
- Functional groups
- Editing maps
- Services
- Mobile apps
- Web apps
- Dashboards

Public Works
- Central groups
- Common services
- Standard basemaps
- Information model

Embedded maps
Mobile apps
Web apps
Open data

Functional groups
Editing maps
Services
Mobile apps
Web apps
Dashboards
Configuration Patterns

- Influential factors
  - COTS and configurable solutions strategy
  - Deployment time
  - Technical expertise
- Where do you start?
  - With your business requirements
  - Align them with maps and apps
  - Review system configuration patterns
- Three configuration patterns
  - Complete system adoption
  - Publish and adopt
  - Code and customize

...embrace an agile implementation approach
Complete System Adoption

Step 1: Configure mapping portal
- Set up subscription
- Configure groups
- Invite users

Step 2: Organize your data
- Deploy information model
  - Add fields, features
  - Configure domains
  - Set spatial reference
  - Load source data

Step 3: Author the maps
- Configure maps
  - Adjust scale dependencies and def queries
  - Validate label expressions
  - Publish basemaps and operational layers

Step 4: Deploy the apps
- Configure the desktop, mobile and web apps
  - Add basemaps and operational layers
  - Adjust extents
  - Configure popups
  - Deploy Add-ins and models
  - Add new maps and apps to Organization

Supported by Esri Support Services
Publish and Adopt

Step 1: Configure mapping portal
- Configure ArcGIS Organization
  - Set up subscription
  - Configure groups
  - Invite users

Step 2: Create publication database
- Deploy information model
  - Add fields, features
  - Configure domains
  - Set spatial reference

Step 3: Load production data
- Create ETL Scripts
  - Set source / target
  - Schedule scripts
  - Load production data

Step 4: Author the maps
- Configure maps
  - Adjust scale dependencies and def queries
  - Validate label expressions
  - Publish basemaps and operational layers

Step 5: Deploy the apps
- Configure the mobile and web apps
  - Add basemaps and operational layers
  - Adjust extents
  - Configure popups
  - Add new maps and apps to Organization

Supported by Esri Support Services
Code and Customize

Step 1: Configure mapping portal
- Configure ArcGIS Organization
  - Set up subscription
  - Configure groups
  - Invite users

Step 2: Use your GDB Schema
- Configure your GDB schema
  - Add fields, features

Configure ArcGIS Organization

Step 3: Repair the maps
- Repair map layers (source and symbology)
- Adjust scale dependencies and def queries
- Validate label expressions
- Publish basemaps and operational layers
- Or, just try to use your maps...

Step 4: Customize the apps
- Publish your own mobile and web apps
  - Customize/re-compile the apps
  - Add basemaps and operational layers
  - Adjust extents
  - Configure popups
  - Add new maps and apps to Organization

The Developer Pattern
Implementation Approaches
Configure ArcGIS Online organization

1. Review model organization
2. Setup organization
3. Create central groups
4. Register your content
5. Create functional groups
6. Deploy focused maps and apps

Tip: Admin Tools for ArcGIS Online
AGO Admin Tools
Information Model

• Supports maps and apps
  • Easy to adopt and extend
• Organized access/maintenance patterns
• Fully documented
  • Features, layers and services
• Service catalog supports mobile / web apps

Start with the layer and field aliases and work from there....
Deploy information model

1. Review data dictionary
2. Configure schema
   1. Domains
   2. Field Alias
   3. Additional fields
3. Set spatial reference
4. Deploy empty GDB

Tip: Xray for ArcCatalog and ArcMap

Or….start with service definition and create empty layer in your organization
Show Me!
Deploy maps

- **File Geodatabase to File Geodatabase**
  - Use “Set data source” from the context menu in ArcGIS Catalog

- **File Geodatabase to Enterprise GDB**
  - Use “Set Map Data Sources” to update map:
    - Data sources
    - Label expressions
    - Definition queries

Tip: Productivity Tools > Set Map Data Sources
Configuring Web Applications (Hosted)

- ArcGIS Online Hosted Web Applications
  - State and Local Government Configurations
  - Leveraging ArcGIS Online web application templates
- Follow a consistent pattern
  - Consume web maps
- Can be configured quickly
  - ArcGIS Online configuration panel or advanced configuration within json
- Published in ArcGIS Online
  - Or, downloaded and deployed on local web server
Configuring Web Apps (On-Premise)

- On-Premise web application
  - Configurable JavaScript applications
- Follow a consistent pattern
  - Consume web maps with ArcGIS Online Hosted Services or ArcGIS for Server Services
- Can be configured quickly
  - No programming necessary, just use a configuration file
- Deployed on local web servers
- Example
  - Park Locator
Show Me!
Configuring Web Apps (On Premise)
Tips & Takeaways

1. Deploy the application with the sample dataset first
2. Follow documentation (…don’t skip any steps)
3. If you really need to skip…skip the basemap creation and caching
   - Instead, just use an Esri provided ArcGIS Online Basemap (Web Mercator Auxiliary Sphere)
4. Don’t forget to configure the proxy and publish the app as ASP. NET application (on premise)
5. Never mix spatial references. If the basemap is in Web Mercator then the operational layers need to be in Web Mercator too
The Community

Destination where government's can collaborate

Place where developers can contribute

It's not just about the technology

Have ongoing dialog, share success stories and learn from others
Tools

1. Admin Tools for ArcGIS Online
2. AGO Admin Tools
3. X-Ray for ArcCatalog
4. X-Ray for ArcMap
5. Set Map Data Sources
6. Schema Migration Wizard (not shown today)
7. Gizinta (not shown today)
Thank You

http://solutions.arcgis.com

http://meetup.com/ArcGIS-for-Local-Government/
http://meetup.com/ArcGIS-for-State-Government/

@ArcGISLocalGov
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http://esri.github.com
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