



Configuring the ArcGIS for Local Government Solution

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Agenda

- Introduction
- Configuration Patterns
- Implementation Approaches
- Your Feedback



ArcGIS as a Platform

Simple, Open, and Configurable



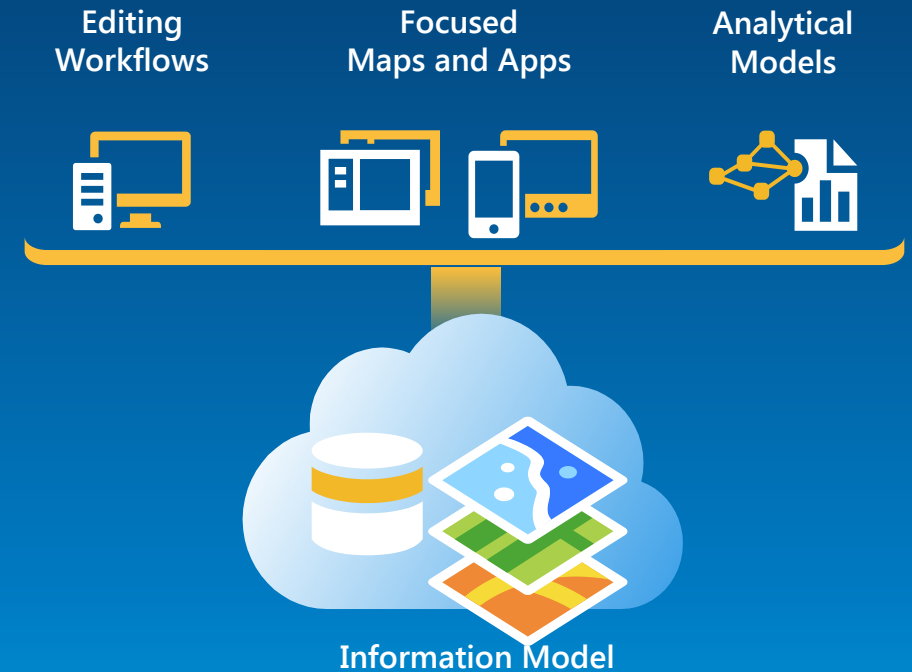
Making Mapping and GIS Available Across Your Organization

Transforming the Role of GIS

ArcGIS for Local Government

Esri solutions for local government customers

- Series of useful maps and apps focused on local 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

ArcGIS for Local Government

Our mission is to help you.....

- Deliver maps and applications quickly throughout your 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 Local Government

Public Works

- Campus Editing
- Campus Place Finder
- Citizen Problem Reporter
- SnowCOP
- My Government Services
- Railroad Crossing Inventory
- Street Tree Inventory
- Street Furniture Inventory
- Guardrail Inventory
- Pavement Marking Inventory

- Road Network Management
- Road Closures
- Plans and Drawings
- Maintenance Agreements
- Sidewalk Inventory
- Bridge Inventory
- Sign Inventory
- Signal Inventory
- Streetlight Inventory
- Public Parking
- Capital Project Planning



Land Records

- Tax Parcel Editing
- Deed Drafter
- Public Land Survey Editing
- Tax Parcel Map Book

- Tax Parcel Viewer
- Value Dashboard
- Tax Reverted Property
- Floodplain Inquiry
- Data Reviewer for Parcels



Elections

- Election Results
- Election Polling Places



Public Safety

- Flood Planning
- Special Event Planning
- Fire Station Wall Map
- Fire Run Book
- Pre-Incident Planning
- AED Inventory
- Home Safety Inspection
- Target Hazard Analysis
- Fire Hydrant Inspection
- Cell Phone Analysis
- Incident Mapping

- Field Interview Card
- Public Information Map
- Impact Summary Map
- Damage Assessment
- My Hazard Information
- EM Maps
- CAMEO Tools
- Evacuation Zones
- Emergency Assistance
- Health and Safety Reports



Water Utilities

- Water Distribution Map
- Sewer Network Map
- Stormwater Network Map
- Water Asset Locator
- Model Organization
- Network Editing
- DR for Water Utilities
- Map Change Request
- Proposed Water Design
- Water Leak Investigator
- Utility Isolation Trace
- Main Break Notification
- Drinking Water Advisory
- Outage Viewer
- Social Media Sentiment
- Capital Planning
- Capital Projects
- Pavement Coordination
- Water Service Request
- CSO Outfalls
- Sewer Service Lookup
- Backflow Inspection

- Hydrant Inspection
- Valve Exercise
- Inlet Inspection
- Field Notes
- Water Utility Mobile Map
- Manhole Inspection
- MS4 Inventory
- Illicit Discharge
- Site Violations
- Water Violations
- Water Restrictions
- Green Infrastructure
- Water Conservation
- SCADA Processor
- Customer Complaints
- High/Low Consumption
- Water Inventory Reports
- CCTV Processor
- Nighttime Flow Analysis
- Sub DMA
- Leak Logger
- Pressure Zone Analysis



Planning

- Site Selector
- Live, Work, Locate
- Park Locator
- Address Data Management
- Address Crowdsourcing
- Data Reviewer for Addresses

- Land Use Public Comment
- Land Use Public Notification
- Code Violation
- Events Calendar



Local Government

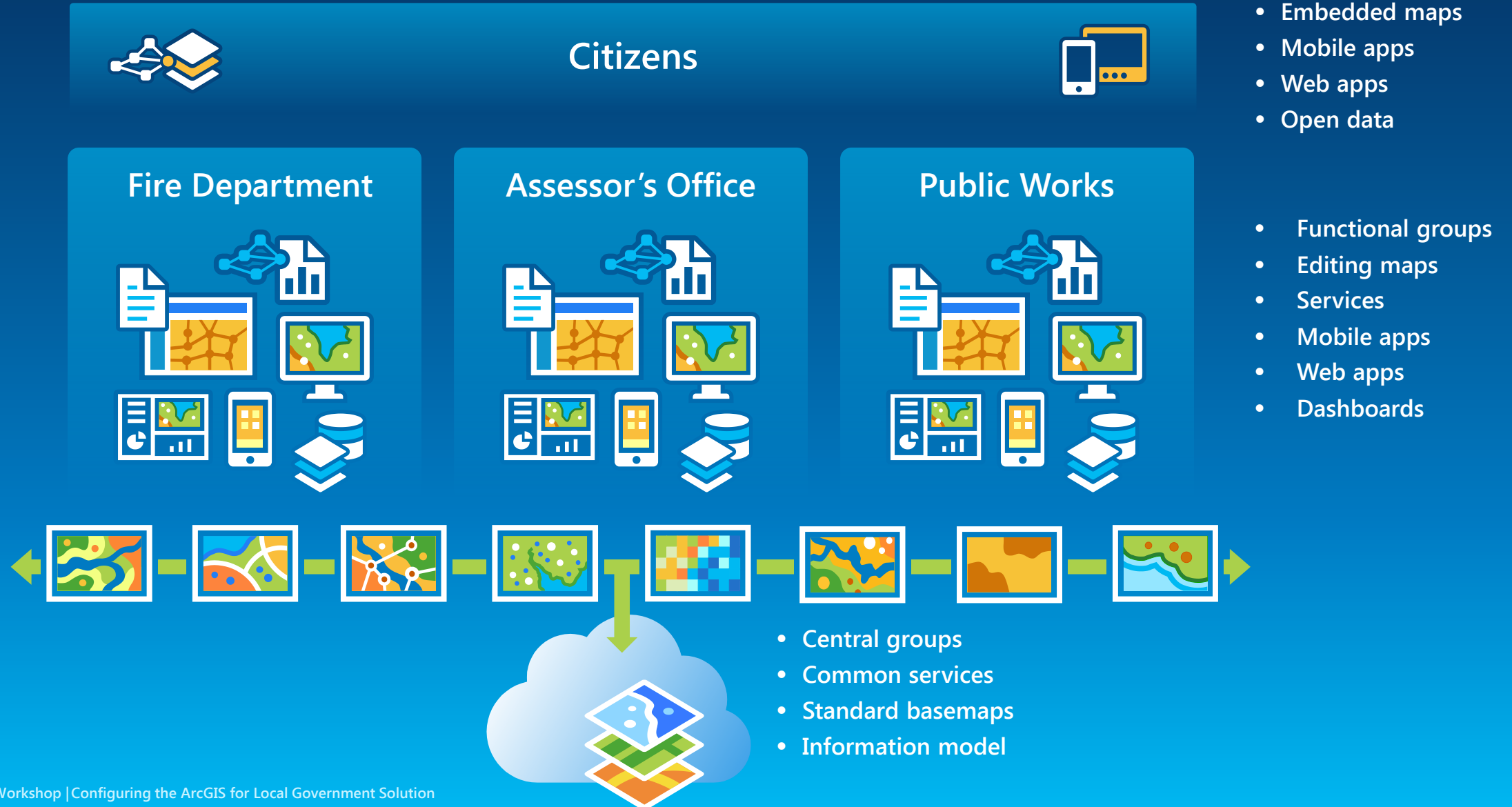
- Information Model
- Basemaps
- Data Reviewer for Basemaps
- Executive Dashboard
- Briefing Book

- Crowdsourcing
- Maps and Apps Gallery
- Community Parcels
- Community Addresses
- Model Organization



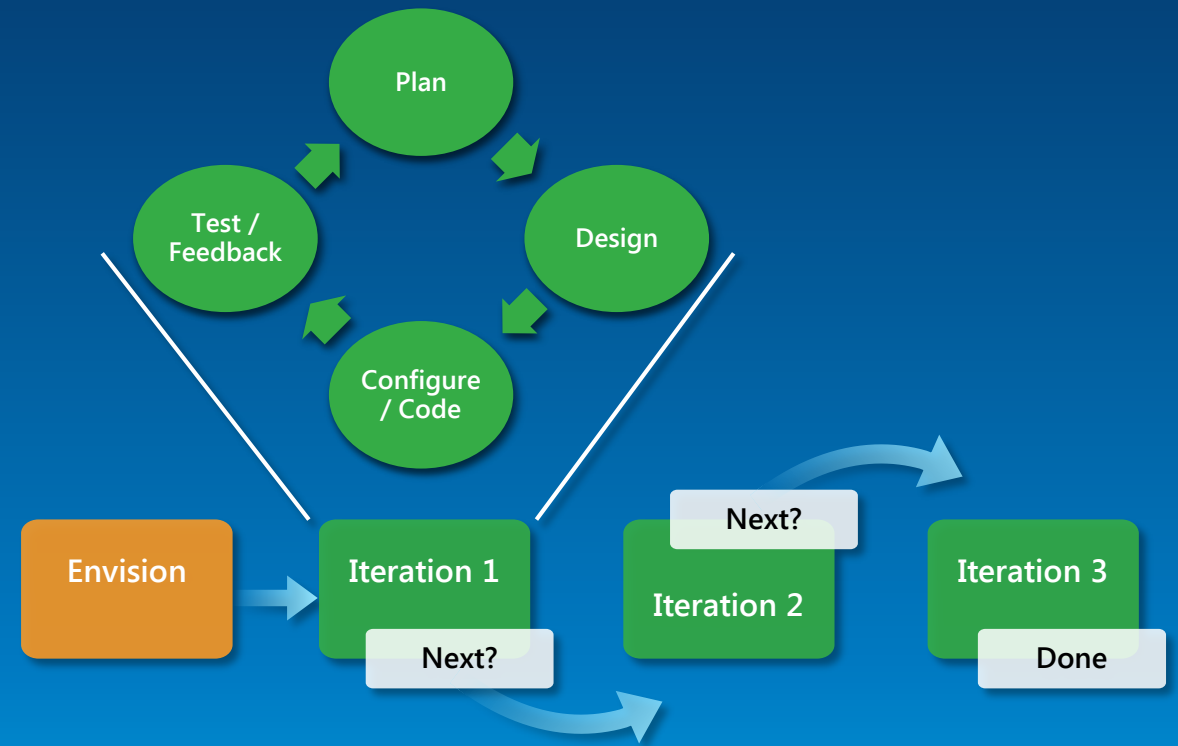
A System View

Deploying ArcGIS for Local Government



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



Configure ArcGIS Organization

- Set up subscription
- Configure groups
- Invite users

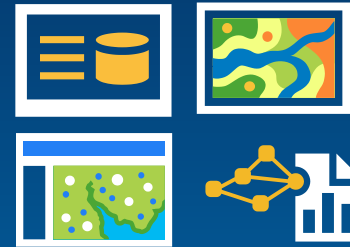
Step 1: Configure mapping portal



Deploy information model

- Add fields, features
- Configure domains
- Set spatial reference
- Load source data

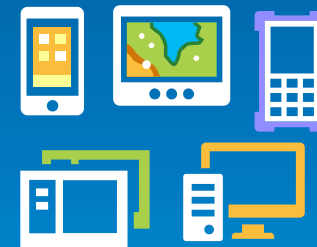
Step 2: Organize your data



Configure maps

- Adjust scale dependencies and def queries
- Validate label expressions
- Publish basemaps and operational layers

Step 3: Author the maps



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

Step 4: Deploy the apps

Supported by Esri Support Services

Publish and Adopt



Configure ArcGIS Organization

- Set up subscription
- Configure groups
- Invite users

Step 1: Configure mapping portal



Deploy information model

- Add fields, features
- Configure domains
- Set spatial reference

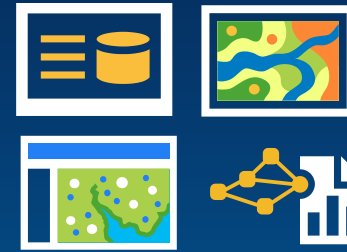
Step 2: Create publication database



Create ETL Scripts

- Set source / target
- Schedule scripts
- Load production data

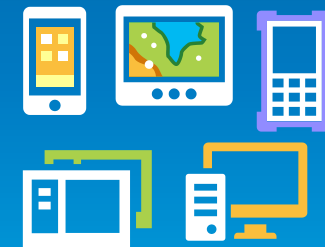
Step 3: Load production data



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



Configure ArcGIS Organization

- Set up subscription
- Configure groups
- Invite users

Step 1: Configure mapping portal



Configure your GDB schema

- Add fields, features

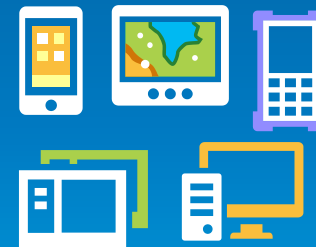
Step 2: Use your GDB Schema



Configure 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 3: Repair the maps



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

Step 4: Customize the apps

The Developer Pattern

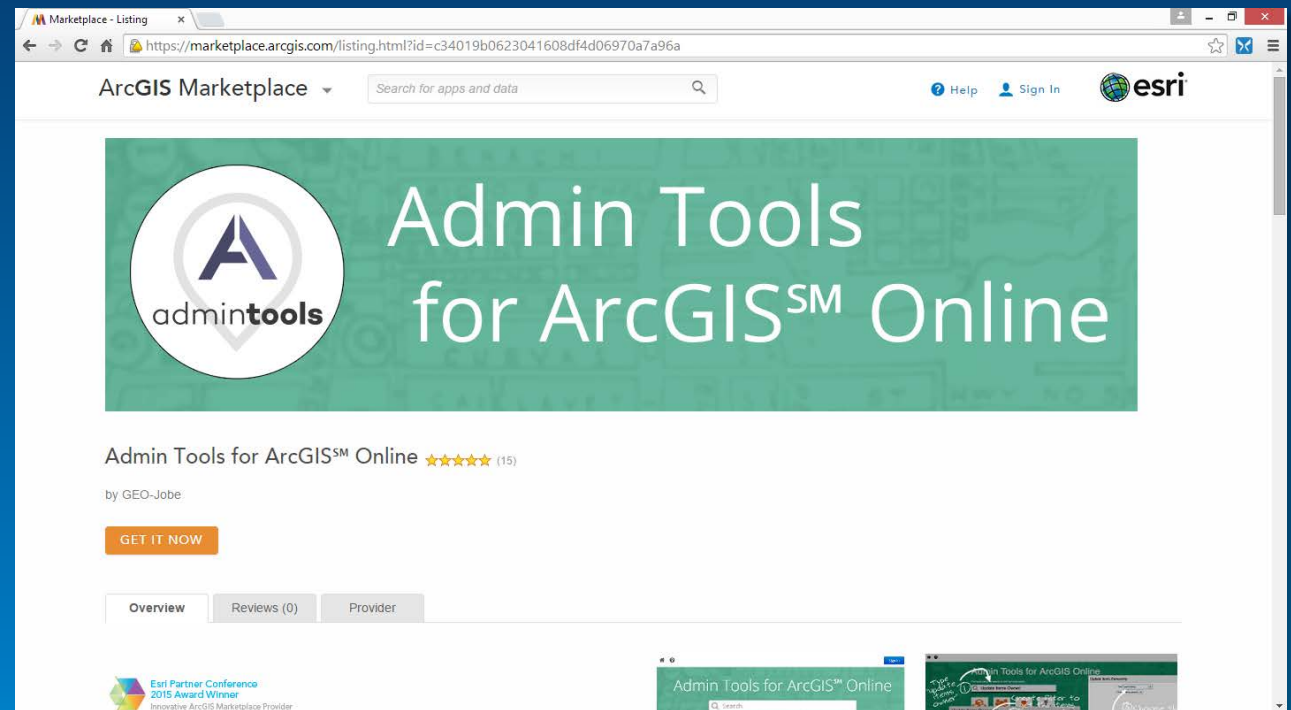
ArcGIS for Local Government

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

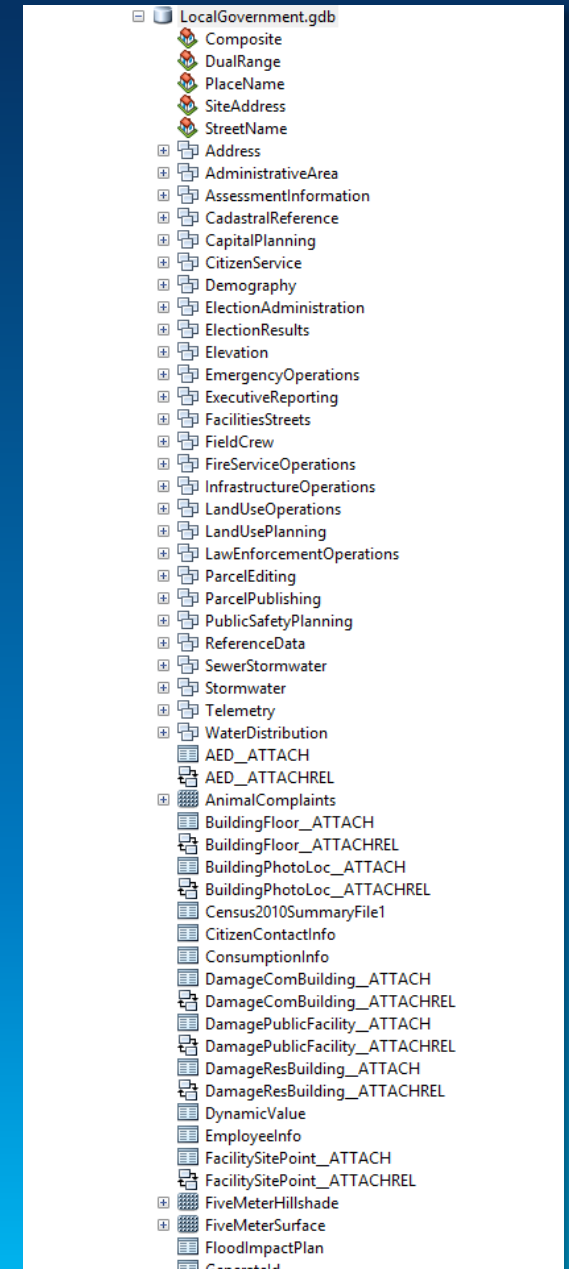


Tip: Admin Tools for ArcGIS Online
AGO Admin Tools

Information Model

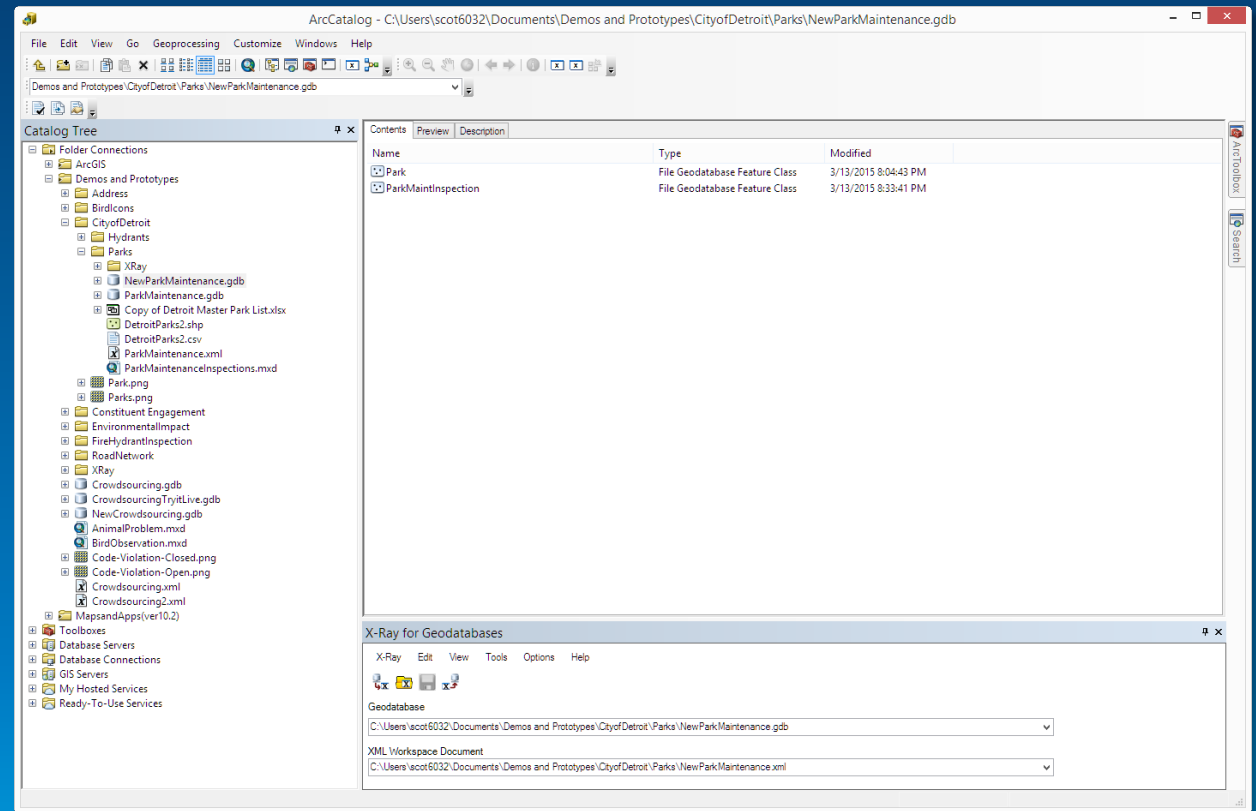
- Supports maps and apps
 - Easy to adopt and extend
- Organized access/maintenance patterns
- Fully documented
 - Features, layers and services
- Service catalog supports mobile / web apps

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

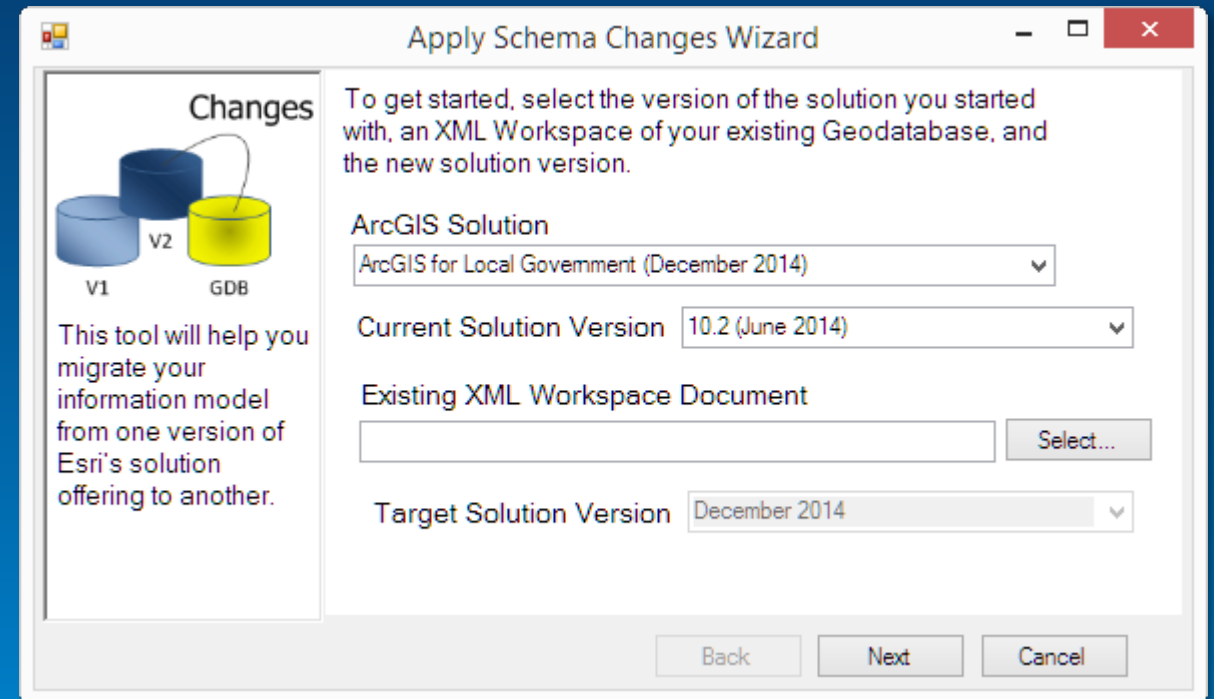


Tip: Xray for ArcCatalog and ArcMap

Or....start with service definition and create empty layer in your organization

Configure information model

1. Review release notes
2. Analyze differences
3. Select changes
4. Create schema
5. Deploy empty GDB



Tip: Schema Migration Wizard

Show Me!



Load your data

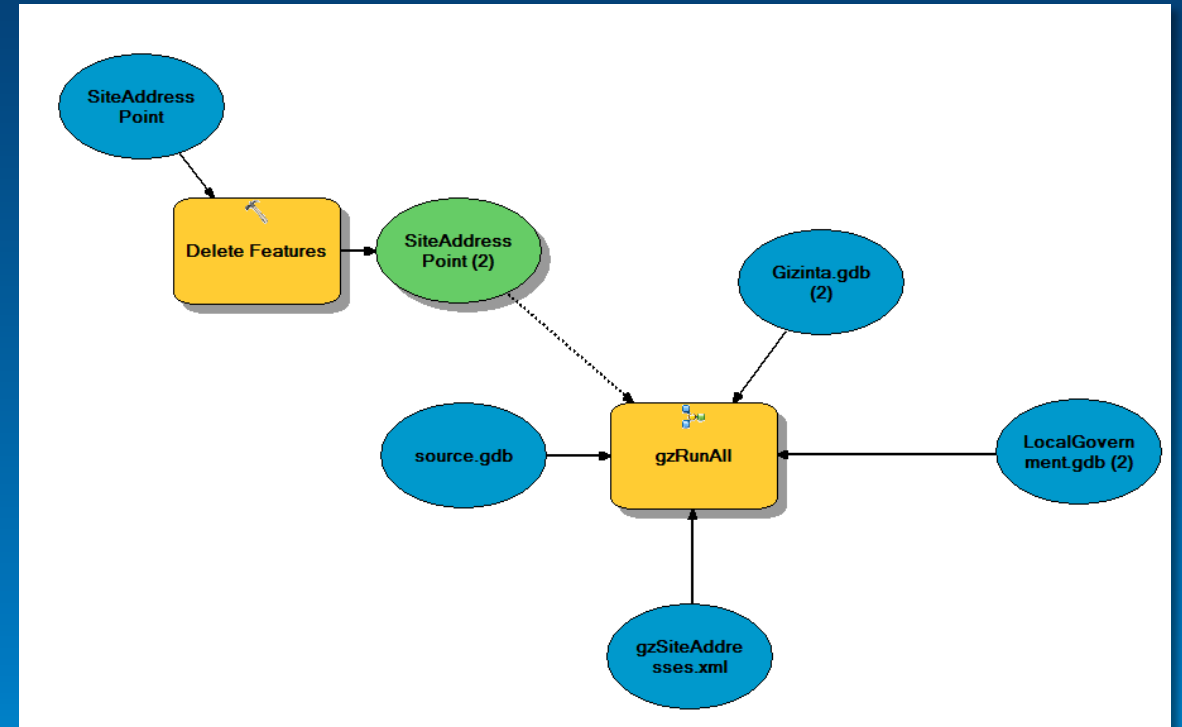
1. Extract
2. Transform
3. Load
4. Repeat...

Tip: Gizinta

The screenshot shows the Gizinta website homepage. The browser address bar displays "gizinta.com". The main header features the "Gizinta" logo and the tagline "GIS Data Movement". A navigation menu includes links for "HOME", "DOWNLOADS", "NEWS", "DOCS!", "FORUM", and "CONTACT US", along with an "RSS" feed icon. The main content area contains a search bar, a "Log In" button, and input fields for "Username" and "Password". Below the login form are checkboxes for "Remember Me", a "Log In" button, and links for "Register" and "Lost Password". A "Twitter" button with the Twitter logo is also present. The main text describes Gizinta as a set of tools for simplifying GIS data movement. A diagram shows "Existing Data" in a box with an arrow labeled "Gizinta" pointing to a cloud labeled "ArcGIS". Below this, it states "Gizinta is made by the people at Vertex3" and lists "Functionality" points: "Extract from source datasets", "Configure and automatically transform datasets to predefined data models", "Perform source-target quality checks", and "Update Geodatabases with the results with options for partial and full updates". At the bottom, a "Gizinta Intro" section shows a "source -> Target" diagram with two columns of data fields: "ROAD_SEG" (ROADSEGMENTID, STREET_NAME) and "Roads" (GeolID, FullStreetName).

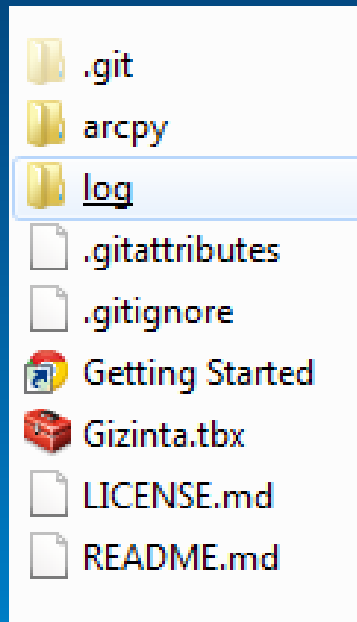
Examples

- Append Geodatabases
 - Updated Data Model
- Convert to LGIM
 - One-time or ongoing



Gizinta Downloads

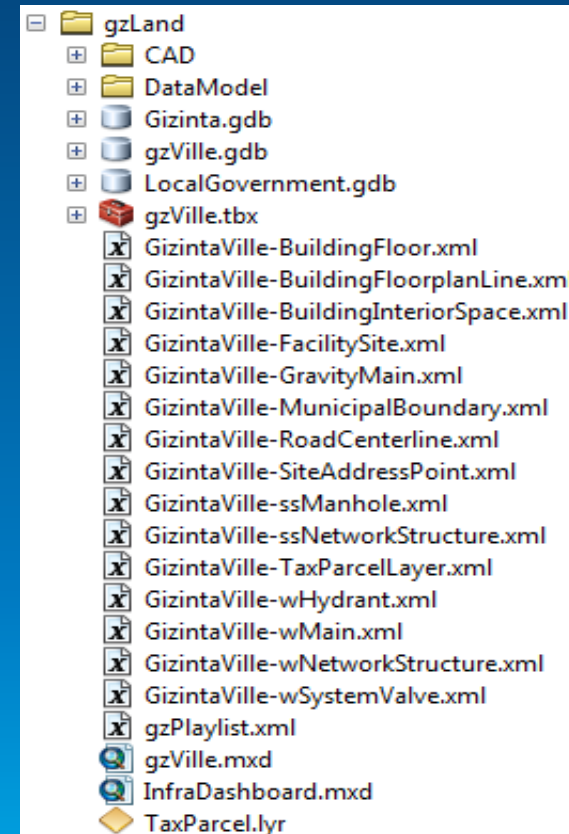
Tools (github.com/gizinta)



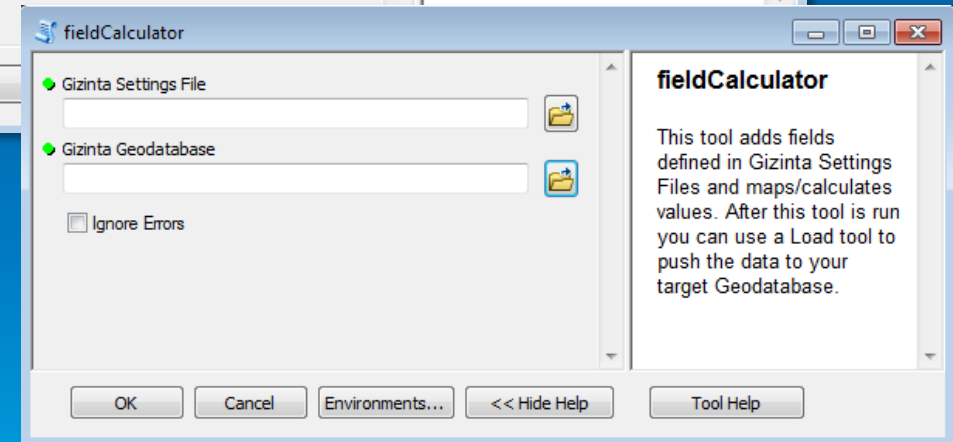
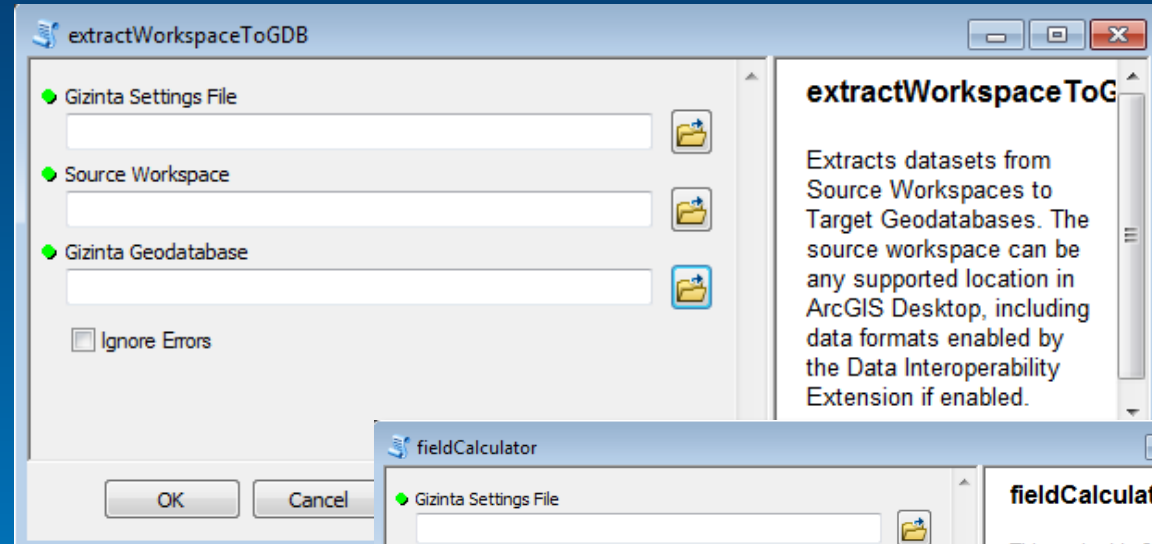
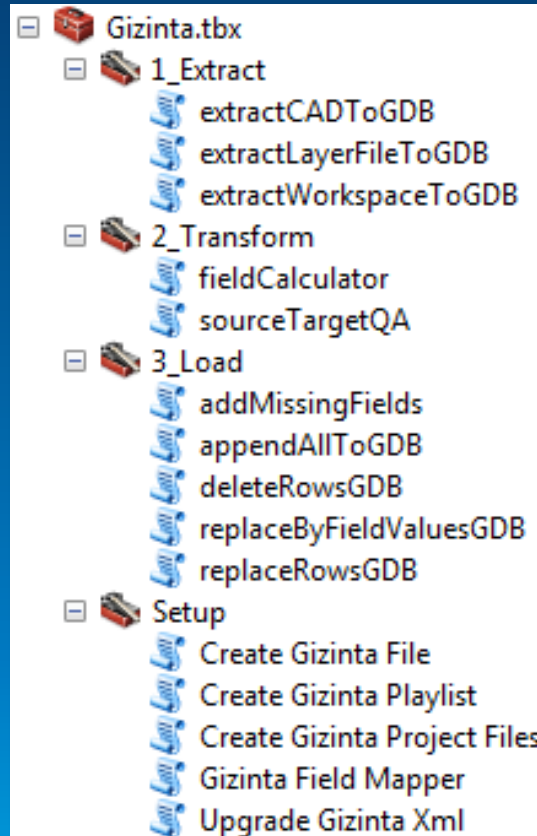
Documentation

<http://gizinta.com/docs/>

Examples (gizinta.com)



Gizinta Toolboxes



It's Free

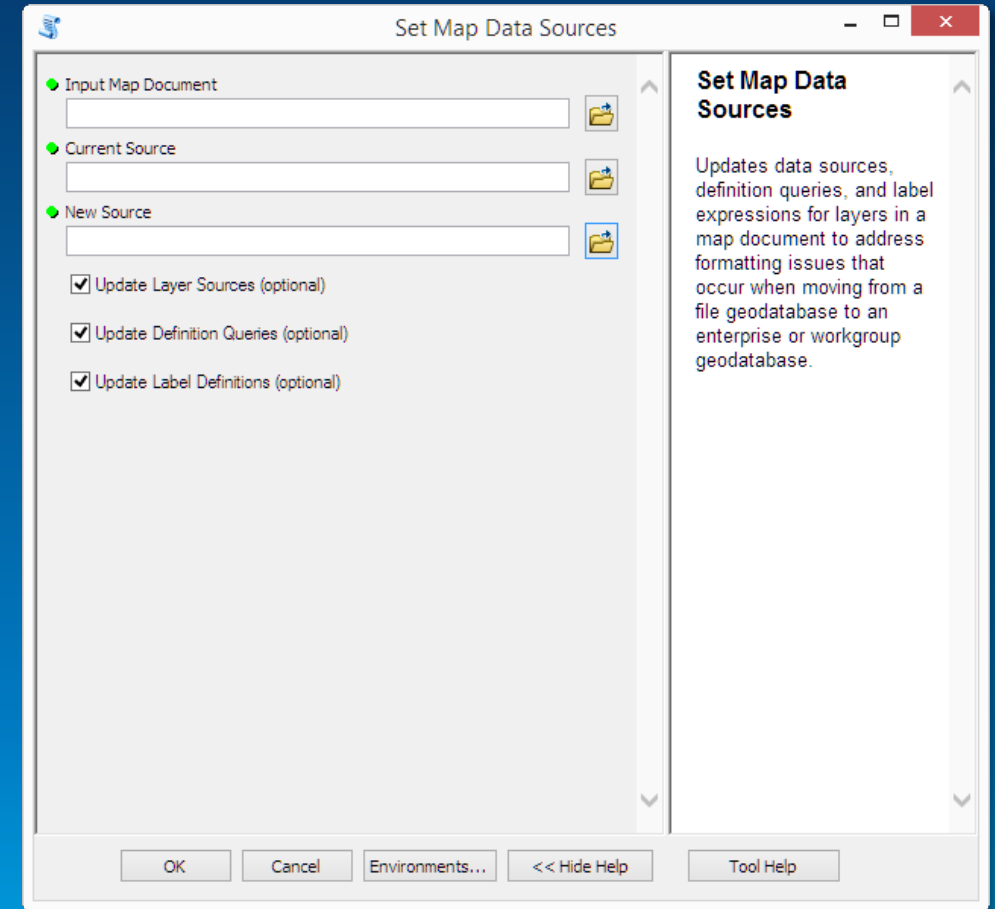
- Download and use Gizinta tools from
 - Gizinta.com
 - ArcGIS Galleries
 - Creative Commons Share-alike license
- ArcGIS Desktop Tools
 - <http://gizinta.com>
 - <http://github.com/Gizinta>
- <http://gizinta.github.io/gseFP>

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 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

Configuring Web Applications (Hosted)

- ArcGIS Online Hosted Web Applications
 - 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
- Example
 - Public Parking (configuration of Finder Web Application Template)

Show Me!



Configuring Web Apps (Hosted)

Public Parking

arcgis4localgov.maps.arcgis.com/home/webmap/configureApp.html?appid=49ed979a70154b0a9f1c8df499314ae6&folderid=cd1cc04a403d4000a5686fc05684e125

Header

Title: Public Parking

Icon URL: esri.com/7G6/McL7G6qca...

Color Scheme: Sea Blues

Map Settings

Currently displaying Public Parking web map. Use the Select a map button to choose a different web map.

SELECT WEB MAP

Alternate Basemap Group: Basemaps

Basemap Group Owner: GISITAnalyst

Find Settings

Hint: 200 W Jefferson Ave, Naperville

Zoom Level: 19

Show PopUp for Selected Feature

Find Layers and Fields

Surface Lots

Parking Garages

On Street Parking

Pay Stations

Result Display Layers and Fields (optional)

Surface Lots

Parking Garages

On Street Parking

Pay Stations

SAVE RESET CANCEL

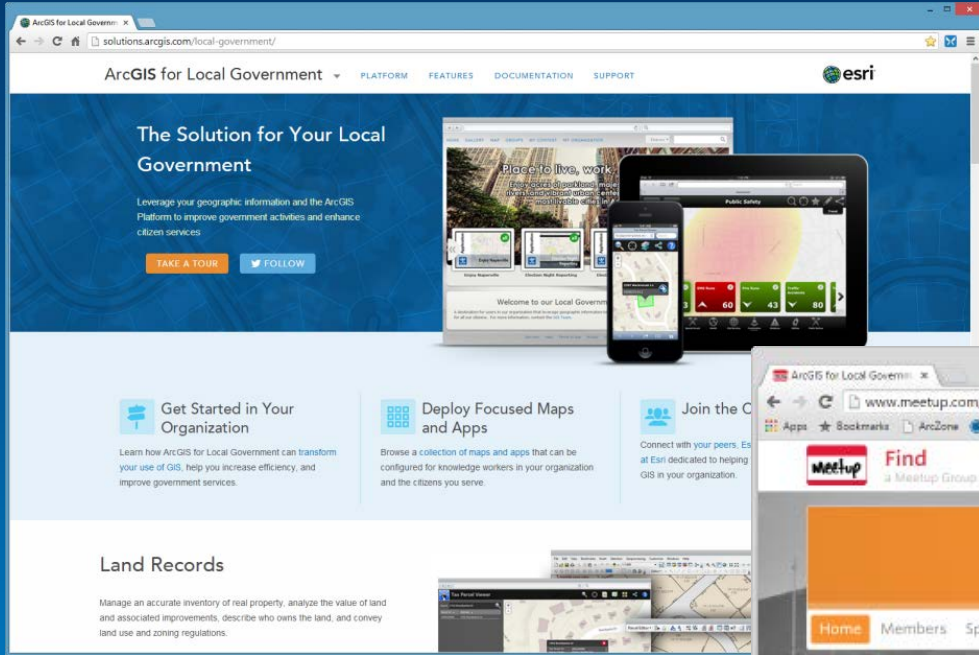
Tips & Takeaways

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

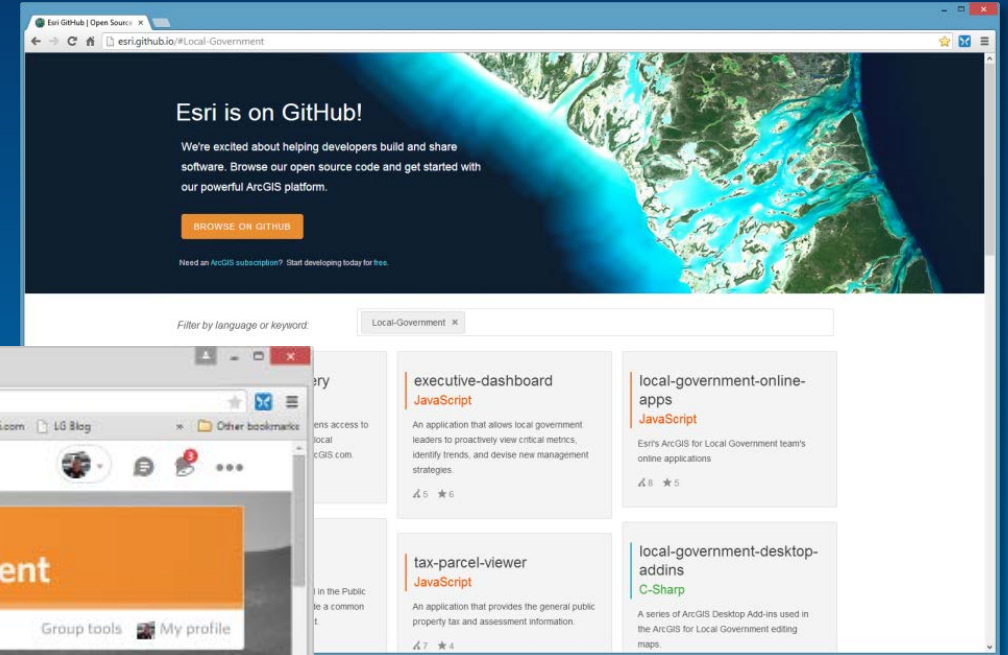
More detailed info in Demo Theaters and ArcGIS Solution Island

The Community

It's not just about the technology



Destination where government's can collaborate



Place where developers can contribute too



Ongoing dialog to 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. Schema Migration Wizard
6. Gizinta
7. Set Map Data Sources

UC Events

- **ArcGIS for Local Government Sessions**
 - Seven different tech workshops
- **Special Interest Group**
 - Wednesday Lunch
- **Solution Island**
 - Focused conversations / support

Thank you...



<http://solutions.arcgis.com>



<http://meetup.com/ArcGIS-for-Local-Government/>



@ArcGISLocalGov

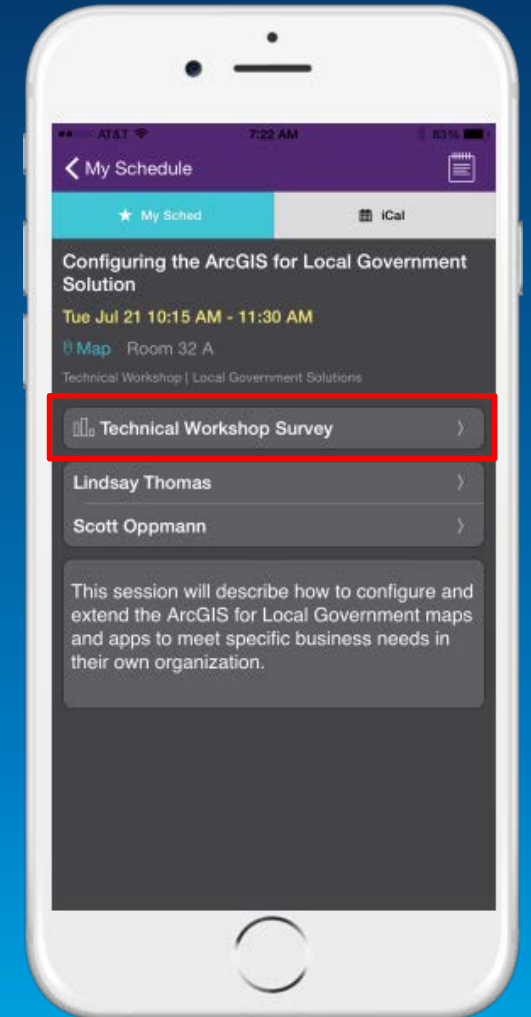


<http://esri.github.com>

Please fill out the session survey:

Mobile – Esri Events UC mobile app

Paper – Pick up and place in drop box





Understanding our world.