

Esri | California • Hawaii • Nevada
Regional User Group Conference

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Tips and Tricks for Building Web Apps for the Nondeveloper

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Agenda

- **The ArcGIS System**
- **Getting started with ArcGIS templates**
- **Configuring applications for the web**
- **Enabling field information with configurable mobile applications**
- **Integrating ArcGIS for Sharepoint**

ArcGIS 10 — A Complete System

Easier
More Powerful
and Everywhere

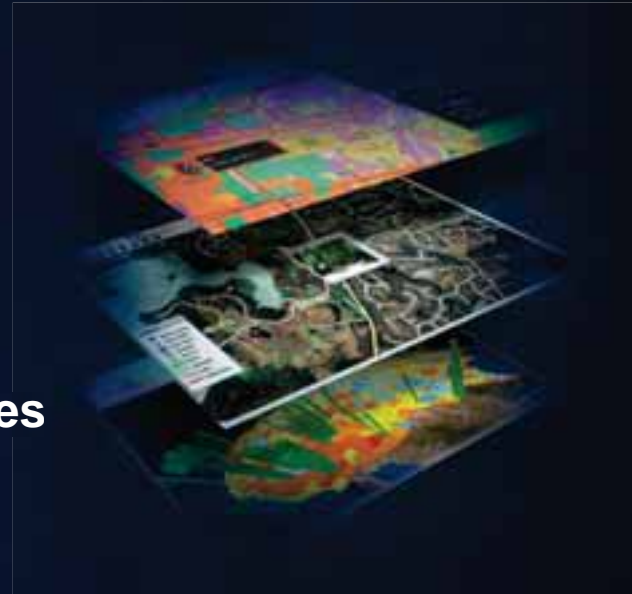


ArcGIS is an online system



ArcGIS Online includes

- **Maps**
 - Basemaps, maps, layers
 - Map templates
- **Applications**
 - Web & mobile
 - Code and application templates
- **Tools**
 - Locators, gazetteers
 - Tasks
- **Software**
 - ArcGIS Web mapping APIs
 - Online applications (e.g., BAO, Explorer Online)



ArcGIS Online Maps

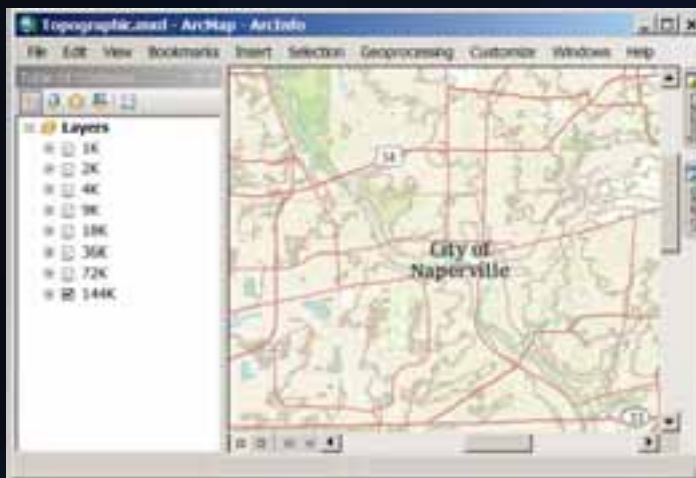
- **ESRI Maps**
 - Developed and maintained by ESRI
 - Imagery, streets, demographics
- **Community Maps**
 - Jointly developed by ESRI and ArcGIS users
 - Topographic map, International street
- **User Maps**
 - Developed and maintained by ArcGIS users
 - May be managed (hosted) by user or ESRI



Map Templates

- Contain best practices for publishing your data
- Are used in ArcGIS Online maps
- Are well designed for Web and mobile applications
- Are downloadable, ready to use, plug-in your data

Local Government Topographic

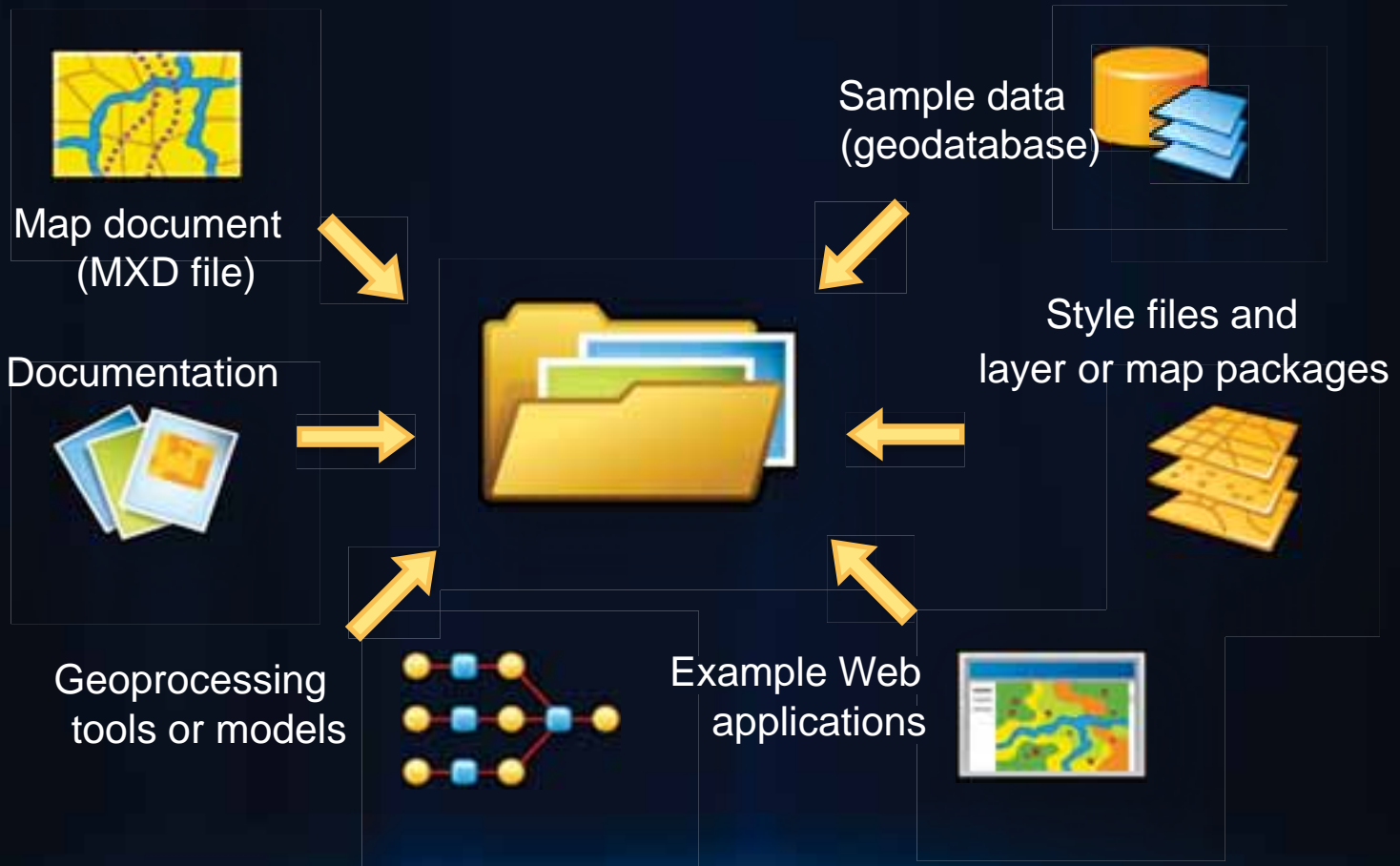


World Topographic Map



What is included with a Map Template?

A collection of resources for producing a well-designed map



Industry focused templates

- **Contain maps and applications that will help you get started in a specific industry**
 - **Community Maps**
 - **Defense & Intelligence**
 - **Electric & Gas**
 - **Hydro**
 - **Local Government**
 - **Roads & Highways**
 - **Telecommunications**
 - **Water Utilities**

Geodatabase

- **Contain best practices for geodatabase design**
- **Each data model includes...**
 - **An example case study implementation**
 - **A small sample database**
 - **A geodatabase template for importing the data model**
 - **A white paper explaining the design**
 - **Data model poster**
 - **Tips and tricks on how to utilize the data model from the case study**

Demo

Configurable web applications



ArcGIS.com Viewer

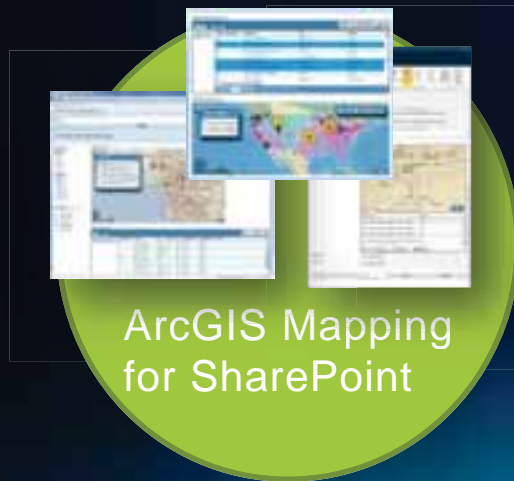
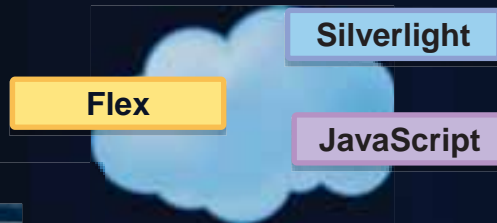
Three overlapping screenshots of the ArcGIS.com Viewer interface, showing various map views and data layers.



ArcGIS Explorer


Three overlapping screenshots of the ArcGIS Explorer interface, displaying different map styles and data layers.

Open Web APIs



ArcGIS Mapping for SharePoint

Three overlapping screenshots of the ArcGIS Mapping for SharePoint interface, showing map views and data layers.

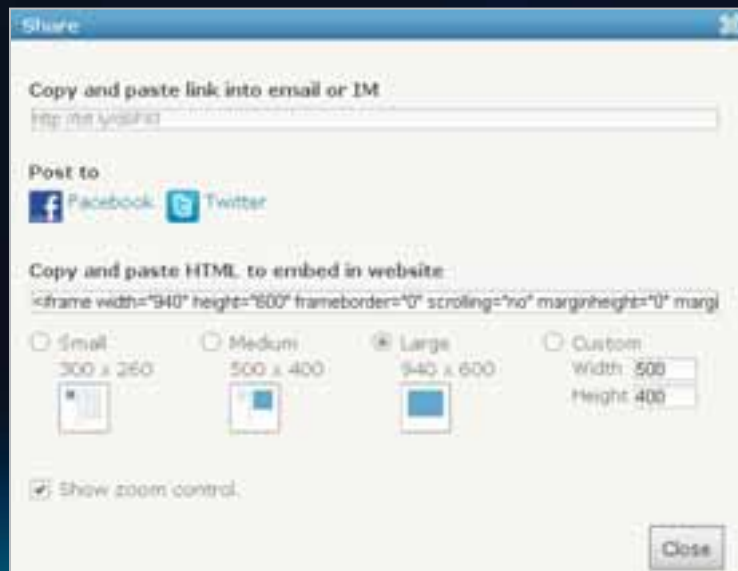


ArcGIS Viewer for Flex

Three overlapping screenshots of the ArcGIS Viewer for Flex interface, showing map views and data layers. A red Flex logo and a black Facebook (FB) logo are visible in the bottom left corner of the screenshots.

ArcGIS.com Viewer

- **Allows users to create and share maps**
 - Use any accessible ArcGIS Server
 - Embed maps from ArcGIS.com into your website
- **Maps are hosted on ArcGIS.com**
- **Built using ArcGIS API for JavaScript**



Demo

ArcGIS Viewer for Flex

- **Downloadable Web application**
 - Installed and maintained on-premise
- **Configurable application**
 - Configure out-of-the-box widgets
 - Download and configure user widgets
 - No programming experience required
- **Can also be customized**
 - Customize existing widgets
 - Create and distribute your own widgets
 - Advanced programming skills required
- **Built using ArcGIS API for Flex**



Configuring ArcGIS Viewer for Flex

- **Two types of XML configuration files:**
 - **Application level**
 - **Widget level**
- **Use application configuration file to specify:**
 - **Basemaps**
 - **Operational layers**
 - **Widgets**
- **Use widget configuration files to specify:**
 - **Widget-specific parameters**

Demo

Enabling your mobile workforce

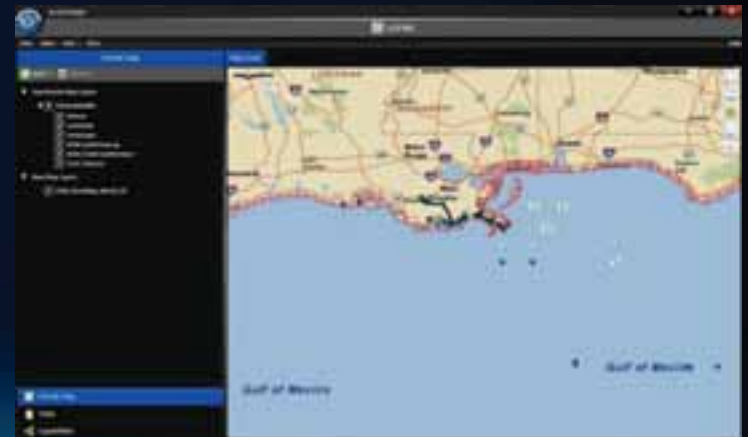
- **Improve field productivity**
 - Use maps to make decisions
 - View location of real-time information
 - Route and navigate using maps
- **Maintain operational data**
 - Inspect assets
 - Collect accurate locations
 - Capture observations
 - Record events
- **Facilitate accurate operational awareness**
 - Real-time locations
 - Wireless synchronization



Mobile applications for the non-developer

- **Light weight devices**
 - ArcGIS for iOS
 - BAO for iOS
 - ArcGIS for Windows Phone
 - ArcGIS for Android

- **ArcGIS Mobile Project Center**
 - Configure ArcGIS Mobile applications



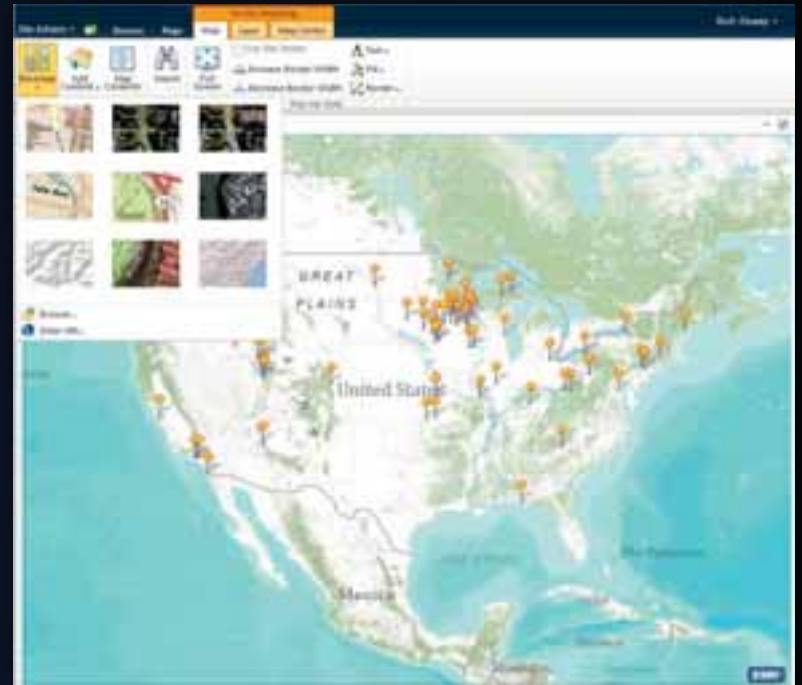
Configurable mobile application on ArcGIS.com

The screenshot displays the ArcGIS.com Gallery interface. At the top, there is a navigation bar with the ArcGIS logo, a 'GALLERY' button, and links for 'MAP', 'GROUPS', and 'MY CONTENT'. Below the navigation bar, the page title is 'Featured Maps and Apps from the ArcGIS Community'. There are three tabs: 'Maps', 'Web Apps', and 'Mobile Apps', with 'Mobile Apps' being the active tab. The main content area features a grid of nine mobile application thumbnails, each with a title below it:

- DivvoWatch**: A satellite map view with a red location pin.
- QuakeFeed iOS App**: A map of the United States with red and orange circular markers indicating earthquake locations.
- BAD for iOS**: A black smartphone displaying a mobile application interface.
- WetCollect Software for Mobile Wetland Data Collection**: A yellow handheld device displaying a data collection interface.
- Advanced Mobile Maps4Apps for Field Workers**: A map interface with a network of lines, possibly representing roads or utility lines.
- Responder Mobile**: A tablet displaying a complex mobile application interface with multiple panels and a map.
- QC for Damage Assessment and**: A tablet displaying a grid of colorful icons representing different types of damage or features.
- Phly311**: A black smartphone displaying a mobile application interface with a city skyline.
- EMS Fire Response**: A map interface showing a topographic map with a red line indicating a route or boundary.

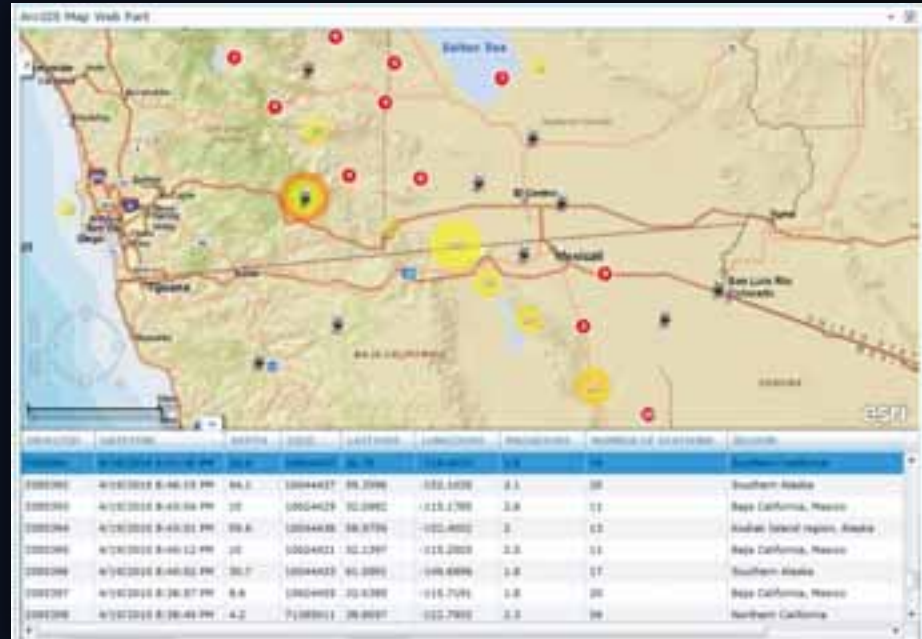
ArcGIS Mapping for SharePoint 2.0

- Enables the creation, display, and sharing of information within SharePoint
- Includes a configurable web part
- Uses data from
 - ArcGIS Server, ArcGIS Online, Bing Maps, SharePoint List & Form Libraries, SQL Server (BCS/SDS)
- Integrated with SharePoint 2010



Access tabular information

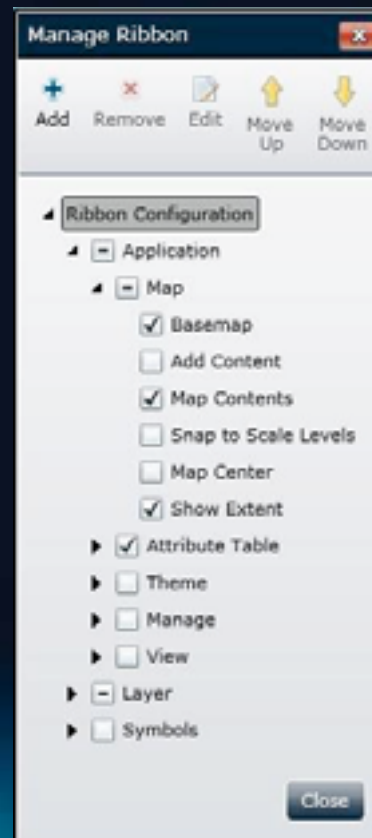
- Query features
- Select records
- Render features using attribute values
 - Class breaks
 - Unique values



Customizable run-time

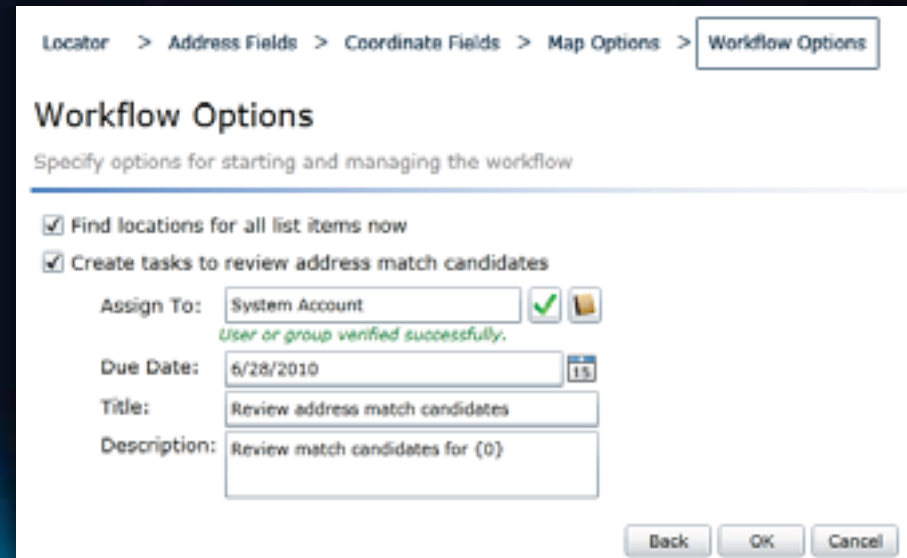
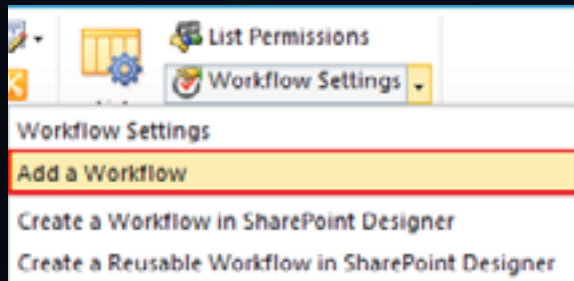


- **Configure Items on SharePoint's Ribbon**
 - Allow access to tools, map configuration, and ribbon elements
 - User functionality is defined by configured features



Locate Addresses Workflow

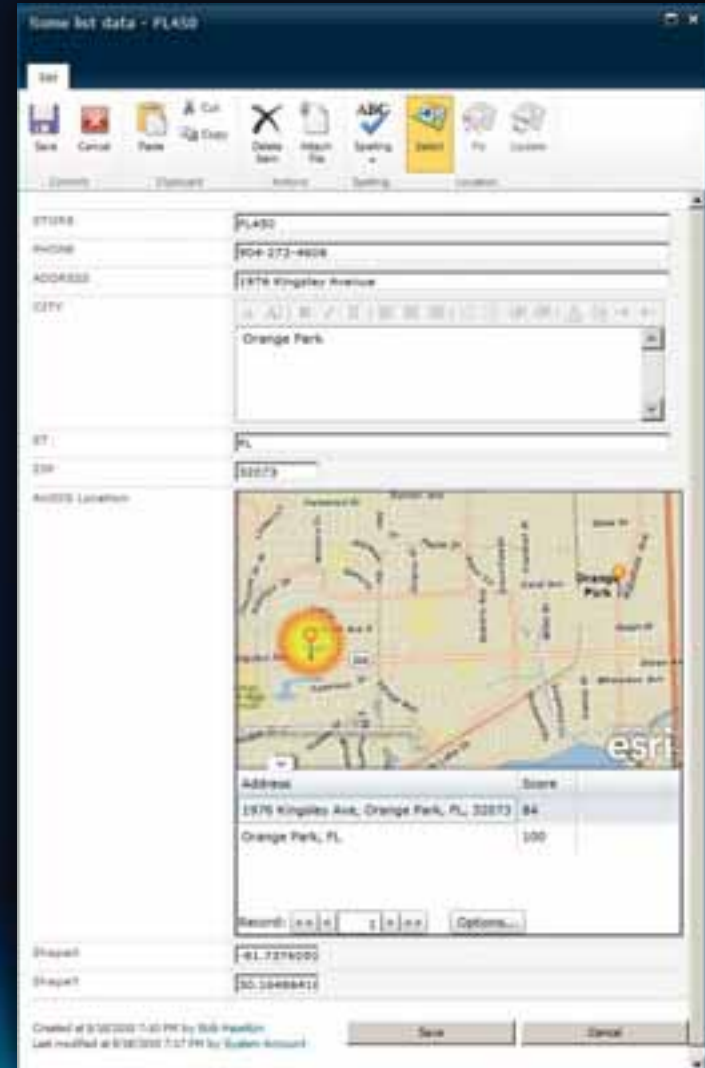
- Used to find the location of addresses stored in SharePoint lists
- Create a SharePoint workflow to locate addresses
- Can be used with ArcGIS Online or your Geocoding Service



A screenshot of the 'Workflow Options' configuration page in SharePoint. The breadcrumb trail at the top reads: 'Locator > Address Fields > Coordinate Fields > Map Options > Workflow Options'. The page title is 'Workflow Options' with the subtitle 'Specify options for starting and managing the workflow'. The configuration includes two checked checkboxes: 'Find locations for all list items now' and 'Create tasks to review address match candidates'. The 'Assign To' field is set to 'System Account' with a green checkmark and a confirmation message 'User or group verified successfully.'. The 'Due Date' is set to '6/28/2010'. The 'Title' is 'Review address match candidates' and the 'Description' is 'Review match candidates for {0}'. At the bottom right, there are 'Back', 'OK', and 'Cancel' buttons.

Locate Addresses Workflow

- **Automatic updates**
 - When a list item is changed or added
- **Interactively select the best address candidate match**
 - Using the Location Field
- **Track the status of candidate selection**



ArcGIS Mapping Administration

ArcGIS Mapping for SharePoint @ VS Live » Site Settings

Home

Libraries
Site Pages
Shared Documents

Lists
Calendar
Tasks
Addressed (Sales Data)
MyAddresses
VSLive111
Demo1

Discussions
Team Discussion

Recycle Bin
All Site Content

Users and Permissions
People and groups
Site permissions
Site collection administrators

Galleries
Site columns
Site content types
Web parts
List templates
Master pages
Themes
Solutions

Reporting Services
Manage Shared Schedules
Reporting Services Site Settings

Site Collection Administration
Search settings
Search scopes
Search keywords
FAST Search keywords
FAST Search site promotion and demotion
FAST Search user context
Recycle bin
Site collection features
Site hierarchy
Site collection audit settings
Audit log reports
Portal site connection
Site collection policies
Content type publishing
SharePoint Designer Settings
Visual Upgrade
Help settings

Look and Feel
Title, description, and icon
Quick launch
Top link bar
Tree view
Site theme

Site Actions
Manage site features
Save site as template
Reset to site definition
Delete this site
Site Web Analytics reports
Site Collection Web Analytics reports

Site Administration
Regional settings
Site libraries and lists
User alerts
RSS
Search and offline availability
Sites and workspaces
Workflows
Workflow settings
Related Links scope settings
Term store management

ArcGIS Mapping Administration
Basemaps
Connections
Geometry Service
Locators
Symbols
Extensions

Extending ArcGIS Mapping for SharePoint

- **Geoprocessing**
 - Add geoprocessing tools to the interface
 - Samples for common tools available online
- **Extend the Web Part using the ArcGIS API for Microsoft Silverlight**



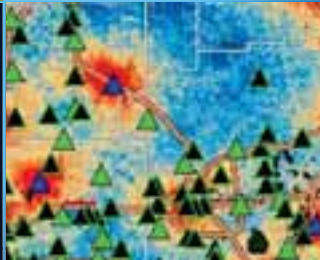
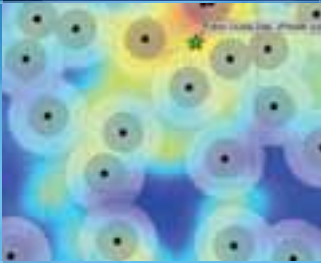
Demo

Summary

- **ArcGIS is a complete system**
- **Templates provide a starting point for creating maps and applications**
- **Configurable web application help you deploy applications faster**
- **Configurable mobile applications enable field maps and data collection**
- **SharePoint delivers maps and workflows to non-GIS users within you organization**

Fulton County Dept. of Health and Wellness

Questions





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