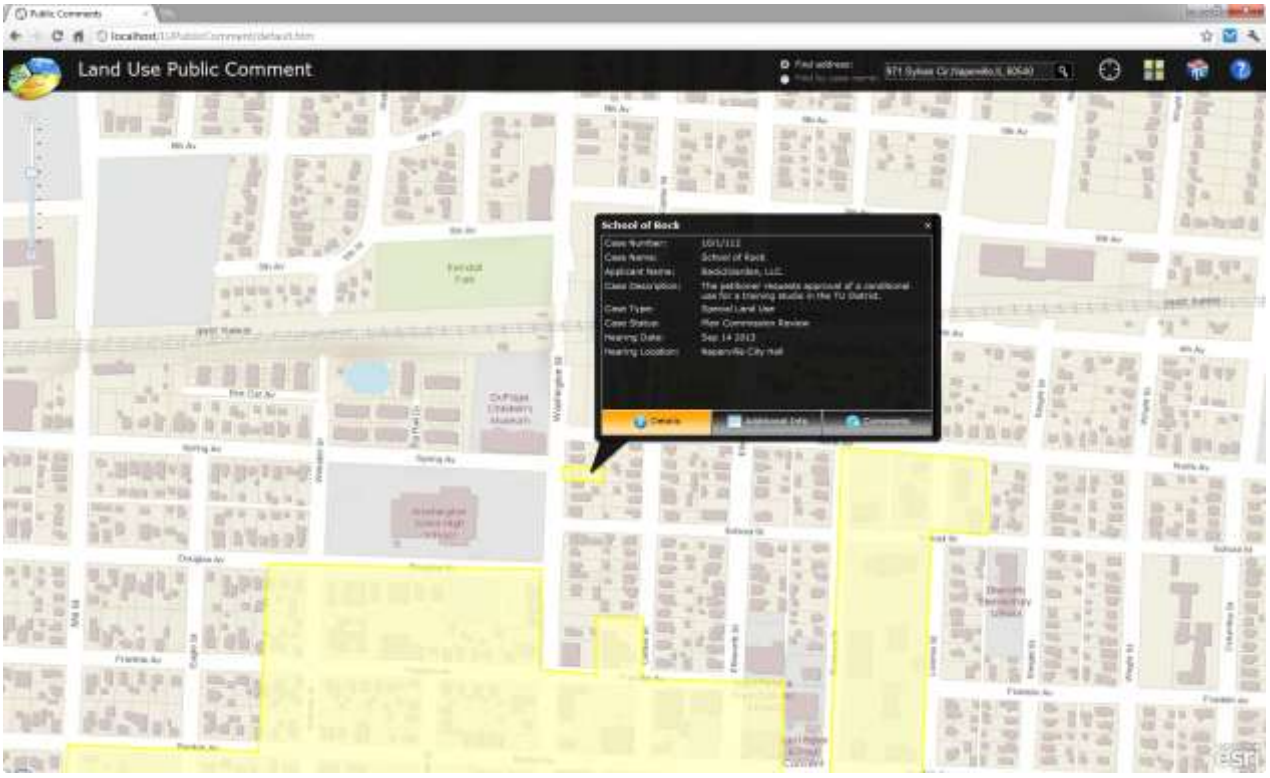
Template: Land Use Public Comment
Version: Final ArcGIS 10 Release
Date: June 29, 2012

Introduction

This Land Use Public Comment application is a configuration of ArcGIS Server and a JavaScript application that allows the general public and other interested parties to comment on proposed land use cases being heard in their Local Government. This interactive web application includes two local government base maps to choose from, and a simple tool to review the land use case and submit public comments to the responsible organization.



The Land Use Public Comment Application

This application is named Land Use Public Comment. It can be used by planning and zoning, building, or other local government organizations to deliver a web-based public comment application. This application provides 24x7 access to the organization and typically supplements statutory public notice requirements. In local governments that use technology during their planning commission, zoning board of appeals, or governing body's meetings, the online comments can be reviewed during the hearing and at the same time residents are commenting in person on the proposal. If technology is not present, a manual report can be created and routed to appropriate staff. Note, the application has been configured to only show development plans with a future hearing date. It does not allow comments to be submitted on development plans with a hearing date in the past.

The Land Use Public Comment application comes with two local government base maps. The first is the Parcel Public Access base map. This base map provides a consumer representation of parcel information and can be used to locate facilities, structures, etc. by address. It uses design elements found in the General Purpose base map and includes structures, roads, major facilities and landmarks, water features, and boundaries.

The second base map is the Imagery Hybrid base map. This base map provides high-resolution imagery as an alternative to much of the content contained in the General Purpose base map. It includes roads and labels overlaid on recent imagery that provide context for the features visible on the imagery. Please note, the Imagery Hybrid base map is configured in this

application but not included in the download because of its size. You can download a copy of the Imagery Hybrid base Map from ArcGIS.com when you are ready to deploy the Land Use Public Comment application with your authoritative data.

The Land Use Public Comment application uses an ArcGIS 10 feature service to create public comment information in the Local Government geodatabase. As the Public Comment table is populated with content, it can be visualized in other maps and apps provided on the ArcGIS for Local Government Resource Center.

As an initial step, we suggest you try the Land Use Public Comment application. Then follow the instructions below to install this application on your own.

Web Configuration

The Land Use Public Comment application is optimized for a PC with the following:

- Microsoft Internet Explorer 7/8/9, Mozilla Firefox, Google Chrome, Apple Safari
- 1280x1024 Screen Resolution

Software Environment

The following software must be installed and configured:

- ArcGIS Server 10 w/SP1 or higher for the Microsoft .Net Framework – Standard or Advanced
- ArcGIS Desktop 10 w/SP1 or higher - ArcInfo or ArcEditor
- ArcGIS Desktop 10 w/SP1 or higher - Maplex Labeling Extension
- ArcSDE for Microsoft SQL Server 2008 Express – Personal
- Microsoft ASP.Net Framework 4.0

Note: ArcGIS Server can be configured on other supported web servers and database platforms; however this application has been optimized for ArcGIS Server the Microsoft.Net Framework and ArcSDE for Microsoft SQL Server 2008 Express.

Contents

The following files are provided in the Land Use Public Comment ZIP file:

Directory	Item	Description
Maps and Geodatabases	ParcelPublicAccess.mxd	The map document used to author the ParcelPublicAccess map
	ParcelPublicAccess.msd	The map service definition used to author the ParcelPublicAccess map service
	LandUseCases.mxd	The map document used to author the LandUseCases Feature Service
	LocalGovernment.gdb	The local government geodatabase with content from the City of Naperville, Illinois
Application	LUPublicComment	A folder containing the application files, graphics files, and items needed to configure the Public Comment application
Documentation	DataDictionary.htm	An HTML document that contains a description of the LocalGovernment.gdb content
	ParcelPublicAccess.html	An HTML document that describes the contents of ParcelPublicAccess.mxd
	LandUseCases.html	An HTML document that describes the contents of LandUseCases.mxd
	Getting Started with Land Use Public Comment.pdf	A PDF document that describes how to configure the application and changes made with each release

How to configure and use the Land Use Public Comment Application

You can configure the Land Use Public Comment application in your environment, and in doing so, learn how to publish and serve your own maps using ArcGIS Server and your organization's data. To complete the configuration, you will need experience with ArcGIS Server and Microsoft's Internet Information Server (IIS). If you are new to JavaScript applications, this application will demonstrate a pattern you can use to deploy your own JavaScript application and publish web maps using ArcGIS Server.

Implementation Steps

Follow the five implementation steps to publish and serve the Land Use Public Comment application in your organization.

Step 1 – Publish the Local Government Base Map Services

1. Unzip the Land Use Public Comment Download you downloaded from ArcGIS.com and place the contents of the zip file in the following directory on your computer:

    - <your_directory>\ArcGISTemplates\LocalGov\PublicComment\

2. Copy LocalGovernment.gdb and the ArcMap map service definition (msd) for the base map to a directory location that is accessible to your ArcGISSOC Account on your ArcGIS Server computer.

    Here are the map documents to copy to the directory location:
    - ParcelPublicAccess.msd
    - ImageryHybrid.msd

    Or, grant the ArcGISSOC Account access to the following directory:

    <your_directory>\ArcGIS Templates\LocalGov\PublicComment\MapsandGeodatabase

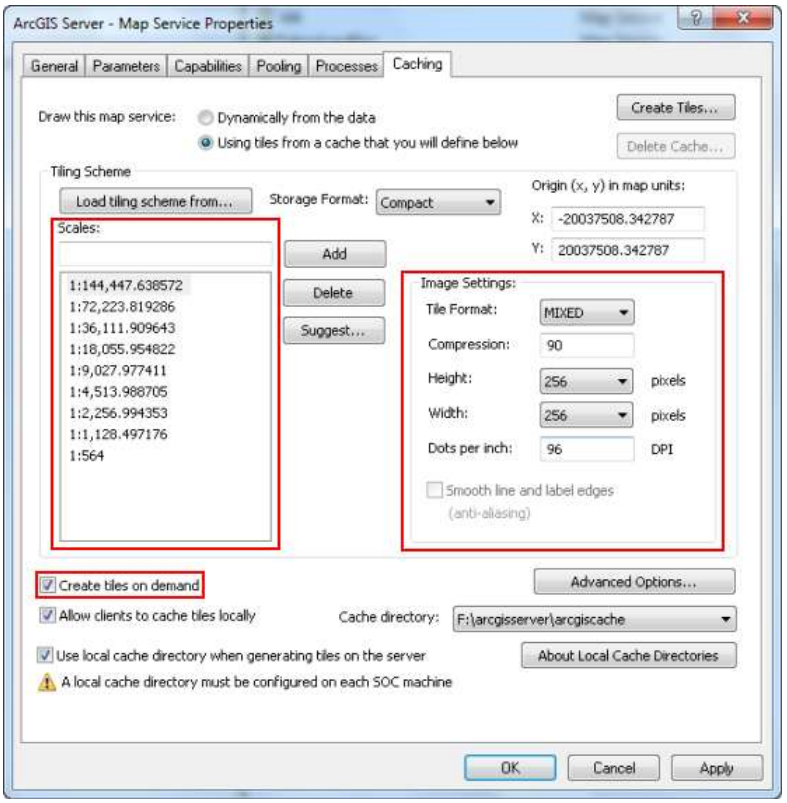
3. Using ArcCatalog, publish the base map services used by the Land Use Public Comment Application:

    - Publish the ParcelPublicAccess.msd and ImageryHybrid.msd as map services. Accept all other defaults.
    - Once complete, go into the ArcGIS Services Directory and record the REST End Points (full URL paths) of each service.

Note: The ArcGIS Services Directory is typically found at: http://<yourserver>/ArcGIS/rest/services

4. Construct a Map Cache for the base map services to increase the performance of the Land Use Public Comment application:

    - Using ArcCatalog, right-click on the ParcelPublicAccess map service
      Select > Service Properties > Caching
    - Select the following caching options:
      Select > Using tiles from a cache that you will define below.
    - Load the tiling scheme
      Select > Loading tiling scheme from… > ArcGISOnline/Bing Maps/Google > OK
    - Use the Delete button to remove each map scale that is smaller than 1:144,447.63
    - Use the Add button to create a new map scale that is 1:564
    - Set the Image Settings:
      Select > Tile Format > MIXED
      Select > Compression > 90



- Select the option to "Create tiles on demand" if you would like the map to cache as you use it
- Click OK. When prompted, "Do you want to create tiles now?", choose to construct tiles later.
- If you downloaded the ImageryHybrid base map application separately from the Local Government Resource Center, you can now repeat the same process for the ImageryHybrid map service

Note: The setting "Create tiles on demand" will create map tiles the first time each area is visited (i.e., "on demand"). The first user to navigate to an area that has not been cached must wait while the corresponding tiles are computed by the server. The tiles are then added to the service's cache folder and remain on the server. This means that subsequent visitors to the area will not have to wait for the tile to be created. The performance of your web map will increase considerably as the tile cache is filled in.

Step 2 – Publish the Land Use Cases Feature Service

1. Load the LandUseOperations Feature Dataset provided in the LocalGovernment.gdb into your ArcSDE geodatabase:

   - Open ArcCatalog > Expand Database Servers
     Select your Database Server > Right-click > New Geodatabase
   - Name your geodatabase "LocalGovernment" and Set the Initial Size to 500 MB
   - Copy and Paste the LandUseOperations Feature Dataset into your LocalGovernment ArcSDE geodatabase

2. Grant the ArcGISSOC account access to your ArcSDE geodatabase and assign read/write permissions for the ArcGISSOC account. Once you've granted the ArcGISSOC account permissions to the geodatabase, register the LandUseOperations Feature Dataset as Versioned.

Note: If you are using an Enterprise version of ArcSDE, write permissions for the ArcSDE data are required. See the help for additional information

3. Copy the LandUseCases ArcMap document (.mxd) to a directory location that is accessible to your ArcGISSOC Account on your ArcGIS Server computer.

Or, grant the ArcGISSOC Account access to the following directory:

<your_directory>\ArcGIS Templates\LocalGov\PublicComment\MapsandGeodatabase

4. Open the LandUseCases.mxd and set the data source for the LandUseCase feature class and PublicComment table to point to the new ArcSDE geodatabase. Once you've reset the data source, save the LandUseCases.mxd.

5. Use the Map Service Publishing toolbar to create a LandUseCases map service definition (.msd). Set the ArcGIS Server Options to:

   - Anti-Aliasing>Best
   - Text Anti-Aliasing>Force

6. Once complete, save the LandUseCases map service definition to a directory location that is accessible to your ArcGISSOC Account on your ArcGIS Server computer.

7. Using ArcCatalog, publish the feature service used by the Land Use Public Comment Application:

   - Publish the LandUseCases.msd as a feature service. Accept all other defaults.
   - Once complete, go into the ArcGIS Services Directory and record the REST End Points (full URL paths) of each service.

Step 3 – Publish an ArcGIS Server Geometry Service

1. Publish a geometry service in ArcGIS Server.

   - Using ArcCatalog, publish a geometry service to ArcGIS Server:
     - Right-click on the server in ArcCatalog, and select "Add a New Service"
     - Select a geometry service
     - Accept all other defaults. Click Finish.

Step 4 – Configure the Land Use Public Comment Application

1. Change the ASP.Net proxy page to point to your ArcGIS REST service URL.

   - Using Windows Explorer, navigate to the LUPublicComment proxy file:

     <your_directory>\ArcGIS Templates\LocalGov\PublicComment\Application\LUPublicComment\proxy.config

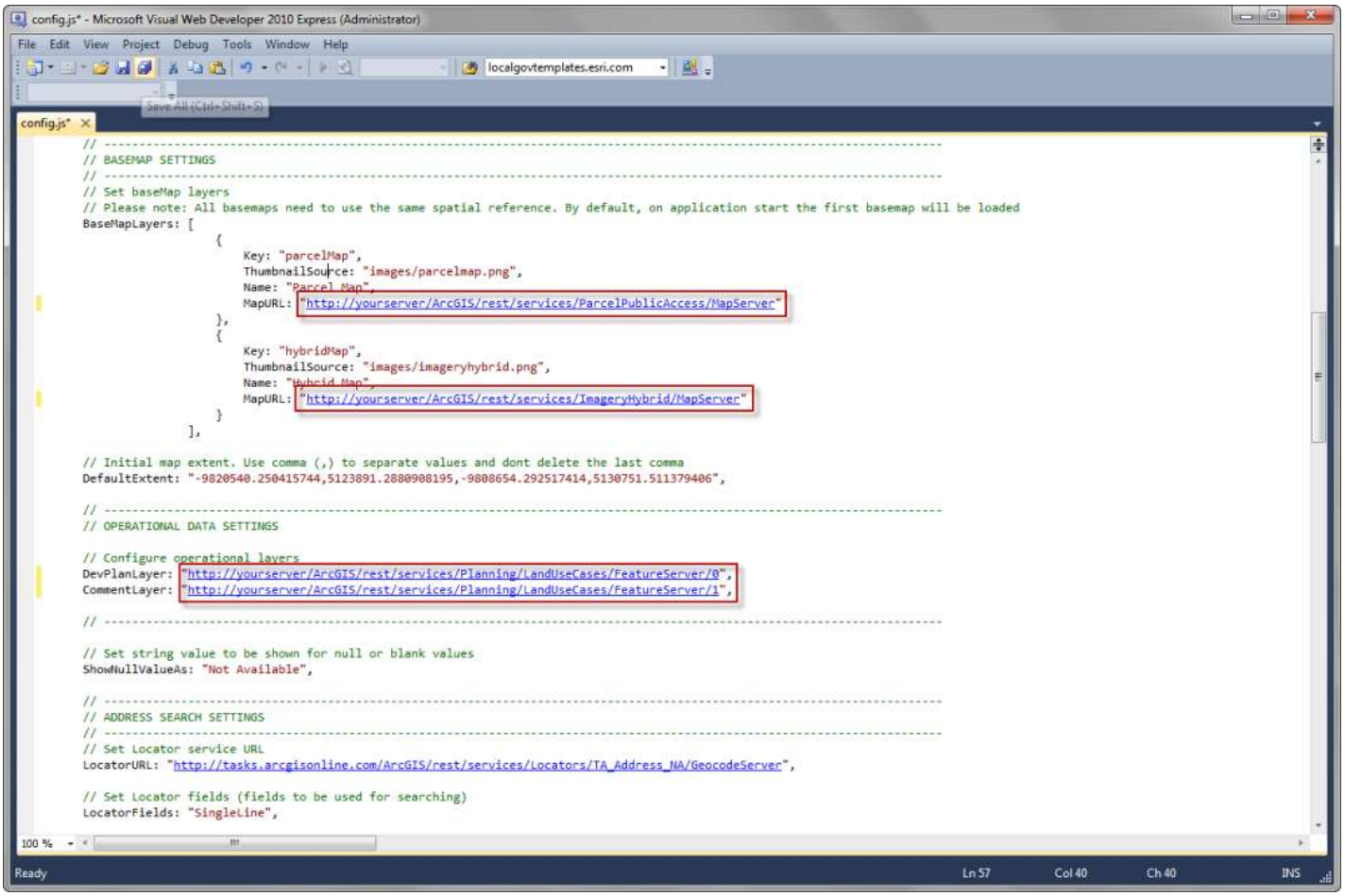
   - Open the Config file in Microsoft Notepad. Two lines of code need to be changed in this configuration file.
   - Enter the URLs for your REST services directory. Save the file and exit.

2. Modify the Public Comment Web application configuration file to point to the map services you authored.

   - Using Windows Explorer, navigate to the Public Comment :

     <your_directory>\ArcGIS Templates\LocalGov\PublicComment\Application\LUPublicComment\js\config.js

   - Open the config.js file in Microsoft Notepad or another text file editing tool. Five lines of code need to be changed in this configuration file.



- Replace the URL for the rest services directory. You should only have to replace “yourserver” in this file with the name of your ArcGIS Server.
- Verify that the REST Services URL and map service names are correct.
- Enter the URL for the base map you published in Step 1.
- Enter the URLs for the Land Use Cases map service you published.

Note: If you are having trouble finding the correct URL to replace, search for “yourserver” and you will find the URL’s that need to be replaced.

- Save the file and exit.
- Finally, before you start using the Land Use Public Comment application, it’s a good idea to clear your REST and internet browser cache.

Note: You may need to build portions of the cache by panning and zooming in ArcCatalog using the cache-on-demand method suggested in this document. If you get a blank screen in the application and your config.js file is correct, spend some time working in ArcCatalog to verify the map looks good and then consider building the cache in ArcCatalog using "Up date Tiles...". Work in one geographic area at multiple cache scales to start generating the cache.

Step 5 – Publish the Land Use Public Comment Application

1. Publish the Land Use Public Comment application.

- Using Windows Explorer, navigate to the Public Comment application directory:

  <your_directory>\ArcGIS Templates\LocalGov\PublicComment\Application\

- Select the "LUPublicComment" directory and copy it to your web server so it can be accessed as a website or virtual directory

Note: In Microsoft IIS, the web server directory is <your_directory>\Inetpub\wwwroot\.

2. Define the Application Pool on your web server.

   - Open Internet Information Services (IIS) on your computer and navigate to:

     Start > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager

   - Select <your server>> Web Sites> Default Web Sites
   - Right-click on the LUPublicComment directory and select "Convert to Application"
   - Select ASP.Net v. 4 Application Pool. Click OK.

Note: If you do not have this option you will need to install Microsoft .Net Framework 4.0, and then register it with IIS.

3. Begin using the Land Use Public Comment application.

   - The Land Use Public Comment application can be started by navigating to the URL.
     - Example: http://<yourserver>/LUPublicComment/default.html
   - When you're ready to start using the Land Use Public Comment application with your data, start by downloading the Local Government Information Model schema-only layer package. It can be used to create the empty geodatabase you'll need to migrate your data.

Note: Once you've completed the configuration, verify that each base map and the comment form works properly. If the base maps don't display, check the config.txt file to ensure your map services are entered properly. Also verify in ArcCatalog that map cache tiles are being generated.

Release Notes

The June 29, 2012 release of the Land Use Public Comment application addresses the following:

New Functionality

1. Added the most recent Local Government geodatabase and Data Dictionary
2. Added the most recent ParcelPublicAccess base map
3. Added the most recent Map Dictionaries
4. Added support for Javascript API 2.8
5. Converted the config.txt (text file) to config.js (javascript file) so users can validate and troubleshoot the application easier

Resolved Problems

1. Resolved an issue with the Date Object that affected attribute information in the Info Popup
2. Resolved an issue with the Geolocation function that precluded users from getting the correct location
3. Resolved an issue with the LandUseCases.mxd (turned the SHAPE field on in map layer) that precluded the feature service from publishing correctly

Known Issues

N/A