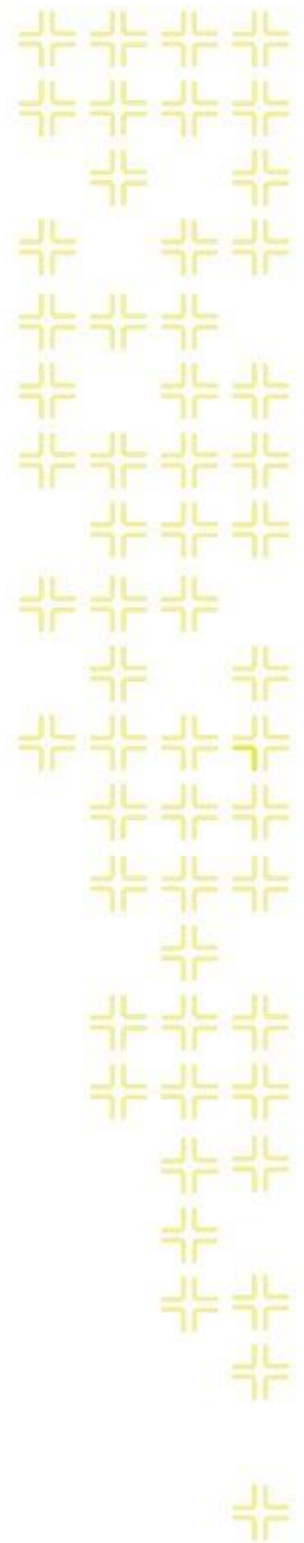




TRAINING GUIDE

Lucity GIS Viewer



Lucity GIS Viewer

In this session, we'll introduce you to the Lucity GIS Viewer

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Data Sources

Two types of data sources can be used with the Lucity GIS Viewer: local and online.

Local

Local data can be used by the GIS Viewer in the form of packages. Packages are a set of items (maps and referenced data) that ArcGIS bundles into a single file. Packages are created using the ArcGIS Desktop software and can be easily transferred from user to user or easily provisioned onto a machine.

The GIS Viewer can consume Map, Title, and Locator packages. The following is a description of each:

Package name	File extension	Description
Map package	MPK	Map packages (.mpk) make it easy to share complete map documents with others. A map package contains a map document (.mxd) and the data referenced by the layers it contains, packaged into one convenient, portable file. Map packages can be used for easy sharing of maps between colleagues in a work group, across departments in an organization, or with any other ArcGIS users via ArcGIS Online. Map packages have other uses, too, such as the ability to create an archive of a particular map that contains a snapshot of the current state of the data used in the map.
Tile package	TPK	Tile packages (.tpk) contain complete cached map documents in the form of a map and a tile cache of the data. Tile packages can be used for easy sharing of cached maps between colleagues in a work group, across departments in an organization, or with any other arcGIS user via ArcGIS online. Tile packages are ideal in disconnected environments where you still need access to the data.
Geoprocessing package	GPK	A geoprocessing package (.gpk) is a convenient way to share analysis and geoprocessing workflows as a single compressed file created from the result of a successfully run geoprocessing tool.
Locator package	GCPK	Locator packages (.gcpk) make it easy to share locators with others. A locator package may contain one locator or a composite locator along with its participating locators packaged into one convenient, portable file. The file size of the locator package is smaller than the locator as it is compressed and thus makes file transfer easier. Locator packages can be used for easy sharing of locators between colleagues in a work group, across departments in an organization, or with any other ArcGIS users via ArcGIS online. Locator packages can also be used to create an archive of the locators.

Online

In addition to packages, the Lucity GIS Viewer can also consume online data sources. These are geospatial web services (such as map services and geocoding services) created and distributed by ArcGIS for Server.

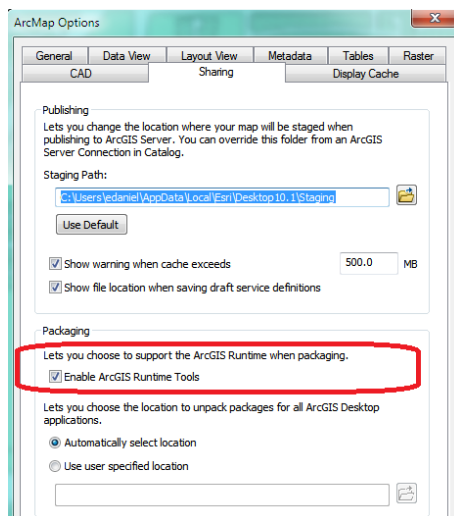
Notes: _____

Map Packages

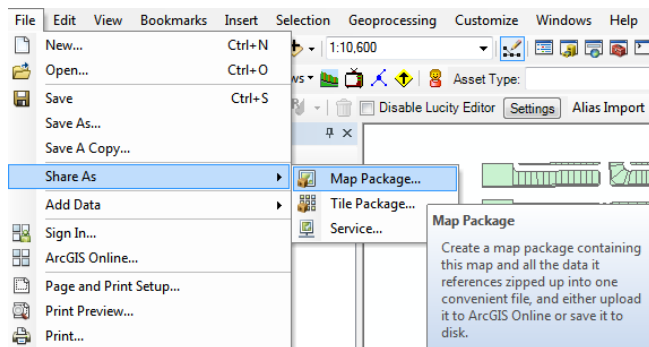
Map packages (.mpk) make it easy to share complete map documents with others. A map package contains a map document (.mxd) and the data referenced by the layers it contains, packaged into one convenient, portable file. Map packages can be used for easy sharing of maps between colleagues in a work group, across departments in an organization, or with any other ArcGIS users via ArcGIS Online. Map packages have other uses too, such as the ability to create an archive of a particular map that contains a snapshot of the current state of the data used in the map.

Creating a map package

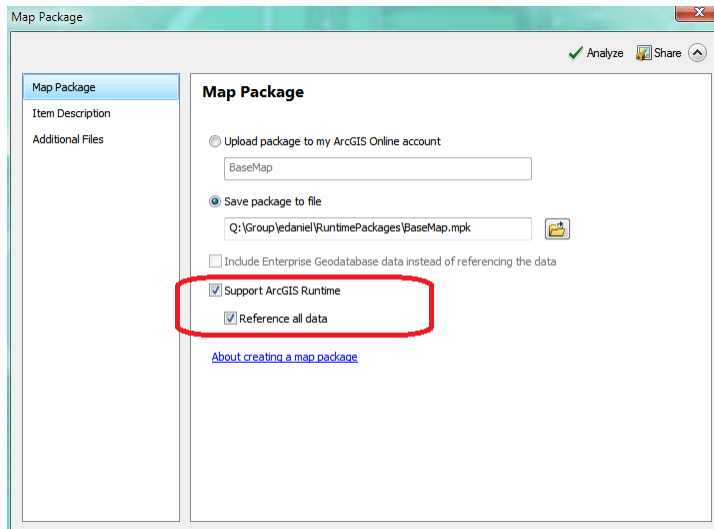
1. Prepare an ArcMap map document with the data and settings (symbolology, scale dependent rendering, aliases, etc) you would like to deploy in the map package.
2. In ArcMap, click Customize > ArcMap Options on the main menu. The ArcMap Options dialog appears.
3. On the Sharing tab, under the Packaging Section, check the Enable ArcGIS Runtime Tools.
4. Click OK.



5. Click File > Share As > Map Package on the main menu. The Map Package dialog box will display.



6. In the Map Package dialog, fill out the required information. The critical item is to make sure the Support ArcGIS Runtime is checked.



Note: You have the option to reference SDE data or to include it in the map package. Keep in mind if you choose to include the data, any changes to the underlying SDE data will not be visible in the Lucity GIS Viewer until the map package is recreated.

7. Click Analyze to validate your map for any errors or issues.
8. Once validated, click Share to create your map package.

For more information on creating map packages refer to ESRI's help at:

<http://resources.arcgis.com/en/help/main/10.1/index.html#/006600000403000000>

And

http://resources.arcgis.com/en/help/runtime-wpf/concepts/index.html#/About_map_packages/0170000000059000000/

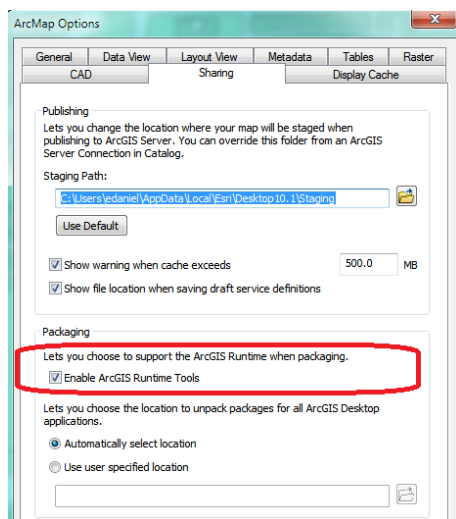
Notes: _____

Tile Packages

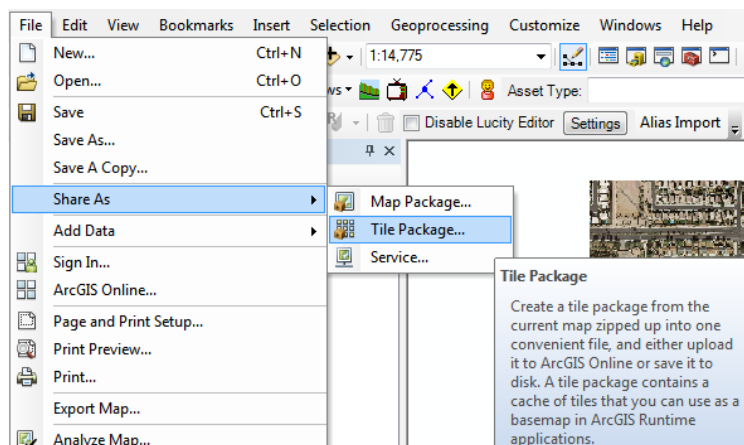
A tile package allows you to create a set of tiles (images) from a map, and then use the set of tiles as a basemap in ArcGIS applications. The tiles are wrapped into a single file, a .tpk file, so you can share the file as you would any file. You can email it, copy it to a network locale, upload it to ArcGIS Online, and so on.

Creating a tile package

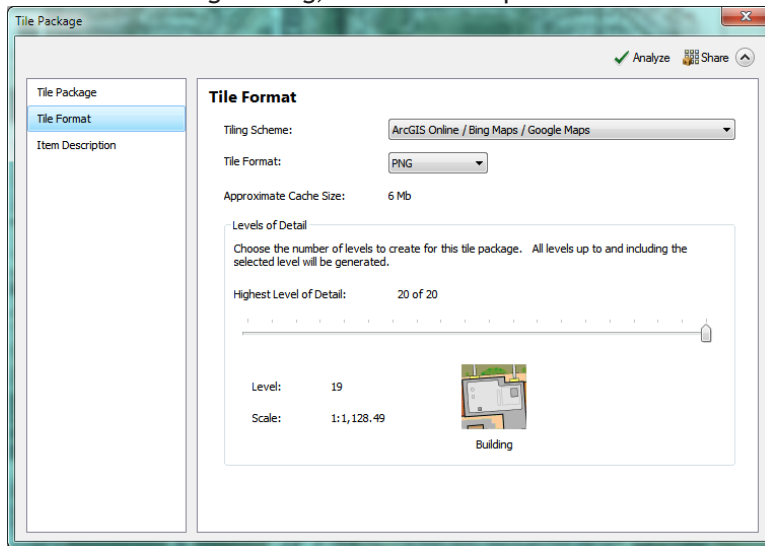
1. Prepare an ArcMap map document with the data and settings (symbolology, scale dependent rendering, aliases, etc) you would like to deploy in the tile package.
2. In ArcMap, click Customize > ArcMap Options on the main menu. The ArcMap Options dialog appears.
3. On the Sharing tab, under the Packaging Section, check the Enable ArcGIS Runtime Tools.
4. Click OK.



5. Click File > Share As > Tile Package on the main menu. The Tile Package dialog box will display.



6. In the Tile Package dialog, fill out the required information.



*Note: If you use the **ArcGIS Online/Bing Maps/Google Maps** tiling scheme, the data frame of your source map document must use the **WGS 1984 Web Mercator (Auxiliary Sphere)** projected coordinate system.*

7. Click Analyze to validate your package for any errors or issues.
8. Once validated, click Share to create your tile package.

For more information on creating tile packages refer to ESRI's help at:

<http://resources.arcgis.com/en/help/main/10.1/index.html#//006600000457000000>

And

http://resources.arcgis.com/en/help/runtime-wpf/concepts/index.html#/About_tile_packages/017000000004w000000/

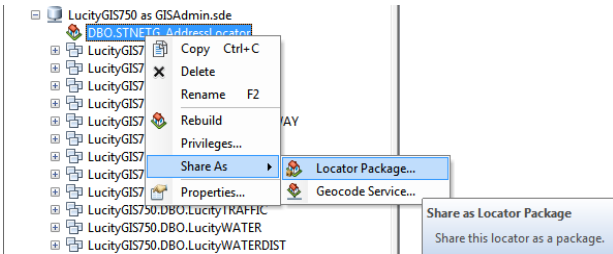
Notes: _____

Locator Packages

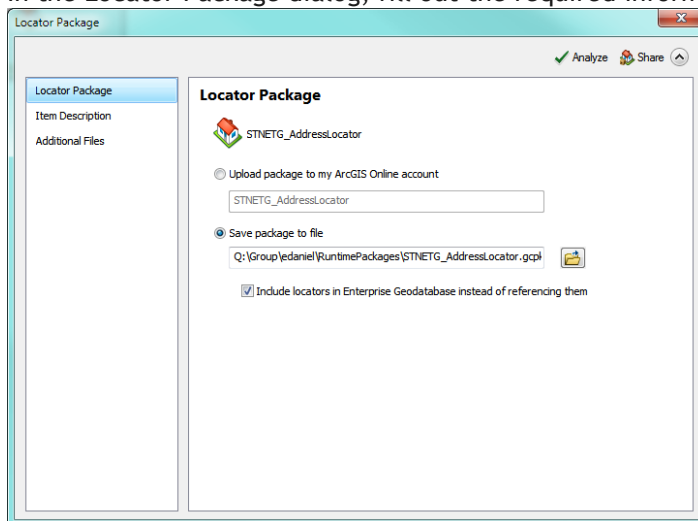
A geocode locator package (.gcpk) makes it easy to share locators with others. A locator package can contain one locator or a composite locator along with its participating locators packaged into one convenient, portable file. The file size of the locator package is smaller than the locator, as it is compressed and thus makes file transfer easier. Locator packages can be used for easy sharing of locators between colleagues in a work group, across departments in an organization, or with any other ArcGIS users via ArcGIS Online. Locator packages can also be used to create an archive of the locators.

Creating a locator package

1. Create a locator or composite locator in ArcCatalog.
2. In ArcCatalog, right-click on a locator or composite locator and click Share As > Locator Package. The Locator Package dialog box appears.



3. In the Locator Package dialog, fill out the required information.



Note: You have the option to reference SDE data or to include it in the locator package. Keep in mind if you choose to include the data, any changes to the underlying SDE locator will not be visible in the Lucity GIS Viewer until the locator package is recreated.

4. Click Analyze to validate your locator for any errors or issues.
5. Once validated, click Share to create your locator package.

For more information on creating tile packages refer to ESRI's help at:

<http://resources.arcgis.com/en/help/main/10.1/index.html#//00250000003v000000>

And

http://resources.arcgis.com/en/help/runtime-wpf/concepts/index.html#//About_locator_packages/01700000005s000000/

Lucity GIS Viewer Setup

The Lucity GIS Viewer is configured to use map settings setup in the Lucity Administration application. This section describes the various settings that must be configured before using the Lucity GIS Viewer.

- Lucity Administration Tool
 - Map Services
 - Map Setup
 - System Settings
 - Authorizations
- ArcCatalog
 - Geodatabase Configuration
- Lucity Desktop
 - Show in Map Configuration
- Lucity Security
 - User Permissions
- Workstation Installations

Notes: _____

Lucy Administration Tool

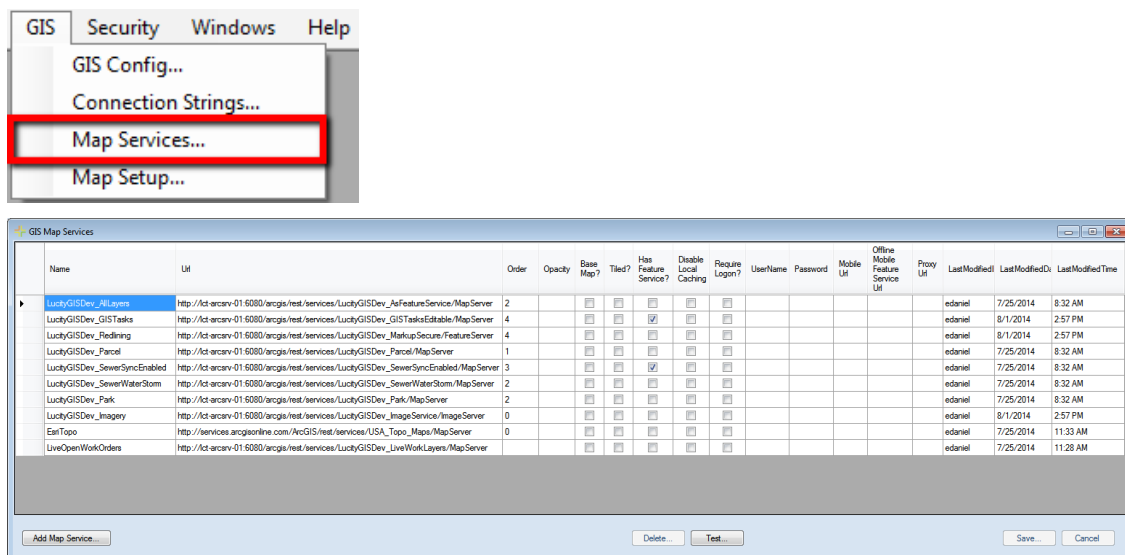
The Lucy Administration tool is used to configure the majority of the settings necessary for the GIS Viewer to run. This section will cover each component in detail

To access the Lucy Administration tool go to Start>>All Programs>>Lucy>>Lucy Administration tools or run the Lucy.Admin.exe located in the local ...\\Lucy\\bin directory.

Map Services

Map services indicate the data that will be loaded into Lucy GIS Viewer. This is where you would specify your local and/or online data sources.

1. In Lucy Admin click GIS>>Map Services... The GIS Map Services dialog will appear.



2. Click the Add Map Service button at the bottom. This will add a new record to the table. Fill out the following information:
 - **Name**- This is a unique name for the map service. This can be whatever you'd like and will be used later when indicating what services should be associated with the map
 - **URL**- This is used by the map to display data.
 - For local data sources you would specify the path (including filename) of the map or tile package. For example, `Q:\Group\edaniel\RuntimePackages\BaseMap.mxd`. In addition, if the package is located on a network share, it is strongly recommended that UNC be used instead of a mapped drive to prevent issues caused by missing or incorrect mapped drives on end user machines.
 - For online data sources this is the URL to the map service. For example: http://services.arcgisonline.com/ArcGIS/rest/services/World_Street_Map/MapServer. Note: The URL must be a REST service.
 - **Order**- This is the order in which the map service should appear when overlaid with other map services. Lower order numbers will appear underneath map service with higher order numbers.

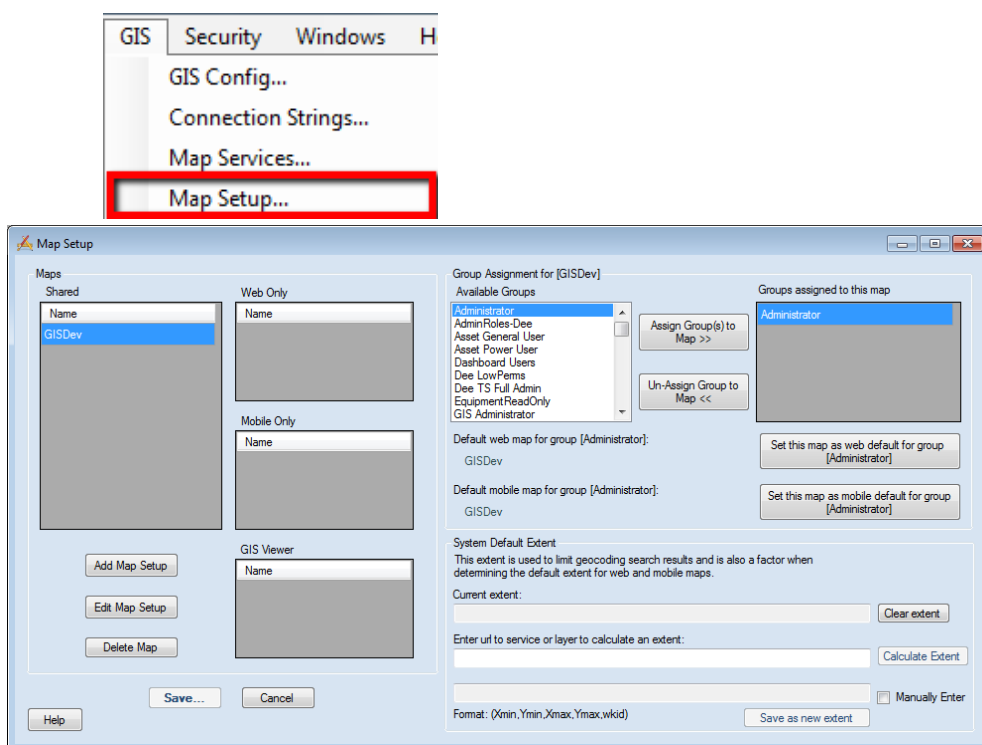
- **Opacity**- This is the default opacity that will be used when the service is loaded in the map
- **Tiled**- Place a check in this field to indicate a tiled package or web service.
- **Disable Local Caching**- Default is false. If you were to disable local caching requests to refresh the map image will go directly to ArcGIS Server rather than the browser's cache.

3. Click Save

Map Setup

Once packages and/or web services have been added to the Map Services section of the Lucity Admin tool you can use the Map Setup section to start creating the maps.

1. In Lucity Admin click GIS>>Map Setup... The GIS Map Setup dialog will appear.



Notes: _____

- The left-hand side of the dialog displays all available maps. Click the Add Map Setup or Edit Map Setup buttons to open the GIS Map Edit screen.

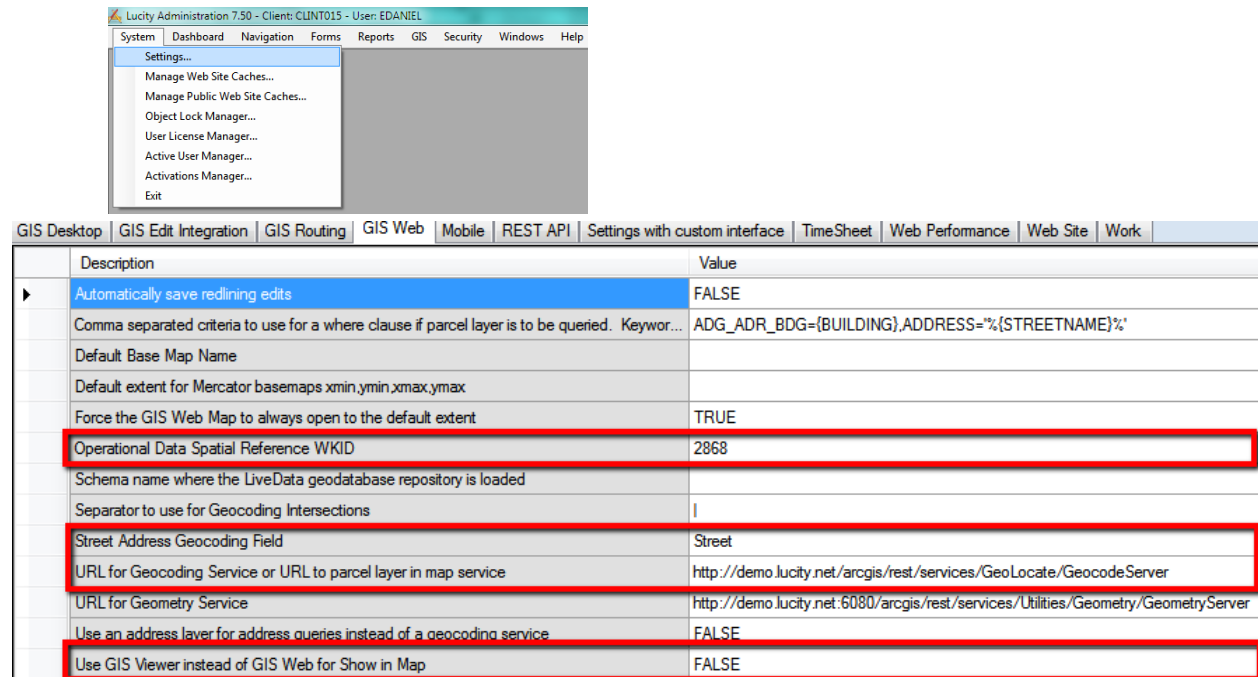
Name	Url	Order	Order Override	Disable Identify	Disable Edits	Disable Visibility	Default Extent
LucityGISDev_Imagery	http://tct-arcsv-01.6080/arcgis/rest/services/LucityGISDev_ImageService...	0		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LucityGISDev_Parcels	http://tct-arcsv-01.6080/arcgis/rest/services/LucityGISDev_Parcels/MapS...	1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
LucityGISDev_SewerStreet...	http://tct-arcsv-01.6080/arcgis/rest/services/LucityGISDev_SewerStreetS...	2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LucityGISDev_SewerStreet...	http://tct-arcsv-01.6080/arcgis/rest/services/LucityGISDev_SewerStreetS...	2	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Enter a unique map **Name**. Each map setup has to be assigned a name. If you setup more than one map then a user will be given a list of map names to choose from.
- Select GIS Viewer from the **Lucity application(s) that can use this map** list box. This setting must be set to GIS Viewer!
- Set the **Geocoding URL**. Enter a URL here if the geocoding service used for this map will be different than the URL in the **Default Geocoding Url** box. The Default Url is set in Lucity Administration under **System > Settings** on the GIS tab. Note: The GIS Viewer will work with either an online geocoding service or a local locator package. To use a local package enter the file path including name of the package. For example: (Q:\Group\edaniel\RuntimePackages\STNETG_AddressLocator.gcpk).
- In the **Available Web Services** grid, select all the web services that need to be added to the map and click Add. Records will appear in the **Services to Display in Map** grid.
- In the **Available Local Services** grid, select all the web services that need to be added to the map and click Add. Records will appear in the **Services to Display in Map** grid.
- In the **Services to Display in Map** grid check the **Disable Identify** box to stop the identify tool from querying that service. Disabling Identify also disables the ability to select features in that service. Note: Users can also manually control selectability in the map.
 - The order cannot be customized in this dialog; instead, set the order in the Order field under **GIS > Map Services**.
- Click Close to return to the Map Setup screen.

System Settings

Additional settings can be configured for the Lucy GIS Viewer. These settings are set Lucy Admin tool.

1. In Lucy Admin click System>>Settings... The System Settings dialog will appear.



Description	Value
Automatically save redlining edits	FALSE
Comma separated criteria to use for a where clause if parcel layer is to be queried. Keyword...	ADG_ADR_BDG={BUILDING},ADDRESS=%{STREETNAME}%'
Default Base Map Name	
Default extent for Mercator basemaps xmin,ymin,xmax,ymax	
Force the GIS Web Map to always open to the default extent	TRUE
Operational Data Spatial Reference WKID	2868
Schema name where the LiveData geodatabase repository is loaded	
Separator to use for Geocoding Intersections	
Street Address Geocoding Field	Street
URL for Geocoding Service or URL to parcel layer in map service	http://demo.lucity.net/arcgis/rest/services/GeoLocate/GeocodeServer
URL for Geometry Service	http://demo.lucity.net:6080/arcgis/rest/services/Utilities/Geometry/GeometryServer
Use an address layer for address queries instead of a geocoding service	FALSE
Use GIS Viewer instead of GIS Web for Show in Map	FALSE

2. Make changes, as needed, to the following settings.

- Operational Data Spatial Reference WKID- The WKID is the "Well Known Spatial ID" for the operational data layer in the Webmap. This spatial reference will be used by Lucy to record xy coordinates and any other spatial data.
- Street Address Geocoding Field- If using an online geocoding service then this is the field name the geocoder is based on.
- URL for Geocoding Service or URL to parcel layer in map service- (Optional) The URL for the geocoding or parcel services for finding addresses. To switch between the two check the setting "Use an address layer for ..." Note: REST/ must precede the word service in the URL.
- Use GIS Viewer instead of GIS Web for Show in Map- Forces the Lucy Web show in map to launch the Lucy GIS Viewer instead of the Lucy Web Map.

Notes: _____

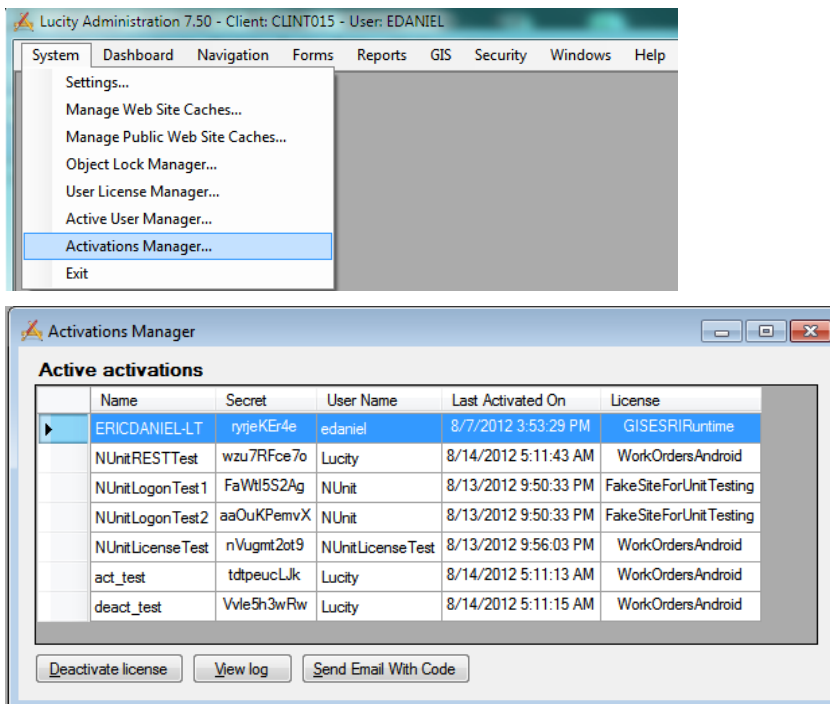
Authorizations

The Lucy GIS Viewer is licensed on a per machine basis. Therefore, in order for a user to be able to run the GIS Viewer, their machine has to be activated to use the GIS Viewer.

The first time a user attempts to run the Lucy GIS Viewer the application which check if the machine has been activated, if not, they will receive a prompt confirming they want to activate the machine.

You may find the need to deactivate a machine. The Activations Manager in Lucy Admin offers the ability to view the systems current activations and allows you to deactivate licenses.

1. In Lucy Admin click System>>Activations Manager... The Activations Manager dialog will appear.



2. The Name column lists the device (computer) name. The License column lists the product that has been activated. Note: Lucy GIS Viewer license is named "GISERIRuntime"
3. To deactivate a license, simply select the device to deactivate and click the **Deactivate license** button.

Notes: _____

ArcCatalog

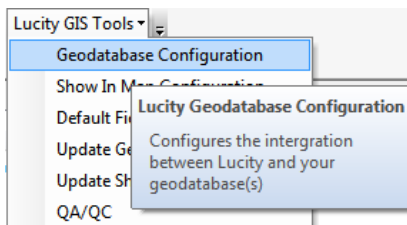
Lucity's Geodatabase Configuration tool in ArcCatalog can be used to validate your geodatabase configuration to ensure that it is properly setup in order for the Lucity GIS Viewer to work with your data.

Geodatabase Configuration Tool

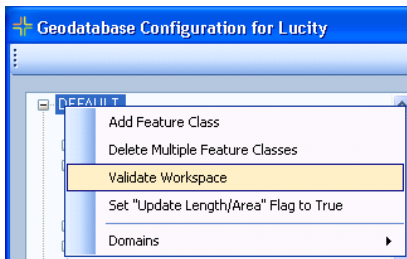
Note: Users must have the following Lucity Security permissions to use this tool

- GIS > GIS System Configuration > Run
- GIS > GIS Admin Connection Strings > Edit

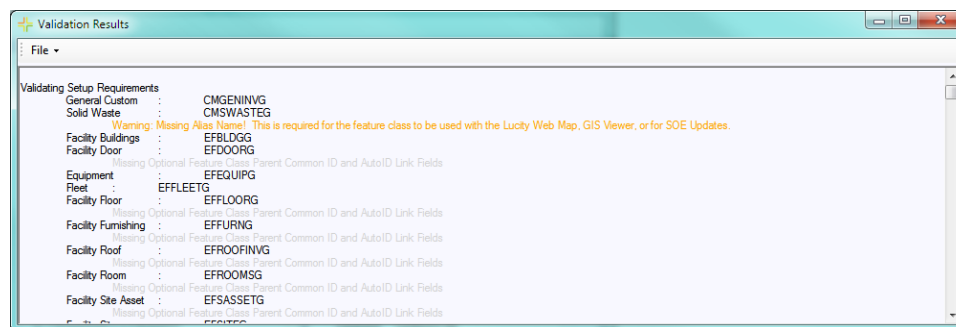
1. In ArcCatalog, Click on Lucity GIS Tools>>Geodatabase Configuration.



2. Right-Click on the geodatabase node and select Validate



- Immediately upon clicking this tool, a dialog similar to the one shown below will be displayed with results of the verification. Once it is complete you will be able to scroll down and view any messages resulting from verification.



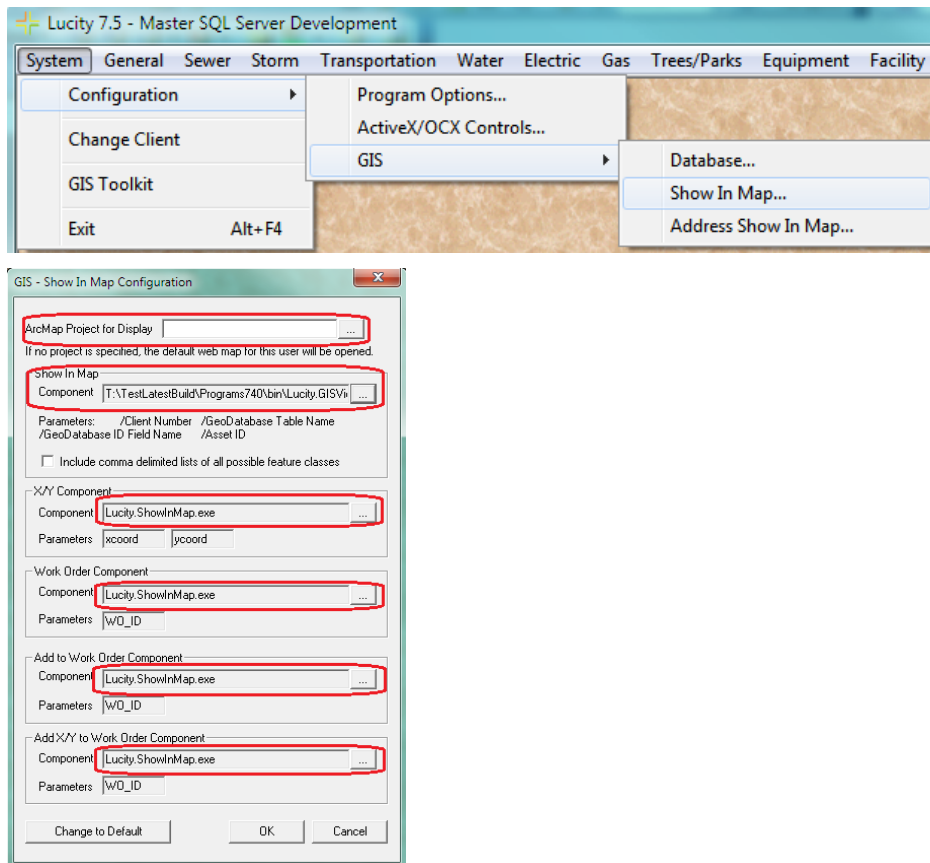
- Warnings to watch for are “Missing Alias Name!”. Alias names must be assigned to the feature classes that are used with the Lucity GIS Viewer.
- Refer to the Help Guide on how to assign alias names to your feature classes; there are Lucity GIS tools in both ArcCatalog and ArcMap that assist in this process.

Lucity Desktop

There are settings in the desktop application that must be configured in order for it to open the Lucity GIS Viewer when using the show in map capabilities.

Show in Map Configuration

1. In the Lucity desktop application, click on System>>Configuration>>GIS>>Show In Map... The Show in Map Configuration dialog will appear

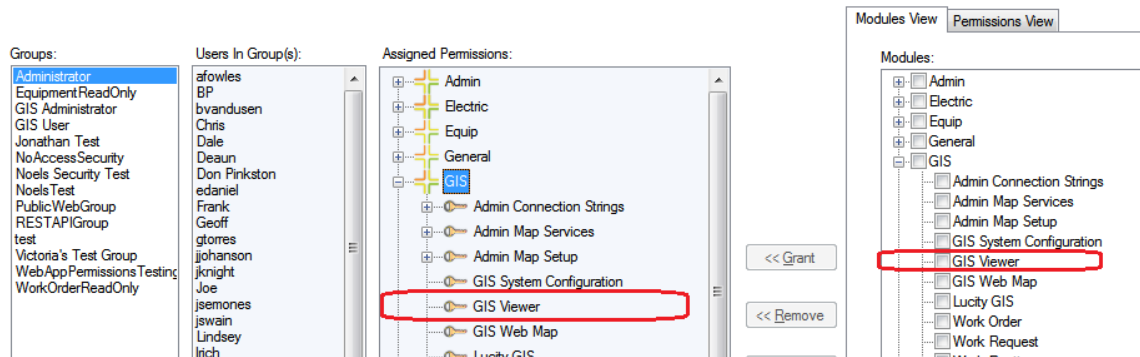


2. Make the following changes to configure the desktop to work with the GIS Viewer:
 - ArcMap Project for Display-This must be blank, if there is a current value in this field clear it out.
 - Components- All the components should be pointing to the local \Lucity\bin\Lucity.GISViewer.exe. If not, click the ... button to specify the Lucity.GISViewer.exe.

Lucity Security

In order for users to access the Lucity GIS Viewer, they must be given the proper permission in the Lucity Security program.

In the Lucity Security program make sure all users that will be using the Lucity GIS Viewer application have been assigned the Run permission for GIS Viewer, this permission is listed under the GIS node.



Workstation Install

The Lucity GIS Viewer application is licensed on a per machine basis, thus it should only be installed on the number of machines that you own licenses for. The standard Lucity Workstation install does not install the GIS Viewer application nor does the option to install Admin Tools.

In order to install the Lucity GIS Viewer on a machine, you must select the Custom install option with the Lucity workstation installation

Notes: _____

Lucy GIS Viewer Overview

The Lucy GIS Viewer is a standalone mapping application that allows users to interact with their asset data. It doesn't require any ESRI software to be installed on their machine and can be easily deployed to end users. The Lucy GIS Viewer is made up of a map display, two toolbars, and a navigation wheel.

Launching the GIS Viewer

- From the Start Menu
 - Once the Lucy GIS Viewer has been installed on a machine, it can be started by the shortcut in the operating system's start menu.
- Directly from the .exe
 - Once the Lucy GIS Viewer has been installed, it will be located in the local \Lucy\bin directory. You can launch the application by double-clicking the Lucy.GISViewer.exe.
- From the Show in Map button
 - Once the web and desktop application has been configured to use the Lucy GIS Viewer, then you can launch the application by clicking the various show in map buttons within the desktop and web applications.

GIS Viewer Tools

- Map Management Tools
 - In the top left corner are the map management tools. They allow users to view information about the map, control selectability and visibility, open and close the data table, add data, and perform standard map navigation.
- Analysis Tools
 - In the top right corner are the analysis tools. The tools on this toolbar allow users to identify, select and query features, and load subsets.
- Navigation Tools
 - In the bottom left corner is the navigation wheel. It provides map navigation functionality such as zoom to full extent, rotate, zoom in/out.

Notes: _____

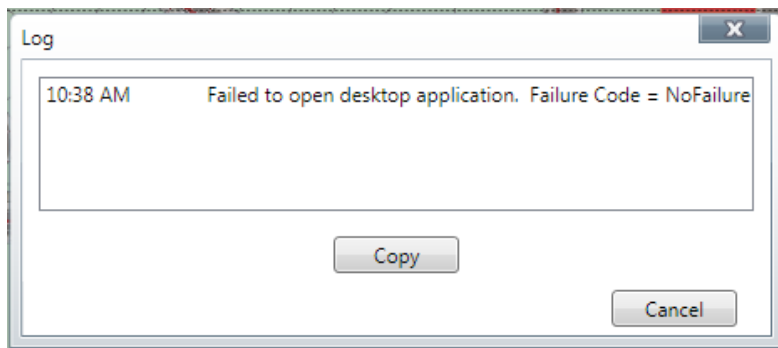
Map Management Toolbar

The following are the various tools available on the map management toolbar:



Log

Errors encountered using the various GIS Viewer tools will typically be logged. In addition, some tools may log additional information why it was unable to complete the requested task. Click on this tool to bring up a list of items that have been logged.



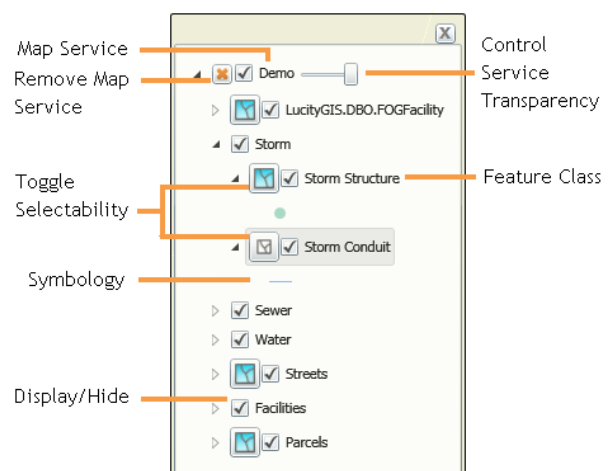
Each item will contain a time stamp of when it was recorded. Use the copy button to copy the contents to the clipboard. Closing out of the Lucity GIS Viewer will clear the log.



Map Layers

This tool allows users to toggle feature layer visibility, transparency, selectability along with the ability to remove a layer from the map.

- Remove Map Service- click this to remove the map service and all associated feature classes. This is only for the current map session. The next time the map is loaded, the map service will be back.
- Transparency- this controls the layer transparency. Move the horizontal scroll to adjust the level of transparency.
- Selectability- this controls whether or not the layer is selectable. When disabled, the layer will not be included in results when using the identify, select, or query tools.
- Visibility- this controls whether or not the layer is visible in the map.

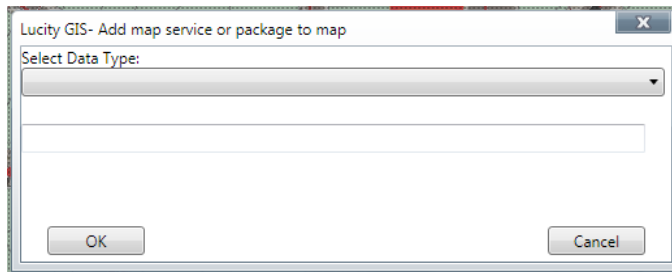


Note: All these settings are just for the current map session. They will be set to the default values the next time the map is loaded.

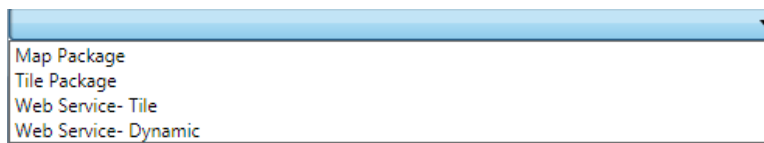


Add Data

This tool can be used to add data to the map. Map and Tile packages along with map or tile web services can be added on the fly.



1. Select the type of data to add from the drop down.



2. Enter the location of the data source.

- If adding a map/tile package click the button to find the location of an .mpk or .tpk file.
- If adding a web service, simply enter the URL of the service in the next box

3. Click Ok and the data will be added to the map. You can remove or adjust the layer properties using the Map Layers tool.



Data Table

The data table tool allows users to see information about and interact with features that are currently selected or plotted in the map. This table is opened automatically by the use of some of the GIS Viewer tools.

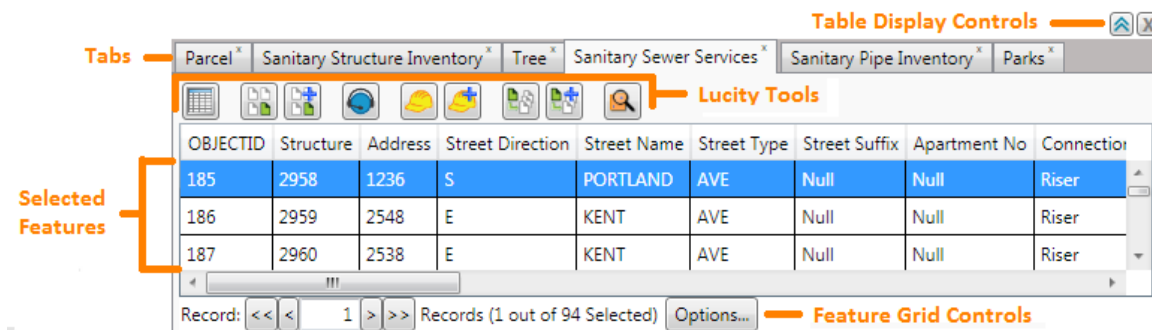


Table Display Controls

- ⬆ This button is used to expand the table to show more records
- ✕ This button is used to close the table. This does not clear the selection

Tabs

At the top of the grid there is a row of tabs. Each tab corresponds to a feature class that has features included in the current selection. Click on a tab to switch to a table showing the selected features for that feature class.

Selected Features

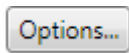
Features that appear in the table are currently selected. They are displayed in the map using the main selection color (the default is yellow).

- Click on one or more rows in the grid to highlight a subset of the selection results. These features are displayed in the map using the secondary selection color (the default is red).
- The Lucity Tools work off the features that are selected in the grid.

Feature Grid Controls

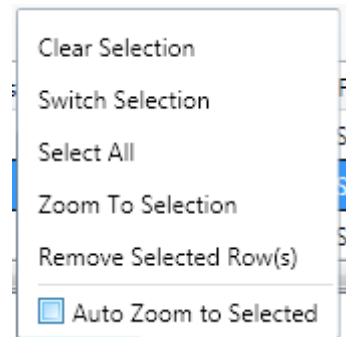


This button can be used to move through the records in the grid. It will select/highlight the record number. It also displays the number of records in the grid



This button shows various feature grid options.

- Clear Selection- Clears the selected/highlighted features in the grid
- Switch Selection- Features currently selected are unselected and vice versa
- Select All- Selects/highlights all features in the grid
- Zoom to Selection- Zooms to the selected features in the grid.
- Remove Selected Row(s) - Removes the selected features from the grid. Note: This will also remove these features from the map selection.
- Auto Zoom to Selected- Check this box if you wish the map display to zoom to each new feature selected/highlighted in the grid.



Lucity Tools

These tools allow users to perform Lucity operations against features in the map. More information on these tools can be found further in this document under the Lucity Tools section.



Pan

This tool allows users to pan around in the map. This tool is selected by default when the map is first loaded.



Zoom In/Out

These tools allow the user to zoom in/out. Click the tool then draw a box to the extent you would like to see displayed.

Note: If you have a mouse wheel, it can also be used to zoom in/out of the map display.

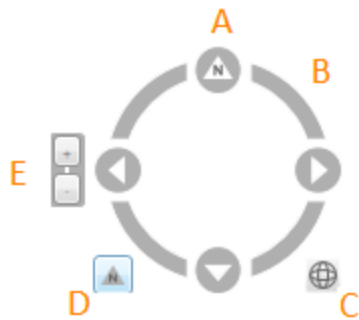


Return to Previous/Next Extent

These tools allow you to cycle through previous map extents.

Navigation Wheel

The following are the various navigation tools:



- A. **Pan** - Click the four arrows on the wheel to move the map North, South, East, and West.
- B. **Rotate** - Click and drag the other areas of the compass to rotate the map in any direction.
- C. **Zoom to Full Extent** - Click the globe icon on the lower right of the compass to zoom to the full extent.
- D. **Reset North** - Click the arrow icon on the lower left of the compass to reset the map to North.
- E. **Zoom In/Out** - Click the + and - buttons on the left side of the compass to zoom in and out of the map.

Notes: _____

Analysis Toolbar

The following are the various tools available on the analysis toolbar:



Identify

The Identify tool allows users to select a feature in the map and display its attributes. Note: Only layers marked as selectable in Map Properties will be displayed in the results.

1. Using the identify tool click a feature in the map. The identify results window will appear.

126857 (Sanitary Structure Inventory)	
OBJECTID	305
Structure	126857
Subtype	Null
Structure Type	Standard
Structure Depth (ft)	1258.12
Rim Elevation	1272.64
Status	N/A
Component Type	Standard
GPS Flag	Null
Unique Number	29982
In Lucity Database?	1
Last Modified By	GBA
Last Modified date	7/24/2006 2:00:58 PM
Last Synchronized Date	12/9/2011
SHAPE	Point

2. If more than one feature was at the location of the mouse-click, you can use the drop down to select the desired feature.



Find

The Find tool searches for addresses and assets based upon the criteria the user enters. Note: Only layers marked as selectable in Map Properties will be displayed in the results.

Find Address

1. To locate an address in the map enter and Address and Street.
2. Enter optional cross street or zip code
3. Click Find
4. A point will be put in the map at the address location.

Address Asset Attribute Query Customer

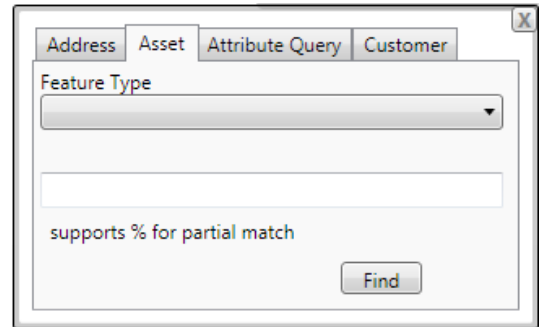
Address

(Optional) Cross Street

(Optional) Zip Code

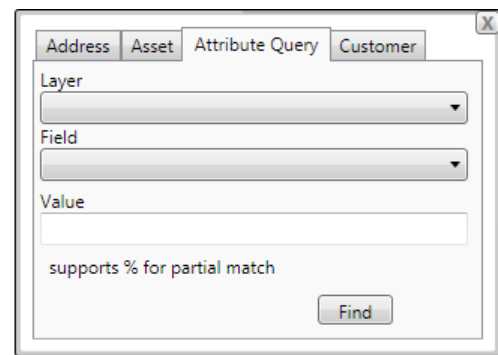
Find Asset

1. To locate an asset in the map select a Feature Type. This list is populated with the feature classes linked to Lucy in the map.
2. Type in an asset number. This is the feature's common identifier.
3. Click Find.
4. The asset(s) will be selected in the map.

The screenshot shows a dialog box titled 'Find Asset' with four tabs: 'Address', 'Asset', 'Attribute Query', and 'Customer'. The 'Asset' tab is selected. It contains a 'Feature Type' dropdown menu, a text input field for an asset number, and a 'Find' button. Below the input field, it says 'supports % for partial match'.

Attribute Query

1. To select features in the map based upon an attribute query, select a Layer. This list is populated with all selectable layers in the map.
2. Select a Field. This list is populated with all the fields from the layer.
3. Enter a Value. This is the value you want to search for in the field.
4. Click Find.
5. The asset(s) that meet the search criteria will be selected in the map.

The screenshot shows a dialog box titled 'Attribute Query' with four tabs: 'Address', 'Asset', 'Attribute Query', and 'Customer'. The 'Attribute Query' tab is selected. It contains a 'Layer' dropdown menu, a 'Field' dropdown menu, a 'Value' text input field, and a 'Find' button. Below the input field, it says 'supports % for partial match'.

Create Point

This tool creates a point in the map. This tool can be used to add x/y locations to a work request, work order, and pm/work template records.

1. Using the Create Point tool click a location in the map.
2. A red point will appear in the map and the Data Table will be opened with a tab for X/Y Points.



Selection

This tool allows users to select features. Note: Only layers that are marked as selectable will be included in the selection results.



Clear Selection

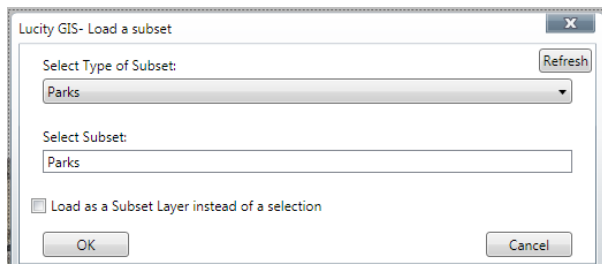
This tool clears the map selection. All selected features in the map will be cleared and any address or x/y points added to the map will also be removed.



Load Subsets

The Load Subsets tool allows users to load a subset in the map. This tool can either select the features that are included in the subset, or create a temporary subset layer that contains these features.

1. Click the Load Subset tool, the following dialog will appear:



2. Choose an asset type from the Select Type of Subset list. This list only includes asset types for which there is a feature class in the map.
3. By default, the tool will select features in the layers in the map linked to the asset type selected. Check the Load as Subset Layer box if you prefer to have a new layer added in the map with the subset features.
4. Click OK
5. The assets will be selected in the map and appear in the Data Table or a layer will be added to the map and you can modify its properties using the Map Layers tool.

Notes: _____

Lucy Tools

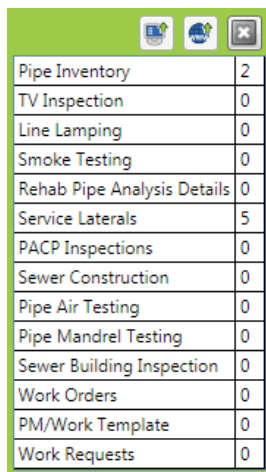
The following are the various Lucy tools available in the Data Table



Relationships

The Relationships tool shows all Lucy modules and records related to the highlighted record(s). Users can then view the related record(s) in either the Lucy desktop or web application.

1. After making a selection in the map, select the desired record(s) in the data grid.
2. Select the Relationships tool. The following results window will appear:



Pipe Inventory	2
TV Inspection	0
Line Lamping	0
Smoke Testing	0
Rehab Pipe Analysis Details	0
Service Laterals	5
PACP Inspections	0
Sewer Construction	0
Pipe Air Testing	0
Pipe Mandrel Testing	0
Sewer Building Inspection	0
Work Orders	0
PM/Work Template	0
Work Requests	0

3. Each line in the window is a Lucy module. To the right of the module name is a count of how many records in that module are related to the selected record(s) in the data grid.
4. Select a module to view, then click on one of the following buttons to open that module.



Open in Lucy Desktop



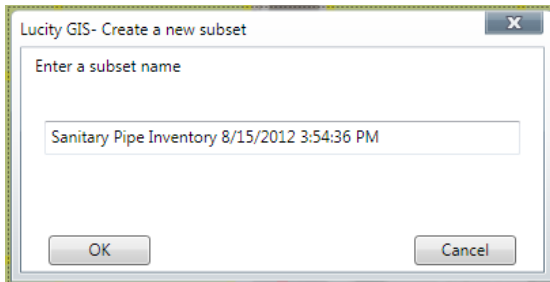
Open in Lucy Web



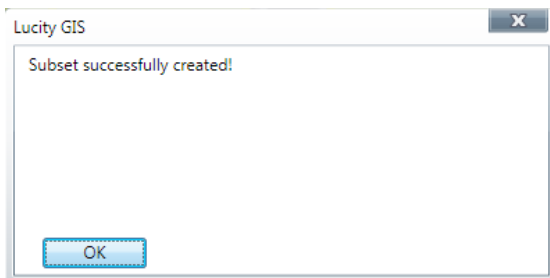
Create Subset

The Create Subset tool allows users to create a new subset from selected features. Subsets allow users to save a fixed group of records for later use.

1. After making a selection in the map, select the desired record(s) in the data grid.
2. In the Data Table, click the Create Subset tool. A dialog similar to the following will appear:



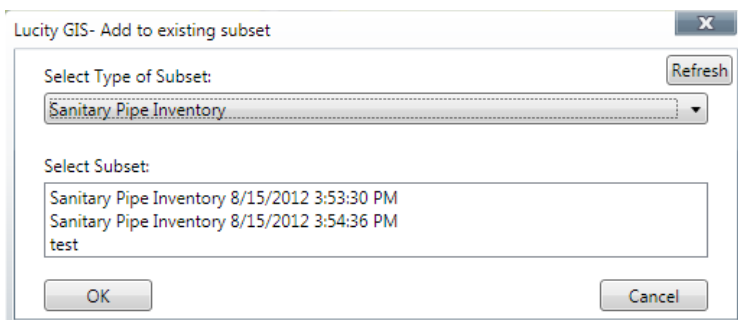
3. Enter a name for the subset. By default the dialog creates a name based on the asset type, date, and time.
4. Click OK.
5. Once complete a dialog will appear indicating if it was successful.



Add to Subset

The Add to Subset tool allows users to add assets to an existing subset.

1. After making a selection in the map, select the desired record(s) in the data grid.
2. In the Data Table, click the Add to Subset tool. A dialog similar to the following will appear.



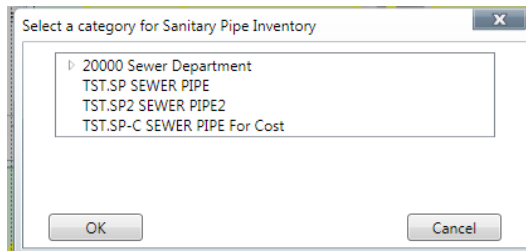
3. The type of subset will be automatically filled out based upon the asset type of the feature class you are working with. Select an existing subset in the list provided.
4. Click OK
5. Once complete a dialog will appear indicating if it was successful



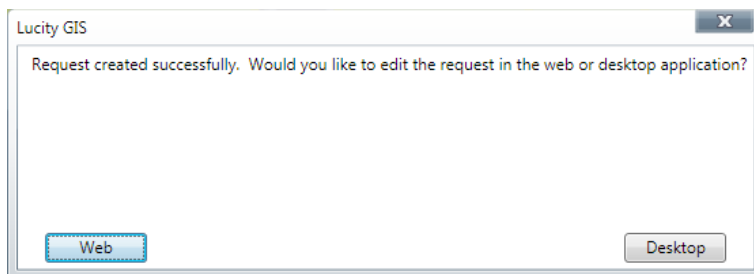
Create Request

The Create Request tool allows users to create a request from the map based on an asset or x/y location.

1. After making a selection in the map, select the desired record(s) in the data grid.
2. In the Data Table, click the Create Request tool.
3. If the highlighted asset does not have a default work category, the following popup will appear. Only valid categories will appear in the list. Select a category and click OK.



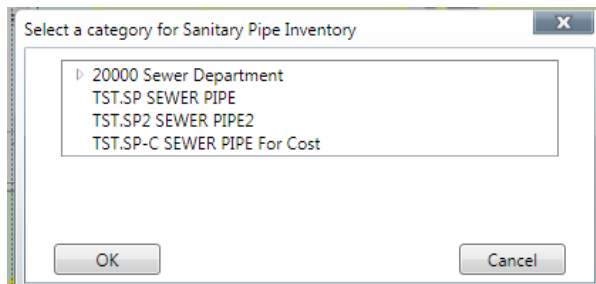
4. Once complete a dialog will appear indicating if you would like to edit the request in the web or desktop application.



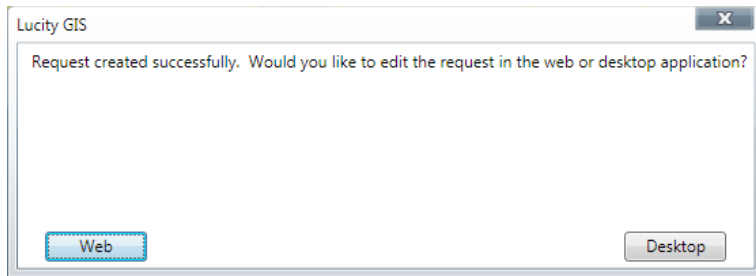
Create Work Order

The Create Work Order tool allows users to create a work order from the map based on asset(s) or x/y location(s).

1. After making a selection in the map, select the desired record(s) in the data grid.
2. In the Data Table, click the Create Work Order tool.
3. If the highlighted asset does not have a default work category, the following popup will appear. Only valid categories will appear in the list. Select a category and click OK.



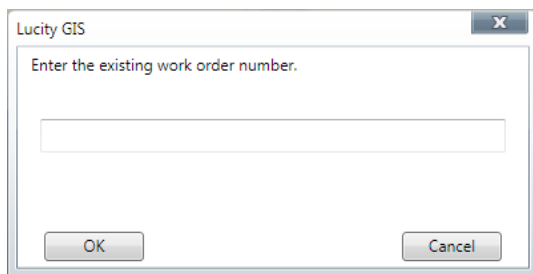
- Once complete a dialog will appear indicating if you would like to edit the work order in the web or desktop application.



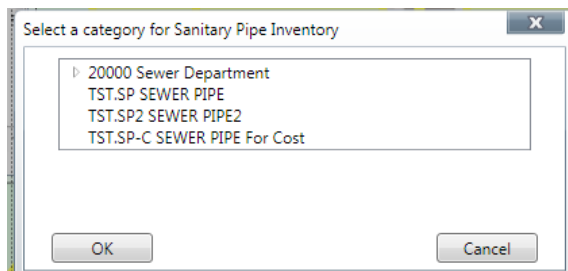
Add to Work Order

The Add to Work Order tool allows users to add asset(s) or x/y location(s) to an existing work order from the map.

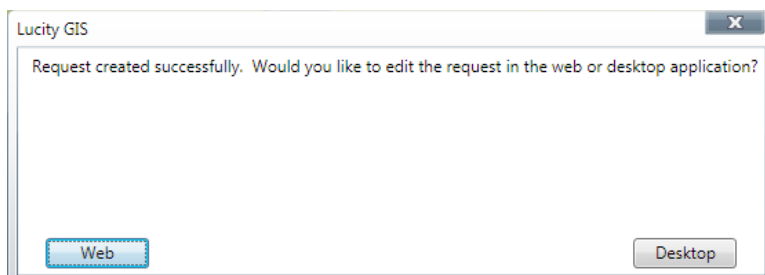
- After making a selection in the map, select the desired record(s) in the data grid.
- In the Data Table, click the Add to Work Order tool. The following dialog will appear:



- Enter the existing work order number and click OK.
- If the highlighted asset does not have a default work category, the following popup will appear. Only valid categories will appear in the list. Select a category and click OK.



- Once complete a dialog will appear indicating if you would like to edit the work order in the web or desktop application.





Create PM/Work Template

The Create PM/Work Template tool allows users to create a pm/work template record from the map based on asset(s) or x/y location(s).

1. After making a selection in the map, select the desired record(s) in the data grid.
2. In the Data Table, click the Create PM/Work Template tool. The following dialog will appear:

Lucity GIS

Enter a new Routine/PM Work Template code and description:

OK Cancel

3. Enter a unique code and description for the pm/work template. Click OK.
4. If the highlighted asset does not have a default work category, the following popup will appear. Only valid categories will appear in the list. Select a category and click OK.

Select a category for Sanitary Pipe Inventory

20000 Sewer Department
TST.SP SEWER PIPE
TST.SP2 SEWER PIPE2
TST.SP-C SEWER PIPE For Cost

OK Cancel

5. Once complete a dialog will appear indicating if you would like to edit the pm/work template record in the web or desktop application.

Lucity GIS

PM/Work Template record created successfully. Would you like to edit the record in the web or desktop application?

Web Desktop

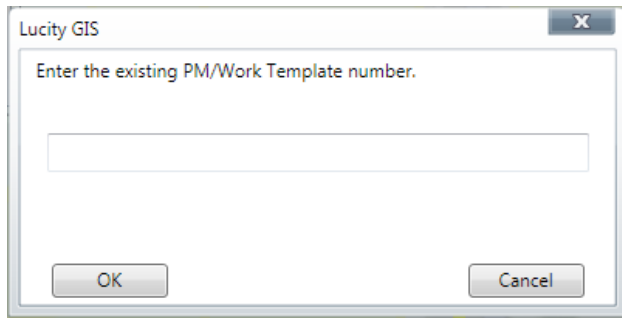
Notes: _____



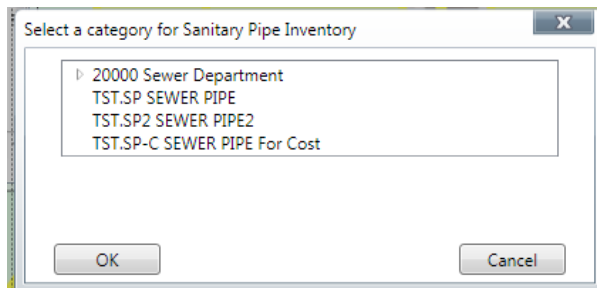
Add to PM/Work Template

The Add to PM/Work Template tool allows users to add asset(s) or x/y location(s) to an existing pm/work template record from the map.

1. After making a selection in the map, select the desired record(s) in the data grid.
2. In the Data Table, click the Add to PM/Work Template tool. The following dialog will appear:



3. Enter the existing pm/work template number and click OK.
4. If the highlighted asset does not have a default work category, the following popup will appear. Only valid categories will appear in the list. Select a category and click OK.



5. Once complete a dialog will appear indicating if you would like to edit the pm/work template in the web or desktop application.

