Lucity Web Map Administration

Contents

Portal Config and SSO
Registering with Portal
Behind the Scenes
Resetting Portal Integration6
Single Sign On7
Secured Services
Logged into Portal and accessing a secured service federated with Portal
Logged into Portal and accessing a Web Map secured service not federated with Portal9
Lucity Legacy Maps vs Esri Web Maps10
Portal Gallery11
Lucity Web Map Gallery Configuration11
Lucity Base Map Gallery Configuration12
Limiting Gallery Results by Tags13
GIS Views14
GIS View Design14
Creating a new GIS View15
Editing an Existing View16
Map View Name and Description18
Select a Webmap or a Lucity Legacy Map18
Default Basemap19
Auto-generate Popups
Configuring Tools
Configuring GIS Views for the Menu22
Default GIS View
Logic used to determine which GIS View is opened24
Configuring Default GIS Views based on Groups25
Configuring Default GIS Views based on Module View27
Defining Selectable Layers in the GIS View29
Utility services in Lucity Admin
Geocoding Service
Geometry Service
Routing Service
Printing Service
Module Spatial Data

Redlining	
Point Location Tool	
Bookmarks	
Lucity Dashboard Map	
GIS Split View	
Things to consider	

Portal Config and SSO

Lucity integrates with the Esri portal technology. This can be ArcGIS Online or it can be Portal for ArcGIS Enterprise. Portal integration is currently optional in the web map, but recommended. Enabling SSO is optional.

The Lucity integration with portal requires an application for Lucity Web to be registered in your portal.

Registering with Portal

To register Lucity with your portal, go to the Esri Portal Integration interface in the Admin Portal under Web App Management.

	e 💄 Admin Portal 😣 🕇	🌼 🧮 🎨 🍪 🔗 🔔 🕜 Eric Daniel
Home + Reports + Users And Licenses	portal. This will register a new application users will be unable to log into the portal to option. This registration is specific to the in	tion that is allowed to access and have users login to your in your ArcGIS (Local or ArcGIS Online). If this is not configured, your access GIS content and will not be able to use the Lucity Esri SSO stalled Url for Lucity Web. If you have a test client or a second er, it must be re-registered or the application must be manually Portal.
+ Settings	Portal Uri:	https://www.arcgis.com
— Web App Management	Portal Administrative User:	
Tasks	Portal Administrative Password:	
Client Applications	Register this Lucity Web Application with	Esri
Background Tasks		
GIS Scheduled Tasks Log		
Spatial Updater Processing		
Esri Portal Integration		
Audit Log		
System Errors		
Application Activity Log		
+ Email		
+ Tools		

- If not using ArcGIS Online, change the URL to your local portal URL. This may be something like <u>https://myserver/portal/</u> or <u>https://www.servername.com/server/</u> depending on what your portal home address is. The 2 above URLs have the following portal home addresses, <u>https://myserver/portal/home</u> or <u>https://www.servername.com/server/home</u> respectively.
- 2. Enter a portal administrative user and password. These are not saved, they are only used during this session to register the application.
 - a. Note: Portal administrative user credentials are case sensitive.
- 3. When the process is completed, the client id is displayed:



- 4. If desired, turn on the SSO integration. This allows users to login with their Esri credentials.
 - a. Enabling this option enables the button on the Lucity login page.
 - b. Each user must also be configured with their Esri login credentials in Lucity Security.

nicole	
· · · · · · · · · · · · · · · · · · ·	
nschmidt@lu	ucity.com
roup: Admin	nistrator 🗸
ng on to Lucity	y with ESRI Logon
NicoleSchmi	idtLucity
Locked	Change Password
dows Account	ts:
	ord at next logon
WEOTT 0.02.2	
lk	Cancel
	roup: Admir ng on to Lucit; NicoleSchm Locked dows Accoun

Behind the Scenes

When the automated portal registration is run through the Lucity admin portal, an application is registered with portal which will show up as an App under gallery or content.

Home Gallery Map Scene Groups Content O	rganization		Nicole V Q
Content My Content My Favorites My Groups My O	rganization		
+ Add Item 🗸 🛛 🖹 Create 🗸	Q Search NicoleSchmidtLucity		
Folders 🖴 New	1 - 16 of 36 in NicoleSchmidtLucity		Sort by: Date Modified 🗸 🔱
🚔 All My Content	Title		Modified 🔹
NicoleSchmidtLucity	ROW Test Grouped Map	Web Map	🚱 ★ 🚥 Aug 21, 2017
	ParkHosted	Feature Layer (hosted)	🔒 ★ 🚥 Aug 21, 2017
∨ Item Type	ParkHosted	Service Definition	🗄 ★ 🚥 Aug 21, 2017
Maps Lavers	LucityGIS_Storm_demo1	Map Image Layer	🍓 ★ 🚥 Aug 21, 2017
Scenes Apps	Lucity Demo	Application	🗄 ★ 🚥 Aug 21, 2017
Tools Files	Sewer Map and Water Feature Plus Image Server	Web Map	🍓 ★ 🚥 Aug 21, 2017

The important part of this application registration is under settings in the item details

ucity Demo	
Overview Usage Settings	
neral Settings Application ettings	
General Settings	
Delete Protection	
Prevent this item from being accidentally deleted.	Delete item
Extent	Set Extent
lo extent has been set for this item.	
	Save Cancel
Application Settings	
Data Source	
JRL	
App Registration	Application Usage Update Unregister App
Registered Info	

This includes the client Id used by Lucity along with the URL for your Lucity Web environment that handles login redirects. This will always end in "Public/oauth-callback.html"



If you unregister the app, or if you remove a URL, it may cause Lucity to be unable to use the portal integration. If that happens you can reset and create the portal integration details as described below.

Resetting Portal Integration

To reset the portal integration, go to the Esri Portal Integration in the admin portal and click Clear.

	e 💄 Admin Portal 😣 🕇	🔅 📰 🎨 😵 🔗 🌲 🕜 Eric Daniel
Home + Reports + Users And Licenses	portal. This will register a new application i users will be unable to log into the portal to option. This registration is specific to the ins	ion that is allowed to access and have users login to your n your ArcGIS (Local or ArcGIS Online). If this is not configured, your access GIS content and will not be able to use the Lucity Esri SSO stalled Urf for Lucity Web. If you have a test client or a second er, it must be re-registered or the application must be manually fortal.
+ Settings - Web App Management Tasks Client Applications Background Tasks GIS Scheduled Tasks Log Spatial Updater Processing Esri Portal Integration Audit Log System Errors Application Activity Log + Email	You have configured Lucity with your Esri Portal Uri: Lucity Web App ID: Enable Esri SSO Integration Clear	Portal https://www.arcgis.com 8FbwkYKgxAuxt2MZ
+ Tools		

Single Sign On

Once Enable Esri SSO Integration is enabled, users can log into Lucity using the "ArcGIS" option on the login page.



Clicking ArcGIS will open a prompt that ask the user to enter their Esri credentials

Lucity Test S	QL Server 19r2 wants to access	your ArcGIS Online account information
	Sign in with	@ esri
	ArcGIS login	^
	🔒 Username	
	Password	
	Sign In	Cancel
	Forgot username?	or Forgot password?
	Enterprise login	\checkmark
	f Facebook	G Google

It will use the Esri login entered to lookup a Lucity user using the Esri account configured in security.

User:	nicole
First Name:	
Last Name:	
Email:	nschmidt@lucity.com
Default Rules	Group: Administrator
🛃 Allow Log	ging on to Lucity with ESRI Logon
ESRI Logon I	D: NicoleSchmidtLucity
🗹 Enabled	Locked Change Passw
Associated W	indows Accounts:
 Allow App Password User must 	Add X Remo ication Authentication never expires change password at next logon
 Allow App Password User must 	Add 🗙 Remo ication Authentication never expires

Once logged in with SSO, the user will not need to enter credentials for any services federated with their portal or that are configured to login automatically in their portal.

Notes:_____

Secured Services

Logged into Portal and accessing a secured service federated with Portal

Once logged into portal, users will not be prompted for credentials when they try to access secured services on any server that is federated with portal. The exception is if they try to access a secured service you have not granted them access to through the sharing properties of the service in portal.

Logged into Portal and accessing a Web Map secured service not federated with Portal

If a user is logged into portal but is accessing a secured service that is not federated with portal, the behavior will depend on whether the credentials were saved with the service in portal (this feature only available for Feature Services, not Map Services).

Item from the web 🛿		×
Reference an item on the Web.		^
Туре:		- 1
 ArcGIS Server web service WMS (OGC) WMTS (OGC) 	KMLWFS (OGC)Document	
URL:		- 1
https://demo.lucity.net/server/rest/services/	LucityGIS_Traffic/FeatureServer	±
A secure service was detected.		
Username:		- 1
Password:		
		٩
Do not store credentials with service ite	em. Prompt for authentication everytir	ne.

O Store credentials with service item. Do not prompt for authentication. Learn

If it is a Map Service or the credentials were not saved with the service, the user will be prompted for credentials

Sign In $ imes$
Please sign in to access the item on https://arcgis.mylucity.net/portal (item)
Username:
OK Cancel

Lucity Legacy Maps vs Esri Web Maps

The Lucity Web interface is optimized for use with Esri "web maps". To be able to use "web maps", you must be using portal (ArcGIS Online or have upgraded to 10.5+ and using portal for ArcGIS Enterprise) and must have web maps authored and available for your users. These web maps can reference ArcGIS Server services on older ArcGIS Server versions, if needed. It is not necessary for an ArcGIS Server service to be publicly accessible to deploy web maps using ArcGIS Online to your enterprise.

If you have not upgraded to 10.5+ yet or are not ready to configure web maps in ArcGIS Online, you can use the old-style "Lucity Legacy Maps" during the transition.

The Lucity mobile products currently still require Lucity Legacy Maps. These will be transitioned to web maps in the next 9 to 12 months.

Portal Gallery

The Swap Webmap and Swap Basemap tools will display a list of items from the portal configured with Lucity. The following sections describe how these galleries can be customized.

Lucity Web Map Gallery Configuration

If you are logged into portal, the Lucity web map gallery (by default) will include all web maps in your organization. Lucity will automatically figure out what organization you belong to and only show web maps shared with your organization.



If you are not logged in, the list of web maps will be all public web maps published by any user in ArcGIS Online. If you want to limit the gallery to only show public maps in your own organization, set the Org Id in the Lucity System settings and the map gallery will automatically limit the web map gallery to only show web maps in your organization:

GIS Portal Integration •				
Setting Description	Setting Value	T	Setting Category	
Allow logging on to Lucity using Esri portal credentials	TRUE		GIS Portal Integration	
Base URL to your GIS Portal	https://www.arcgis.com		GIS Portal Integration	
Number of minutes after which the Esri token will expire.	600		GIS Portal Integration	
Org Id for ArcGIS for Portal (optional)			GIS Portal Integration	
Tag search string for Basemaps on Portal for ArcGIS or ArcGIS Online	tags: lucity_basemap		GIS Portal Integration	
Tag search string for Portal for ArcGIS or ArcGIS Online	tags: lucity, lucity_eval		GIS Portal Integration	
The Client ID you created for your GIS Portal			GIS Portal Integration	

Lucity Base Map Gallery Configuration

If Show Portal Basemap Gallery is selected, the portal Basemap gallery which has been configured in the maps tab of the Organization settings in portal will be used to limit the base map results. No other limits or tag search strings are applied to limit the results



If Show Portal Basemap gallery is not selected, the basemap gallery will include all items that meet this search criteria:

tags:esri_basemap OR tags:partner_basemap OR tags:user_basemap OR tags:basemap

Unless a custom search tag is defined for basemaps. If a custom search criterion is specified, the above default tag search criteria is not used.

Limiting Gallery Results by Tags

To further customize what results are returned in the web map or basemap gallery display, you can set an additional query to be applied to the gallery results in system settings.

GIS Portal Integration						
Setting Description	Setting Value	etting Value				
Allow logging on to Lucity using Esri portal credentials	TRUE		GIS Portal Integration			
Base URL to your GIS Portal	https://www.arcgis.com		GIS Portal Integration			
Number of minutes after which the Esri token will expire.	600 G		GIS Portal Integration			
Org Id for ArcGIS for Portal (optional)			GIS Portal Integration			
Tag search string for Basemaps on Portal for ArcGIS or ArcGIS Online	tags: lucity_basemap		GIS Portal Integration			
Tag search string for Portal for ArcGIS or ArcGIS Online	tags: lucity, lucity_eval		GIS Portal Integration			
The Client ID you created for your GIS Portal			GIS Portal Integration			

Entering

tags:lucity

in the setting value, the gallery will only show web maps or basemaps with a tag of "lucity" applied.

This search string is not limited to tags, it can include groups in the query string as well. For more information on configuring a custom search criterion, review the ArcGIS Online reference for searching.

GIS Views

GIS Views are the name we have given the tab which contains the map and the full GIS web tool suite. A GIS View is comprised of a Map (Basemap or Web map or Basemap and Lucity Legacy Map), a collection of tools, and a collection of map components (legend, table, etc.).

If you do not have any GIS Views, when you first open the map, you will be prompted to create one (if you have permissions to create GIS Views, otherwise you will be prompted to have your administrator create one).

There are no GIS Views Defined	
	Create a GIS View

GIS View Design

A GIS View must have a name and it may also have a description. Only users with General - Edit in the GIS View module in security can edit views.

Modules View	Permissions View		
Modules:			Permissions:
	min ectric uipment aneral Admin Authentication Setup Admin Authentication Setup Admin Map Setvices Admin Map Setup GIS Add Layers GIS System Configuration GIS View GIS Web Map GIS Web Map GIS Work Orders	H	General - Add General - Delete General - Edit Run

Creating a new GIS View

To create a new view, from the user admin pane, select "Create New >>GIS View"



The view will open in design mode

				← Add GIS View
	OPEL S MARK	Center	Delma	GIS View Name:
Layers Legend Selection	weanst wannes	Metald South Biopping Context	W SSIT SI Nari Nari Nari Nari Nari Nari Nari Nari	Description (optional):
14150	10 00 00 00 Wosen Ter	A A A A A A A A A A A A A A A A A A A	W SIN SI	Select a Webmap or a Lucity Map
	n n n n n n n n n n n n n n n n n n n	Design Mode	W Kolector	Elear
	W 103et St	Edit Properties	1 Maple 1	Lucity Map:
	Backholas Gen W 100(h S Index Great	Assign Groups	Park Park Found Teachill Teach	Options
	Comparest Victory	Default Groups	8 X -	Auto-generate popup for layers
	Tre 47 Cash Pray	Default Views		Only include tools selected include new tools automatically
	w ston?	Exit	W 150th St	
	Anna Santanan Anna Santanan Park	- 1 3	and 1121h St	Table of Contents Toggle
Conto	The sea of the second s	Monona Gardong		Fixed Zoom in Button
	W 110th Ter Willing	Centerr	W 11 den St	Fixed Zoom out Button
	Cosas Cosas	1	net Place Leawood	Go to Current Location Button
Ment Memorial Park		Corps		Find Address
W.11901.51	W 199m St W115	n si	man and a start	Find Lat/Long
Westgate	Timasteret Fidge		Mensirah Medical Canatr	Find Asset
0.4 mi	Target	Gline		Dist Daint and Davarra Casaada Taal * *
as City, MO, Missouri Dept. of Conservation, Esri, HER	Garmin INCREMENT P USGS METUNASA EPA USDA	and the second second		Cancel Save

Editing an Existing View

To edit an existing view, either open that GIS View from the menu, or from the GIS Map button on the widget bar.



Alternately, or if it is not available through the menu or widget bar, the GIS View can be opened from the user admin pane ("Open>>GIS View")

	+			Eric Daniel edanie@ucity.com Administrator
Parks Streets Plant Reports Fleet Facility Group Storm Sewer Traffic Water	Open Particular Particula	Isard To Isard To Isard Isard Isard To Isard To I	Barred Tab Group	Create New Change Password Create Settings Log Out
	Cancel			-

Once in a view, click the Design Mode icon to start editing the GIS View. And click the Edit Properties on the Design Mode menu:





The Edit Map dialog will appear:

<
Edit GIS View
GIS View Name:
Trace
Description (optional): Map containing sewer, storm, and water features
Select a Webmap or a Lucity Map
Webmap:
Lucity Trace Map Elear
Lucity Map:
Options
Auto-generate popup for layers
Only include tools selected
Include new tools automatically
Table of Contents Toggle
Zoom in Tool
Fixed Zoom in Button
 Fixed Zoom out Button Home Button
Go to Current Location Button
Find Address
Find Lat/Long
Find by Attribute
Find Asset
Cancel Delete Save

Map View Name and Description

GIS View Name:	
Trace	
Description (optional): Map containing sewer, storm, and water features	

A GIS View must be given a unique name. The name is what will be displayed to the user when selecting from a list of GIS Views. The Description is optional and is used to provide more information about the GIS View.

Select a Webmap or a Lucity Legacy Map

Webmap:	
Lucity Trace Map	Clear
Lucity Map:	

A GIS View will have a web map assigned or a Lucity Map assigned. Users can change what is displayed on the fly using the Swap Web map and Swap Lucity map tools in the table of contents.

If you do not want users to change web maps or lucity maps, you can remove the tools, as described below. If you want to allow users to swap web maps and lucity maps but do not want them to be able to persist their changes, revoke the General - Edit permission in GIS Views.

Note: If you are not in design mode for the map, web map and lucity map swaps are not persisted. But if you open the GIS view designer and save, your changed web map or lucity map will be persisted with the GIS View.

Default Basemap

If you are using web maps, the basemap will always be determined based on the web map being loaded. If you are using Lucity maps, the default basemap is calculated as follows. If the default basemap for web is configured here:

Es		Url	Order	Opacity	Base Map for Web?	Base Map for Mobile?	Feature Service?	User Auth		Require Logon?	Feature Service Url	Proxy Url
	sri_WorldStreet	https://services.arcgisonline.com/arcgis/rest/services/World_Street_Map/MapServer	0		✓	✓		· · · · · · · · · · · · · · · · · · ·	¥			
Es	sri_WorldTopo	https://services.arcgisonline.com/arcgis/rest/services/World_Topo_Map/MapServer	0		✓	✓		· · · · · · · · · · · · · · · · · · ·	¥			
Se	ewer	https://demo.lucity.net/server/rest/services/LucityGIS_Sewer/MapServer	2				✓	· · · · · · · · · · · · · · · · · · ·	¥		https://demo.luci	
Pa	ark	https://demo.lucity.net/server/rest/services/LucityGIS_Park/MapServer	4				✓	· · · · · · · · · · · · · · · · · · ·	~		https://demo.luci	
W	/ater	https://demo.lucity.net/server/rest/services/LucityGIS_Water_Dist/MapServer	3				✓		¥		https://demo.luci	
AG	GO 1	https://services.arcgis.com/53PW7Esq9rERkspc/arcgis/rest/services/LucityGIS_SewerEnv/Feature	2					· · · · · · · · · · · · · · · · · · ·	¥	✓	https://services	
AG	GO 2	$https://services.arcgis.com/53PW7Esq9iERkspc/arcgis/rest/services/ParkShared_Test/FeatureSer$	4					· · · · · · · · · · · · · · · · · · ·	¥	✓	https://services	
Se	ewer Editable	https://demo.lucity.net/server/rest/services/LucityGIS_Sewer/MapServer	2				✓	· · · · · · · · · · · · · · · · · · ·	¥			
Ra	aster	https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer				✓			¥		%root%/LucityMo	
Re	edlining	https://demo.lucity.net/server/rest/services/LucityGIS_Redlining/FeatureServer							¥			
Tra	raffic Secured	https://demo.lucity.net/server/rest/services/LucityGIS_Traffic/MapServer	2					Matt Demo	~			

It will use this basemap. If not, and if the user is logged into portal, it will use the default basemap configured in the portal Organization settings.

If the user is not logged into portal, the default basemap will be the Esri "grey" basemap.

Auto-generate Popups

Popups is a term used in the webmap to refer to the dialog that appears when a feature is clicked in the map. Popups typically show the attributes for a feature in the map.

	Segment Network: COLLEGE		
	Segment ID	14040	•
aton	Street Direction		
Hotel	Prefix Type		
	Street Name	COLLEGE	
-	Street Type	BLVD	
4	Street Suffix		1
	Pavement Type		
6118	0. 🖻 🔚 💥 🏠 😜 🗢	€	590.0
	→ COLLEGE BLVD		1111

The template for a popup is defined on a per layer basis. For Esri webmaps, popup templates are configured and saved with the Esri webmap.



For Lucity Legacy maps or Esri webmaps that contain layers that don't have a popup template defined, you can enable a GIS View setting that will automatically create a default popup template for layers:



When a GIS View loads, if a layer in the map doesn't have a popup template defined and the autogenerate popup setting is enabled, then a default popup template showing all GIS attributes is created and assigned to the layer. Otherwise, no popup template will be created for that layer, and users will not be able to "identify" features from that layer in the map.

Configuring Tools

Each view can be configured with a distinct list of tools. There are 2 options when managing tools in a GIS View.



The "Only include tools selected" option allows you to specify a list of tools that are in the GIS View, and even after major upgrades which add new tools to the available list, only the tools you originally specified will be available for the user.

The "Include new tools automatically" option allows you to specify a list of tools in the GIS View, but after major upgrades with this option selected, users will automatically have access to the new tools.

In both cases, you will select or "check" all tools you want available.

Configuring GIS Views for the Menu

New for Lucity 2017r2, GIS is available from the menu:



If the System Setting for "Allow access to all GIS Views to All Users" is TRUE, then all GIS Views you create will automatically show up in this list for all users. This is the default setting.

GIS V	
Setting Description	Setting Value
Allow access to all GIS Views to All Users	TRUE
Lucity Spatial- Enabled	TRUE
Lucity Spatial- Max amount of days to process spatial history	90
Map Exports- Default location	
Map Exports- Format	pdf
Operational Data Spatial Reference WKID	3419
Point Location Tool Work Option (XY,ADDRESS,BOTH)	BOTH
Preload GIS caches to speed initial map load	TRUE
Separator to use for Geocoding Intersections	1

.

If this is false, only users who have been assigned the GIS View will see it in the menu. To assign a user a GIS View, you will assign their default rules group to the view.

Open the GIS View in design mode and select Assign Groups

	Design Mode	
	Edit Properties	
	Assign Groups	
Ī	Default Groups	11 4
	Default Views	
	Exit	ð

Groups can be assigned to more than one GIS View because this dialog only controls what GIS Views show up in the list of available GIS Views in the menu.

Assign Groups to GIS Views							
The setting for allow access to all GIS Views is on in System Settings. It is not necessary for you to use this dialog to assign groups to GIS Views, all users will see all GIS views.							
-Available Groups		Administrator					
		Administrator	Remove				
Demo Ux	Assign						
General User	Assign						
GIS Administrator	Assign						
Mo Test Group	Assign						
Power User	Assign						
PublicWebGroup	Assign						
RESTAPIGroup	Assign						
SupervisorsWithAllowedToApproveTimesh eetPermission	Assign						
Close							

Changes in this dialog are immediately saved.

Default GIS View

Users can be assigned access to multiple GIS Views. Since a user may have access to more than one GIS View, you may want to further define when a specific GIS View should be opened by default.

Logic used to determine which GIS View is opened

When the webmap is opened using the Show in Map tool the following logic is employed to identify which GIS View should be used:

- 1. The system will first try and use the GIS View that is associated to the Lucity module view in which the Show in Map button was clicked.
- 2. If no GIS View has been associated to the module view, or the map is not being launched from a module view, the system will open the GIS View associated to the user's default rules group.
- 3. If there isn't a GIS View associated to the user's default rules group, the system default GIS View will be used.
- 4. If no GIS View has been assigned the system default, a random GIS View will be used.

Configuring Default GIS Views based on Groups

To configure what GIS Views are opened by default for a user, open the GIS View in design mode and select "Default Groups".

	Configure Default GIS Views for Default Rules Groups									
	These settings control which GIS view is opened from Show in Map or the GIS button in the widget bar. Tell me more System Default GIS View The current GIS View [Trace] is the system default GIS View.									
	Available Default Rules Groups — Groups Using This GIS View As Default — Groups — Grou									
Design Mode	Administrator Assign Demo Ux Assign									
Edit Properties										
Assign Groups										
Default Groups										
Default Views										
Exit	Close									

This dialog will tell you what view is currently the default system wide GIS View and will allow you to set the current GIS View to be this default.



After clicking "Make this GIS View the Global Default" the display will change as follows:

And if viewing this dialog from a GIS View that is not the default:

System Default GIS View Trace is the system default GIS View. Make this GIS View the system default Within this dialog, you can assign a different GIS View for different users using their Default Rules Group. Click the Assign button to assign the current GIS View as the default for the default rules group. Note: If a default rules group is already assigned to another GIS View, the name of the assigned GIS view will be listed in italics under the default group name:

Configure Default GIS Views for Default Rul	es Groups	
These settings control which GIS view is opened from Show in —System Default GIS View The current GIS View [Trace] is the system default GIS View		Tell me more
Available Default Rules Groups- search Administrator Assigned To:LucityMap_Sewer Assign	Groups Using This GIS View As Default	Remove

Configuring Default GIS Views based on Module View

With 2018r2 you can assign a GIS View to a Lucity Module View. This assignment will be used in the following situations:

- When using the Show in Map tool in the Lucity module view. The webmap will open the GIS View that has been assigned as the default to the current Lucity module view.
- In the Lucity webmap when a tool requests to open a Lucity module view. The webmap will open the Lucity Module View that has been assigned as the default to the current GIS View.
- In the Lucity webmap when a tool requests to open a Lucity form. The webmap will open the default form associated to the Lucity Module View that has been assigned as the default to the current GIS View.

To assign Lucity Module Views to a GIS View, open the GIS View in design mode and select "Default Views":

	Configure Default GIS Views for Module Views									
	These settings control which GIS view is opened from Show in Map or the GIS button in the widget bar. These settings will also dictate which module view and form should be opened from the GIS View.									
	The current GIS View [Trace] is the system default	GIS View.								
	Module	Available Module Views		Module Views Using this GIS View as Default-						
	Select Program: Water •	Water_Mainbreaks	Assign	Water_Access Roads	Remove					
	Module Grouping 1:	Raw Water_Checks	Assign	Water_Gates	Remove					
Design Mode	Show All Module Views	Raw Water_Culverts	Assign	Water_Loss	Remove					
		Raw Water_Gauges	Assign							
Edit Properties	Reset Module Selections	Raw Water_Main Breaks	Assign							
		Raw Water_Node	Assign							
Assign Groups		Raw Water_Service Boxes	Assign							
Default Groups		Raw Water, Service Manifolds Assign All	•	Remove All						
Default Views										
Exit										
	Close									

1. To start assigning module views to the current GIS View, select an item from the *Select Program* dropdown list. You can further filter the list of modules by selecting optional module groupings:

-Module	Available Moo	dule Views
Select Program:	Water Hydr	rant Flow Test View
Water	······································	Assign
Module Grouping 1:	Water_Hydr	rant Inspection View Assign
Water Distribution	Water_Hydr	rants Assign
Module Grouping 2:		
Hydrants	T T	

- 2. All the modules that are part of that program/grouping that are not currently assigned to this GIS View will be listed under the Available Module Views.
 - a. Note: A Module View can only have one default GIS View. The active default GIS View for a module view will be listed under the module view name.



- 3. To assign the current GIS View as the default for a module view, click the Assign button next to the module view.
 - a. Note: Once you assign the module view to the current GIS View, it will automatically be removed from the Available Module Views section and will appear under the Module Views Using This Map As Default list.
- 4. To remove the current GIS View as the default for a module view, click the Remove button next to the module view under the Module Views Using This Map As Default section.

Defining Selectable Layers in the GIS View

By default, all layers in a GIS View are selectable. That means that whenever the map selection tool is used all features from all layers are queried and included in the selection results. Users can choose to exclude certain layers from the map selection. Based upon the user's permissions they also have the option to save the layer selectability setting to the GIS View, so it is shared with all users that use that GIS View.

An administrator may also decide to configure which layers should be selectable and save that setting with the GIS View.

To save layer selectability:

- 1. Open the GIS View
- 2. In the Table of Contents, switch to the Selection tab



3. Clicking the Enabled/Disabled button following the layer toggles if the layer is selectable or not. After making the desired changes, click the Save to GIS View button for the layer selectability to be saved to the GIS View.

Utility services in Lucity Admin

There are still several services which must be configured in the Lucity Admin program even if you are using the Portal Integration.

-00	coding Services				_							
	Name	Url		User Auth	_	Proxy Url			LastModi		difiedDate	LastModifie
	EsriWorldLocator	https://geocode.arcgis.com/arcgis/rest/services/World/GeocodeServe	r	AGOL_Generic	\sim				EricD	7/25/20	19	11:08 AM
	Dev	https://arcgis.mylucity.net/server/rest/services/LucityGIS_AddressLoca	tor/GeocodeServer		\sim				gsmith	8/15/20	19	2:57 PM
Ad	d Geocoding Service	Delete Default Geocoding Service: EsriWorldLocator	~								Save	Cancel
												Garloor
or	metry Service											
_	UH		Service is secure?	Proxy Url			LastModifiedBy	LastModi	fiedDate	Last Modified Time		Save
	https://utility.arcgisonline.	com/arcgis/rest/services/Geometry/GeometryServer					EricD	7/25/201	9	9:33 AM		
								-				Cancel
ut	ting Service										_	
	UH		Service is secure?	Proxy Url			LastModifiedBy	LastModi		Last Modified Time		Save
							CONVERSION	7/25/201	9	11:08 AM		Cancel
-					_							Carloor
fa	ult Vehicle Start Address for V	Vork Routing:										
	ing Service											
	-										_	
	UH		Service is secure?	Proxy Url			LastModifiedBy	LastModi		Last Modified Time		Save
		t/server/rest/services/Utilities/PrintingTools/GPServer/Export%20Web%20					EricD	7/27/201		4:27 PM		

Geocoding Service

A geocoding service is required for searching for an address or for reverse geocoding address points from the web map. The webmap will use the geocoding service that has been designated the Default Geocoding Service in Lucity:

Map Services Utility Services Work Zone Services Redlining Aliases										
	Geocod	ing Services								
Name								Servi secu		
	•	Lucity_EsriWorld		https://geod	ode.arcgis.com/arcg	is/rest/servi	ces/World/Geocod	eServer		
	Add C	Geocoding Service		Delete	Default Geocodin	g Service:	Lucity_EsriWorld	~		

Geometry Service

The geometry service is required. It is used to convert between coordinate systems to properly render data in the GIS Map.

<mark>≓</mark> ⊢ GIS Servi	- GIS Services								
Map Service	Map Services Utility Services Work Zone Services Redlining Aliases								
Geocodin	g Services								
1	Name	Uł					Service is secure?	Proxy Url	
► E	SriWorldLocator	https://geod	ode.arcgis.com/arcgi	s/rest/servi	ices/World/GeocodeServer	r			
Add Ge	ocoding Service	Delete	Default Geocoding	g Service:	EsriWorldLocator	~			
Geometry	Geometry Service								
	Url Service is secure Proxy Url								1
► h	https://utility.arcgisonline.com/arcgis/rest/services/Geometry/Geometry/Server							E	

Routing Service Not used

Printing Service

This is required if you want your users to be able to generate PDF exports of the GIS Map for printing.

≓_ GIS Services								
Map Services Utility Services Work Zone Services Redlining Aliases								
Geocoding Services								
Name Url		Service is secure?	Proxy Url					
EsriWorldLocator https://geocode.arcgis.com/arcgis/rest/services/World/GeocodeServer								
Add Geocoding Service Delete Default Geocoding Service: EsriWorldLocator	~							
Geometry Service								
Uł	Service is secure?	Proxy Url						
https://utility.arcgisonline.com/arcgis/rest/services/Geometry/GeometryServer								
Routing Service								
Uri	Service is secure?	Proxy Url						
Default Vehicle Start Address for Work Routing:								
Printing Service								
Uł	Service is secure?	Proxy Url						
https://arcgis.mylucity.net/server/rest/services/Utilities/PrintingTools/GPServer/Export%20Web%20								

Note: You need to specify the url to the Export Web Map Task of your print service:

ArcGIS REST Services Directory						
Home > services > Utilities > PrintingTools (GPServer)	← → C 🏠 🔒 https://arcgis.mylucity.net/server/rest/services/Utilities/PrintingTools/GPServer/Export%20Web%20Map%20Task					
JSON SOAP	III Apps ★ Bookmarks This is the url you want to provide Lucity 🛛 🖊 Misc					
	ArcGIS REST Services Directory					
Utilities/PrintingTools (GPServer)	Home > services > Utilities > PrintingTools (GPServer) > Export Web Map Task					
Service Description: The $\ensuremath{PrintingTools}$ service is used by web app	250M					
Tasks:	Task: Export Web Map Task					
Export Web Map Task	Display Name: Export Web Map Task					
<u>Get Layout Templates Info Task</u>	Description: Takes the state of a web application (for example, included services, layer visibility settings, and client					
Execution Type: esriExecutionTypeSynchronous	Category:					
Result Map Server Name:	Help URL: https://arcgis.mylucity.net/server/rest/directories/arcgisoutput/Utilities/PrintingTools_GPServer/Utilities					
MaximumRecords: 100000	Execution Type: esriExecutionTypeSynchronous					
Child Resources: Info	Parameters:					
	Darameter: Web Man as ISON					

The printing service deserves some special attention. The Printing service operates in coordination with your other GIS Services. This means that the printing service must be able to access the services that you want to print. If you have your services on a local intranet server, you cannot use the Printing service provided in ArcGIS Online.

This may mean you choose to use ArcGIS Online for your portal (and possibly some of your other utilities services) but you may need to use the Printing Service on your own 10.4+ ArcGIS Server. If you are not on ArcGIS 10.4 or higher and are using a local private GIS server inaccessible to ArcGIS Online hosting servers, you will be unable to print maps.

Module Spatial Data



The Module Spatial Data tool in the webmap utilizes Lucity Spatial has been present for a long time, but not all clients may have had it configured. It indexes features in the Lucity database so that we can rapidly render them on the map. The Lucity spatial service is the reason that we can render work order locations much more rapidly in the GIS Map. These modules benefit from the Lucity spatial indexing and allow data to be loaded into the GIS Web Map:

- Work: Requests, Work Orders, PM/Templates, Master Project Management, Sub Project Management, Work Permits
- Sewer: PACP Inspections, TV Inspections, Smoke Testing, Building Inspections, Sewer Overflows
- Storm: PACP Inspections, TV Inspections
- Water: Water Flushing Routes, Mainbreaks (distribution, recycled, raw)
- Street: Street Routes, Sidewalk Inspections

There is a session dedicated to Lucity Spatial discussing how to enable and configure the settings.

Redlining

Redlining is a set of tools used for creating, editing, and deleting point, line, and polygon redlining features. The redlining tool is enabled when there is at least one layer in the map that has an alias that is listed in the Redlining Alias List found in GIS Services of the Lucity Administration Tool.



Note:

- When the redlining session initiates, the visibility for all redlining layers in the map will automatically be turned on.
- Only one redlining layer of each type (point, line, polygon) is allowed in the map at one time.
- The redlining tool is disabled during an active measuring session. Close the measure toolbar to enable the redlining tool.

Point Location Tool

The point location tool records the x/y, lat/long, and the reverse geocoded address for a point on the map. The x/y values and/or reverse geocoded address can later be attached to a request, work order, or pm/work template.

Starting with 2018r2, there is a system setting that indicates what information from the Point Location Tool result, should be included when creating a request, work order, and/or pm/template.

Security - Passwords			Settings with custom interface			Web Performance			V	Veb Site		Work	
GIS 3rd Party Integrations GIS E		GIS E	dit Integration	GIS Porta	al Integration	Ident	ity Server	Mobile Re		oorting	REST API	SaaS	Security
Ap	pearance C	itizen	Crystal Ent	erprise	Designer	Automat	ion	Documents	3	Email	(General	GIS
	Description						Value						
•	Allow access to all G	S Views to	All Users				TRUE						
	Lucity Spatial- Enable	d					TRUE						
	Lucity Spatial- Max a	mount of d	ays to process sp	atial history			90						
	Map Exports- Default	location											
	Map Exports- Format						pdf						
_	Operational Data Spa	tial Refere	nce WKID				3419						
	Point Location Tool V	Vork Optio	n (XY,ADDRESS	,BOTH)			BOTH						
	Preload GIS caches	o speed in	itial map load				TRUE						
	Separator to use for (aeocoding	Intersections				1						

Note:

- XY- The x/y of the point location tool will be used when creating the request/wo/pm.
- ADDRESS- The reverse geocoded address of the point location tool result will be used when creating the request/wo/pm. In the event the reverse geocode didn't calculate a valid address then the x/y will be used.
- BOTH- Both the x/y and the reverse geocoded address of the point location tool result will be used when creating the req/wo/pm. In the event the reverse geocode didn't calculate a valid address then only the x/y will be used.

Bookmarks

Bookmarks are essentially saved areas of interest as a map extent (xmin, ymin, xmax, ymax, wkid). Bookmarks are saved to the Lucity database and can be shared among users within the Lucity webmap and ArcGIS Pro add-in. Future releases may expand the sharing capabilities with Lucity mobile.

There are a new set of permissions that control if a user can create, edit, and delete bookmarks. These permssions are found under the LucityGIS grouping.

Modules View	Permissions View	
	imin eschic pupment S Admin Apservices Admin Connection Strings Admin Map Services Admin Map Setup GliS System Configuration GliS Systemer GliS Viewer GliS Viewer GliS Viewer Cuckt GliS	Permissions: GIS Buttower GIS Bookmarks- Add GIS Bookmarks- Edit/Delete GIS Bookmarks- Edit/Delete My Own

Lucity Dashboard Map

Cancel Save

Dashboard maps use the same web map and Lucity maps available in the full GIS View. Configuring dashboard maps is similar to a GIS View.



GIS Split View

Starting with 2019r2 new functionality has been added to the dashboard that will display a split view pane allowing users to see and interact with both their dashboard frames and their default GIS View side by side.

1. To open the GIS Split View, click on the Show Map button 🕥 on the dashboard

Parks	Open Service Requests	c	Open Work Orders	c
Streets	+ Requests by Department (37)		+ Work Orders by Task and Supervisor (34)	
Plant	+ Requests by Status and Problem (37)		+ Work Orders by Priority (34)	
Reports	Today's Service Requests (0)		+ Work Orders by Supervisor (34)	
Fleet	+ Requests by Priority and Problem (37)		+ Work Orders by Category and Supervisor (34)	
			+ Work Orders by Category and Task (34)	
Facility Group				
Storm	My Activities	c		
Sewer		0		
Traffic	+ My Open Work Orders by Category (0)			
Nater	+ My Field Work to Review by Problem (0) + My Ph/s Coming Due Next Week by Category (0)			
water	My Overdue Work Orders by Lead Worker (0)			
	+ Today's Work Orders by Main Task (0)			

2. The map that is displayed is the default map for the current user. This would be the same map as if the user clicked on the Open Map button



3. You can adjust the split view by clicking along the middle pane, the cursor will change to and using the mouse you can move the split view so more or less of the map is displayed.

≣ �		Î	9	W 10181 PI W 10280 ST	4	They	2-1 Ir	
Parks	(© C	(© C					2114	
Streets	Requests by	Work Orders	AR A	NII	NON DR	a r . 1	41	1 ten
Plant	+ Department	+ by Task and	EN O	LNI	Model	1++++	Roe Park	F E VI
Reports	(37)	Supervisor			an and a second		Indian Mark	111
	Requests by	(34)	2 1 1	TO Ser	- mart	man	- and	Val.
Fleet	+ Status and Problem (37)	Work Orders + by Priority		Fidd	11			Pare
Facility Group	Today's Service	(34)	🗖 🗳 🔨	A Here	· · ·	a 🤸	100	
Storm	Requests (0)	Work Orders		there .		0	At the second	
Sewer	Requests by	+ ^{by}	• - ·	1 aline	$\overline{\Lambda}$	mint		
	+ Priority and	Supervisor	1	X Jan	171 -	Yearw	TER D	and
Traffic	Problem (37)	(34)	1 45	1-2.	n (e)	-	1	Form
Water		Work Orders	-			and to		1 Land
		by Category	5 10.10	· · ·	1000 000	and and	and a	D.K.
		Supervisor	Y 4	• • C.		1 24	IT T	HILLAN
		(34)	NO TO	and Friday	• • • • • • • • • • • • • • • • • • •	-	the state	La La
		Work Orders	~ >			The	1 7 7	
		+ by Category	1 - 4		N N	12h	114/1	Tark.
		and Task (34)	1 miles 1	1 N	2012 X 11		Vra T	to server the
				0 0 / 1	and the second sec		2 4	The man
			1			ALC: NO	LK J	here
	1 © C						1- 1	Y
			0.31	ni	11		~ vier	A THE T
	My Open Work Orders		Distant Garmin Barber	VENT PLNGA, USGS Lacity Inc	LEN HERE	and a	m 1	the m
	WOR UIDERS		CONTRACTOR CONTRACTOR	nero na rom (data) tatoy int	In Case of Case			

a. If you click on the map tool, it becomes enabled and when an item is selected within the frame, the results will be displayed in the map.

≣ �			ShowinMap XY Results - 4	🐺 🎹 🔕 🧢 Work Order # 🍸
Parks	Open Service R 🕥 C	Open Work Orders 🕤 C	PM/Template #	STRACT CARE TO LINE
Streets	+ Requests by Department (37)	+ Work Orders by 5 sk and Supervisor		
Plant	+ Requests by Status and Problem (37)	(34)		
Reports	Today's Service Requests (0) + Requests by Priority and Problem (37)	- Work paters by Priority (34)		
Fleet	requests by Phoney and Problem (37)	Empty (13)		
Facility Group		From owners 20 hours) (4)		
Storm	While the Map tool is enabled,	Immediate (few hours) (Priority Text)		the stand of the stand
Sewer	clicking on an item within the	Low (within 14 days) (6)		備以上一个加口下口的
Traffic	frame, will cause the map to display the location of the selected item.	Moderate (within 3 days) (1)	1	
Water	the location of the selected item.	Work Orders by Supervisor (34)		子司持"了」、 25年1
		+ Work Orders by Category and Supervisor (34)	(Storest	11 1 - 3 - 4 - 5
		+ Work Orders by Category and Task (34)		and the second second
			my 7 18	
	My Activities 🕤 C		10. 65	
	My Activities 💿 C		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STATISTICS AND
	+ My Open Work Orders by Category (0)		一般了行力的法	And the state of the
	+ My Field Work to Review by Problem (0)		A	A CONTRACTOR OF A STATE

5. To close the map and exit the split view, click the arrow on the middle pane.



Things to consider

• Set a default width to your frames. If users are going to actively be using the GIS Split View functionality, they may prefer to have their dashboard frames stack.

← Edit Frame	Delete
Name Open Service Requests	
Span Frame	
Visible on Web	
Visible on Mobile	
Mobile Offline Support	
Width (leave blank for 50% width):	350
Sequence in Dashboard:	1

• No width set on frames:



• With a default width set on frames:



• The state of the GIS split view is retained between sessions. For example, when a user closes out of Lucity web with the GIS split view displayed, the next time they log into Lucity web, the GIS split view will automatically be displayed.