



cyclomedia

Street Smart™ User Guide

Version 1.0

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1. Street Smart for ArcGIS Online

1.1 Street Smart

Street Smart for ArcGIS Online introduces high resolution street-level imagery from CycloMedia to the ArcGIS Online community. GeoCycloramas from CycloMedia are spherical, 360-degree, high-resolution street level panoramic images. Users can display

GeoCycloramas, overlay feature layers on the imagery, and, taking advantage of the excellent geographic positioning of the imagery, click on the GeoCycloramas to collect or edit points in a feature layer. The Street Smart application is available to anyone with access to imagery from CycloMedia and access to Esri's ArcGIS Online.

This document describes the English version of ArcGIS Online, based on local setting some words can be in a local language. GeoCycloramas are called Cyclorama's in some countries.



1.2 Setting up the Street Smart for ArcGIS Online application

In a separate Administrator manual, the process to get the Street Smart app is described. In this document it will start at the point that access to the app and access to GeoCycloramas has been taken care of.

2. Preparing data for use in Street Smart

2.1 Web maps

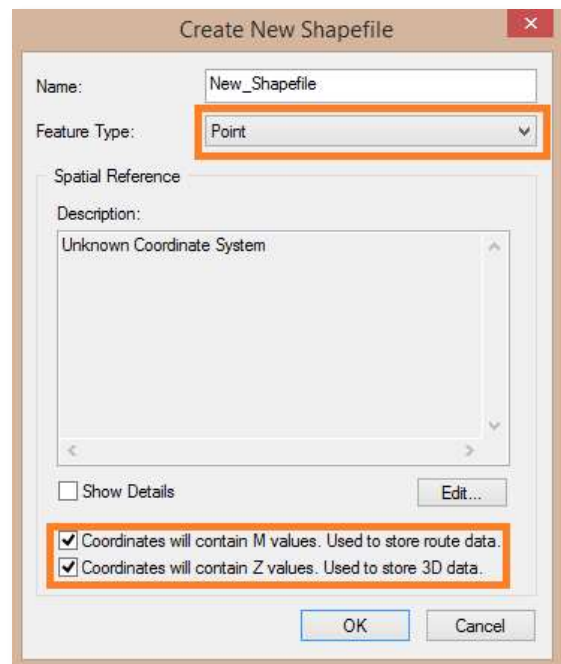
Any Web Maps in ArcGIS Online can be used within Street Smart with a few considerations:

- Standard Web Map coordinate systems are supported, own maps with own (local) coordinate systems used as a basemap are not supported.
- Use a basemap with enough zoomlevel to be able to zoom in to street level.

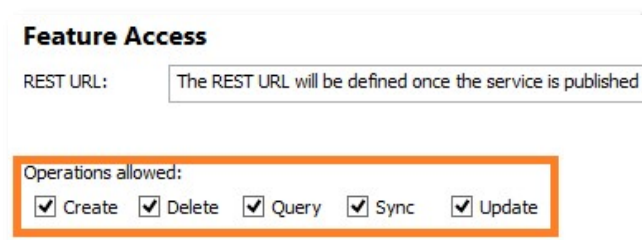
2.2 Point Feature services

In Street Smart the user will be able to do point measurements which will be stored in a Point Feature Service in ArcGIS Online. The following procedure is how to publish this from ArcMap.

The input feature layer must be a point feature type with Z value enabled.



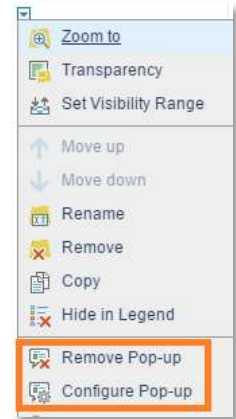
Publish the feature layer to your ArcGIS Online account. Make sure specific parameters are enabled.



Login to your ArcGIS Online account. Use the Web Map and add the feature service to this Web Map. Be sure to enable and configure pop-ups in your feature layer in order to view/edit attribution in Street Smart.

2.3 Other overlays

You can add other layers to the Web Map as well. Layers which are Feature Services will be shown in the choose feature layer and can be switched on and off.

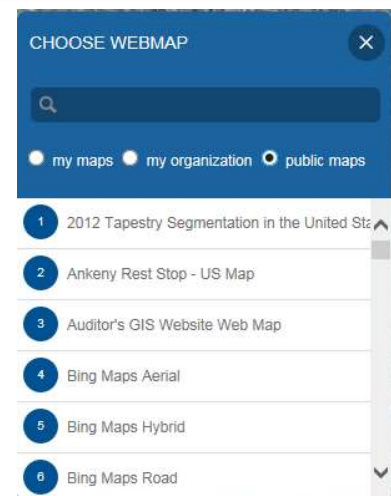
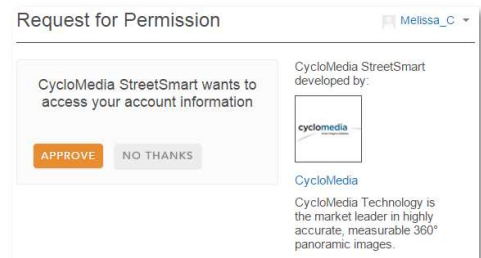


Publish the Web Map with the new feature layer and share it into the group of Street Smart.

3. Using Street Smart for ArcGIS Online

3.1 Starting Street Smart for ArcGIS Online

Start Street Smart from your own ArcGIS Online environment. When starting a Request for Permission to use your account information is asked. Click approve to start the application. When you start Street Smart for the first time you will be asked to select a Web Map. You can choose from your own Web Maps, your organizational Web Maps or Public Web Maps. In the search field it's possible to search for a certain Web Map.



3.2.1 Searching

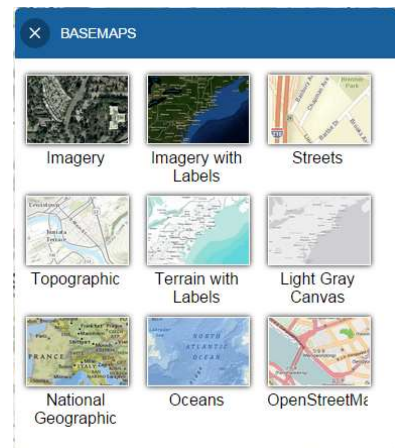
The search box in the upper left corner of the App can be used to navigate to a city or a certain place (e.g. 'Washington DC' or 'Savannah GA').



3.2.2 Basemaps



Your Web Map includes a basemap. To change it, just open the basemap widget by clicking the button and select your new basemap.



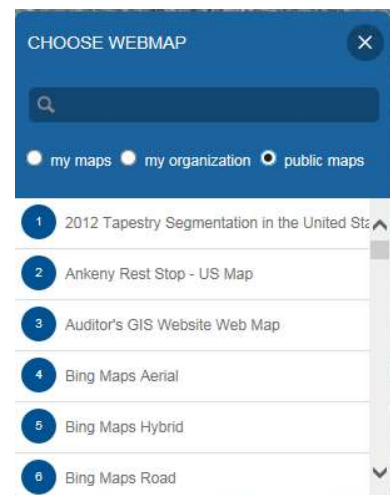
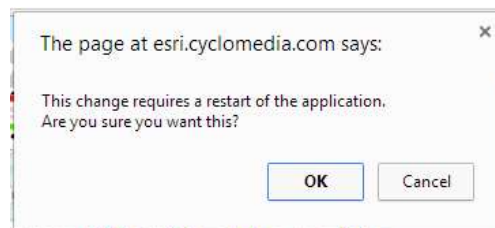
3.2.3 Web Maps



When starting the App you selected a Web Map. You can change this Web Map whenever you want. Just click the button to open the Web Map widget and select your new Web Map. You can choose to search in your own Web Map, the Web Map shared within your organization or public maps available in ArcGIS Online.

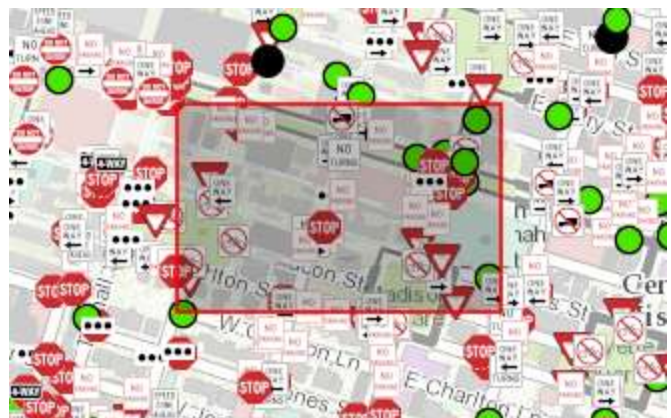
Note: Selecting a new Web Map requires a restart of the App.

If you are sure select OK otherwise CANCEL.



3.2.4 Zoom and pan

- Use the + / - buttons to zoom in and out, or the home button to reset the extent.
- Use the mouse wheel/scroll wheel to zoom in or out.
- Use key combination shift + left mouse button + drag to zoom in (RubberBandZoom).
- Use key combination ctrl + shift + left mouse button + drag to zoom out.



3.2.5 Request 'Data Collect'



In the top main menu bar, between the search box and the user icon, the user can find an email icon. Use this button if you would like to contact CycloMedia for requesting a new data collect. CycloMedia will evaluate the request and contact you for further inquiries.

Besides requesting a new data collect you can use this functionality to provide us with feedback, tips and questions about the App.

In cases other than new data collect requests, just remove the body of the email and change the subject. Please add Street Smart as part of your subject.



3.2.6 Log out

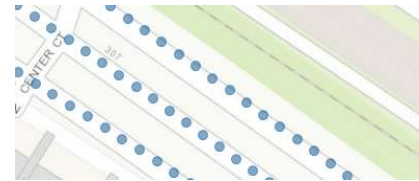


The icon next to your full name displayed in the main menu bar is the logout button.

This button removes your credentials and logs you out of your ArcGIS Online account. Your chosen Web Map and feature layer will remain stored on the system so the layout looks the same the next time your login.

3.3 Viewing GeoCycloramas

When you zoom in to street level the GeoCyclorama recordings will be shown on the map. You can click on one of the recordings to open a GeoCyclorama.



The viewer top bar contains info for:

- Basic line measurement (explained in chapter 3.5)
- The date of the recording
- Close viewer



3.3.1 View

The opened cyclorama can be viewed in 360 degrees. Use your mouse to view around. Up, down, left and right. Zooming in and out is also possible. A list of possibilities:

Type	Keyboard	Mouse
Look Up	N.A.	Left mouse + move down
Look Down	N.A.	Left mouse + move up
Look Left	Arrow Left	Left mouse + move right
Look Right	Arrow Right	Left mouse + move left
Next Cyclorama	Arrow Up	Click recording in cyclorama viewer
Previous Cyclorama	Arrow Down	Click recording in cyclorama viewer

Zoom In	+	Scroll up
Zoom out	-	Scroll down

3.3.2 Move

The cyclorama viewer is also moveable so it can be placed anywhere on the screen. This can be helpful to reorder your layout. The default position is at the lower half of your screen. The position will always reset to its default position when (re)starting the App.

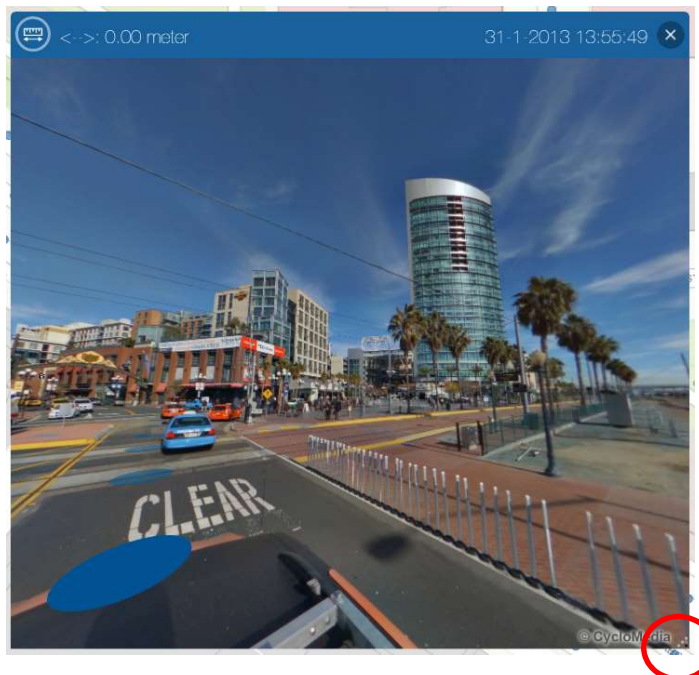
You can move the cyclorama viewer by its title bar / header:



3.3.3 Resize

The cyclorama viewer is also resizable so it can be given a custom width and height. Along with the possibility of moving the cyclorama viewer, you are free to position and resize the viewer so it fits anywhere on the screen. The default width is about 100% of your browser width and the default height is about 50% of your browser screen height. The width and height will always reset to its default width and size when (re)starting the App.

You can resize the cyclorama viewer from the lower right corner, dragging your mouse:



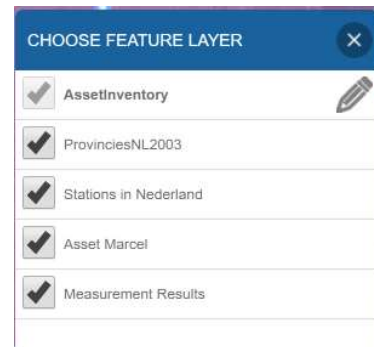
3.4 Measuring with point feature services

After choosing a Web Map, there will be an options menu to select a feature layer. This layer will be editable. This feature layer list will show layers that can be edited and layers that can be overlaid.

In some cases there will be some notifications:

- If a layer has no 'height' or 'z' column.
- If a 'cmt_z' column cannot be added to a layer.
- If there is no cmt_z column.

These notifications inform you about the possibilities or problems we've encountered. Please contact your (layer) manager or ArcGIS administrator if there are any problems with layers.



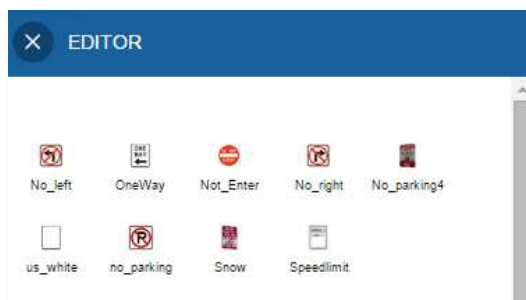
If these steps are completed the Street Smart App should show the user the selected Web Map and its layers.

Note: If there is no feature layer available, there will be a notification which has to be accepted and the app will continue loading without the possibility to tag or edit.

3.4.1 Making a point feature

To add a point to layer, open a Cyclorama close to the location where the new point will be added. Go to "Editor" to open the edit session. Click on the layer in the "Editor" menu to add the new point Click in the Cyclorama Viewer to add the point Close the Attribute table and the "Editor" window to end session.

Note: Adding a point on the map makes a 2D point (XY only). Adding a point in the Cyclorama makes a 3D point (XYZ).



3.4.2 Repositioning a point feature

Pick on a point inside the GeoCyclorama to modify its XYZ location.

The new location is automatically saved.

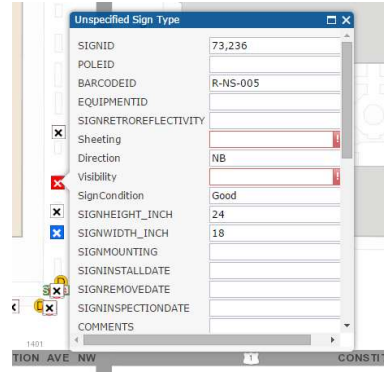


3.4.3 Edit attribute data

Pick a point in the 2D viewer to see its attributes. Edited attributes are automatically saved. Cells in red are required.

3.4.4 Working further with the measured data

The point data is now stored in your ArcGIS Online feature service and can be used anywhere within ArcGIS Online.



3.5 Basic Line Measurement function

3.5.1 Introduction

Besides the point feature a line measurement can be done in the GeoCyclorama. Line measurements cannot be stored in ArcGIS Online.

3.5.2 Measure a line

After opening an GeoCyclorama you can on the 'Measurement' button to activate Basic Line Measurements.



Now Click on a point in the panorama to do the measurement. When a white dot appears on the selected location, the location is found. Do a second measurement to measure the distance

between two points. A line appears and the measured distance is shown. The line will also be shown in the map. Now it's possible to check or the measurements are correct.

Notes:

- Click on the 'Measurement' button to cancel the measurement and delete your current measurements.

3.5.3 Measure a polyline

- Repeat the steps to 'Measure a Line' as stated above.
- Now press elsewhere to directly draw a new line between the last placed dot and the now clicked location. The line will show the distance of the new line, while the total distance will be displayed in the upper bar.
- Repeat clicking to keep adding line-segments to the polyline.

Notes:

- Click on the 'Measurement' button to cancel the measurement and delete your current measurements.

3.5.4 Undo a measurement



Street Smart for will remember your last actions, and you are able to delete this to correct mistakes. After done at least one measurement should be done. Now the 'Undo' button should be colored white, meaning you are able to undo your last action. Press to do this definitely.

Notes:

- Undo can be done multiple times
- Height measurements can be undone as well, and will count for the 'Undo once' purpose.
- 'Undo' comes in handy when a measurement does not give the expected results.

3.5.5 Do a height measurement

To measure the height of an object, clicking the top and bottom of an object often does not result in the expected outcome. Therefore, you are able to do a specific height measurement to guarantee more accurate results.

- Open a recording, and click on the 'Measurement' button.
- Place a basic line measurement on the bottom of a location you want to do a height measurement from.
- Now click on the 'Height' button in the upper bar. The button should color white.
- When hovering over a point, it should slightly light up. Press and hold the left mouse button, and move the mouse up or down. A second dot should appear, to indicate the end of the height measurement.
- When the mouse button is released, the height measurement will be done between the two dots. The label next to the line will start with a '^' and the line will be colored differently.

Notes:

- It is not possible to do a height measurement from a dot that was created by a height measurement.
- You can do a height measurement from every dot in a polyline.
- Height measurements will stay in place even when leaving Height mode.

3.5.6 Copy to Clipboard

To easily copy your measurements to another application or in another file, there is a 'Copy' button to quickly select all current done measurements, as well as the total distance.

- Open a recording, and do a (couple of) measurement(s).

When satisfied, press the 'Copy' button in the upper bar.

- A pop up should appear – when not, check your browser for allowing pop-ups to be generated by the application – holding the measurement data in a textbox, already selected.
- Now copy the text to store this in another application.

Notes:

- The separate measurements will be shown in order they are created.

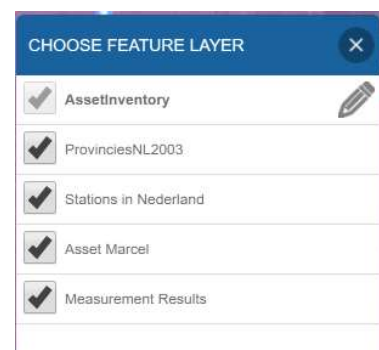
3.5.7 Switch unit systems

Street Smart supports two unit systems for measuring, Metric (default) and Imperial. To switch between these options, just click on the 'Total Measured Distance' text in the upper bar of the recording.



3.6 Overlay

Overlay your own GIS layers and view them inside the GeoCyclorama. All Feature Services in the Web Map will be shown in the "choose feature layer" dialog and can be switched on and of.



4. Support

To obtain Street Smart support, contact the CycloMedia support desk at <http://www.cyclomedia.com/en/globespottercontact/>. Choose **Street Smart** as the product for which you need support.