

Update webmap after underlying feature service is updated

Introduction

This document was put together to solve an issue where a web map has operational layers from an ArcGIS Server (Map Service), and the service containing those operational layers are updated to add an additional layer.

The web map will not update its Table of Contents to reflect the additional layers that were added in the underlying Map Service.

One solution is to remove and add the layer again to the web map, but then popups, customized symbology etc. will need to be re-created.

Pre-requisites

- A Map Service served from an ArcGIS Server
- A saved Web Map which has the Map Service added
- The Map Service was updated with one or more new layers

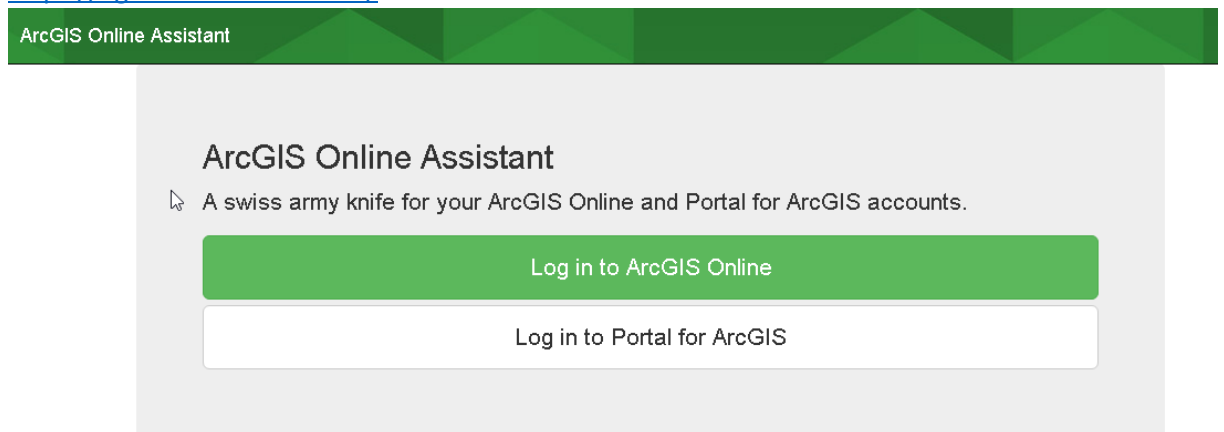
Workflow

Disclaimer: All this is done at your own risk. Please make a backup of the Web map before manipulating its JSON data!

After you have published (overwritten the old) the updated Map Service to the ArcGIS Server, you will need to do the following:

1. Open AGO Assistant in a web browser, Google Chrome, or perhaps Firefox (Internet Explorer does not seem to work properly).

<https://ago-assistant.esri.com/>



Inspect

View the underlying JSON for any item in ArcGIS Online or your Portal.

Update

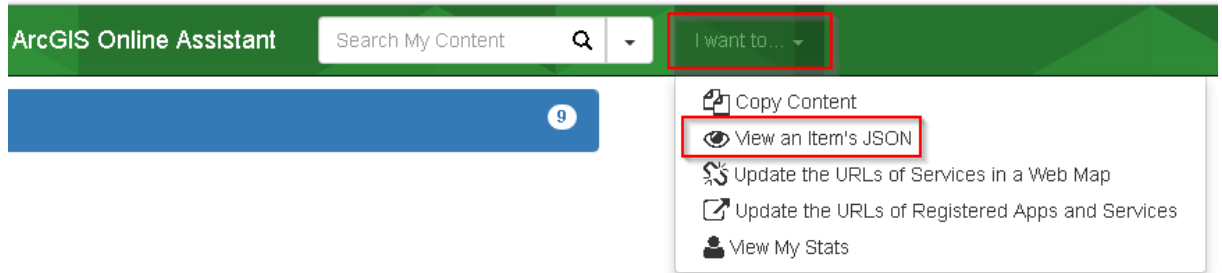
Modify the URLs for services in web maps and registered applications.

Copy

Search for and copy content to your account and other accounts.

2. Log in to ArcGIS Online in AGO Assistant

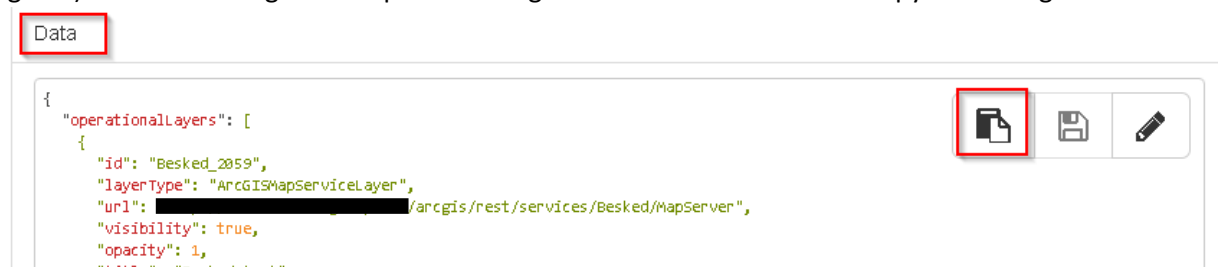
3. Press “I Want to...” and then “View an item’s JSON”



4. Expand the “Root” node and then select the web map you wish to modify, by selecting it in the list. The JSON will display in the left column.

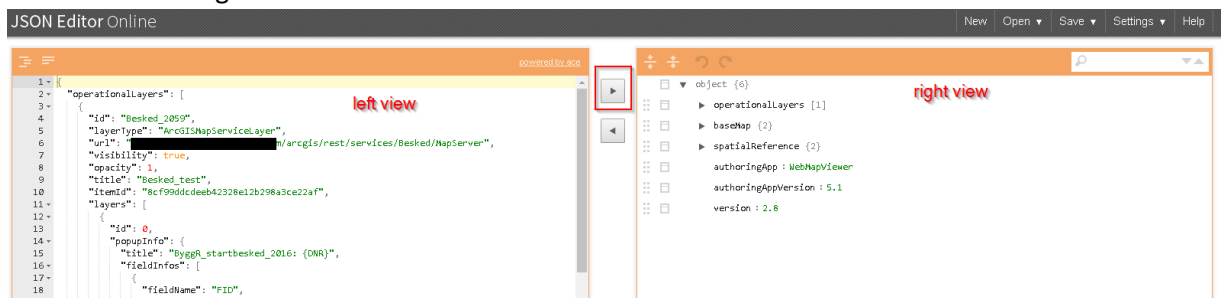


5. There are two ways to proceed, either you edit the JSON with an editor of your choice. This will make editing and overview more clear and easier. Or you can edit the data directly in AGO Assistant.
6. If you chose to work with the data in an external editor, press the “Copy” icon in the top right corner of the JSON data. If not, start the editing by clicking the Pencil (step 21-22 in this guide) and look through the steps below to get an idea of which data to copy and change.



7. You can choose any external editor, but one online editor which seems to work fine is <http://www.jsoneditoronline.org> – which we will show in the following steps.
8. First remove any data in the left view of JSON Editor Online by first clicking anywhere in that view and then pressing Ctrl + A on your keyboard followed by the Delete (Del) key or backspace.
9. Continue by pasting your data in the left view of JSON Editor Online by pressing Ctrl + V on the keyboard, or right click in the left view and choose Paste.

- Press the top arrow button between the views (pointing to the right) to show the JSON structure in the right view.



- In the right view, navigate to the "layers" node, which is located under operationalLayers -> a layer id (0, 1, 2 etc.) that matches the layer you have updated (check the URL under each operationalLayers. Then under the "layers" node for that item you will have one or more layers numbered from 0 and up. Choose one of these item, for example 0, and duplicate it:

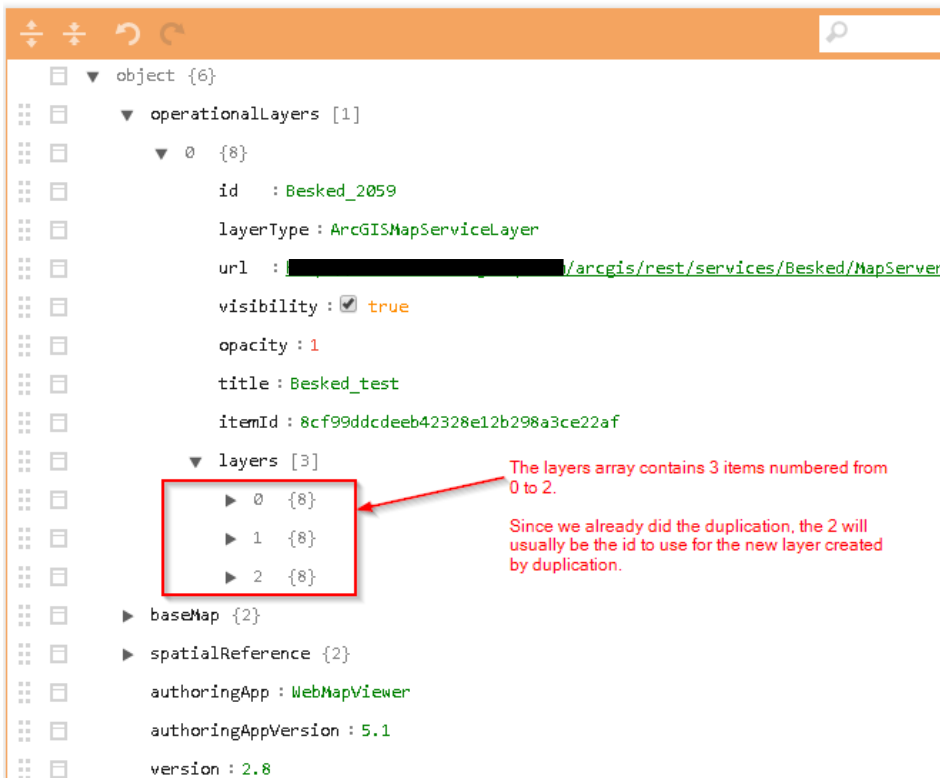


- You will now have a new layer. Depending on what you have done with the layer in the web map view, this new layer might or might not contain certain parameters. If you have changed to order of the layers, it will contain a "layerDefinition" value with the "source" sub-value, to

indicated what the Id of the layer is in the Map Service on the ArcGIS Server. If you have renamed the layer, there will be a "name" parameter. So there might be a few place where you want to change some data:



13. In our example, as the image above shows, we should first change the "id" parameter at the top to be the same as the highest index, after duplication. At least this is true most of the times, but you can always look at each layer to determine the currently highest id, and add one to that.



In our example, we should give the new layer an id value of 2

14. The “mapLayerId” property under “layerDefinition” -> “source”, should match the layer’s id in the Map Service. This can be found by browsing to the Map Service in the web interface of ArcGIS Server, for example:

<http://myarcgisserver.local:6080/arcgis/rest/services/MyMapService/MapServer>

This will show a list of layers under the Layers heading:

Layers:

- [ByggR_startbesked_2016](#) (0)
- [ByggR_slutbesked_2016](#) (1)

Where the number between parentheses show the id of the layer

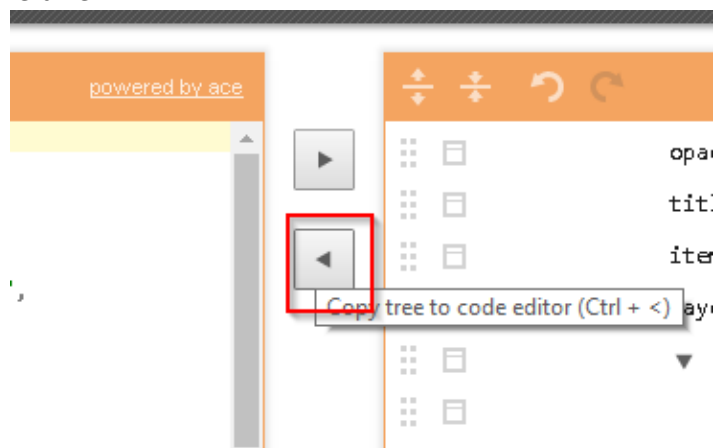
15. The last thing to change here is the “name” property, which can be anything you like. And now you will have completed the new layer (which probably won’t match the image below):

```
▼ 0 {8}
  id : 2
  ► popupInfo {5}
  ▼ layerDefinition {1}
    ▼ source {2}
      type : mapLayer
      mapLayerId : 3
    name : My new layer
    minScale : 0
    maxScale : 0
    parentLayerId : -1
    defaultVisibility :  true
```

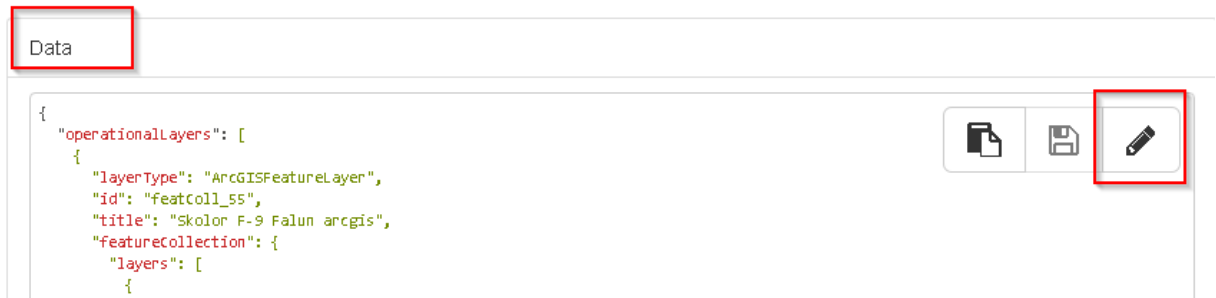
The rest of the layer configuration is best done from the map viewer in ArcGIS Online.

16. Time to get the data back to AGO Assistant and save it.

17. Press the “right arrow” button between the views, to get the modifications transferred to the left view:



18. Select all the JSON data in the left view by clicking in it and pressing Ctrl + A or right click in the left view and choose "Select all".
19. When all JSON is selected, right click and click "Copy", or press Ctrl + C on your keyboard.
20. Go back to AGO Assistant
21. Scroll down to "Data" and press the pencil button to start editing



22. Agree to the risk and terms and press "Proceed"

Warning

You are about to directly modify the contents of an item. Do not proceed unless you are absolutely certain of the risks.

THIS IS UNTESTED AND UNSUPPORTED.

Potential risks include:

- Corrupting your content
- Losing access to your items
- Breaking apps built on top of your web maps

I understand the risks

Cancel

Proceed

23. Select all JSON data by either pressing Ctrl + A or right click and choose "Select all".
24. Paste the data from step 19 by pressing Ctrl + V or by right clicking and choosing "Paste".
25. When this is done, the "Save" icon in the top right corner of the "Data" view will be green (if the json data is valid), so just press it to save the changes you made.
26. Review the Web Map in ArcGIS Online Web Map Viewer to make sure everything looks ok.