

Push to ArcGIS

Push SPSS data to ArcGIS online for powerful Geospatial Analytics



Product: IBM® SPSS® Modeler

Extension type: Export



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Description

Map your IBM SPSS data in Esri® ArcGIS Online. Export, transfer, load, your data for map visualization and deeper geospatial analytics. This node relies on the Requests API.

Requirements

- SPSS Modeler v16.0 or later
- R: http://www.r-project.org/
- SPSS Modeler 'R Essentials' plugin: https://developer.ibm.com/predictiveanalytics/downloads
- Esri ArcGIS Online subscription: http://www.arcgis.com/

Installation

Close SPSS Modeler. Save the *.cfe* file in the CDB folder of the IBM SPSS Modeler installation directory for Windows and Linux. The copy should reside in that same folder and not in a sub-folder.

For example, for Windows 7 the default location is "C:\ProgramData\IBM\SPSS\Modeler\16\CDB".

Restart SPSS Modeler: the node will now appear in the Field Ops palette.

R Packages used

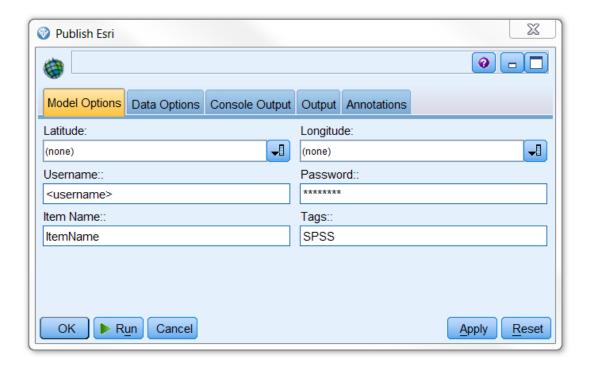
The R packages will be installed the first time the node is used as long as an Internet connection is available.

- 'plyr' author: Hadley Wickham http://cran.r-project.org/web/packages/plyr/plyr.pdf
- 'RCurl' author: Duncan Temple Lang http://cran.r-project.org/web/packages/RCurl/RCurl.pdf
- 'RJSONIO' author: Duncan Temple Lang http://cran.r-project.org/web/packages/RJSONIO/RJSONIO.pdf



User Interface

- Double click on the node to get to the options. There are the following fields:
 - o Latitude: field with the latitude information on your dataset.
 - o Longitude: field with the longitude information on your dataset.
 - o Username: ArcGIS Online username.
 - Password: ArcGIS Online password.
 - o Item Name: name of the items in ArcGIS Online
 - o Tags: name of the tag, for example 'SPSS'



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Reset

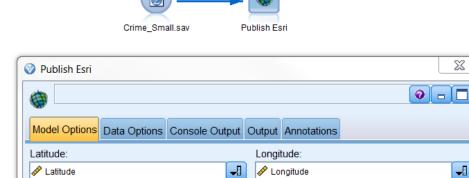
Apply

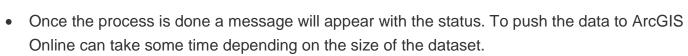
Example

This example will demonstrate how to open a data set on IBM SPSS Modeler and push all the data to ArcGIS Online. The following files are available for testing. Crime_Small.sav located in the Github repository.

User Interface

- Add a 'Statistics File' and load the Crime_Small.sav file. This is a small dataset with crime data containing three fields; latitude, longitude and CrimeStat.
- Connect this file to the new "Publish Esri" node that is placed in the "Export" tab.
- Double click on 'Publish Esri' node to change the options.
- Select the Latitude and Longitude field from your dataset
- Insert your username, password of ArcGIS Online and set a name for your Item and a Tag name.





Password::

Tags:: SPSS

Log into your ArcGIS Online and go to 'My Content'

▶ Run

Cancel

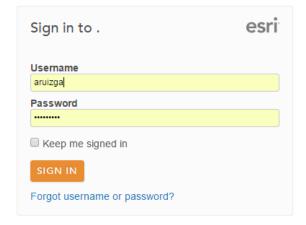
Username:

SPSS_DEMO_ESRI

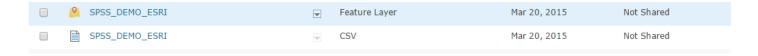
aruizga Item Name:

OK

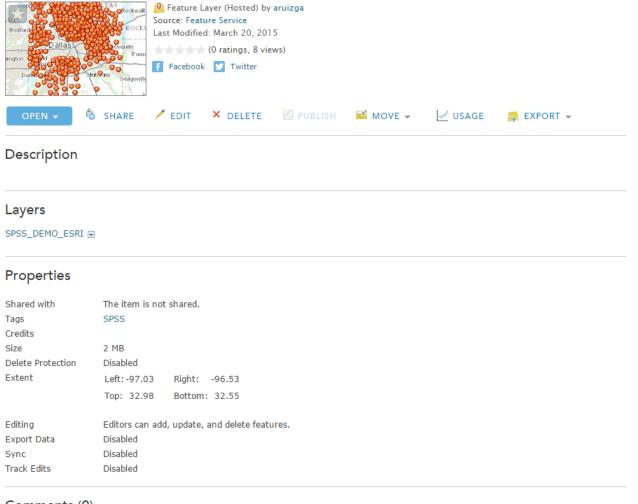




• Now there will be two new elements. One is the csv file and the second is the feature layer.



• If your data have latitude and longitude, the points will be displayed in the feature layer.



Comments (0)



Your data is now <u>a feature layer</u> on ArcGIS Online. You can now use the power of the Esri ArcGIS platform in the cloud or on premises to do more advanced Geospatial analytics and visualization with your data

Important links

Learn

- Learn more about SPSS software.
- Visit developerWorks Business analytics for more technical analytics resources for developers.
- <u>The Comprehensive R Archive Network</u> is the main site for the R project and each R package. The help pages and manuals that are associated with optimx, nlmrt, and Rcgmin are detailed. Numerous references are provided.
- Read "<u>Do I need to learn R?</u>" (Catherine Dalzell, developerWorks, September 2013) to learn
 why R is a valuable tool for data analytics that was expressly designed to reflect the way that
 statisticians think and work.
- "Calling R from SPSS" describes how to use R code inside IBM SPSS Modeler 16.
- Explore <u>ArcGIS Online</u> mapping to discover how to visualize and geospatially analyze your IBM SPSS data, set up an account, and explore Esri's global map, demographic, and business library.
- Read "<u>Create new nodes for IBM SPSS Modeler 16 using R</u>" to learn how to create new extensions easily.

Get products and technologies

- Download the R plug-in for SPSS plugin.
- •
- Obtain a <u>free Esri ArcGIS Online</u> trial subscription

Discuss

- Visit the <u>IBM SPSS Community</u> to share tips and experiences with other IBM SPSS developers.
- Follow developerWorks on Twitter to be among the first to hear about new resources.
- For creative ways to display and tell stories about your IBM SPSS map data, visit Storymaps.arcgis.com