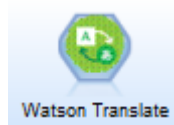# Watson Translate

Use Watson Language Translation Service with Bluemix to translate text

Product: IBM® SPSS® Modeler

Extension type: Utility

Table of Contents

Description:

This node allows you to use the Watson Language Translation service on the Bluemix platform from within SPSS Modeler.   This extension translates the language of the input text from the source language to a target language. The output for this node is a data table that contains the original input data with an additional new column for the translated text. Important: At this time, the Watson service cannot translate from non-English to non-English, meaning English must either be the source or target language.

Requirements:

- SPSS Modeler v16.0 or later
- R: http://www.r-project.org/
- 'R Essentials for SPSS Modeler' plugin: https://developer.ibm.com/predictiveanalytics/downloads/
- A Bluemix account with Watson Language Translation Service activated

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". If the ProgramData folder is hidden type the path manually.
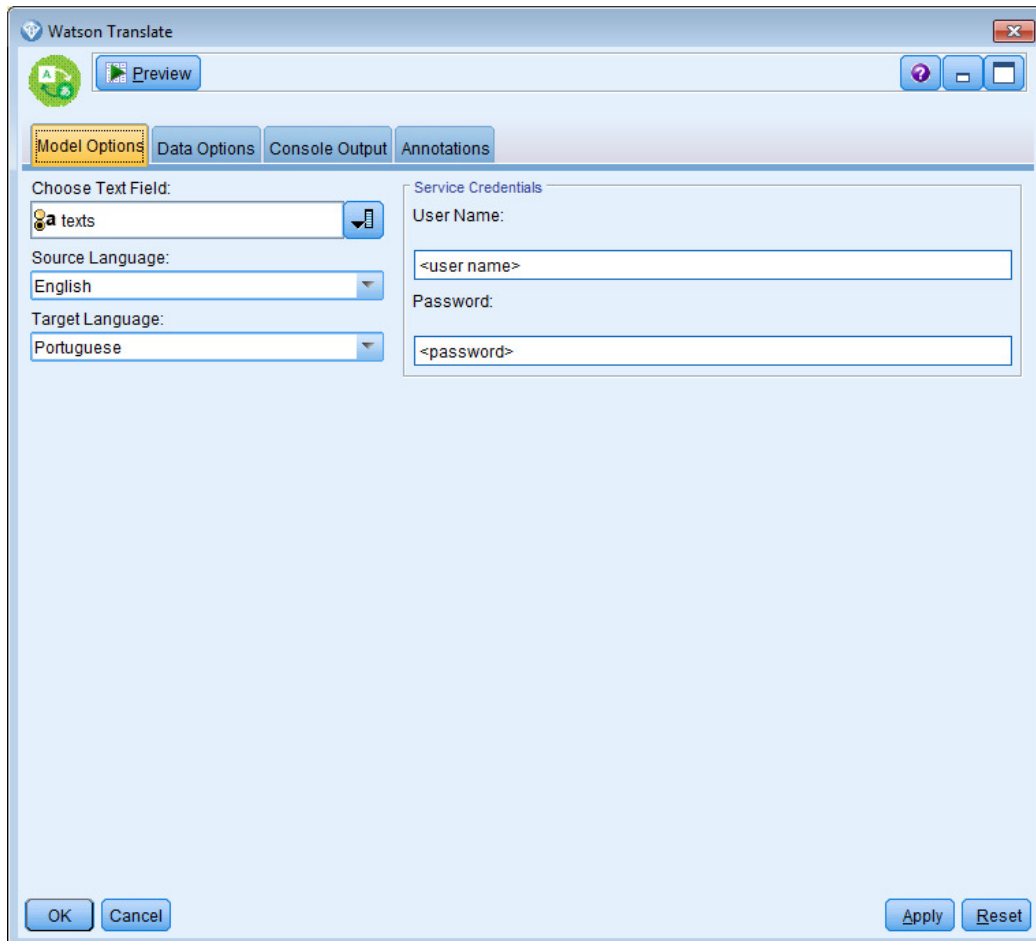
Restart SPSS Modeler: the node will now appear in the Field Ops palette.

R Packages used:

- 'httr' package created by Hadley Wickham Lang https://cran.r-project.org/web/packages/httr/

- 'XML' package created by Duncan Temple Lang https://cran.r-project.org/web/packages/XML/

User Interface

- Double click on the node to get to the options. There are the following fields:
  - Choose a Text Field: click the drop down to select the column containing the text that needs to be identified and translated
  - Source Language: Select the language of the original text being input
  - Target Language: Select the language of desired translated output text
  - User Name and Password: These are the credentials obtained in Bluemix when Watson Language Translation is added to your account (This is not your Bluemix user name and password).
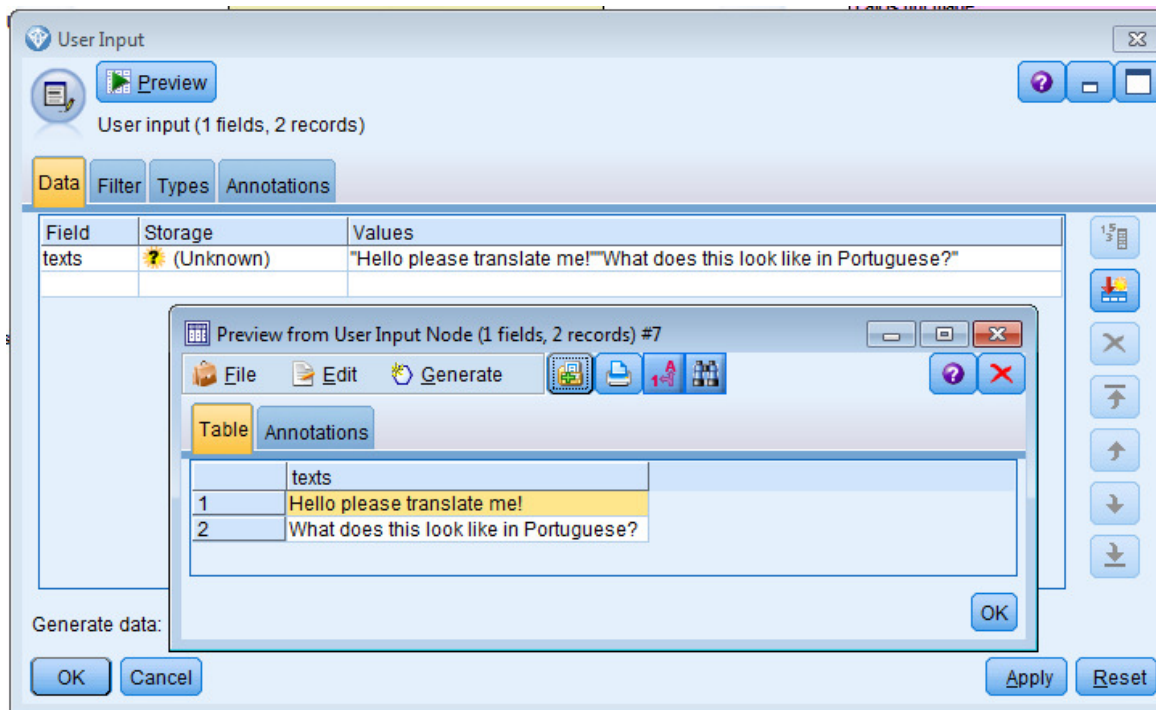
Example

This example will demonstrate how to translate text from a User Input node. Text input can be used from any source node, the User Input node is used for this example for demonstration. For this example, the source text will be English and Portuguese will be set for the target language.

User Input

1. In the sources palette, add a User Input node to the stream

2. Name the first Field "texts" and enter the following text in the Values column:

    "Hello please translate me!""What does this look like in Portuguese?"

3. Add the Watson Translate node to the stream and connect it to the User Input

4. Now fill the fields:

    Choose Text Field: Click the drop down and pick "texts"

    Source Language: choose English

    Target Language: choose Portuguese

    User Name and Password: Enter the credentials obtained by adding Watson Translation Service to your Bluemix Dashboard

5.   From the Output palette, connect a Table to the translation node

6.   Click on the Table and run the stream

Results

If you used the sample text above, your results should match the table below:

Notice that one column was added to the original User Input data. The translated text is in the target language of Portuguese.

Important Links

Learn

- Learn more about SPSS software.

- Visit developerWorks Business analytics for more technical analytics resources for developers.

- Create your Bluemix account here: https://console.ng.bluemix.net/solutions/watson

- The Comprehensive R Archive Network 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 "Do I need to learn R?" (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.

- Read "Create new nodes for IBM SPSS Modeler 16 using R" to learn how to create new extensions easily.

Discuss
- Visit the IBM SPSS Community to share tips and experiences with other IBM SPSS developers.

- Follow developerWorks on Twitter to be among the first to hear about new resources.