Language Translation in Node-RED

Hands-On Lab

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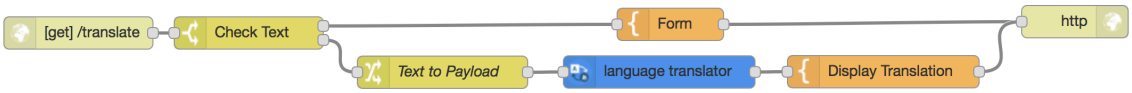


Create a webpage to input text and translate to French
(see *Creating an Interactive Web UI*)

A digital copy of this lab and code snippets can be found at:
`http://ibm.biz/node-red-language-translation`

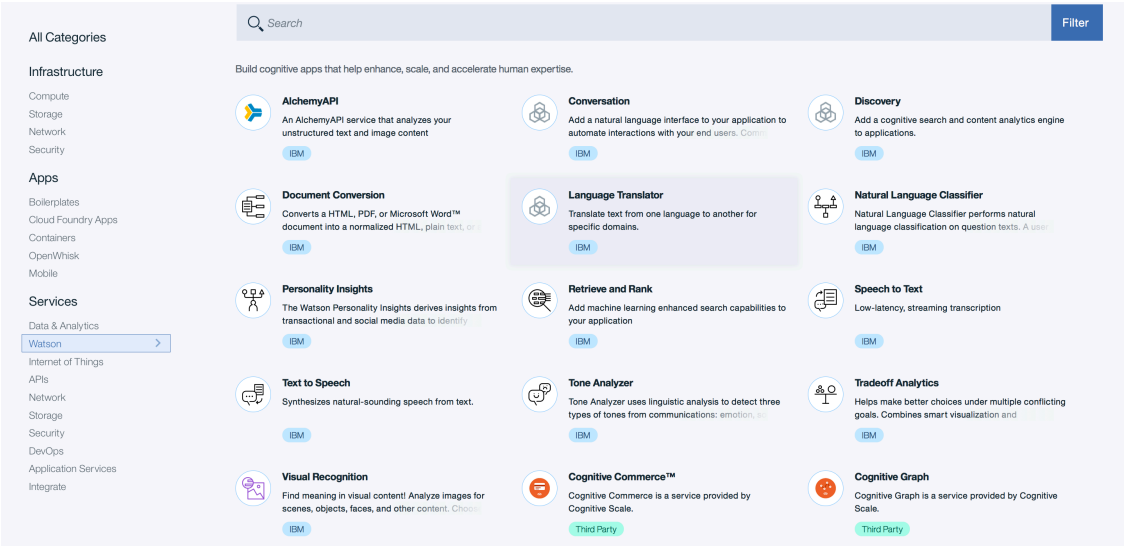
Add Language Translator in IBM Bluemix

The IBM Watson Language Translator service enables you to translate text from one language to another. These languages are supported:

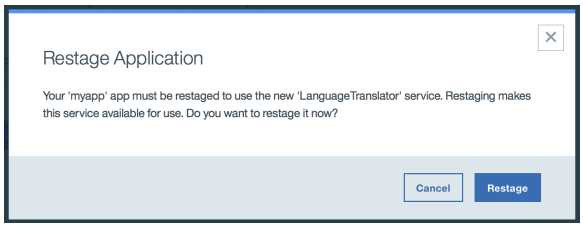
- The News domain - targeted at news articles and transcripts, it translates English to and from French, Spanish, Portuguese or Arabic.
- The Conversational domain - targeted at conversational colloquialisms, it translates English to and from French, Spanish, Portuguese or Arabic.
- The Patent domain - targeted at technical and legal terminology, it translates Spanish, Portuguese, Chinese, or Korean to English.

1. Go to the Connections tab under the application overview for your Node-RED application in the IBM Bluemix dashboard and click on **Connect New**.

2. Click the **Language Translator** tile under the Watson section. Click on **Create**.



3. IBM Bluemix will prompt to restage the application. Click on **Restage**. The application will restart and include the new service credentials in the environment.



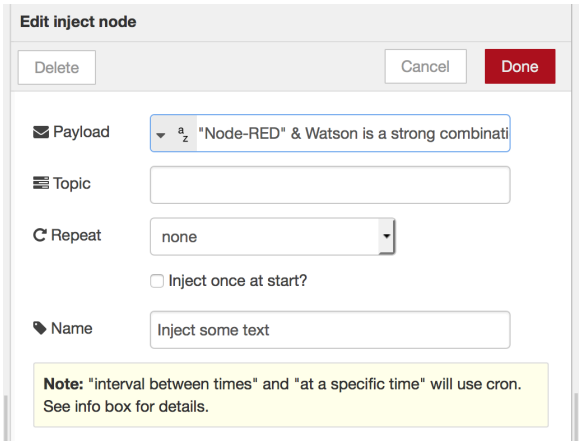
4. When the application has finished restaging, open the Node-RED Flow Editor. If you already have Node-RED open, refresh the page.

Add Language Translator in Node-RED

In this section, we will add a Language Translator node and translate text input into French. In this example some random text (in English in this case) is injected, translated to French and the result outputted to the Debug tab.

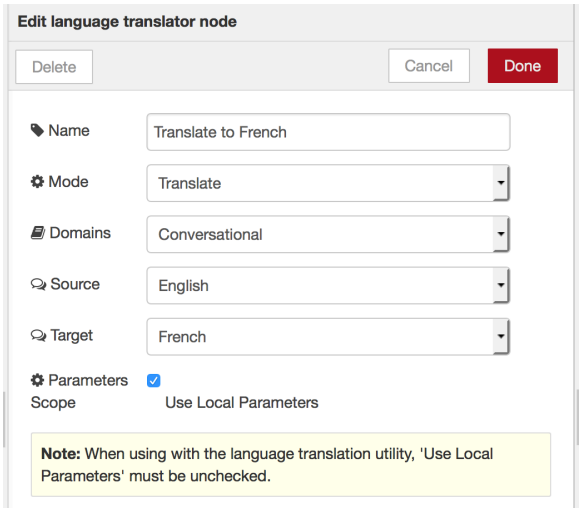
1. Add an 

node as shown below (you can use any text for this):



2. Add a 

node as shown below. The text in this case is English so select English. Based on your source choose the right domain: News or Conversational.

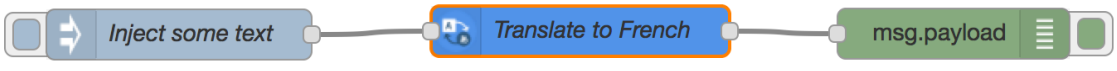


3. Add a 

node. The translated text will be returned in `message.payload` and displayed in the Debug tab.

4. Connect the nodes together as shown below and click on the red 

in the upper-right of the screen.



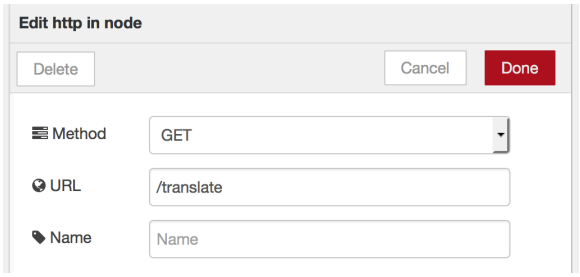
5. Click on the tab on the left side of the inject node to start the flow. The output from the debug node will show up in the debug tab in the right-hand pane.

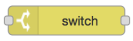
Creating an Interactive Web UI

In this section, we will create a simple webpage that accepts user input, translates it into French, and then displays it on the webpage.

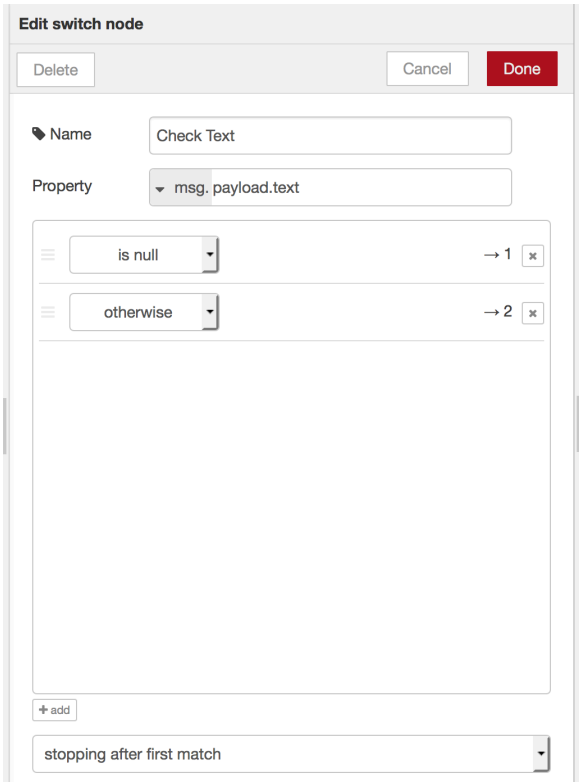
1. Add a 

as shown below.



2. Add a 

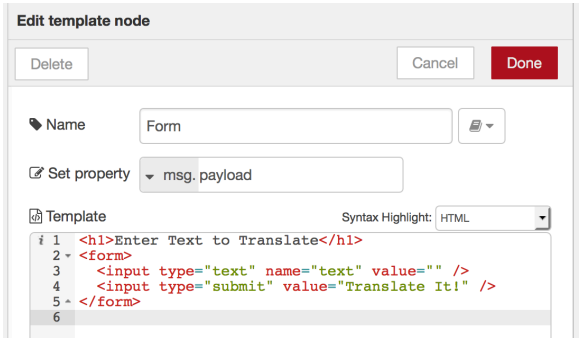
node as shown below. This node checks whether the text parameter is passed in.



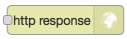
If webpage is called with a query parameter named text, the first flow will be processed. Otherwise, the second flow will be processed.

3. For the first flow, add a 

node to display a form for the user to input text to translate as shown below.

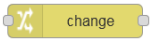


Get the code:
ibm.biz/Bd4mTi

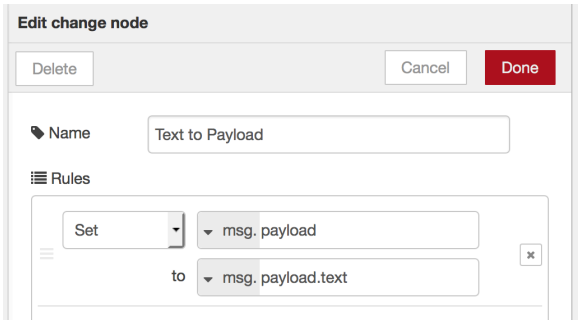
4. Add a 

node and connect the nodes together as shown below.

This will display the form when the user opens a browser and goes to the application URL, appended by /translate.

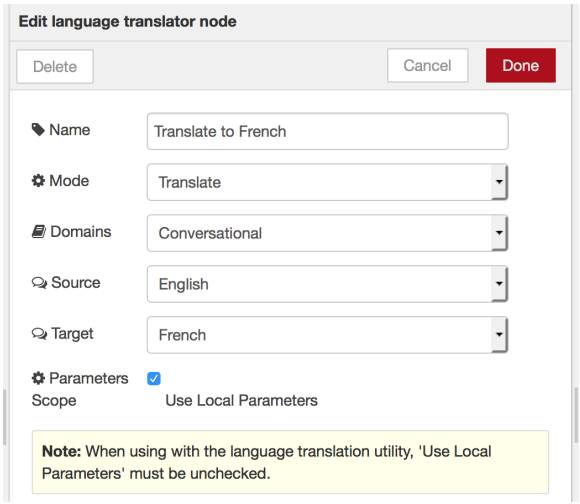
5. Next, add a 

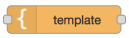
node to extract the text from the query parameter and put it in the msg.payload for the Language Translation node.



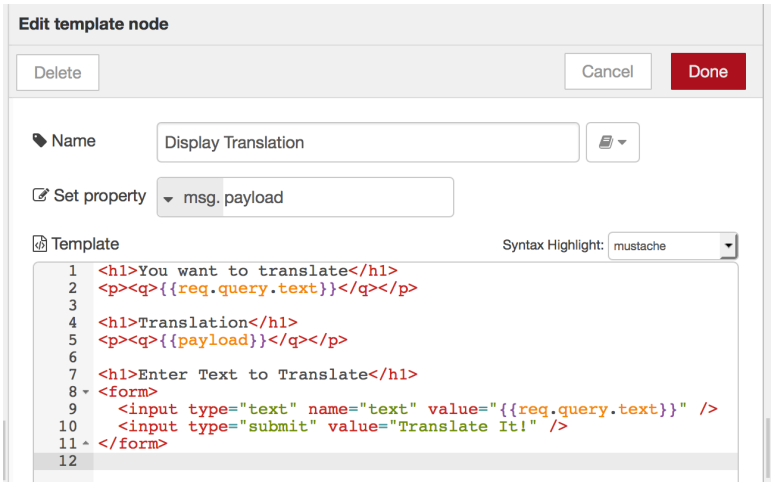
6. Add a 

node as shown below. For this example, we'll translate English text into French.



7. Add a 

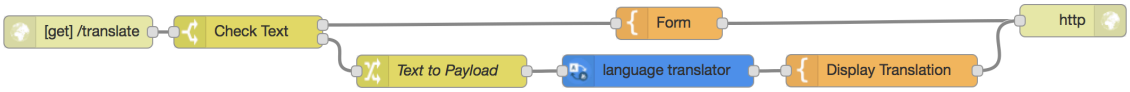
node to display the result along with the form for the user to translate another piece of text.



Get the code:
`ibm.biz/Bd4mTZ`

8. Connect the nodes together as shown below, and click on 

to save the changes.



9. Test the application by visiting the application URL, appended with /translate.

`https://__________.mybluemix.net/translate`