Use Watson Language Translator and Watson Text to Speech capabilities

Now that you have added the Watson Language Translator and Watson Text to Speech, you can use them in your application

- Go to your application's node-red editor
- Copy and import this flow into the editor. (Follow the steps described in the previous lab to import from the clipboard)

[{"id":"4ce623d6.c0d104","type":"ibmiot in","z":"5b951349.5f9094","authentication":"quickstart","apiKey":"","inputType":"evt","deviceId":"8bf9b82ad2fd","applicationId":"","deviceType":"+","eventType":"+","commandType":"","format":"json","name":"IBM IoT App In","service":"quickstart","allDevices":false,"allApplications":false,"allDeviceTypes":true,"allEvents":true,"allCommands":false,"allFormats":false,"x":196.66665649414062,"y":250,"wires":[["b3ad3ec8.deffc8","56fb2f69.10482","6e03d7b1.10c248","1869b46f.f26c54"]]},{"id":"acf5a0d4.9b4c18","type":"function","z":"5b951349.5f9094","name":"temp","func":"return {payload:msg.payload.d.temp};","outputs":1,"x":386.6666564941406,"y":250,"wires":[["4d3ffedc.cca1d","8c307eb4.e2309"]]},{"id":"4d3ffedc.cca1d","type":"switch","z":"5b951349.5f9094","name":"temp thresh","property":"payload","rules":[{"t":"lte","v":"40","v2":null},{"t":"gt","v":"40","v2":null}],"checkall":"true","outputs":2,"x":546.6666564941406,"y":250,"wires":[["e2527562.915778"],["8b4a8e30.d73348"]]},{"id":"c9c52810.f7e22","type":"debug","z":"5b951349.5f9094","name":"cpu status","active":true,"complete":"false","x":950,"y":226.66668701171875,"wires":[]},{"id":"b3ad3ec8.deffc8","type":"debug","z":"5b951349.5f9094","name":"device data","active":false,"console":"false","complete":"true","x":202.6666259765625,"y":340,"wires":[]},{"id":"e2527562.915778","type":"template","z":"5b951349.5f9094","name":"safe","fieldType":"msg","syntax":"mustache","template":"Temperature ({{payload}}) within safe limits","x":706.6666564941406,"y":230,"wires":[["abfa2eb7.344af8"]]},{"id":"8b4a8e30.d73348","type":"template","z":"5b951349.5f9094","name":"danger","template":"Temperature ({{payload}}) critical","x":715,"y":303.3333435058594,"wires":[["abfa2eb7.344af8"]]},{"id":"5b3ba89f.b4ada","type":"comment","z":"5b951349.5f9094","name":"Temperature Monitor","info":"","x":206.66665649414062,"y":150,"wires":[]},{"id":"b7ffa894.0ed42","type":"comment","z":"5b951349.5f9094","name":"Configure source","info":"","x":196.66665649414062,"y":210,"wires":[]},{"id":"8c307eb4.e2309","type":"ui_gauge","z":"5b951349.5f9094","name":"Temperature","group":"2514bb7e.085e3c","order":0,"width":"3","height":"3","gtype":"gage","title":"Gauge","label":"units","format":"{{value}}","min":0,"max":"100","colors":["#00b500","#e6e600","#ca3838"],"seg1":"","seg2":"","x":622.4999389648438,"y":149.99996948242188,"wires":[]},{"id":"56fb2f69.10482","type":"function","z":"5b951349.5f9094","name":"Humidity","func":"return {payload:msg.payload.d.humidity};","outputs":1,"noerr":0,"x":381.6666259765625,"y":186.666

65649414062,"wires":[["2495eca0.e56034"]]},{"id":"6e03d7b1.10c248","type":"function","z":"5b951349.5f9094","name":"Object Temperature","func":"return {payload:msg.payload.d.objectTemp};","outputs":1,"noerr":0,"x":390,"y":109.99999237060547,"wires":[["7abd05e1.5e624c"]]},{"id":"7abd05e1.5e624c","type":"ui_gauge","z":"5b951349.5f9094","name":"Object Temperature","group":"2514bb7e.085e3c","order":0,"width":"3","height":"3","gtype":"gage","title":"Gauge","label":"°C","format":"{{value}}","min":"0","max":"100","colors":["#00b500","#e6e600","#ca3838"],"seg1":"","seg2":"","x":641.6666259765625,"y":54.99999237060547,"wires":[]},{"id":"2495eca0.e56034","type":"ui_gauge","z":"5b951349.5f9094","name":"Humidity","group":"2514bb7e.085e3c","order":0,"width":"3","height":"3","gtype":"gage","title":"Gauge","label":"%","format":"{{value}}","min":"0","max":"100","colors":["#00b500","#e6e600","#ca3838"],"seg1":"","seg2":"","x":608.3333129882812,"y":103.33333587646484,"wires":[]},{"id":"abfa2eb7.344af8","type":"watson-translator","z":"5b951349.5f9094","name":"","action":"translate","basemodel":"ar-en","domain":"conversational","srclang":"en","destlang":"es","password":"","custom":"","domainhidden":"conversational","srclanghidden":"en","destlanghidden":"es","basemodelhidden":"","customhidden":"","filetype":"forcedglossary","trainid":"","lgparams2":true,"ldparamshidden2":"true","x":884.1666259765625,"y":278.3333435058594,"wires":[["c9c52810.f7e22","e11a4b79.a300c"]]},{"id":"f7ad6cb1.9f9e7","type":"http in","z":"5b951349.5f9094","name":"","url":"/audio","method":"get","swaggerDoc":"","x":173.33331298828125,"y":498.00000762939453,"wires":[["caac0040.7c6538"]]},{"id":"b7e5914.2cbe8f","type":"http response","z":"5b951349.5f9094","name":"","x":593.8788013458252,"y":496.2726936340332,"wires":[]},{"id":"caac0040.7c6538","type":"template","z":"5b951349.5f9094","name":"","field":"payload","fieldType":"msg","syntax":"mustache","template":"<!DOCTYPE html>\n<html>\n<head>\n <title>IBM Watson - Text To Speech</title>\n <script src=\"https://ajax.googleapis.com/ajax/libs/jquery/2.1.4/jquery.min.js\"></script>\n \n <script type=\"text/javascript\">\n   var socketaddy = \"ws://\" + window.location.host + \"/ws/audio\";\n\n $(document).ready(function(){\n   var output = document.getElementById('output')\n $('#output').on('playing', function () {\n $('#text').text('Playing audio.')\n   \n   });\n $('#output').on('ended', function () {\n $('#text').text('Waiting for audio...')\n   \n   });\n   sock = new WebSocket(socketaddy);\n   sock.onopen = function(){\n $('#text').text('Waiting for audio...');\n   console.log(\"Connected websocket\");\n   };\n   sock.onerror = function(){ \n   console.log(\"Websocket error\"); \n   };\n   sock.onclose = function () {\n $('#text').text('Not connected. Refresh the page?')\n   }\n   sock.onmessage = function(evt){\n   console.log(\"Websocket message\", evt); \n   output.src = window.URL.createObjectURL(evt.data);\n   output.play();\n   };\n   });\n </script>\n\n</head>\n<body style=\"font-size: 56px; font-family: helvetica; text-align: center; margin-top: 100px;\">\n <div id=\"text\">Connecting...</div>\n <audio id=\"output\"></audio>\n</body>\n</html>","x":388.33331298828125,"y":494.9999771118164,"wires":[["b7e5914.2cbe8f"]]},{"id":"e11a4b79.a300c","type":"watson-text-to-speech","z":"5b951349.5f9094","name":"","lang":"es-ES","langhidden":"es-ES","voice":"es-ES_LauraVoice","voicehidden":"","format":"audio/wav","password":"","x":806.6666259765625
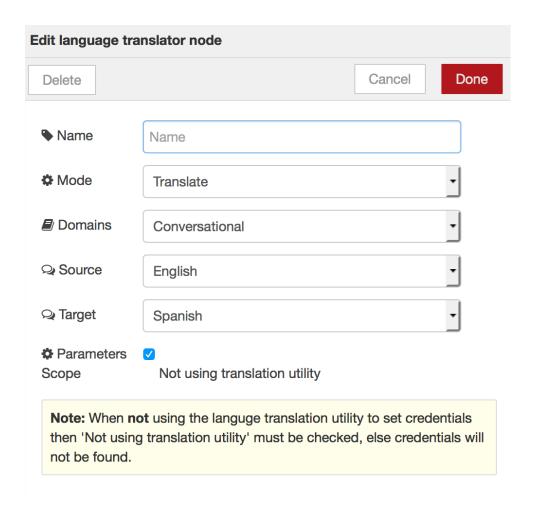
,"y":375,"wires":[["2acd737f.e5f534"]]},{"id":"52ee8814.45042","type":"websocket out","z":"5b951349.5f9094","name":"","server":"b1117a4b.d507d","client":"","x":1060.757568 359375,"y":367.72723388671875,"wires":[]},{"id":"2acd737f.e5f534","type":"function","z":"5b 951349.5f9094","name":"Transform Text to Speech","func":"msg.payload = msg.speech;\nreturn msg;","outputs":1,"noerr":0,"x":949.48486328125,"y":439.54534912109375,"wires":[["52ee88 14.45042"]]},{"id":"1869b46f.f26c54","type":"delay","z":"5b951349.5f9094","name":"","pauseT ype":"rate","timeout":"5","timeoutUnits":"seconds","rate":"1","nbRateUnits":"10","rateUnits": "second","randomFirst":"1","randomLast":"5","randomUnits":"seconds","drop":true,"x":369,"y ":319.5,"wires":[["acf5a0d4.9b4c18"]]},{"id":"2514bb7e.085e3c","type":"ui_group","z":"","nam e":"Simulated Sensor Readings","tab":"7cdbf1bd.089bc","disp":true,"width":"6"},{"id":"b1117a4b.d507d","type":"we bsocket-listener","path":"/ws/audio","wholemsg":"false"},{"id":"7cdbf1bd.089bc","type":"ui_tab","z":"" ,"name":"Home","icon":"dashboard"}]

- Go to ibm.biz/iotsensor on a separate browser tab. Copy the device ID.
- Switch back to the Node-Red editor
- Double click the "IBM IoT App in" node. Paste the device ID.
- Double click the "language translator" node. Make changes as in the screenshot to translate from English to Spanish. Click "Done".

Edit language translator node

Delete		Cancel	Done

🏷 **Name**   `Name`

⚙ **Mode**   Translate ▾

📘 **Domains**   Conversational ▾

💬 **Source**   English ▾

💬 **Target**   Spanish ▾

⚙ **Parameters**   ☑
Scope   Not using translation utility

> **Note:** When **not** using the languge translation utility to set credentials then 'Not using translation utility' must be checked, else credentials will not be found.

- Click Deploy.
- You should now see the debug panel containing messages in Spanish every 10 seconds.
- Set your laptop speaker volume up. Go to <YourAppName>.mybluemix.net/audio
- You should now here the message spoken to you in Spanish every 10 seconds.