# IBM Cloud

# Cloud Basics

Navigating IBM Cloud

## Lab Guide

© Copyright IBM Corp. 2017. All rights reserved

# Notices and Disclaimers

© Copyright IBM Corporation 2017.

The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, these materials. Nothing contained in these materials is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software. References in these materials to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates. This information is based on current IBM product plans and strategy, which are subject to change by IBM without notice. Product release dates and/or capabilities referenced in these materials may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml

Other company, product and service names may be trademarks or service marks of others

# Table of Contents

**Lab Environment Overview** ..... 5

**Cloud Basics** ..... 6

- **Lab Workflow Overview** ..... 7
- **Lab Instructions** ..... 8
- **Lab Summary** ..... 31

© Copyright IBM Corp. 2017. All rights reserved

# Document Revision History

| Rev # | File Name | Date |
|---|---|---|
| 1.0 | Cloud Basics | Jan 12, 2018 |
| 1.1 | | |

**Prepared & Revised by:**

1.0 Erika Bratschun – Erika.bratschun@ibm.com
Name – email
Name – email
Name – email

© Copyright IBM Corp. 2017. All rights reserved

# Lab Environment Overview

## Installed Software and Tools

| Software | Link |
|---|---|
| Fill In | Fill In |
| Fill In | Fill In |
| Fill In | Fill In |
| Fill In | Fill In |
| Fill In | Fill In |
| Fill In | Fill In |

© Copyright IBM Corp. 2017. All rights reserved

| | |
|---|---|
| Purpose: | This lab introduces the subject of Cloud. After completing the lab, you should be able to:<br><br>• Understand Cloud<br>• Navigate IBM Cloud Platform<br>• Launch and use services on IBM Cloud |

| | |
|---|---|
| Tasks: | Tasks you will complete in this lab exercise include:<br><br>• Signing up for IBM Cloud<br>• Navigating the IBM Cloud Platform<br>• Provisioning a Service<br>• Launch Watson Personality Insights<br>• Launch Watson Conversation<br>• Deploy a Cloud Foundry app using Node-RED Starter |

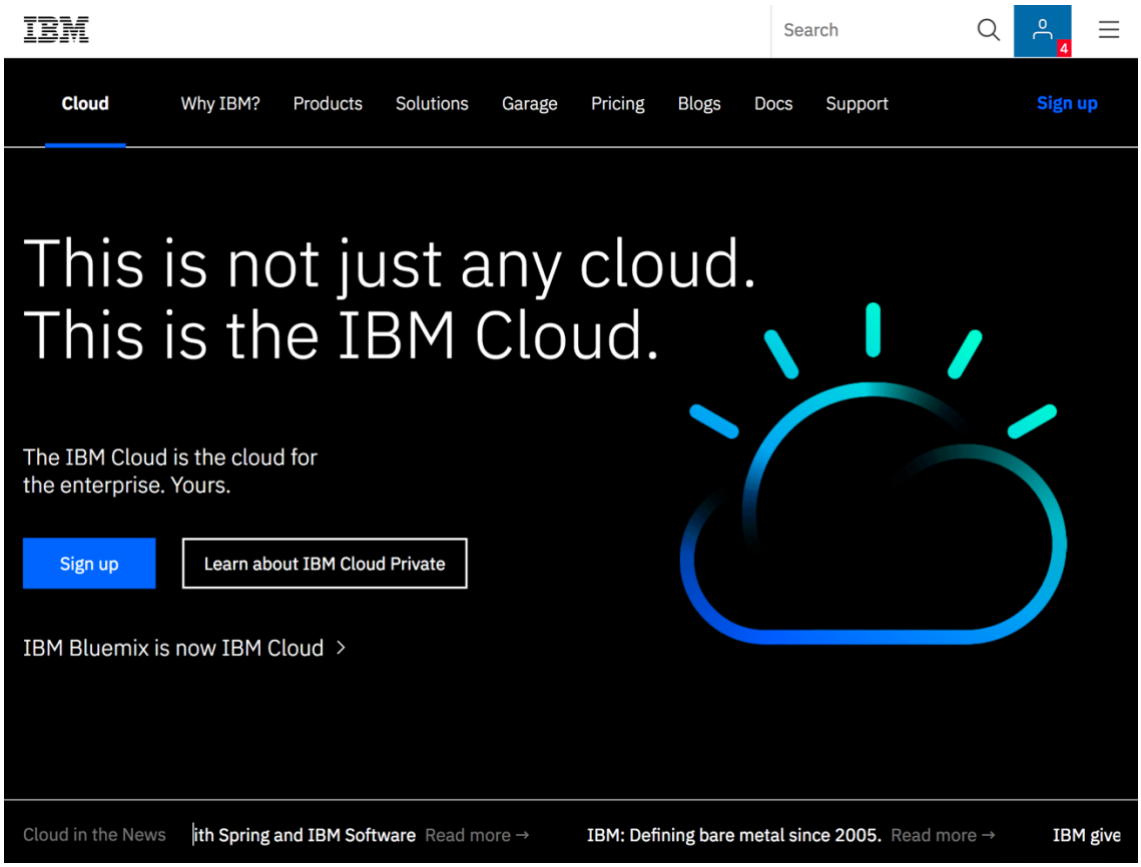
© Copyright IBM Corp. 2017. All rights reserved

## Lab Workflow Overview

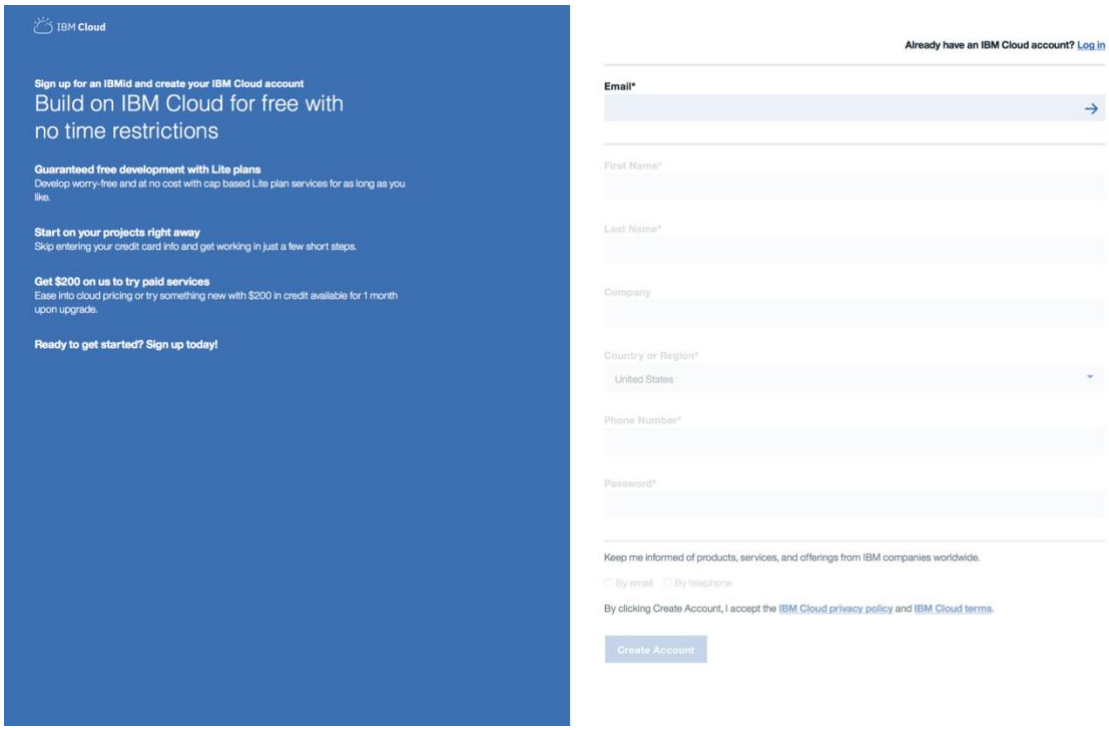
1. Signing up for IBM Cloud
2. Navigating the IBM Cloud Platform
3. Provisioning a Service
4. Launch Watson Personality Insights
5. Launch Watson
6. Create a Node-RED Flow

© Copyright IBM Corp. 2017. All rights reserved

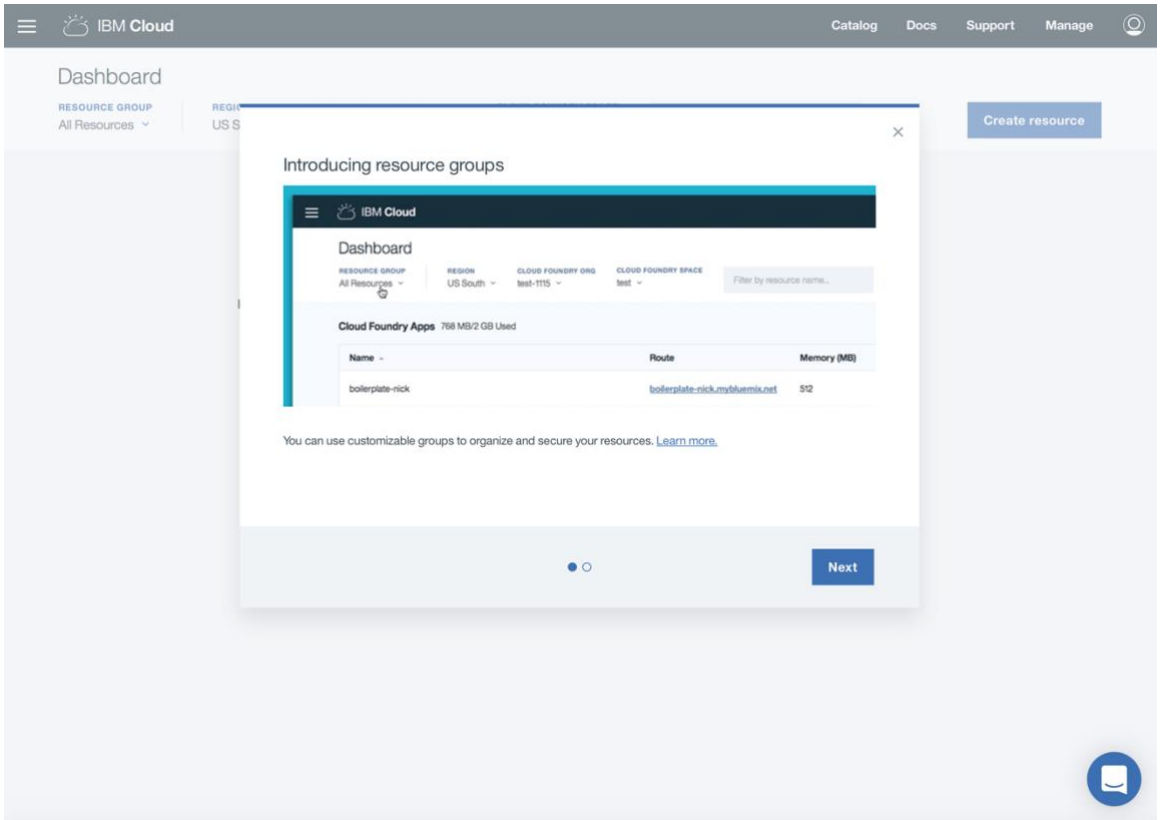
## Lab Instructions

| Step | Action |
|---|---|
| 1 | **<u>Signing up for IBM Cloud</u>**<br><br>a. Go to https://www.ibm.com/cloud/<br><br>b. We are going to sign up for a free IBM Cloud account.<br><br>c. Click “Sign up”.<br><br>  |

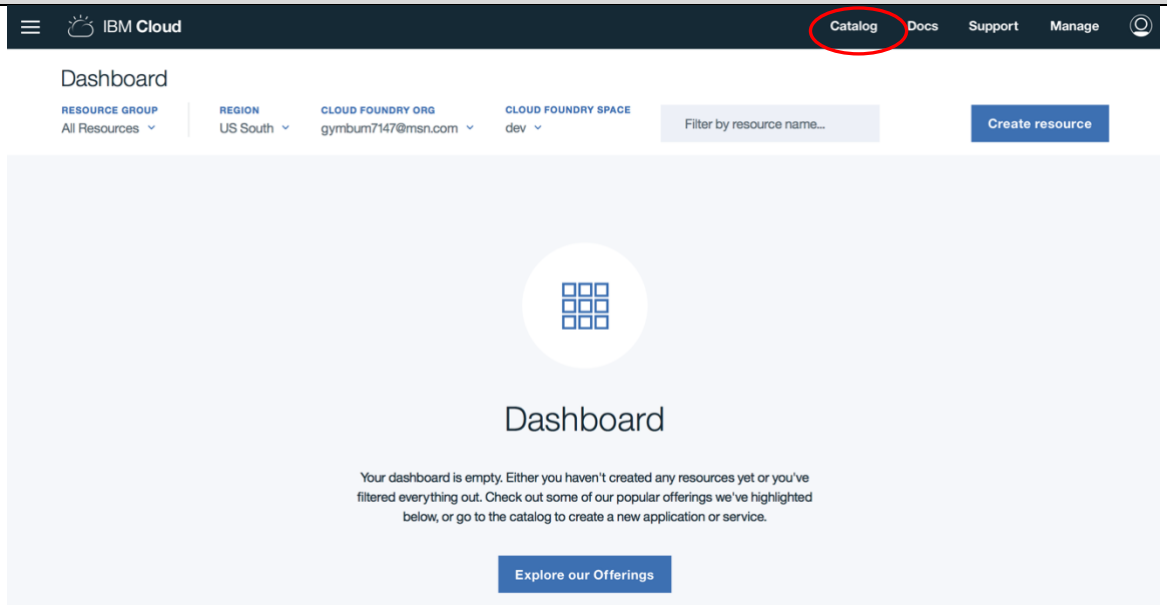
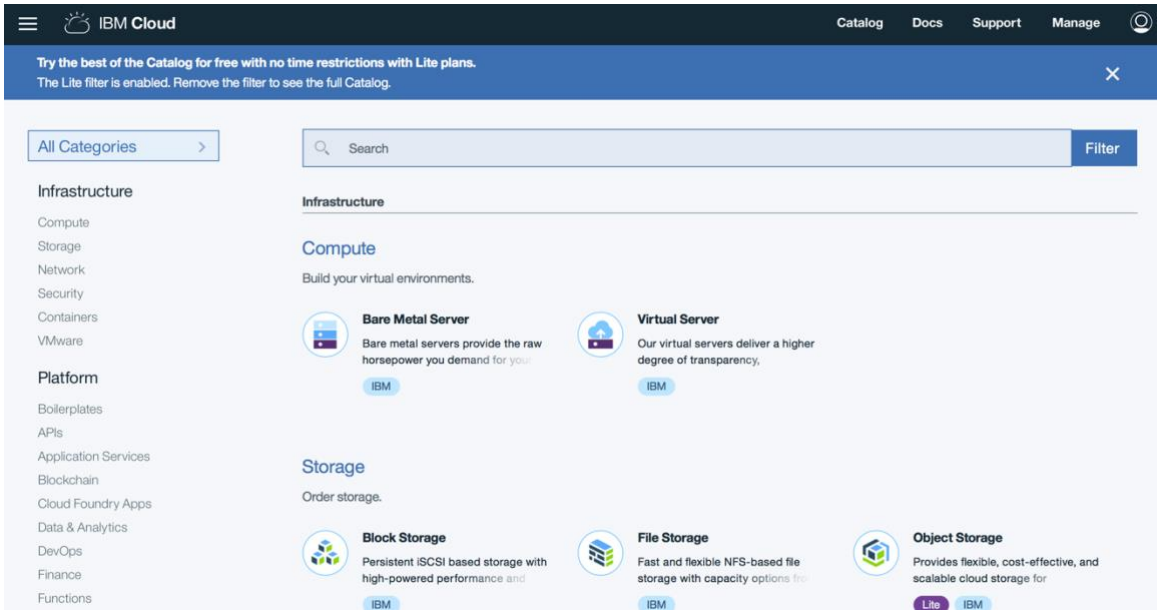
© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
| --- | --- |
| | d. Fill in the required boxes.<br><br>e. Click “Create Account”.<br><br>  |

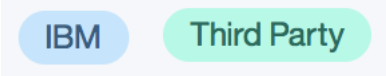
© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| 2 | **<u>Navigating the IBM Cloud Platform</u>**<br><br>a. Log into IBM Cloud at https://console.bluemix.net/dashboard/apps/<br><br>If this is the first time you are using IBM Cloud (formerly Bluemix), an introduction window will appear, feel free to read it. Otherwise, click through.<br><br>b. Click “Next”, Click “Finish”.<br><br>  <br><br><br>c. We are now looking at the IBM Cloud Dashboard.<br><br>d. Click on the “Catalog” button found in the upper right hand corner of the screen. |

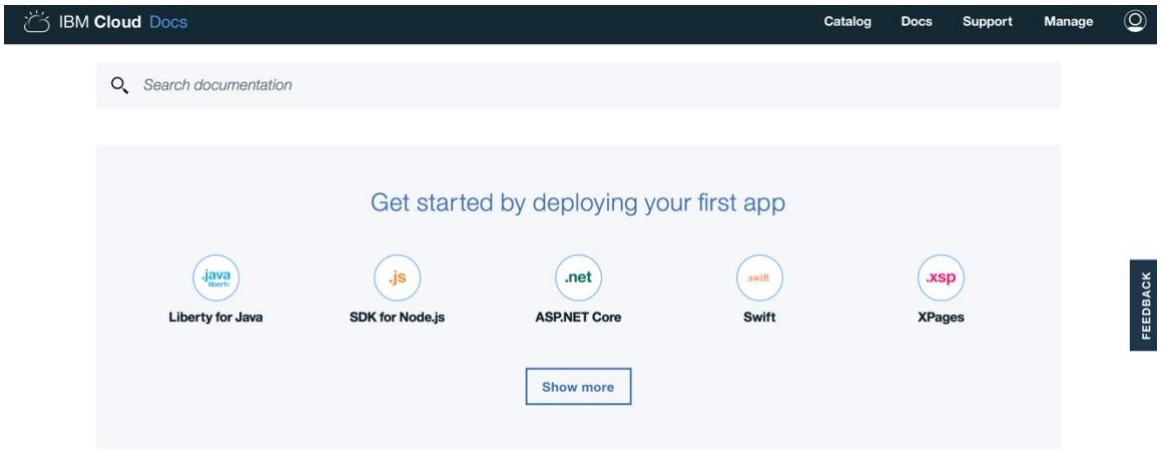
© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| |  <br>e. The Catalog is a compilation of the services offered on the IBM Cloud.<br>  |

© Copyright IBM Corp. 2017. All rights reserved

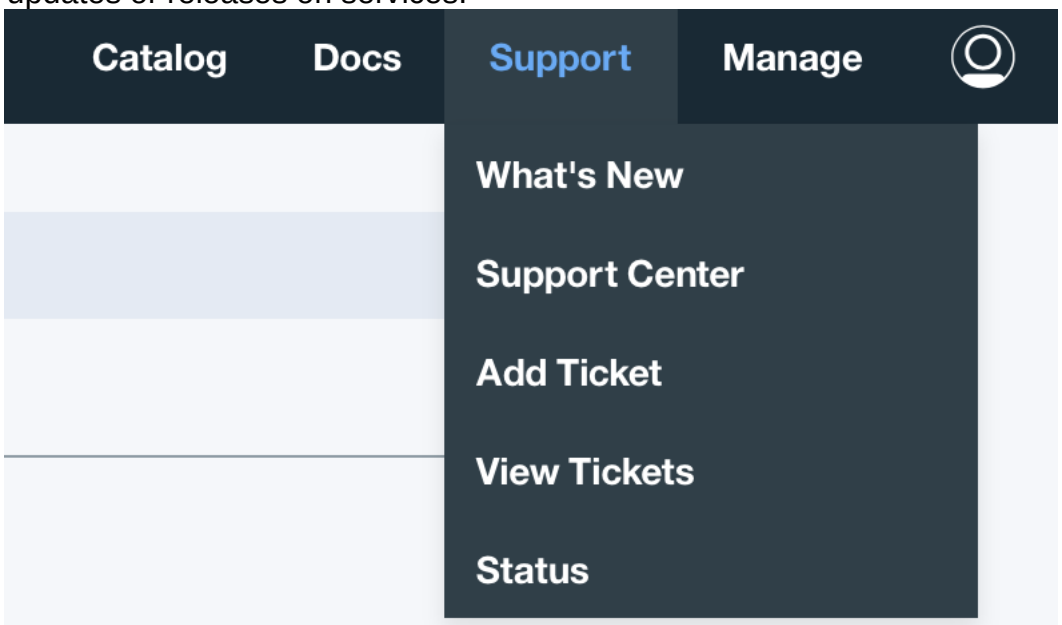
| Step | Action |
|---|---|
| | As you look around the catalog, there are a few places to observe. The page is laid out for simple navigation. We already selected the Catalog button to open the Catalog. The Docs link provides details on each of the services. We will touch on this when we initialize our service here in a bit. The Support page is available to answer any questions that cannot be found in Docs. And lastly Manage is where you can manager your account Space and Organization. You can have multiple Spaces. This is a way to keep different projects organized.<br><br>Services are organized in categories. These include Infrastructure, Compute, Storage, Watson, etc. Each service will have a title, icon, brief explanation of the service, and either a blue or green oval.<br><br>f. IBM Cloud supports both IBM products and services, as well as third-party. They are indicated by the small ovals below each service description.<br><br>  <br><br><br>Going along the same navigation bar as we found the catalog, we can see docs, support and manage.<br><br> <br><br><br>g. Click on “Docs”.<br><br>This is the first “go to” resource if you have questions about any of the services. IBM Cloud Docs houses tutorials, demo’s, videos, starter kits…if you have questions about a service, this is a great resource. Scrolling down you can see that there are numerous links. Each service has a link. Click on one to look at the type of documentation. The documentation ranges from “getting started” and high level “what is this service” to technical details about deploying the services. |

© Copyright IBM Corp. 2017. All rights reserved

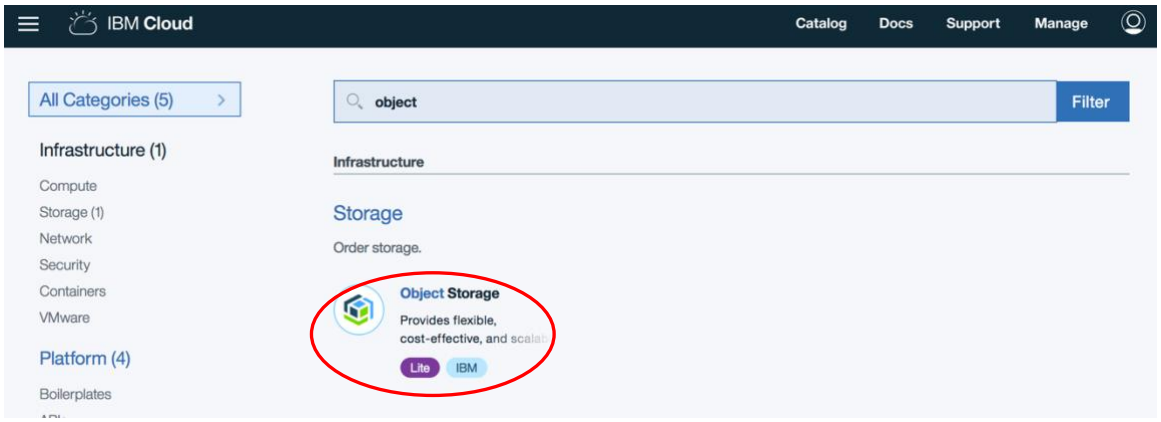



h. Click on “Support”.

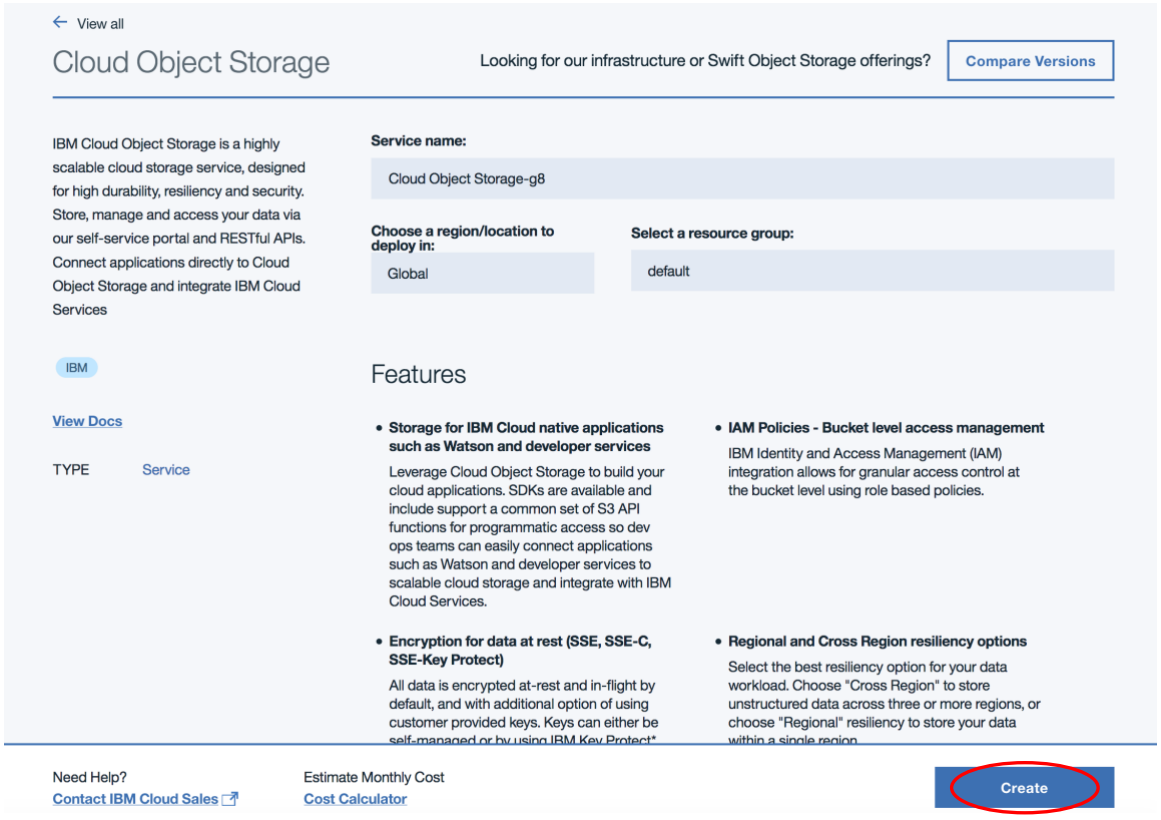
Support is a next level of information and help. When you click on it, it will display a drop down menu. If the answers cannot be solved by looking for Docs OR if an emergency situation arises with one of the services, this is where you go to open a ticket. Once the ticket is open, this is also where you can see the status of your tickets. The “What’s new” tab will show you what is new on IBM Cloud. This is where you can go to see recent updates or releases on services.



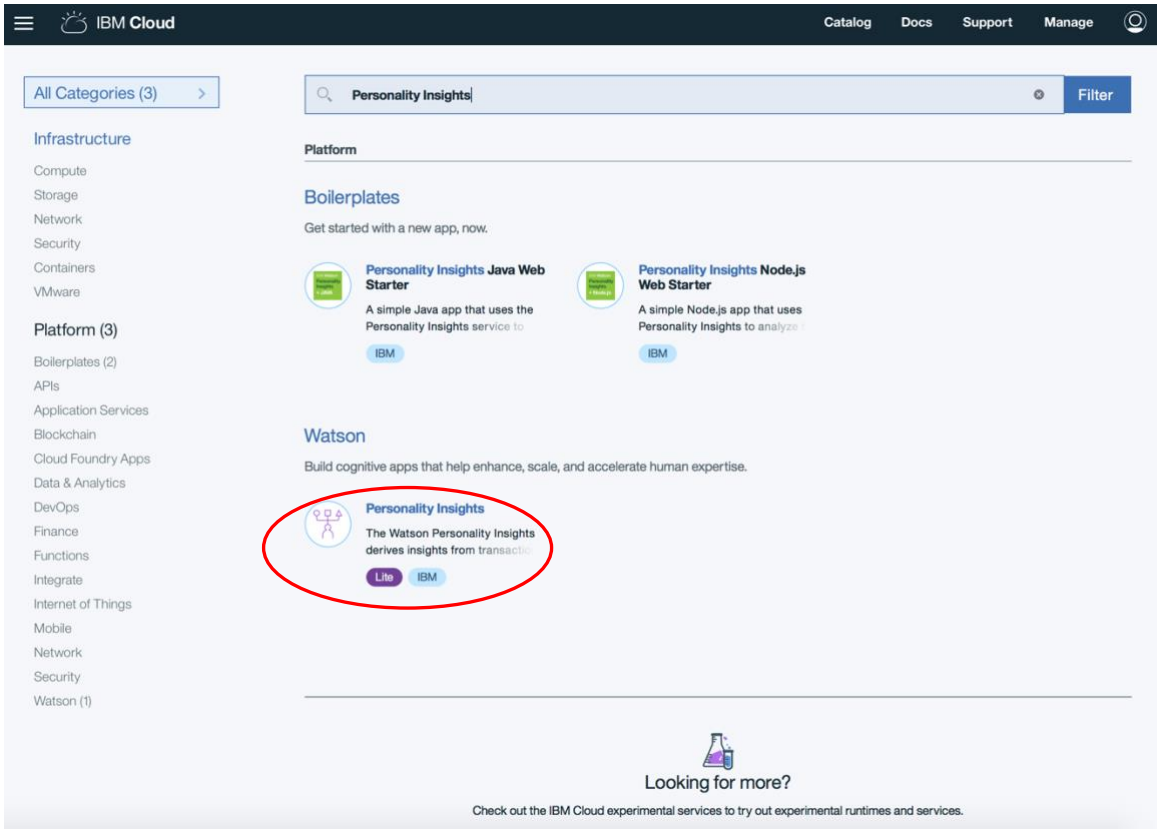

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| | i. Click on “Manage”.<br>Manage is where you can keep track of your own account, billing and usage and security. Within the account tab, you can monitor users, groups, organizations, etc.<br><br>j. Click on the head icon.<br><br>Finally, the head icon will bring you to your personal account page. This is another way to access and manage your accounts such as organizations you are a part of or spaces you are working in.<br><br> |
| 3 | **<u>Provisioning a Service</u>**<br><br>a. Return to the catalog.<br><br>b. Type in “Object”.<br><br>c. Click on “Object Storage”.<br><br>  <br><br>d. Give the service a name, leaving the region and resource group as the default options. The plan is “Lite”.<br><br>e. Click “Create”. |

© Copyright IBM Corp. 2017. All rights reserved

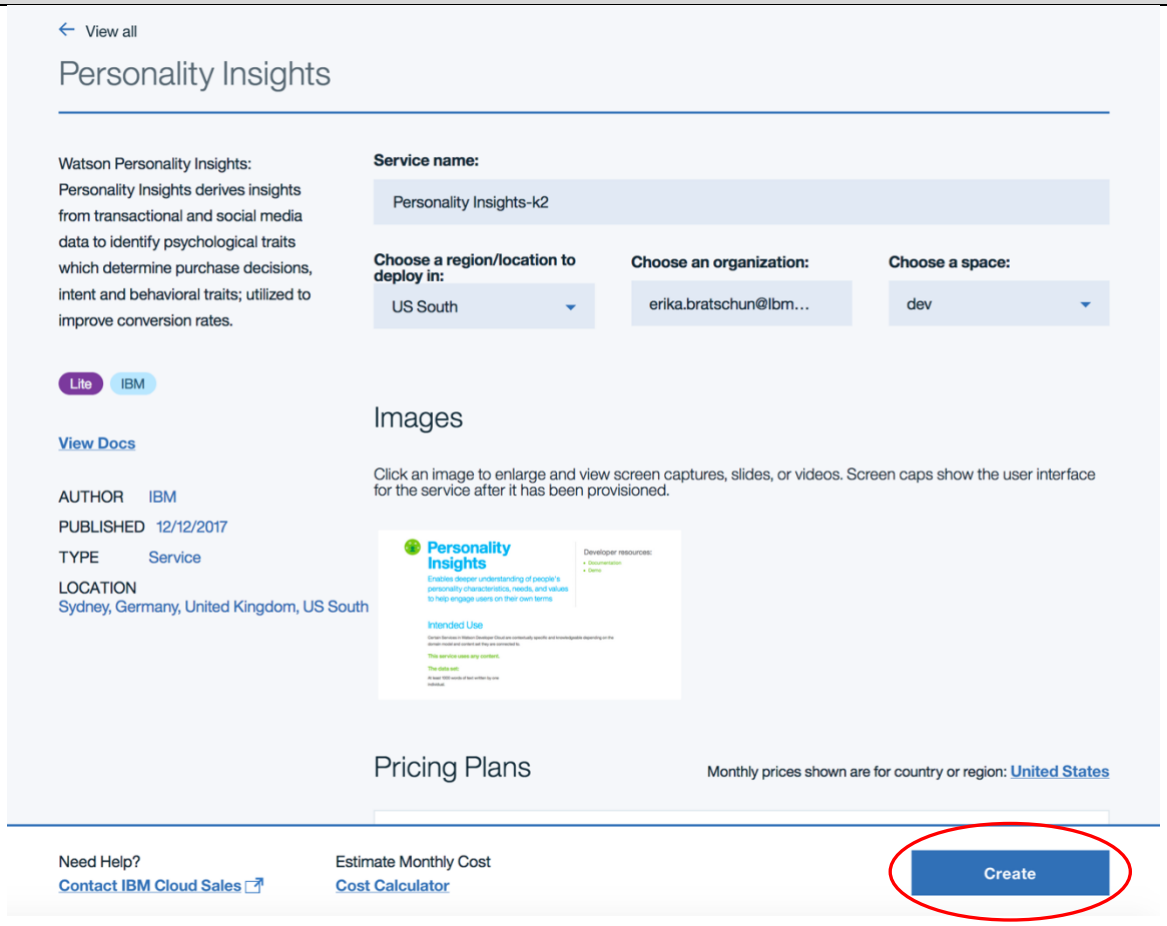
| Step | Action |
|---|---|
| |  <br>f. Return to your IBM Cloud page by clicking on the logo in the top left corner. |
| 4 | **<u>Launch Watson Personality Insights</u>**<br>a. Let's create our own service.<br>b. Click on "Catalog".<br>c. Type into the search bar: "Watson".<br>Alternative way: In the Categories sections, select Watson, Personality Insights. |

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| | d. Click on “Personality Insights” under the Watson section.<br>  <br><br>Watson Personality Insights predicts personality characteristics, needs and values through written text. Understand your customers’ habits and preferences on an individual level, and at scale. We see it used quite frequently to dictate customer interactions based on their preferences. Subscription services and experiences can be catered to customer personality as can offers or even the approach a sales person may take when approaching a customer.<br>e. Type a Service name of your choice. This will be added to a list of your deployed services, and that list will grow, so it is helpful to use a descriptive title including a reference to the project it will be used for. (Ex. Visual Recognition for Flower Classification) |

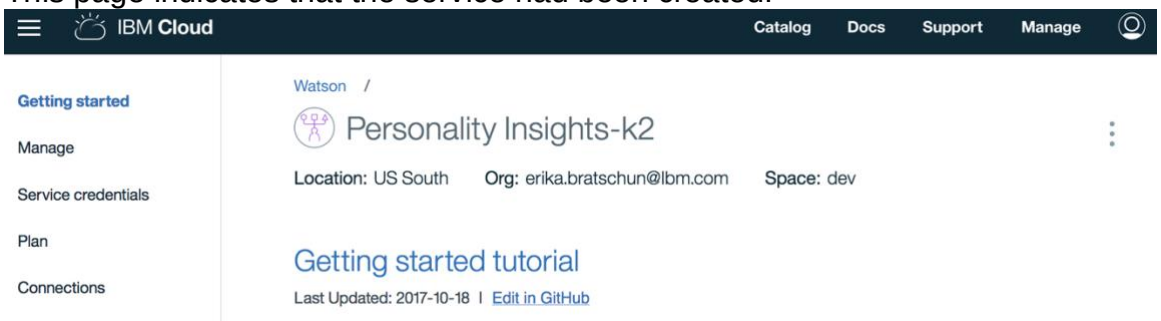
© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|

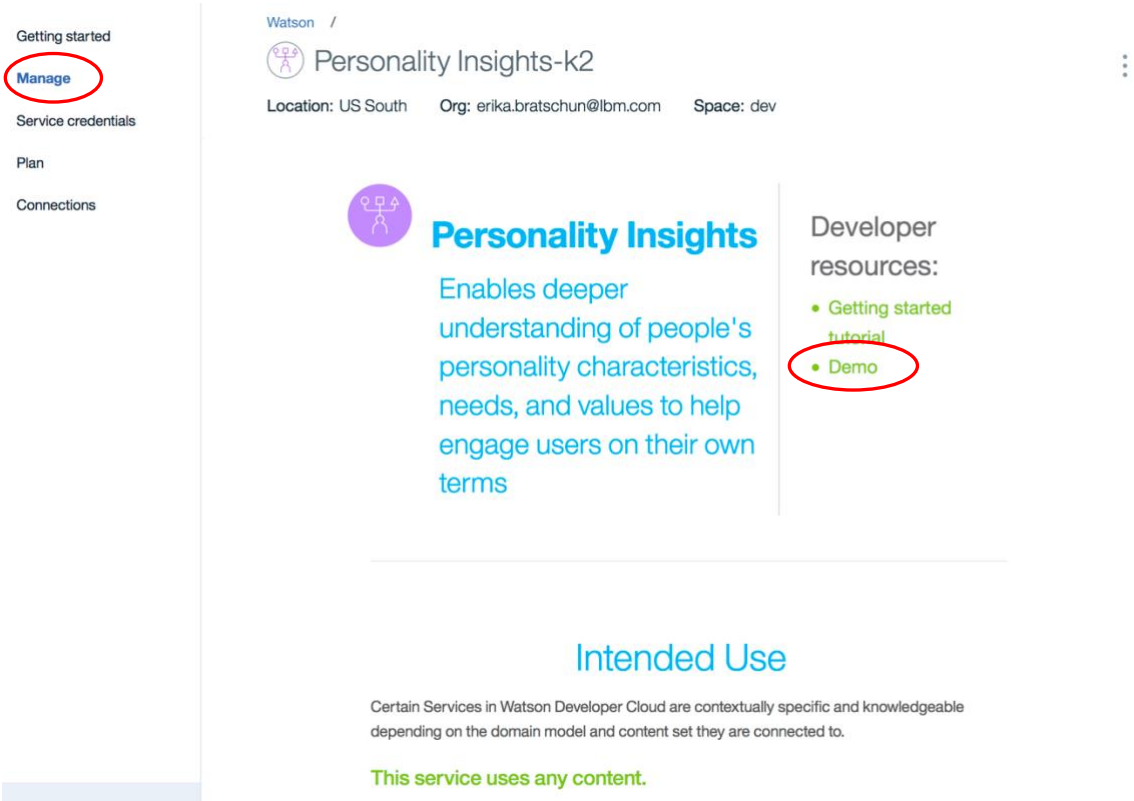



f. The “Free” plan is selected by default.
g. Select “Create” to deploy the Personality Insights Service.

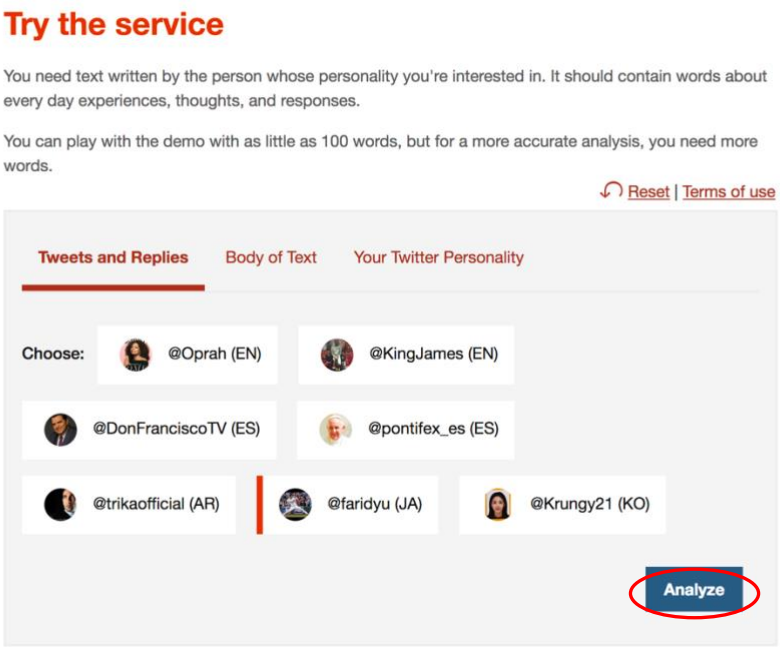
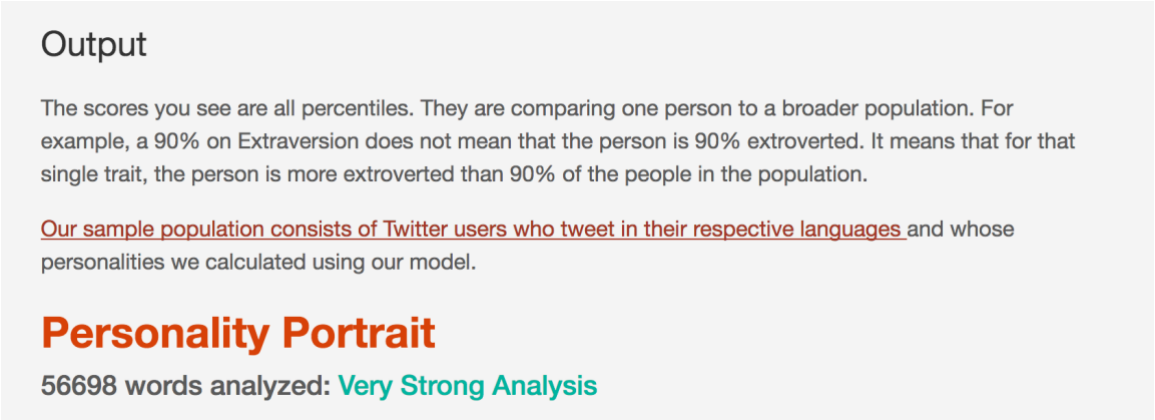
This page indicates that the service had been created.



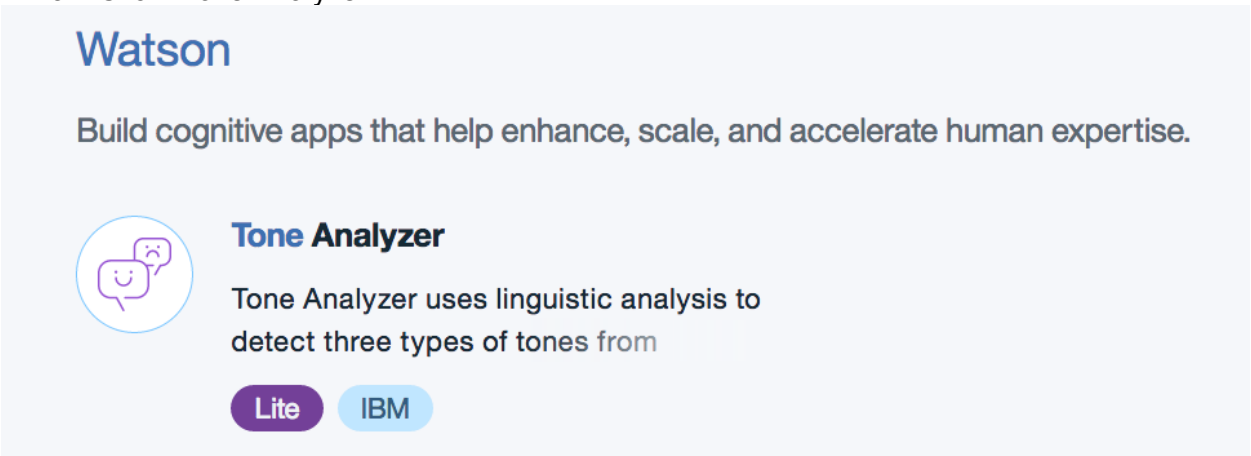
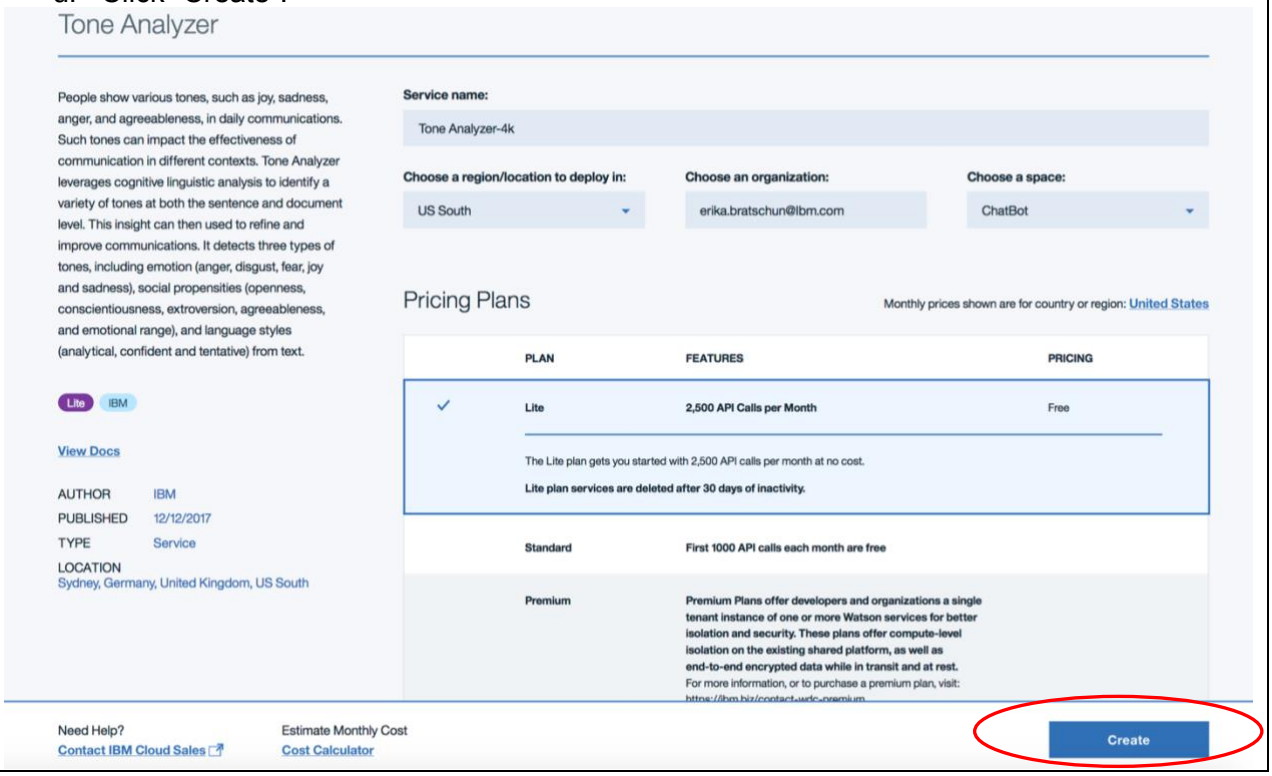

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| | h. Click on “Manage”.<br><br>i. Click on “Demo”.<br><br>  <br><br><br>j. The default demo offers a few twitter handles to analyze their personalities based on tweets. You can also put in your own handle if you’d like. Other options include body of text.<br><br>k. Click on one of the Twitter handles. (@faridyu is used below)<br><br>l. Click “Analyze”. |

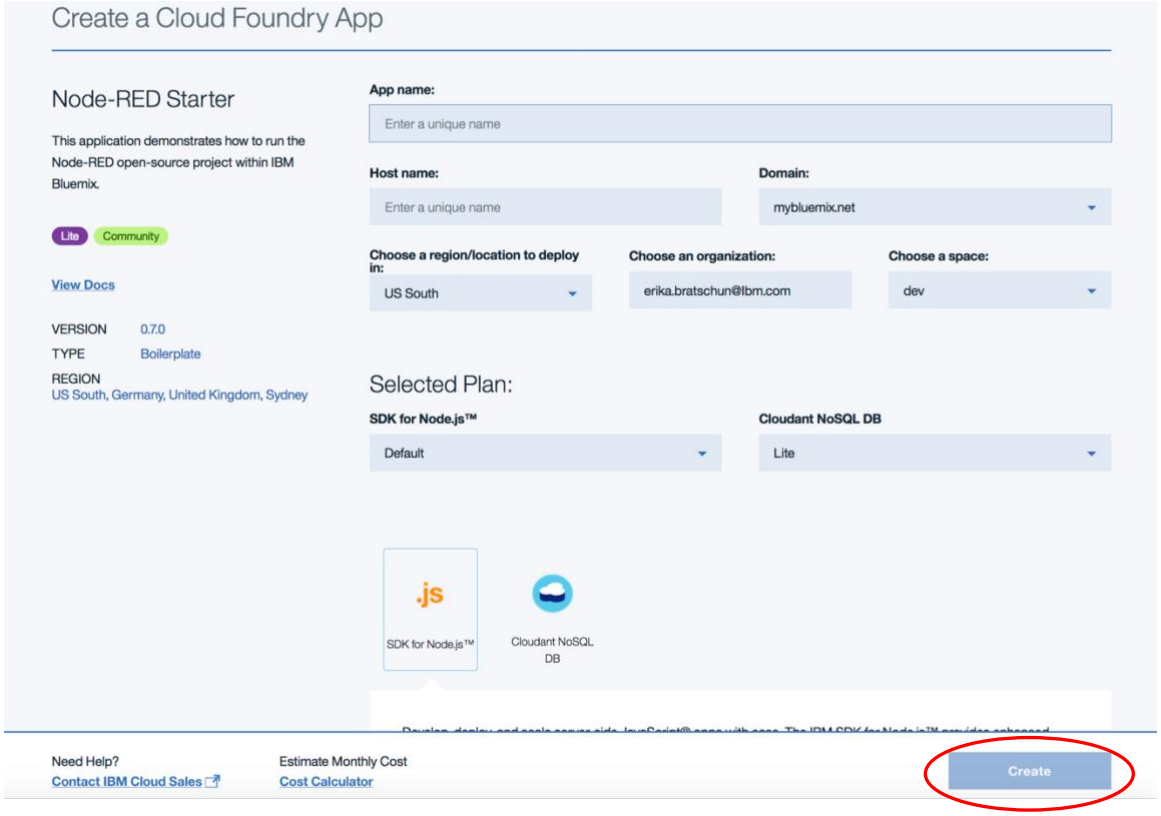
© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| |  <br>m. Scroll down to the output.<br>  |

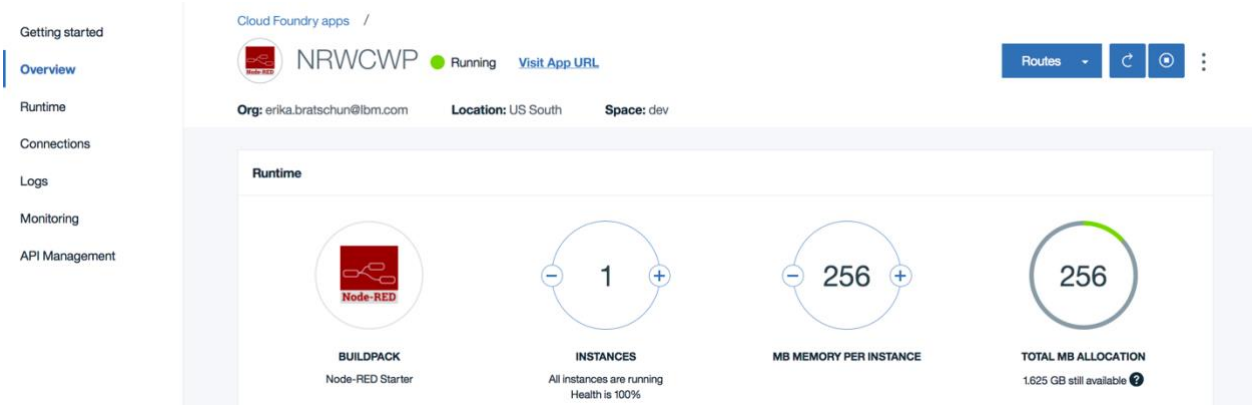
© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| 5 | **<u>Launch Tone Analyzer</u>**<br><br>a. Return to the Catalog.<br><br>b. This time in the search bar, type in “Tone Analyzer”.<br><br>c. Click “Tone Analyzer”<br>  <br><br><br>d. Click “Create”.<br>  <br> |

© Copyright IBM Corp. 2017. All rights reserved 

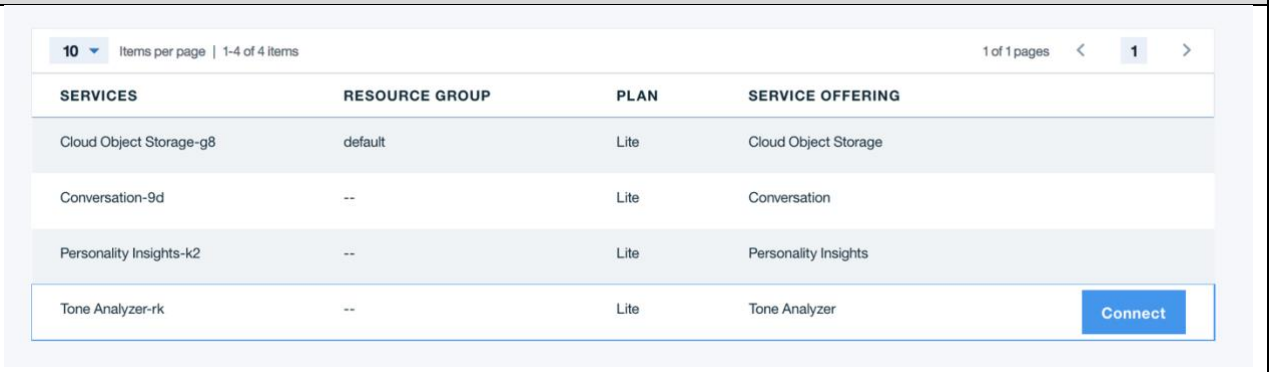
| Step | Action |
|---|---|
| | |
| 6 | **<u>Create a Node-RED Flow</u>**<br><br>a. Return to the Catalog.<br>b. This time in the search bar, type in “Node-Red”.<br>Node-Red Starter falls under the boilerplates section of the catalog.<br><br>Node-RED Starter provides a flow editor to make it easy to wire devices together, APIS, and online services using the wide range of node available in the palette. The boilerplate provided offers a quick start to application development.<br><br>c. Click on “Node-RED Starter”.<br><br>d. Fill in the required categories (once you type in an app name, it automatically becomes the host name as well).<br><br>e. Click “Create”.<br><br>  <br> |

© Copyright IBM Corp. 2017. All rights reserved 

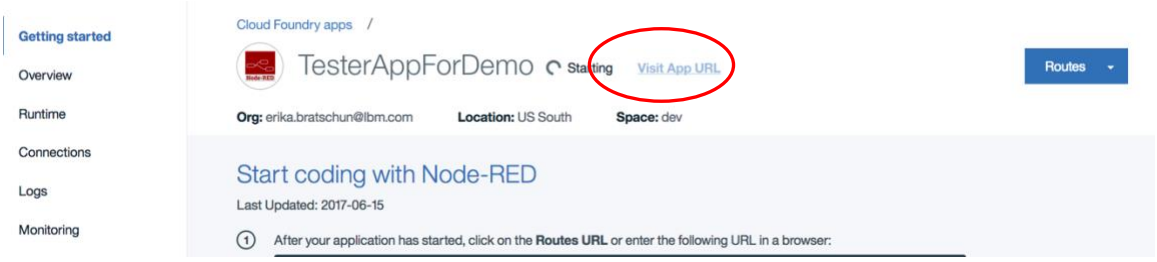
| Step | Action |
|---|---|
| | f. The app will take a few minutes to start, as indicated by the icon next to the apps name.<br><br>g. Click “Connections”.<br><br>Before we can add service to the flow, we need to make sure they are connected.<br><br>  <br><br><br>h. Click “Create Connection”.<br><br> <br><br><br>A list of all your running application that can be connected will appear.<br><br>i. Hover over Tone Analyzer and click “Connect”.<br><br>If a message pops up that asks you to restage app, click “Restage”. |

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|



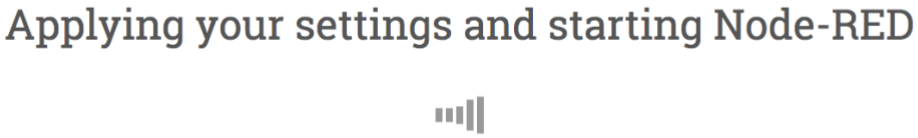

j. Click “Visit App URL”.




k. The Node-Red editor will give you a few options, make your selections and click “Next” through them.

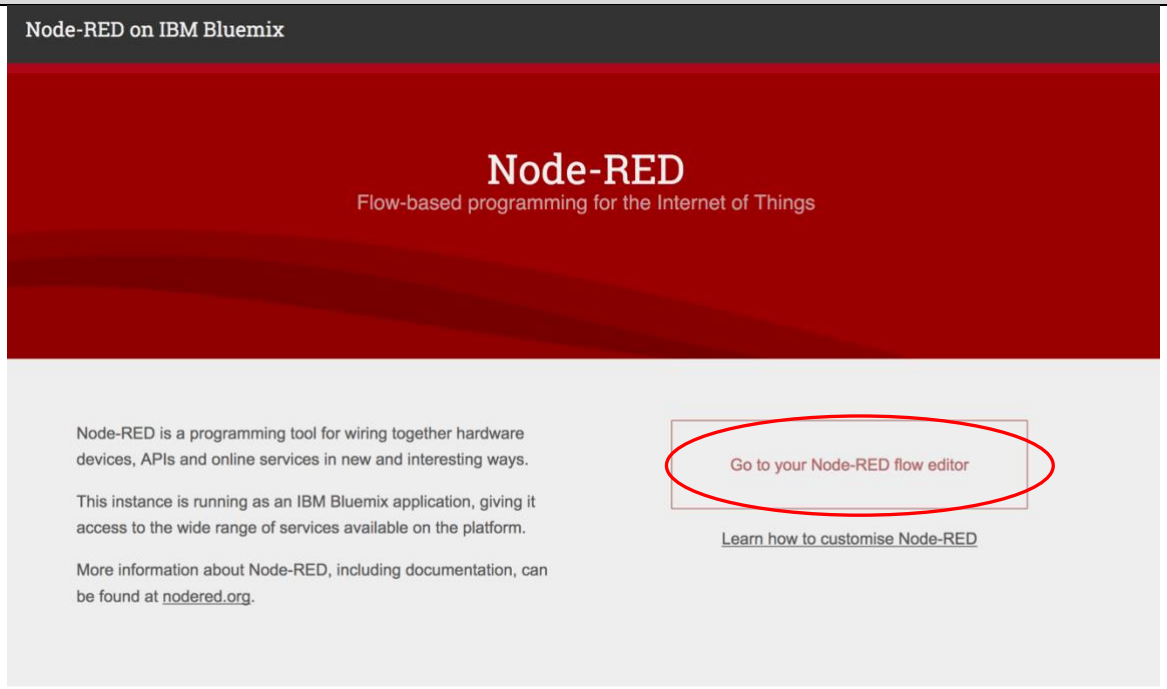
(Example: fill in name and password for security, select “node-red-dashboard”, finish the install)

l. Click “Finish”.

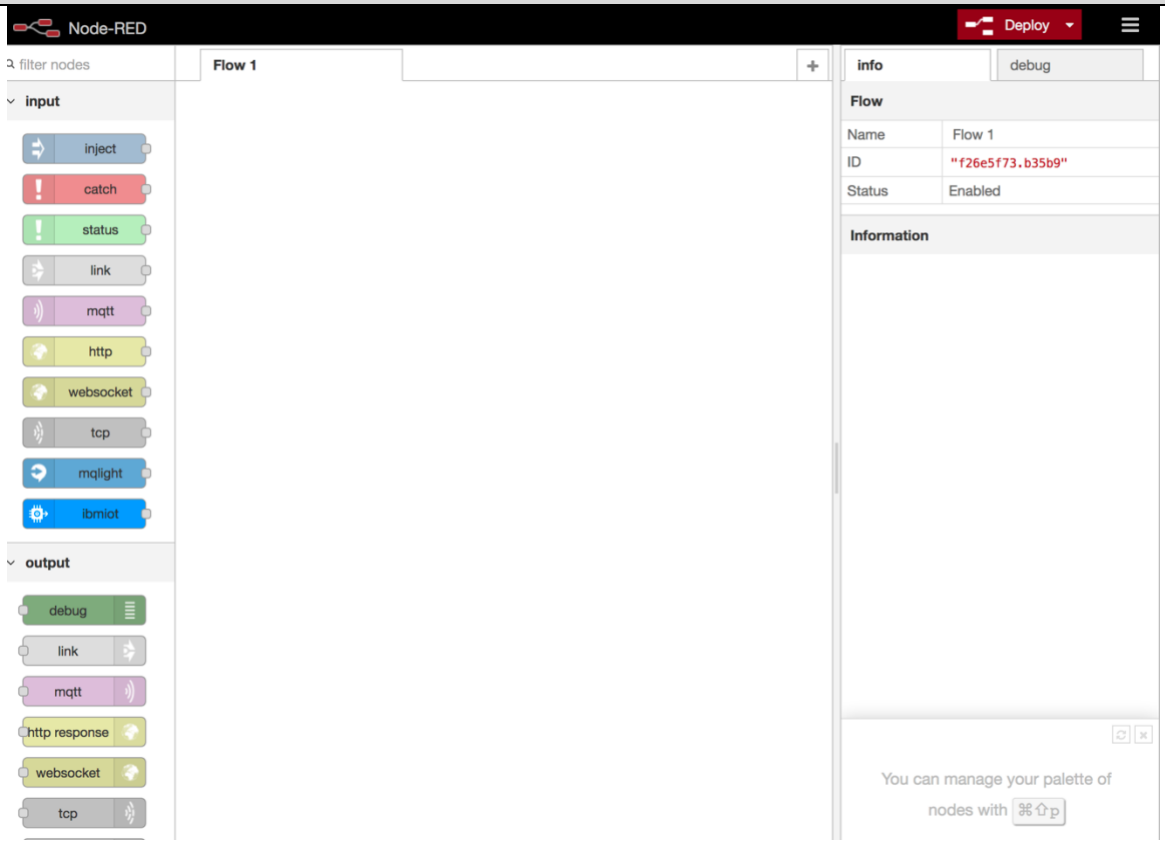



m. Click on “Go to your Node-RED flow editor”.

© Copyright IBM Corp. 2017. All rights reserved

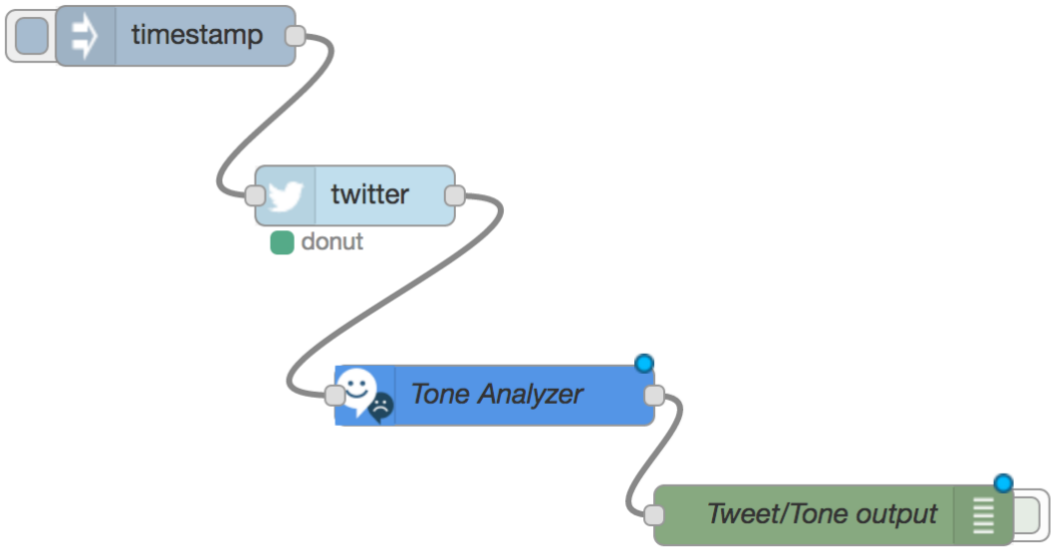
| Step | Action |
| --- | --- |
| |  |

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| |  <br><br>When you open the flow, you can see on the left all the nodes available in the palette that can contribute to a flow.<br><br>n. From the nodes on the left, drag and drop these 4 nodes into the workspace: timestamp, twitter (as an input), tone analyzer, and debug |

© Copyright IBM Corp. 2017. All rights reserved

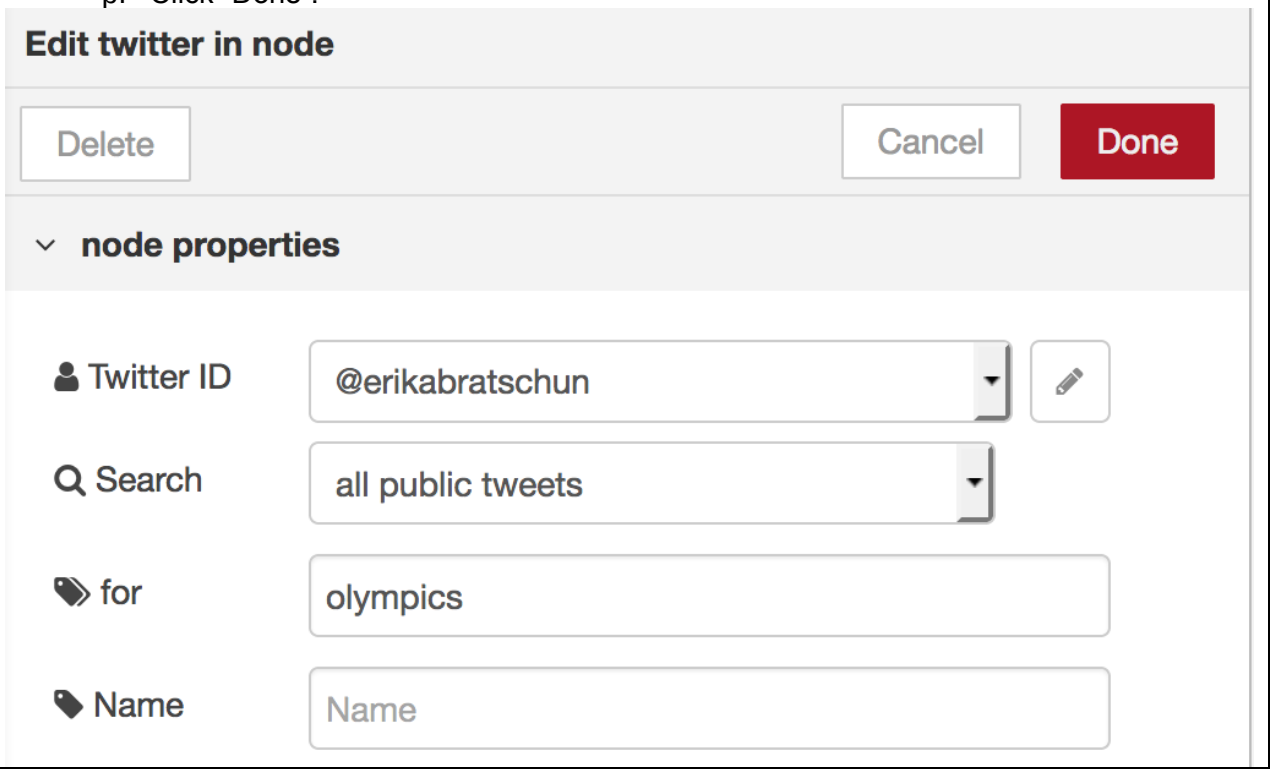
| Step | Action |
|---|---|



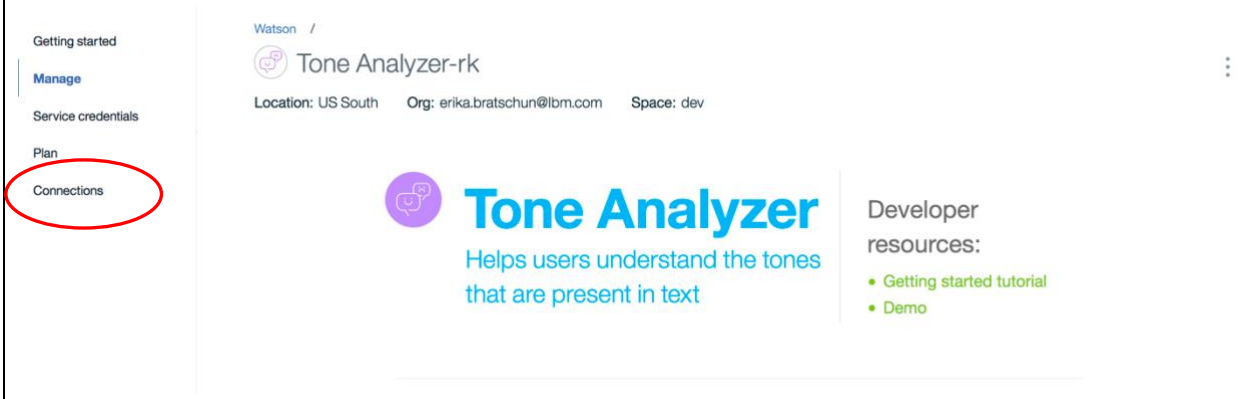
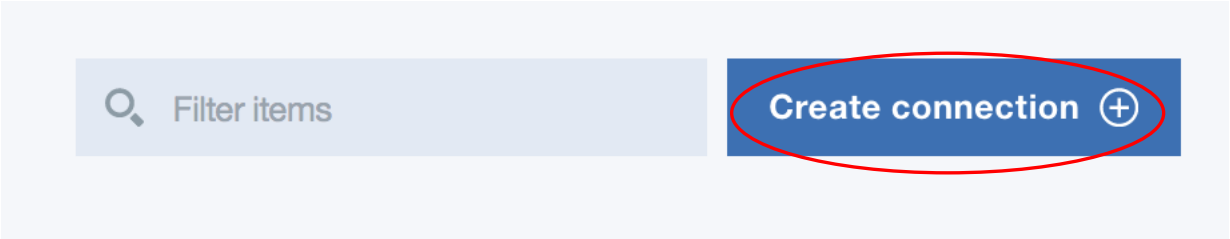

o. Double click on twitter to input your twitter credentials.

The tag is the hashtag that the service will scrape for from Twitter.

p. Click “Done”.



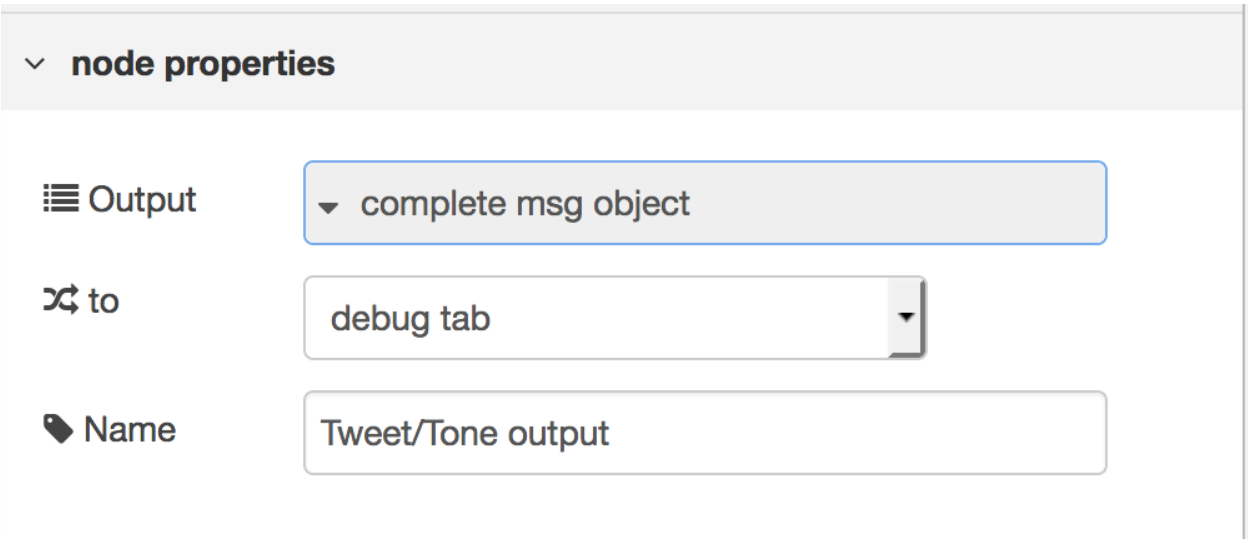

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| | q. Open a new tab and return to Tone Analyzer from IBM Cloud<br><br>r. Click “Connections”.<br><br>  <br><br><br>s. Click “Create Connection”.<br><br>  <br><br><br>t. Select your Cloud Foundry application (Node.js generated from Node-Red) and click “Connect”.<br><br>Your application will now show up as a connected application<br><br>u. Return to Node-RED flow<br><br>v. Double click on the Tone Analyzer node |

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
| --- | --- |
| | **node properties**<br><br>Name: Tone Analyzer<br>Method: General Tone<br>version_date: Dominant Tone<br>Sentences: True<br>Content type: Text<br>Input Text Language: English<br><br>w. Click on “Port Labels”, and copy “version=2016-05-19” into Inputs<br><br>**port labels**<br><br>Inputs<br>1. version=2016-05-19<br>Outputs<br>1. none<br><br>x. Click “Done”. |

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| | y. Double click on the debug node.<br>z. Change the output to “complete msg object”.<br>  <br><br>aa. Connect the nodes by clicking on the dots and drag it to the input/output of the other.<br>bb. Click “Deploy” in the top right corner.<br>cc. To view the output, click the debug tab, found right under the deploy button.<br>Tweets will begin to filter in based on the tag indicated in the twitter node. These tweets are coming in live, so as the tag is mentioned, the tweet will filter into the debug section.<br>dd. To view the tweet and tone, click on one of the tweets and follow the arrow flow shown in the example below. |

© Copyright IBM Corp. 2017. All rights reserved

| Step | Action |
|---|---|
| | 1/12/2018, 10:06:38 AM node: Tweet/Tone output<br>tweets/xiuchensism : msg : Object<br>▾ object<br>topic: "tweets/xiuchensism"<br>payload: "RT @Olympics: True sportsmanship. ❤ https://t.co/O9oCsSksvq"<br>lang: "en"<br>▸ tweet: object<br>▸ location: object<br>_msgid: "faa9fbda.0460a8"<br>▾ response: object<br>▾ document_tone: object<br>▾ tones: array[2]<br>▾ 0: object<br>score: 0.862763<br>tone_id: "joy"<br>tone_name: "Joy"<br>▾ 1: object<br>score: 0.986725<br>tone_id: "confident"<br>tone_name: "Confident"<br>▸ sentences_tone: array[2]<br>Depending on the tweet, you can see that this example shows 2 tones: joy and confidence.<br><br>Test out the tone analyzer with other tags!! |

© Copyright IBM Corp. 2017. All rights reserved

## Lab Summary

To summarize what we just covered in this lab:

1. Sign up for IBM Cloud
2. Navigate the IBM Cloud Platform
3. Provision a Service
4. Launch Watson Personality Insights
5. Launch Watson Conversation
6. Deploy a Cloud Foundry app using Node-RED Starter

© Copyright IBM Corp. 2017. All rights reserved