IBM Cloud

Cloud Basics

Navigating IBM Cloud

Lab Guide

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

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

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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

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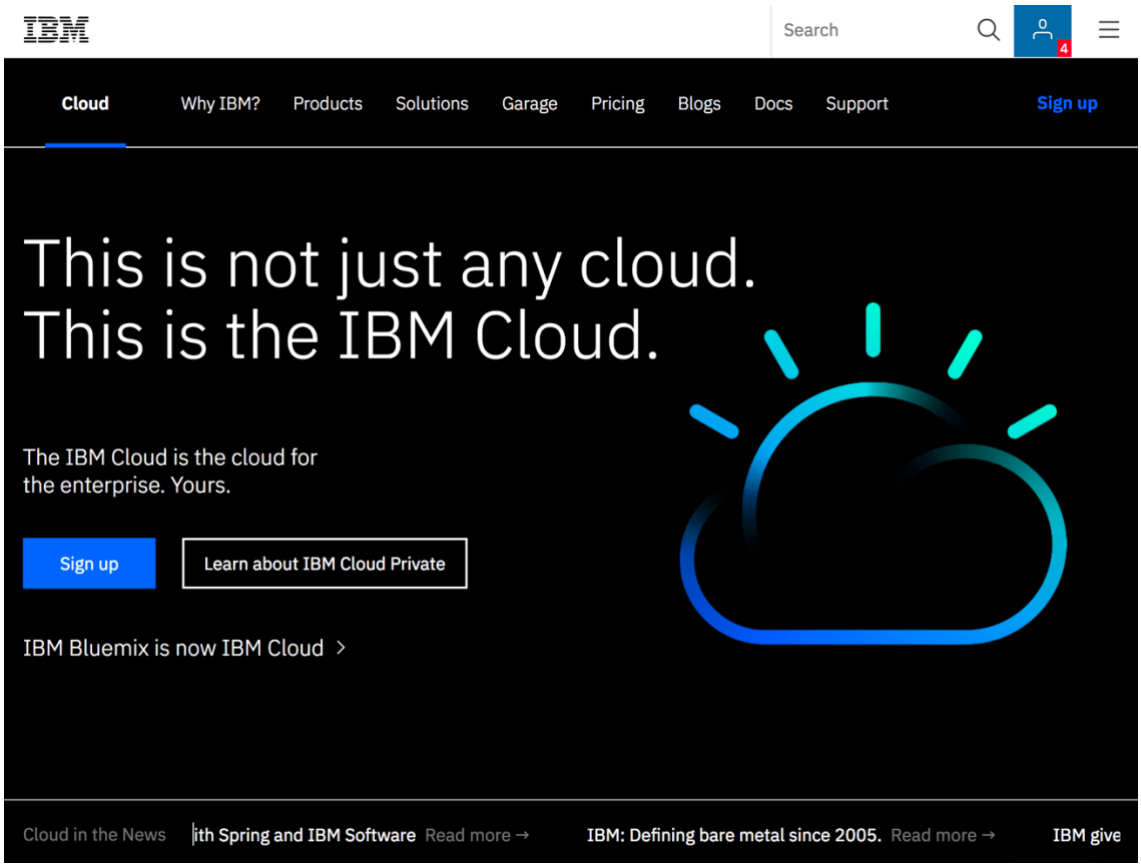
Lab Instructions

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

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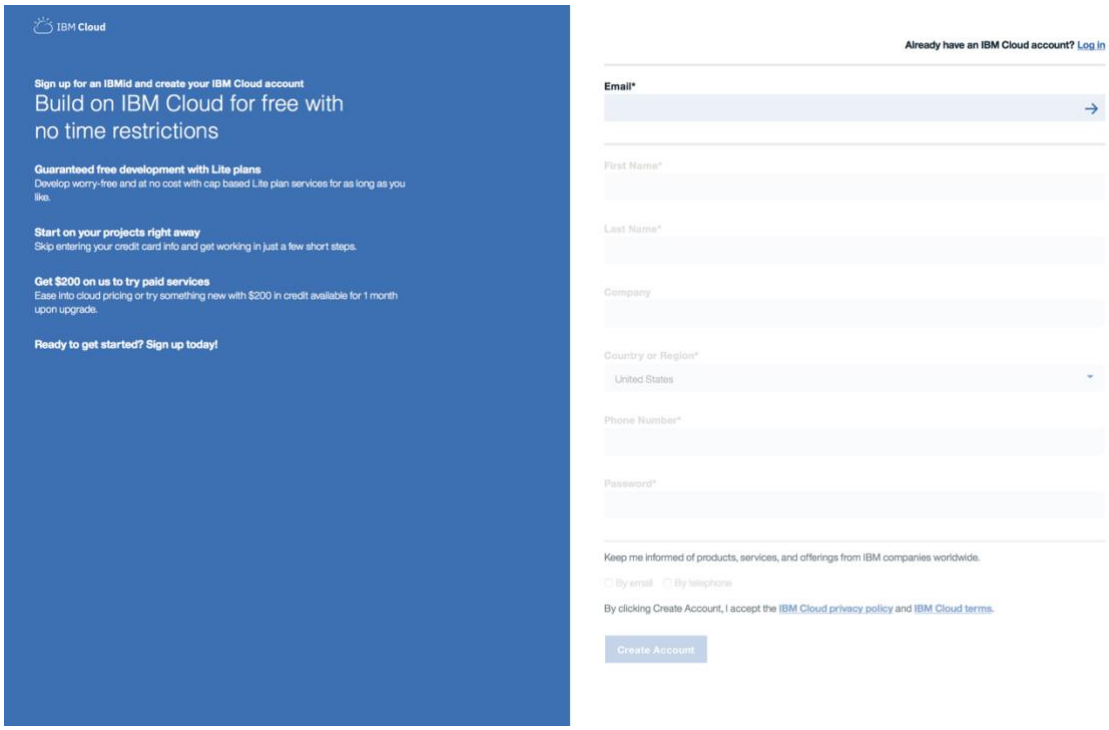
Step	Action
	d. Fill in the required boxes. e. Click “Create Account”. 

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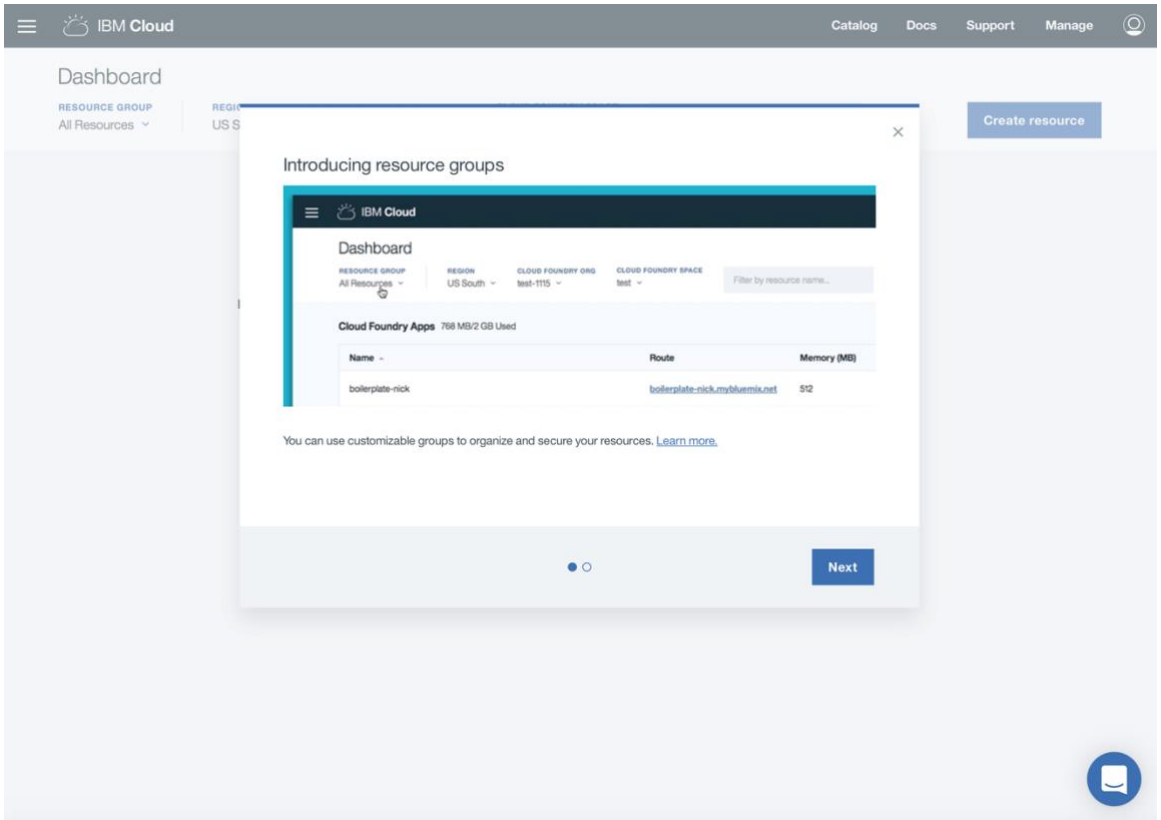
Step	Action
2	**<u>Navigating the IBM Cloud Platform</u>** a. Log into IBM Cloud at https://console.bluemix.net/dashboard/apps/ If this is the first time you are using IBM Cloud (formerly Bluemix), an introduction window will appear, feel free to read it. Otherwise, click through. b. Click “Next”, Click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

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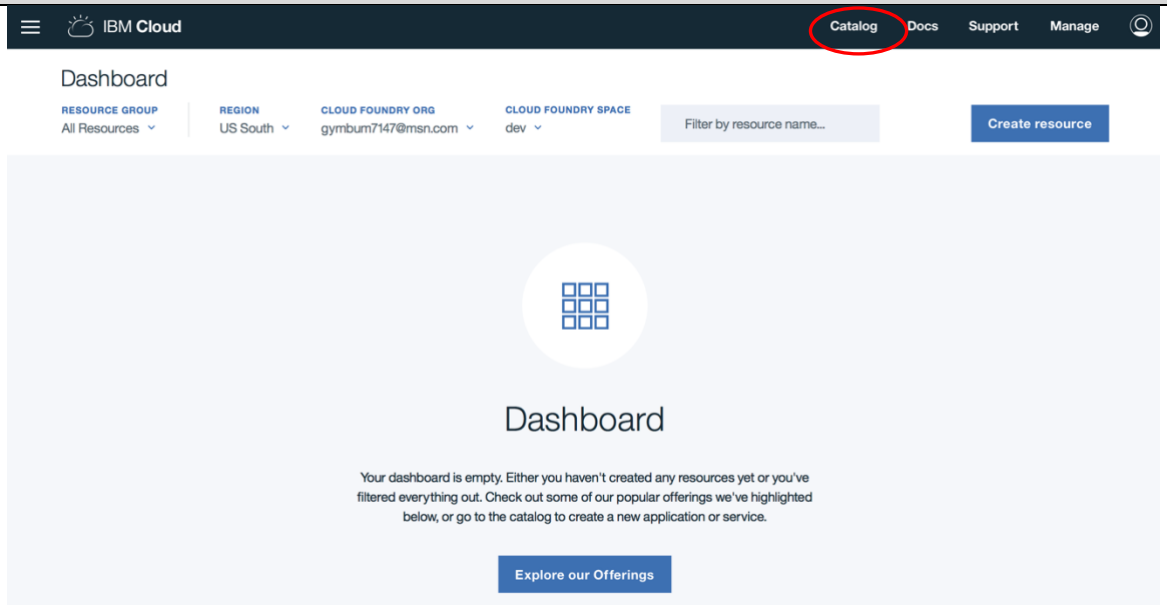
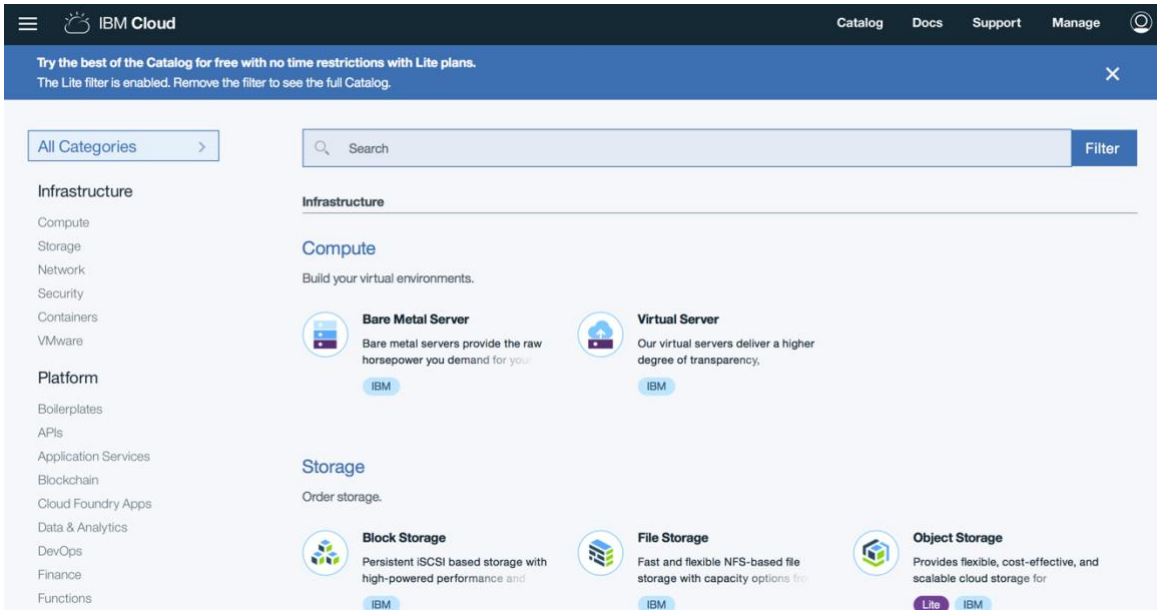
Step	Action
	 e. The Catalog is a compilation of the services offered on the IBM Cloud. 

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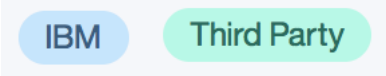
Step	Action
	As you look around the catalog, there are a few places to observe. The page is laid out for simple navigation. We already selected the Catalog button to open the Catalog. The Docs link provides details on each of the services. We will touch on this when we initialize our service here in 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. 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. 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.  Going along the same navigation bar as we found the catalog, we can see docs, support and manage. g. Click on “Docs”. 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.

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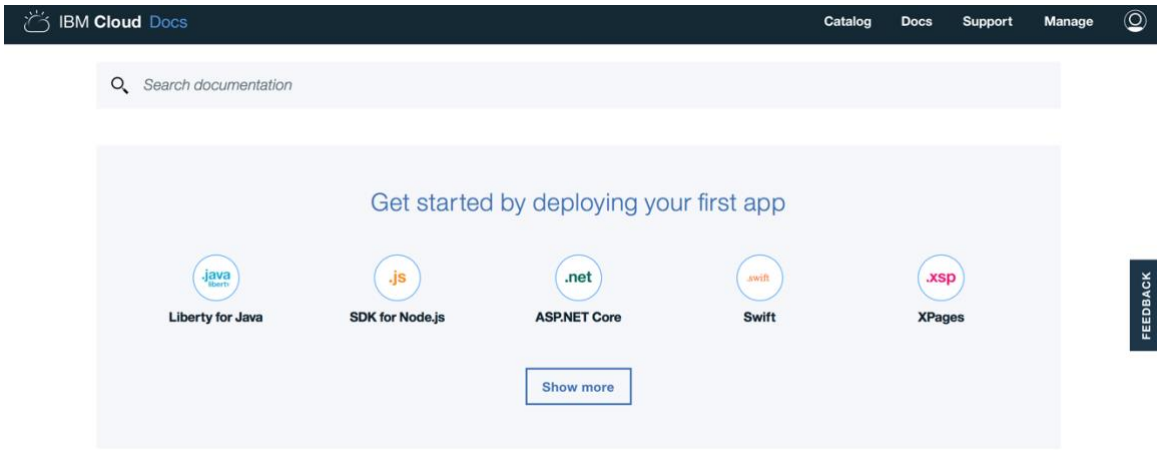
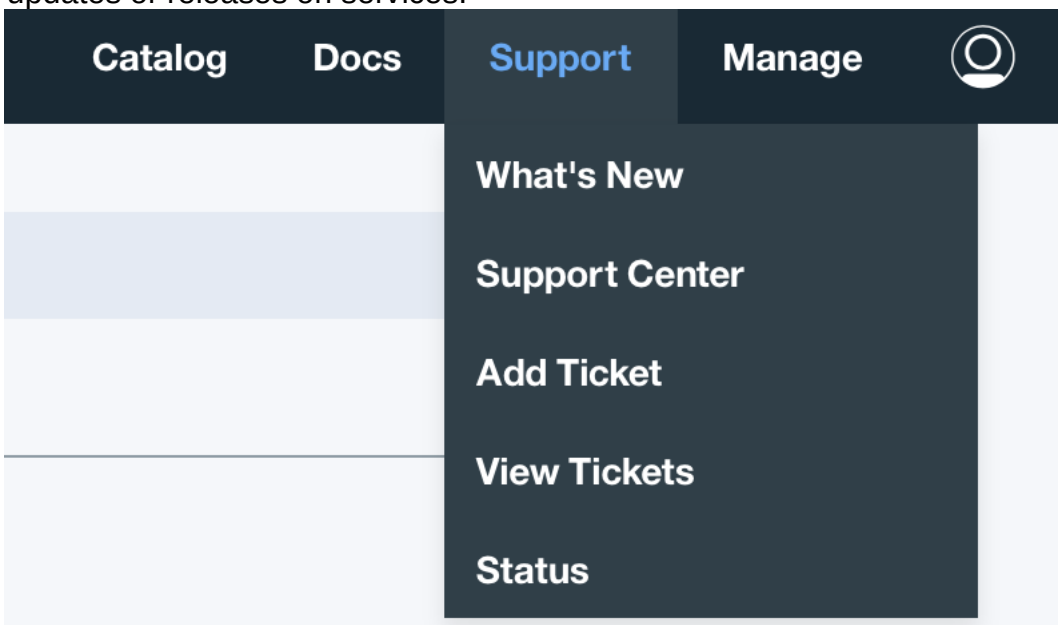


h. Click on “Support”.

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.



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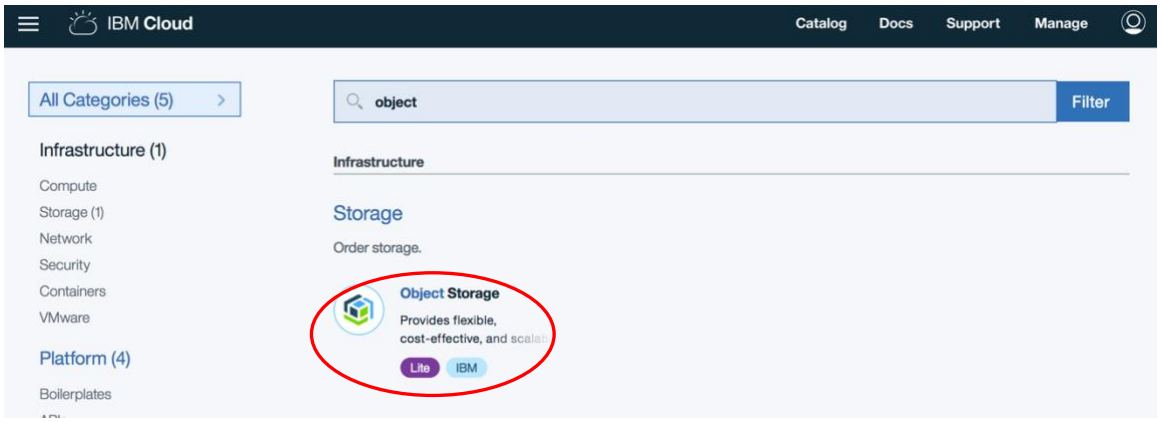
Step	Action
	i. Click on “Manage”. Manage is where you can keep track of your own account, billing and usage and security. Within the account tab, you can monitor users, groups, organizations, etc. j. Click on the head icon. Finally, the head icon will bring you to your personal account page. This is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

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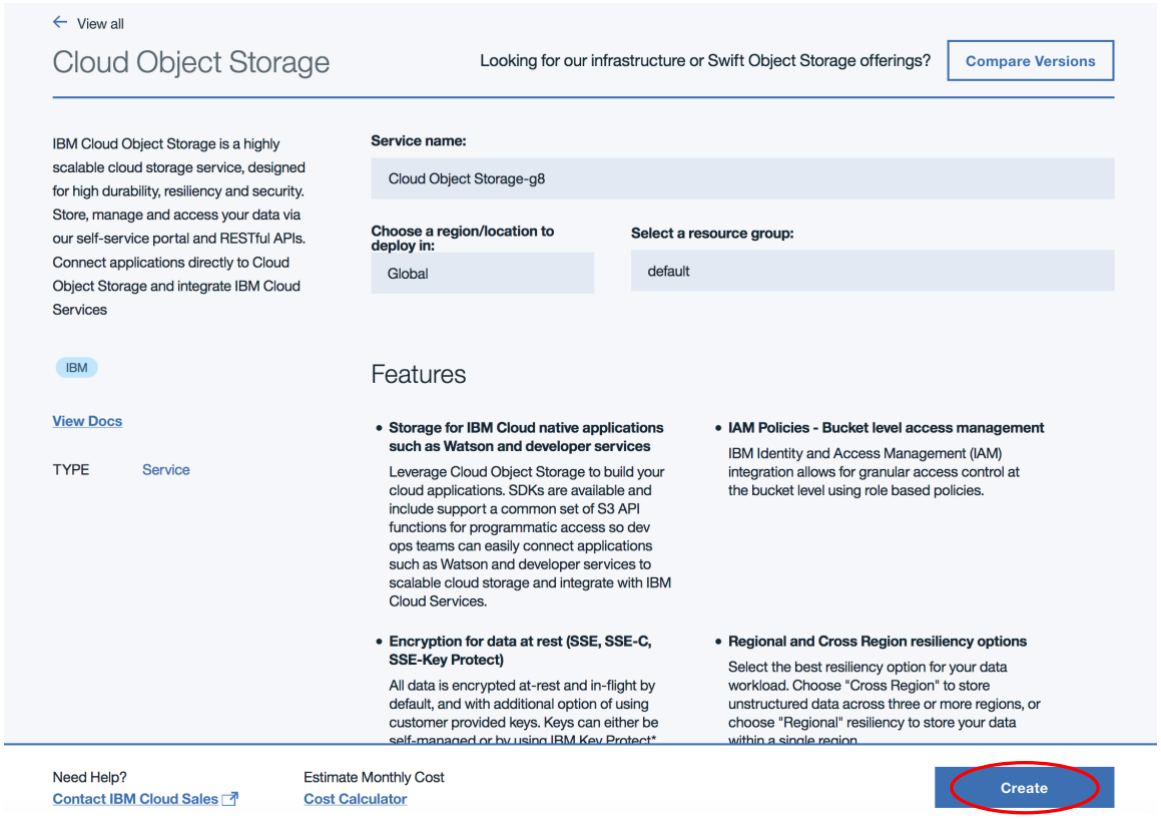
Step	Action
	 f. Return to your IBM Cloud page by clicking on the logo in the top left corner.
4	**<u>Launch Watson Personality Insights</u>** a. Let's create our own service. b. Click on "Catalog". c. Type into the search bar: "Watson". Alternative way: In the Categories sections, select Watson, Personality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

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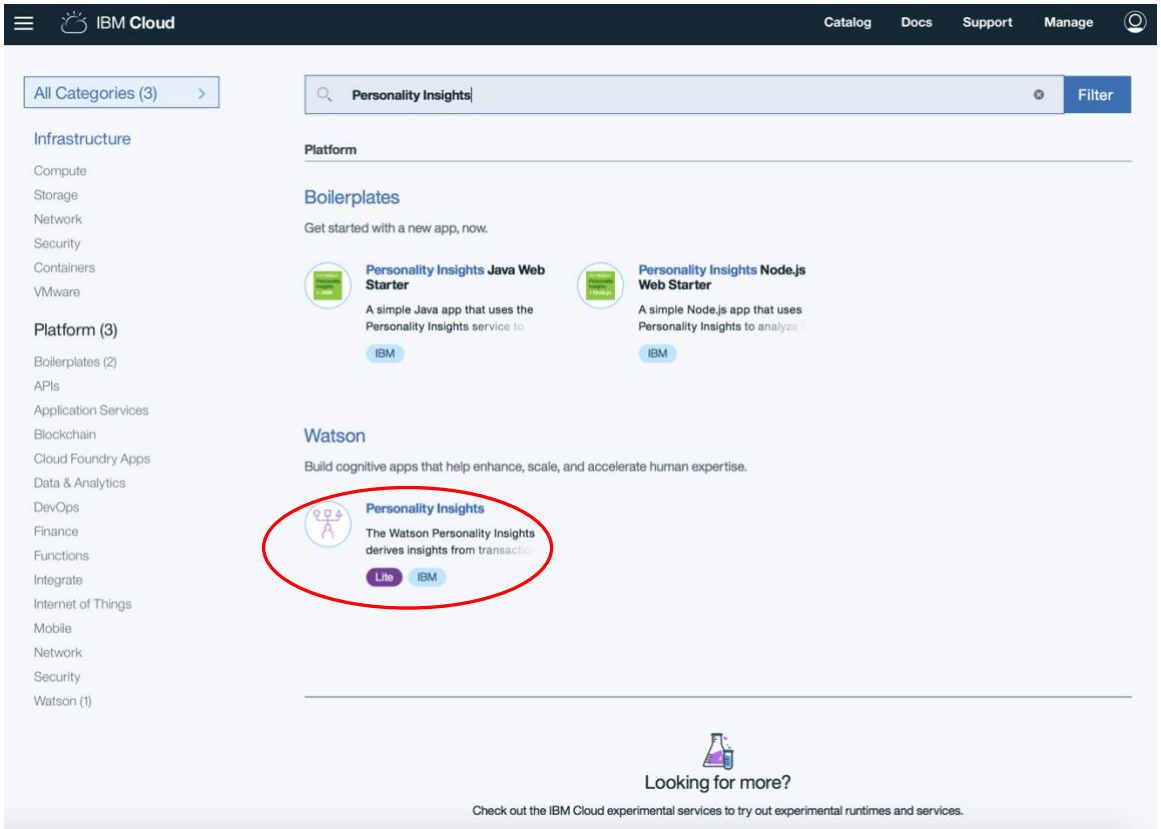
Step	Action
	d. Click on “Personality Insights” under the Watson section.  Watson Personality Insights predicts personality characteristics, needs and values through written text. Understand your customers’ habits and preferences on an individual level, and at scale. We see it used quite frequently to 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. 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)

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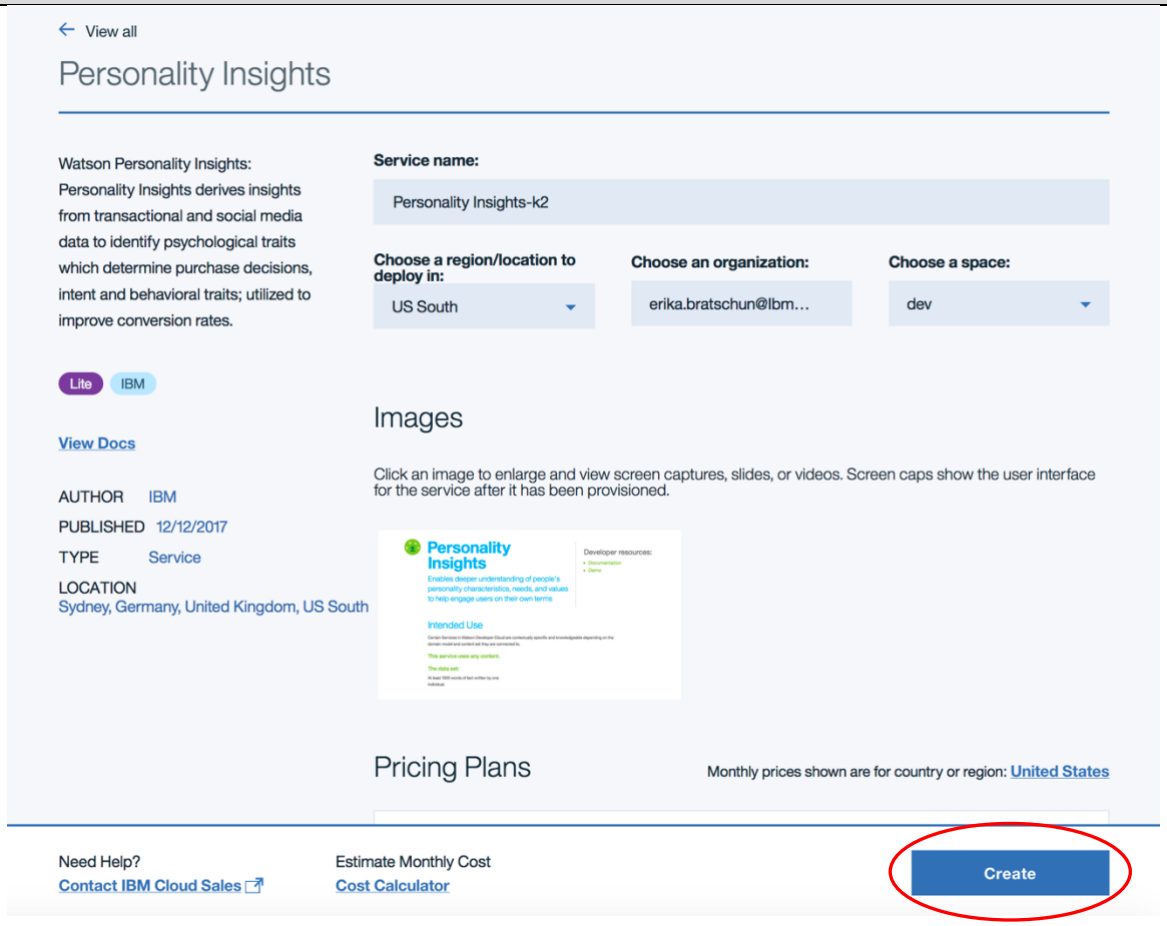
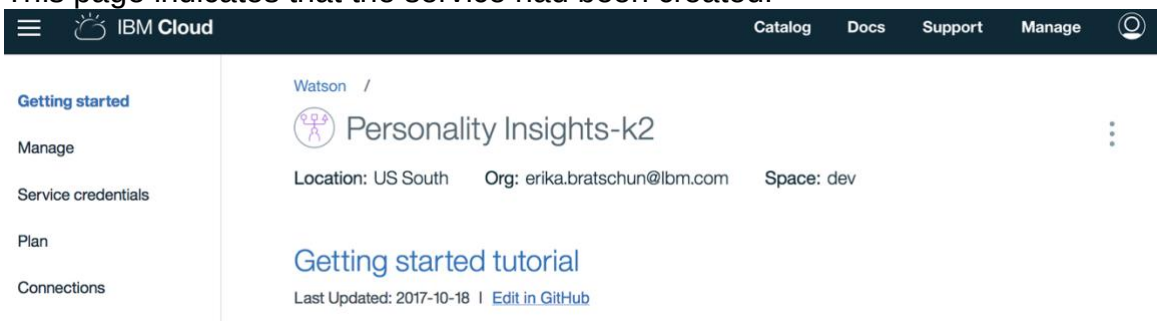
Step	Action
	 f. The “Free” plan is selected by default. g. Select “Create” to deploy the Personality Insights Service. This page indicates that the service had been created. 

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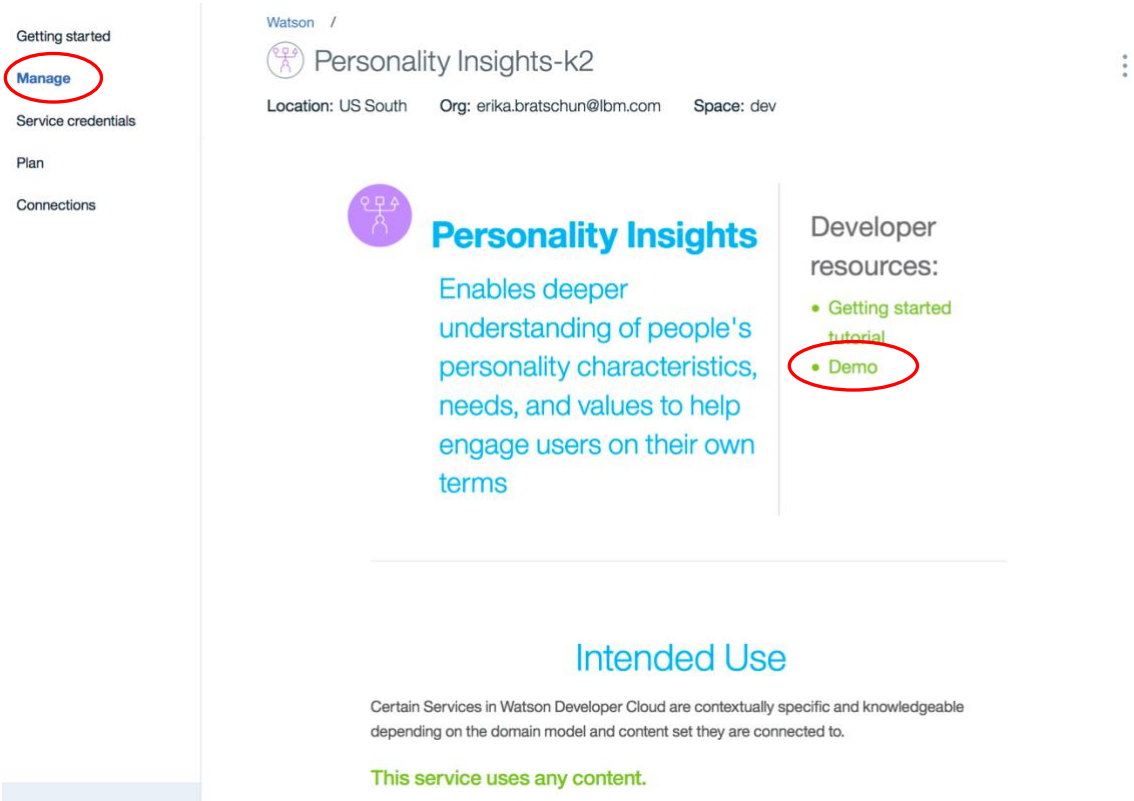
Step	Action
	h. Click on “Manage”. i. Click on “Demo”.  j. The default demo offers a few twitter handles to analyze their personalities based on tweets. You can also put in your own handle if you’d like. Other options include body of text. k. Click on one of the Twitter handles. (@faridyu is used below)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

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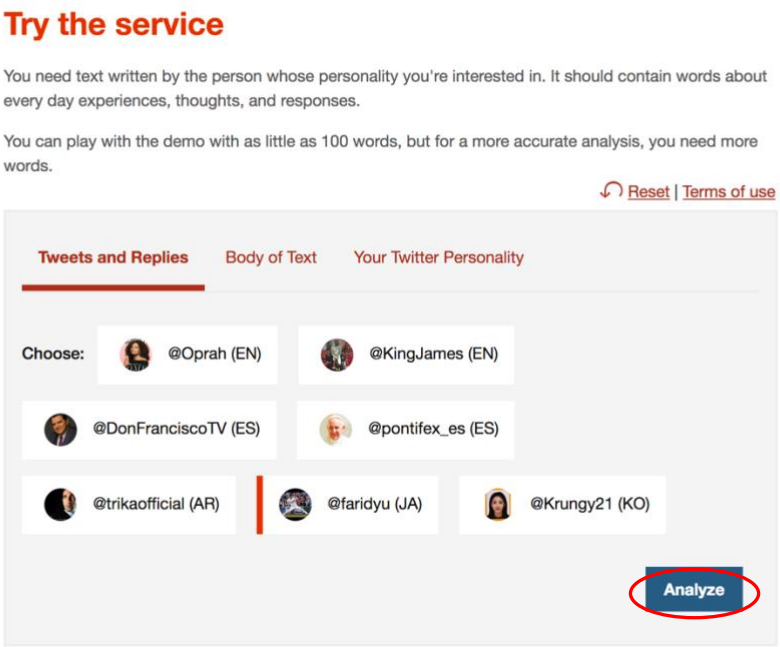
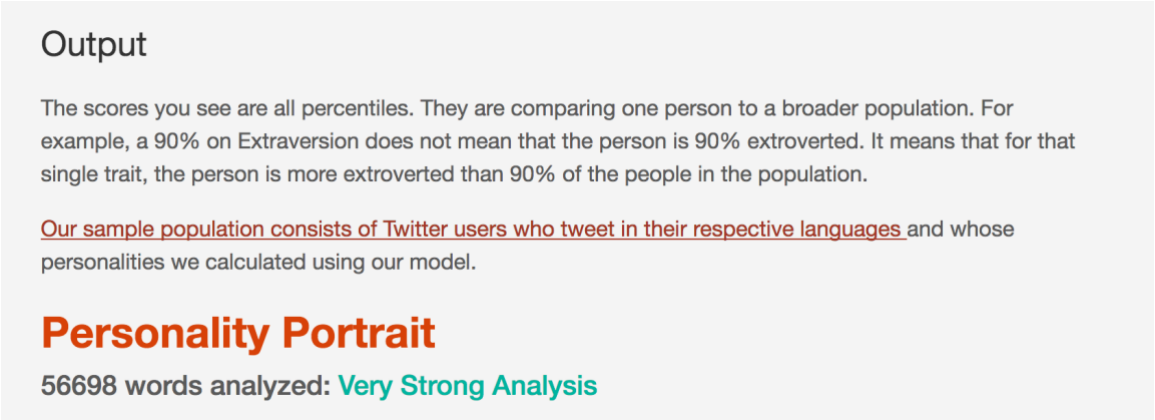
Step	Action
	 m. Scroll down to the output. 

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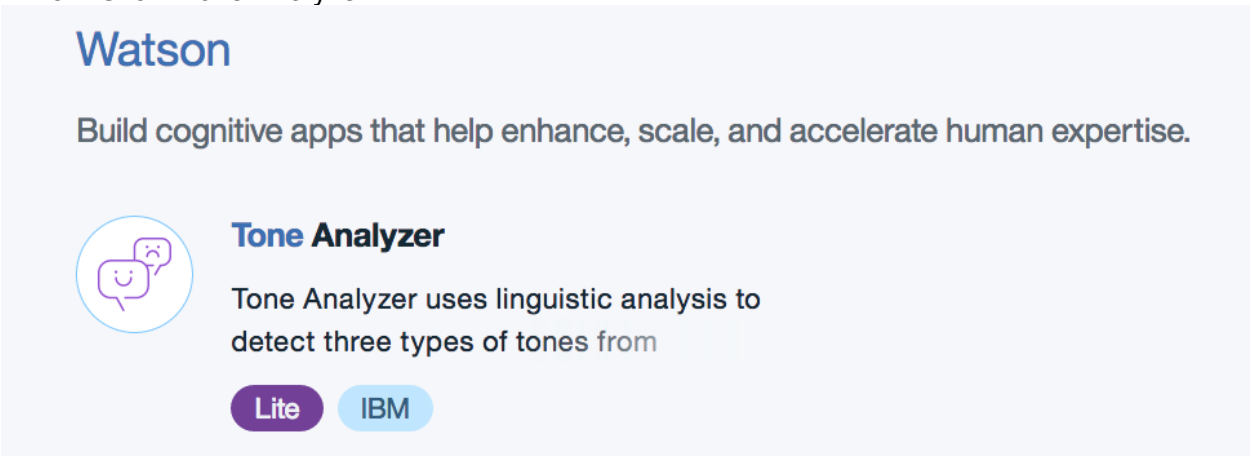
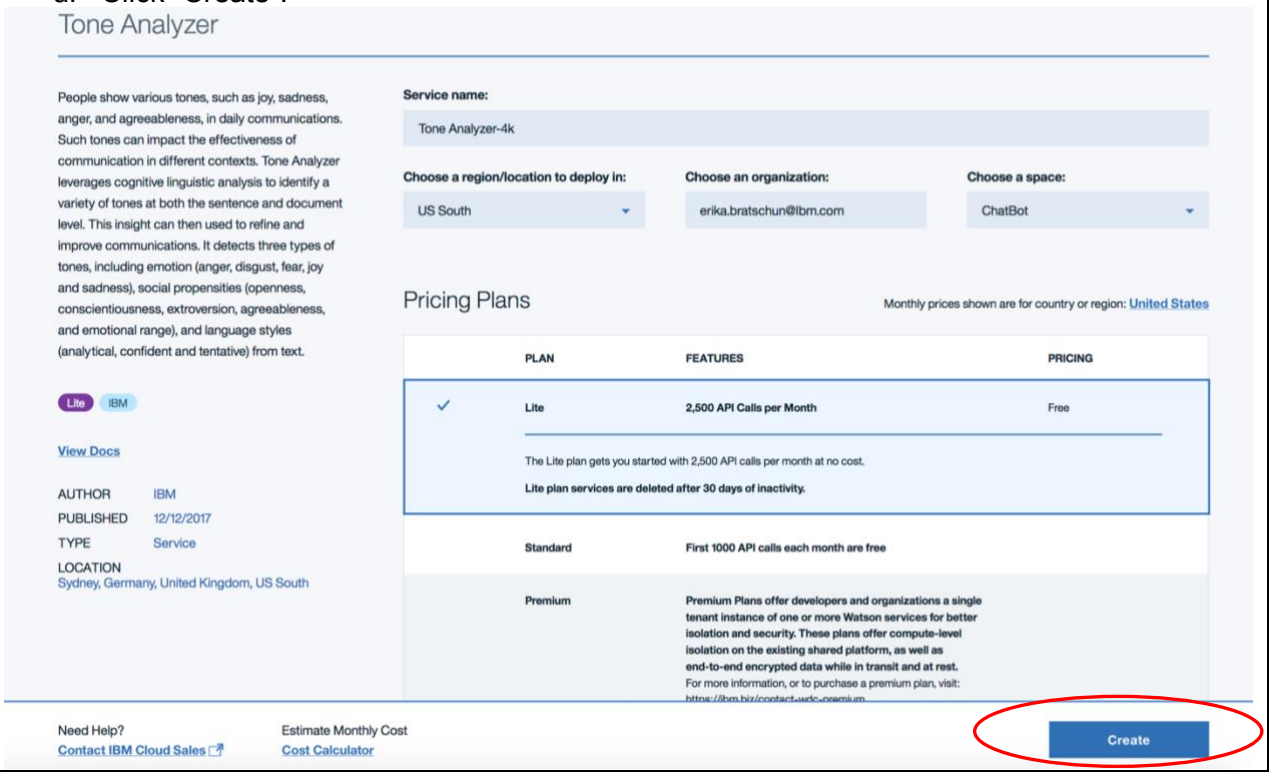
Step	Action
5	**<u>Launch Tone Analyzer</u>** a. Return to the Catalog. b. This time in the search bar, type in “Tone Analyzer”. c. Click “Tone Analyzer”  d. Click “Create”. 

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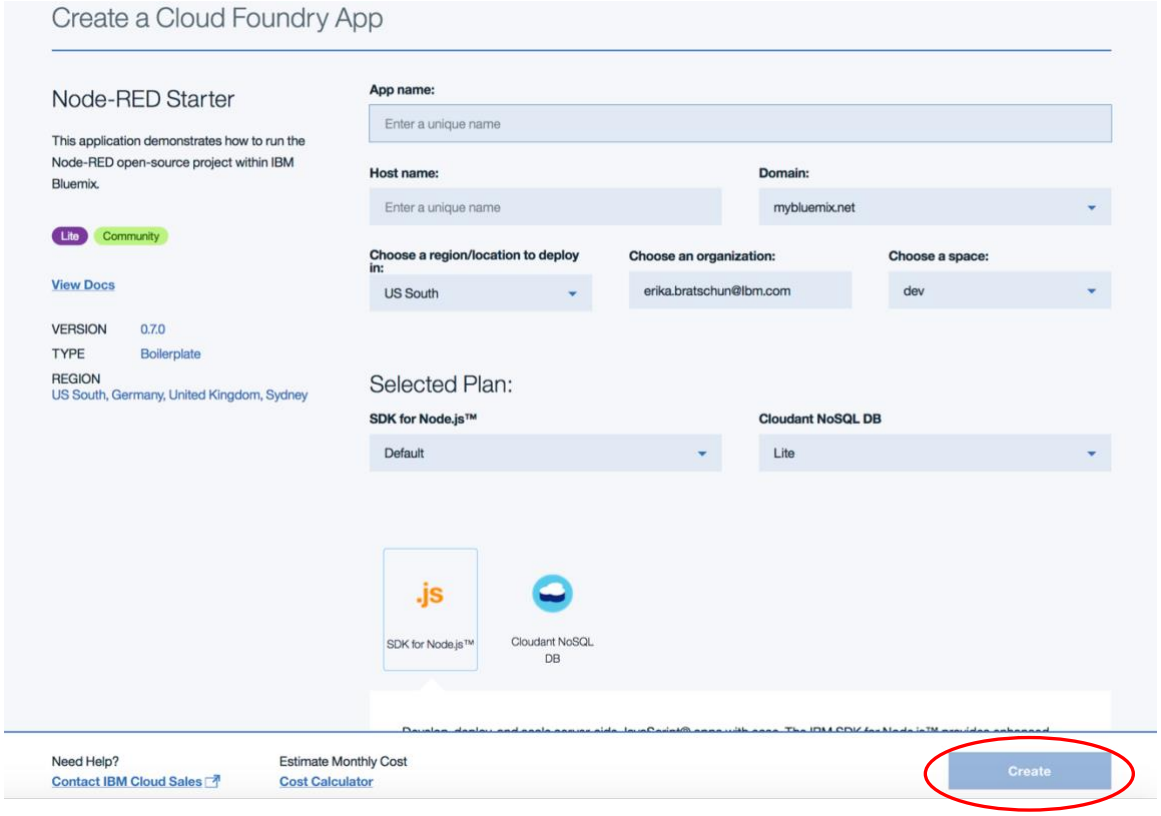
Step	Action
6	**<u>Create a Node-RED Flow</u>** a. Return to the Catalog. b. This time in the search bar, type in “Node-Red”. Node-Red Starter falls under the boilerplates section of the catalog. Node-RED Starter provides a flow editor to make it easy to wire devices together, APIS, and online services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

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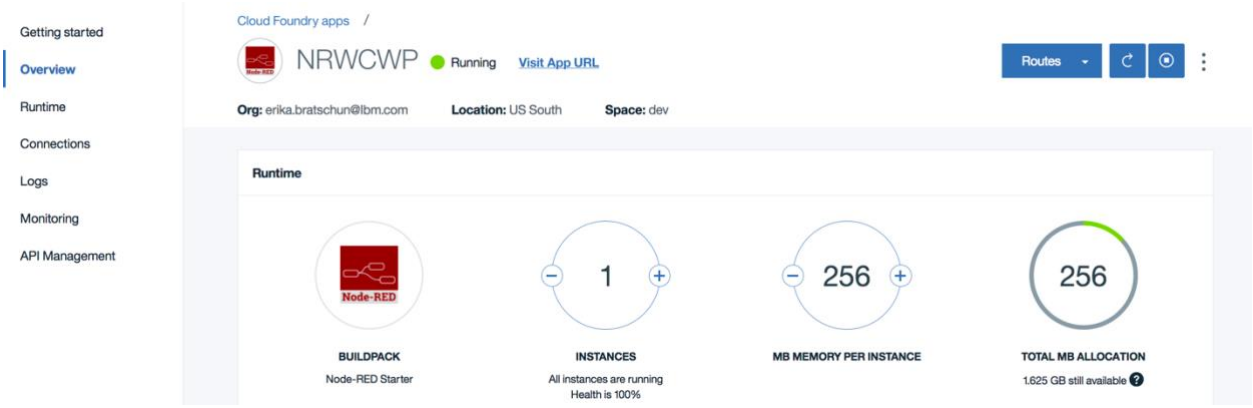
Step	Action
	f. The app will take a few minutes to start, as indicated by the icon next to the apps name. g. Click “Connections”. Before we can add service to the flow, we need to make sure they are connected.  h. Click “Create Connection”. A list of all your running application that can be connected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

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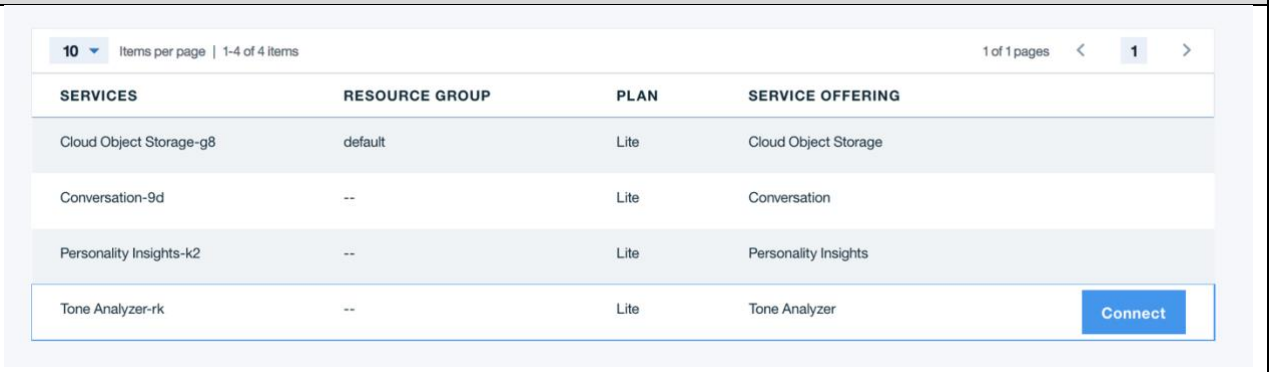
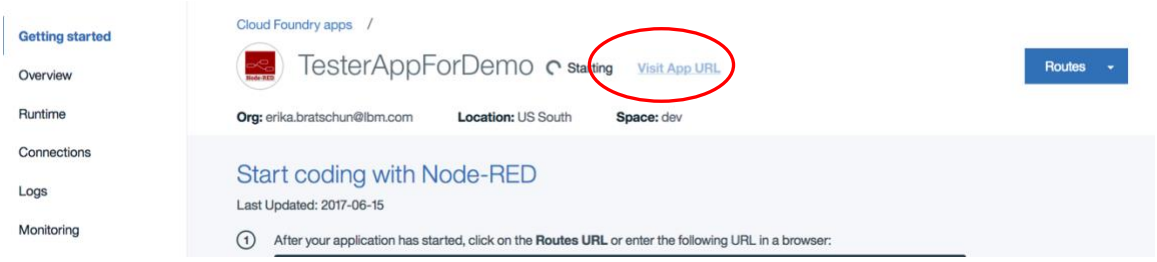
Step	Action



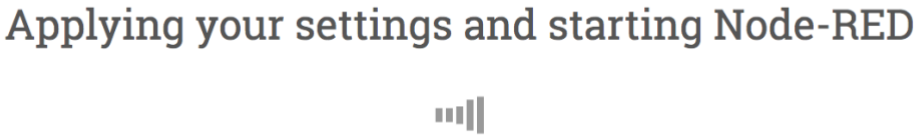
j. Click “Visit App URL”.



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”.

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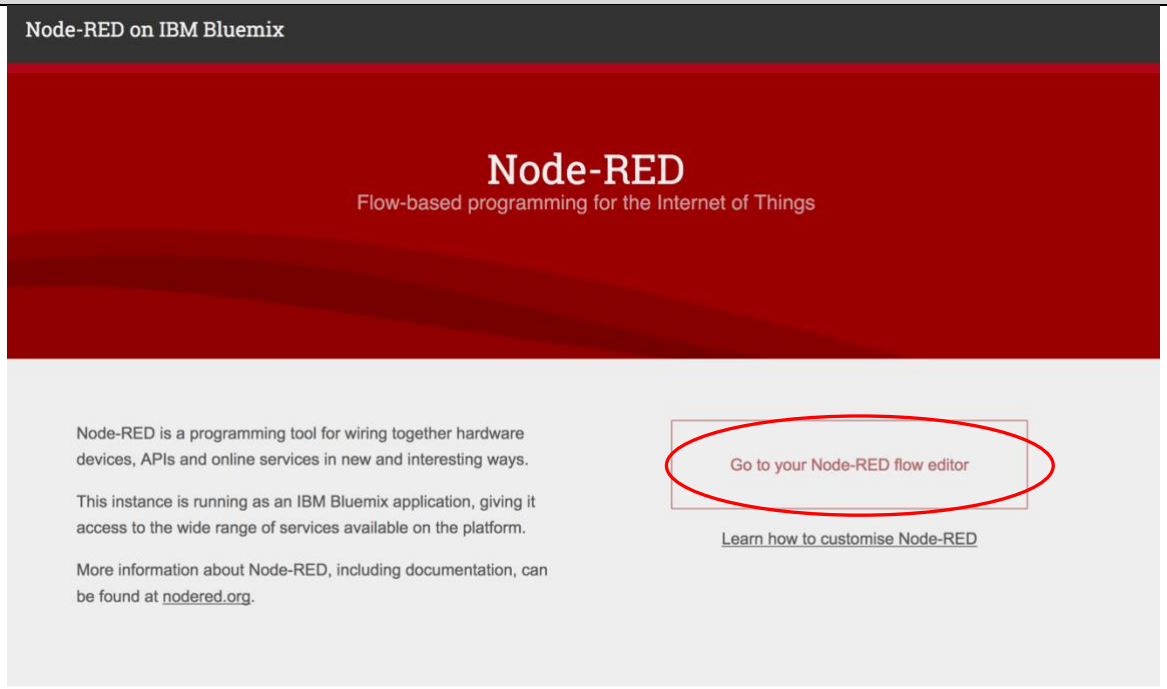
Step	Action
	

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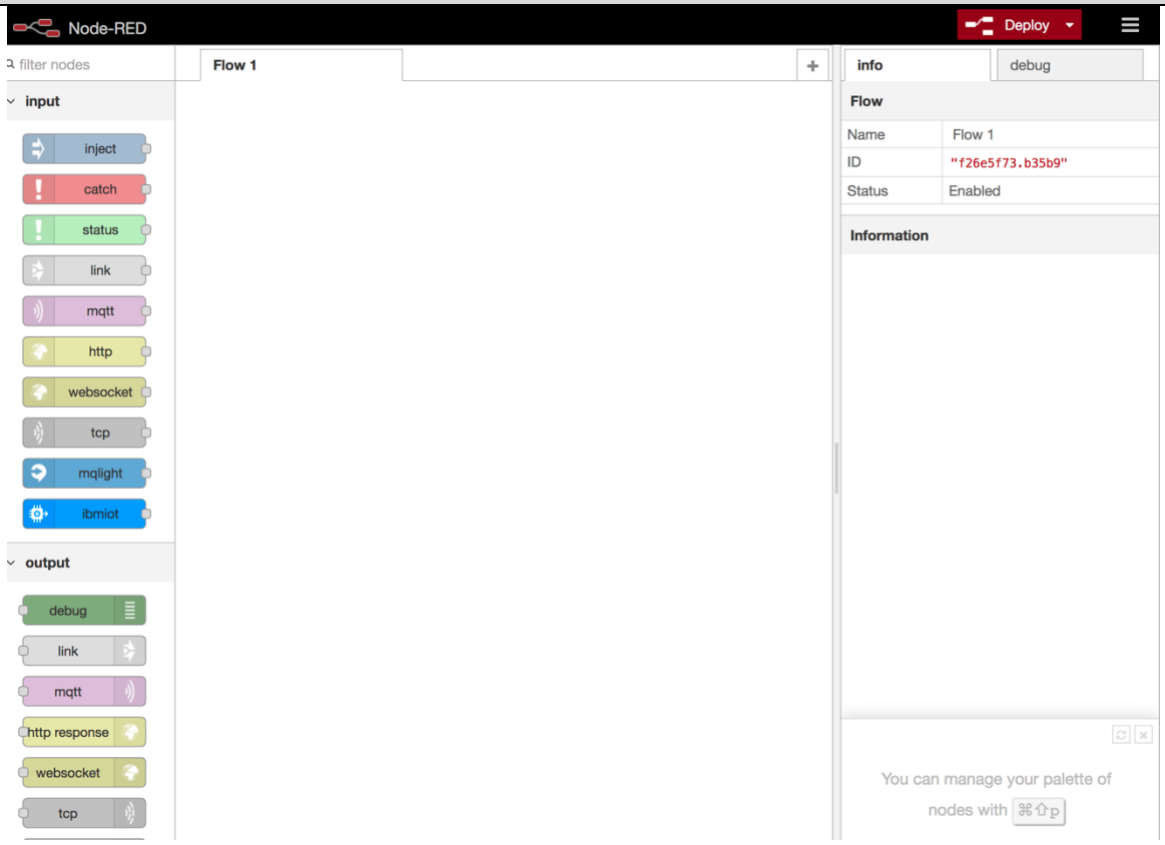
Step	Action
	 When you open the flow, you can see on the left all the nodes available in the palette that can contribute to a flow. n. From the nodes on the left, drag and drop these 4 nodes into the workspace: inject, twitter (as an input), tone analyzer, and debug

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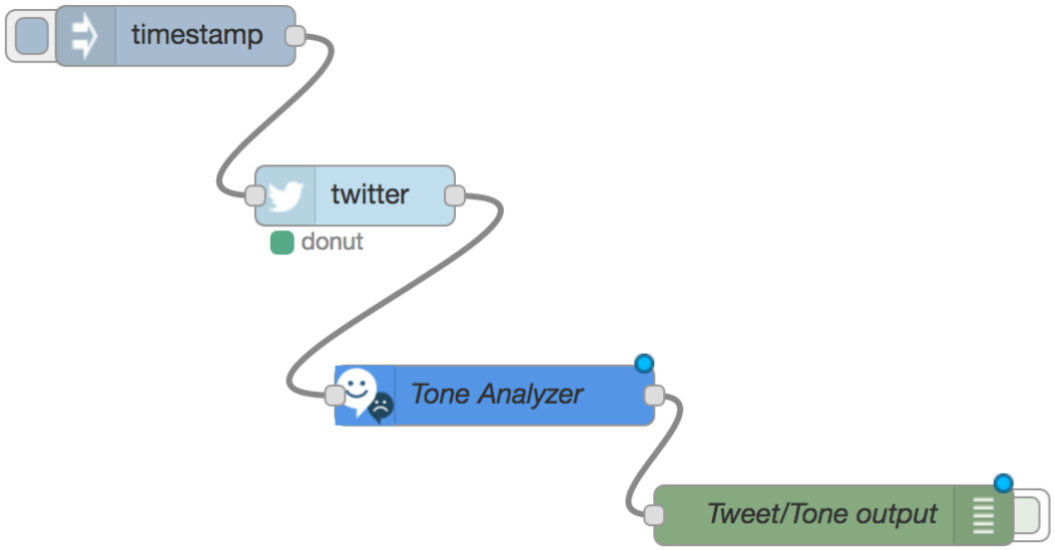
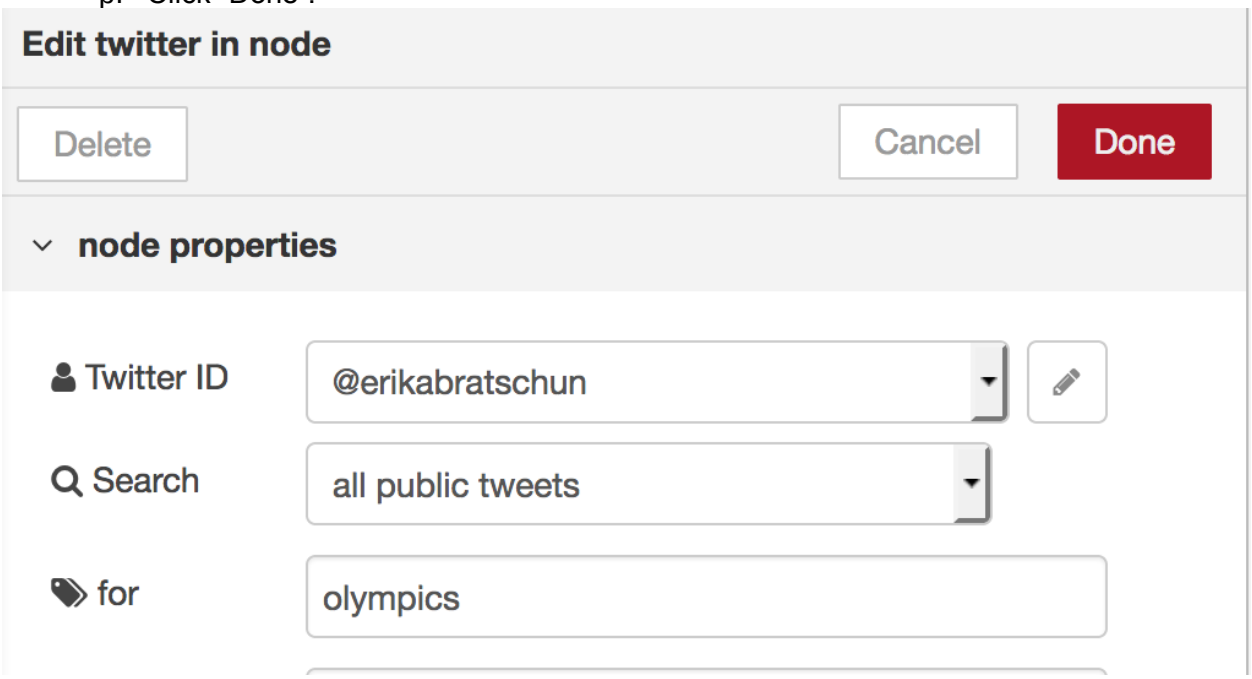
Step	Action



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”.



q. Open a new tab and return to Tone Analyzer from IBM Cloud

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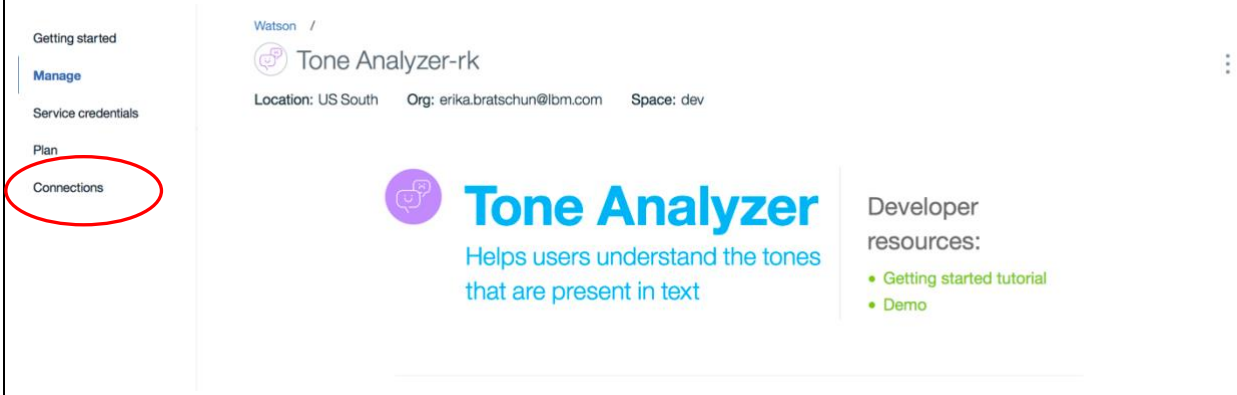
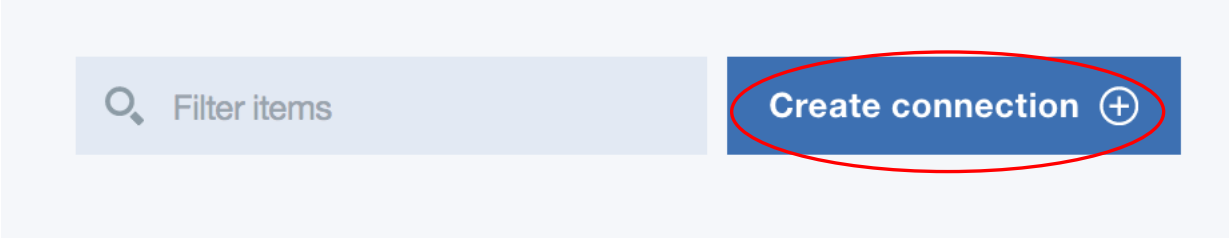
Step	Action
	r. Click “Connections”.  s. Click “Create Connection”.  t. Select your Cloud Foundry application (Node.js generated from Node-Red) and click “Connect”. Your application will now show up as a connected application u. Return to Node-RED flow v. Double click on the Tone Analyzer node

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

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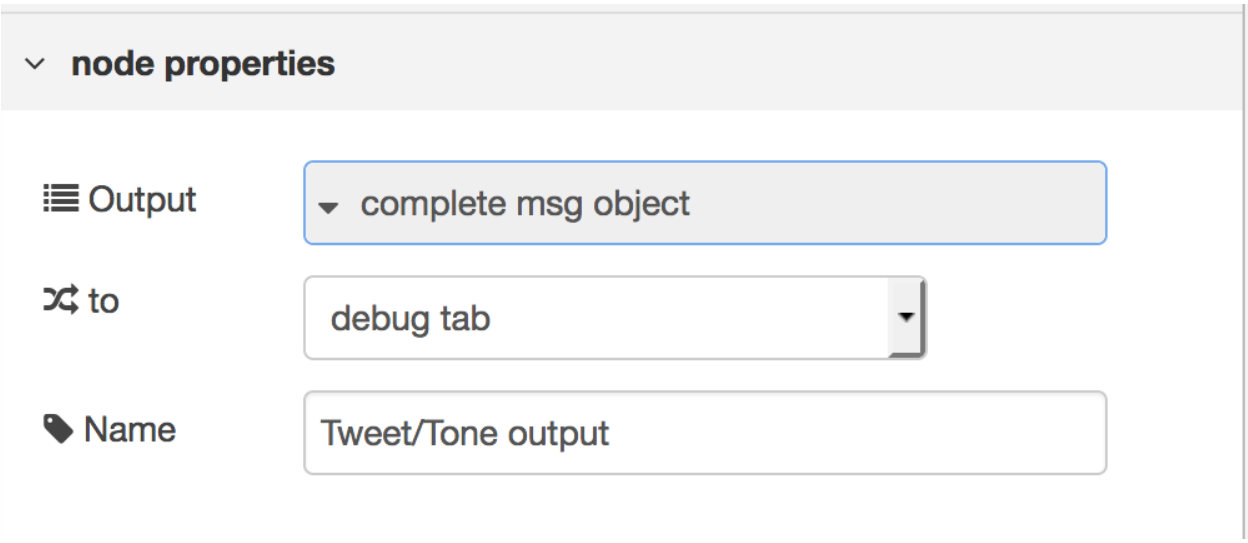
Step	Action
	x. Click “Done”. y. Double click on the debug node. z. Change the output to “complete msg object”.  aa. Connect the nodes by clicking on the dots and drag it to the input/output of the other. bb. Click “Deploy” in the top right corner. cc. To view the output, click the debug tab, found right under the deploy button. 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. dd. To view the tweet and tone, click on one of the tweets and follow the arrow flow shown in the example below.

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

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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

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