

IBM Cloud

Cloud Basics

Navigating IBM Cloud

Lab Guide





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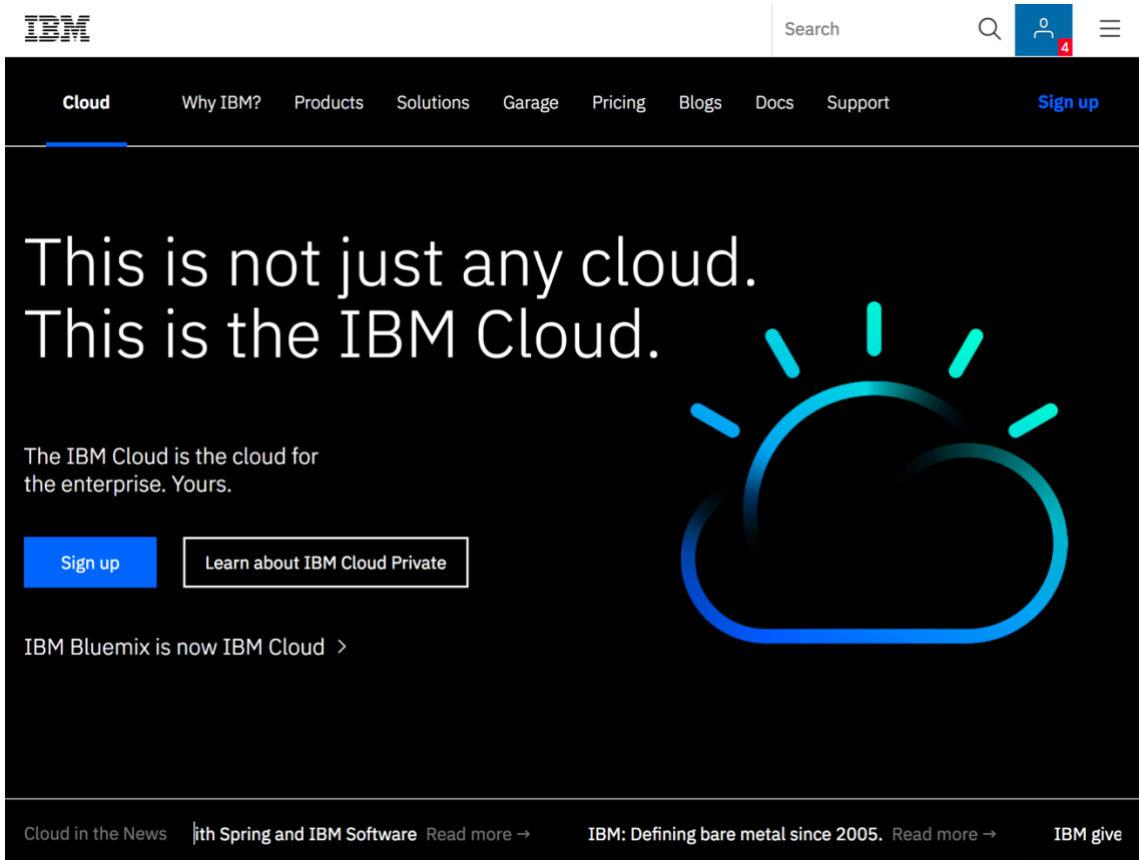
Cloud Basics

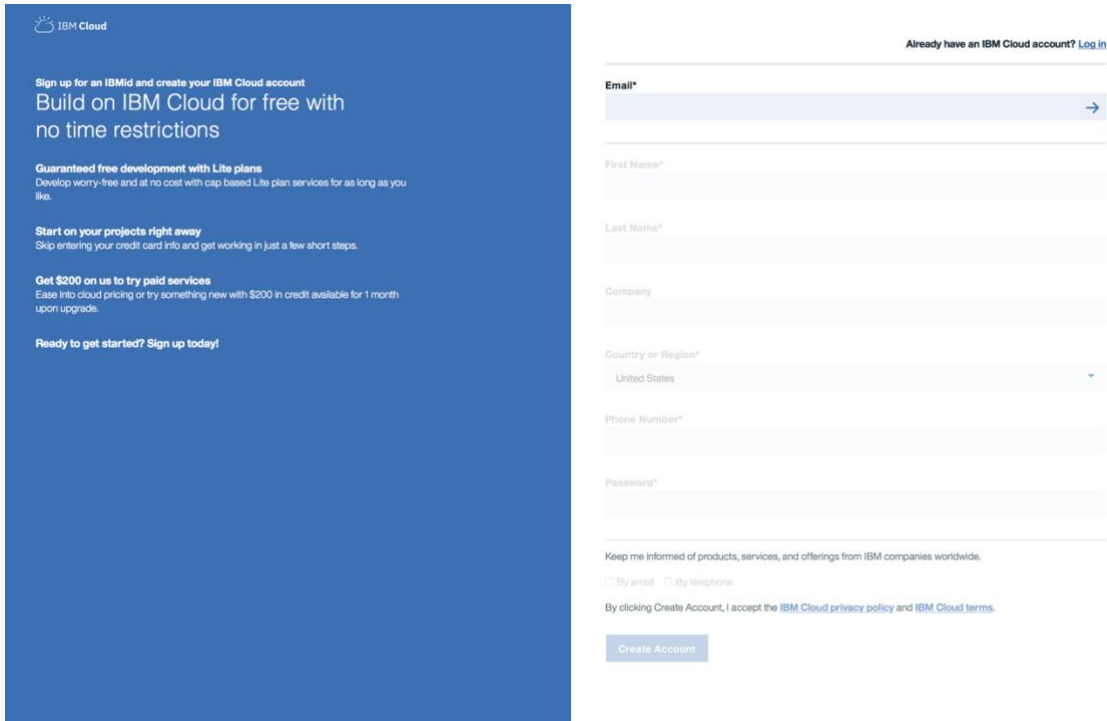
Purpose:	<p>This lab introduces the subject of Cloud. After completing the lab, you should be able to:</p> <ul style="list-style-type: none">• Understand Cloud• Navigate IBM Cloud Platform• Launch and use services on IBM Cloud
Tasks:	<p>Tasks you will complete in this lab exercise include:</p> <ul style="list-style-type: none">• 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

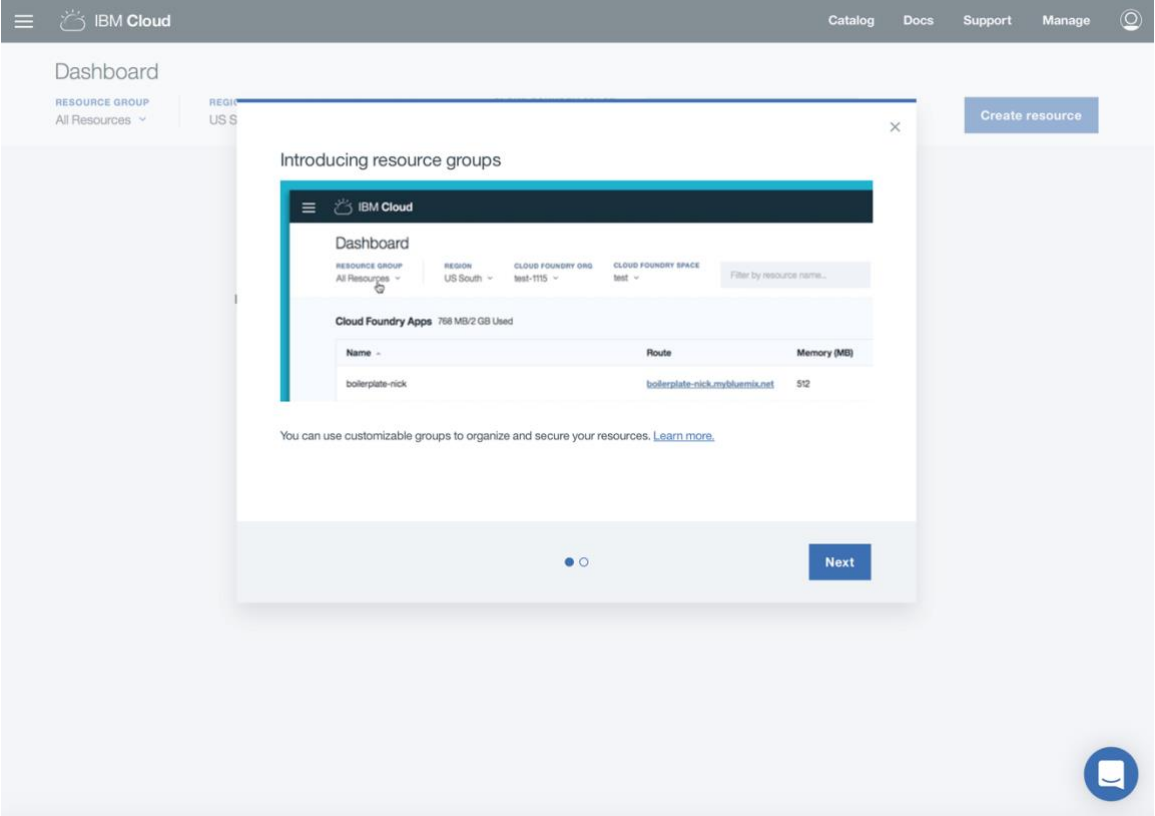
Lab Workflow Overview

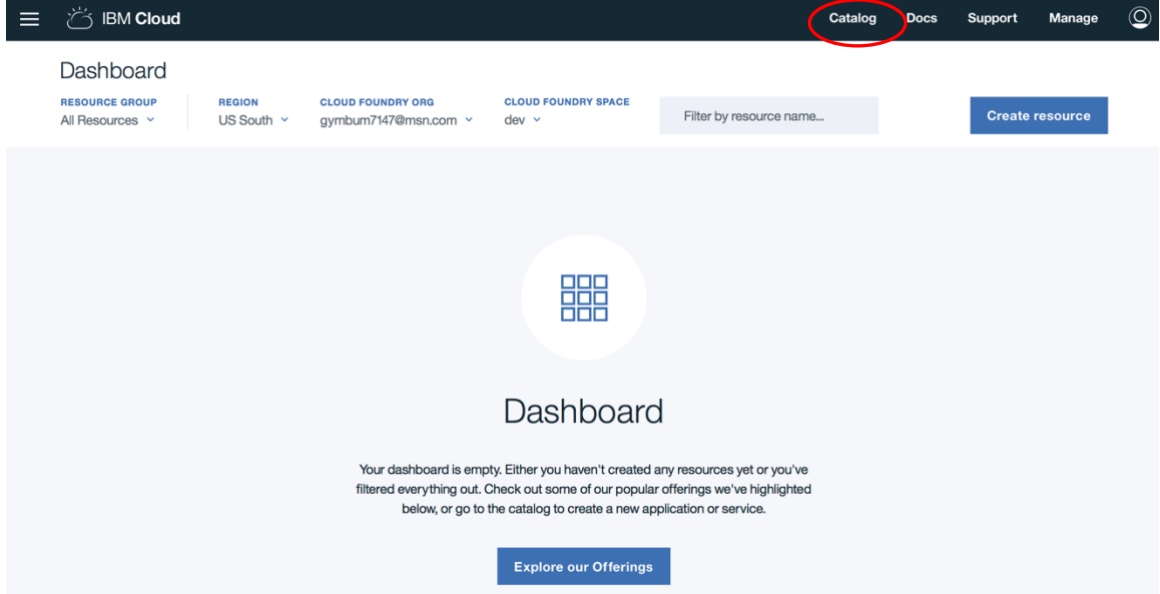
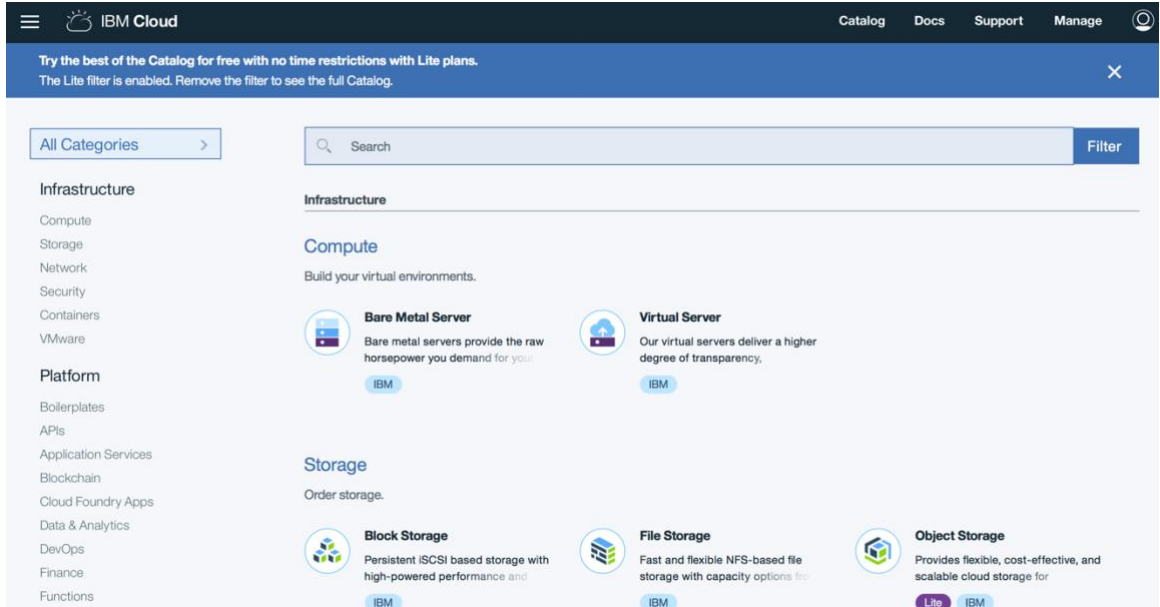
- 1 • Signing up for IBM Cloud
- 2 • Navigating the IBM Cloud Platform
- 3 • Provisioning a Service
- 4 • Launch Watson Personality Insights
- 5 • Launch Watson
- 6 • Create a Node-RED Flow

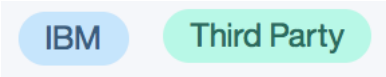
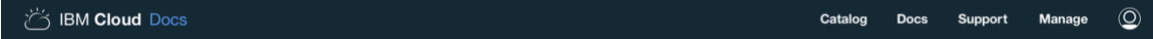
Lab Instructions

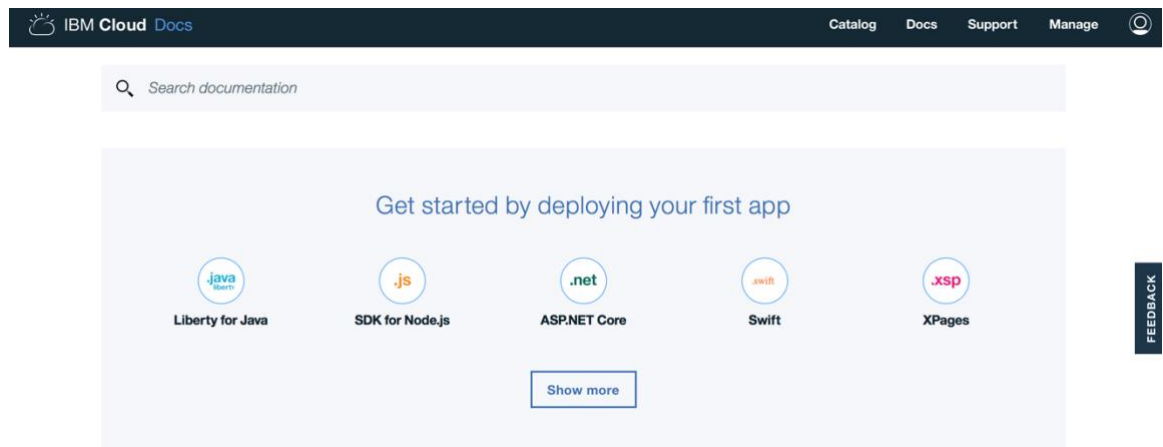
Step	Action
1	<p><u>Signing up for IBM Cloud</u></p> <ol style="list-style-type: none"> Go to https://www.ibm.com/cloud/ We are going to sign up for a free IBM Cloud account. Click “Sign up”. 

Step	Action
	<p>d. Fill in the required boxes.</p> <p>e. Click “Create Account”.</p> <div data-bbox="306 478 1406 1194">  </div>

Step	Action
2	<p><u>Navigating the IBM Cloud Platform</u></p> <p>a. Log into IBM Cloud at https://console.bluemix.net/dashboard/apps/</p> <p>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.</p> <p>b. Click “Next”, Click “Finish”.</p>  <p>c. We are now looking at the IBM Cloud Dashboard.</p> <p>d. Click on the “Catalog” button found in the upper right hand corner of the screen.</p>

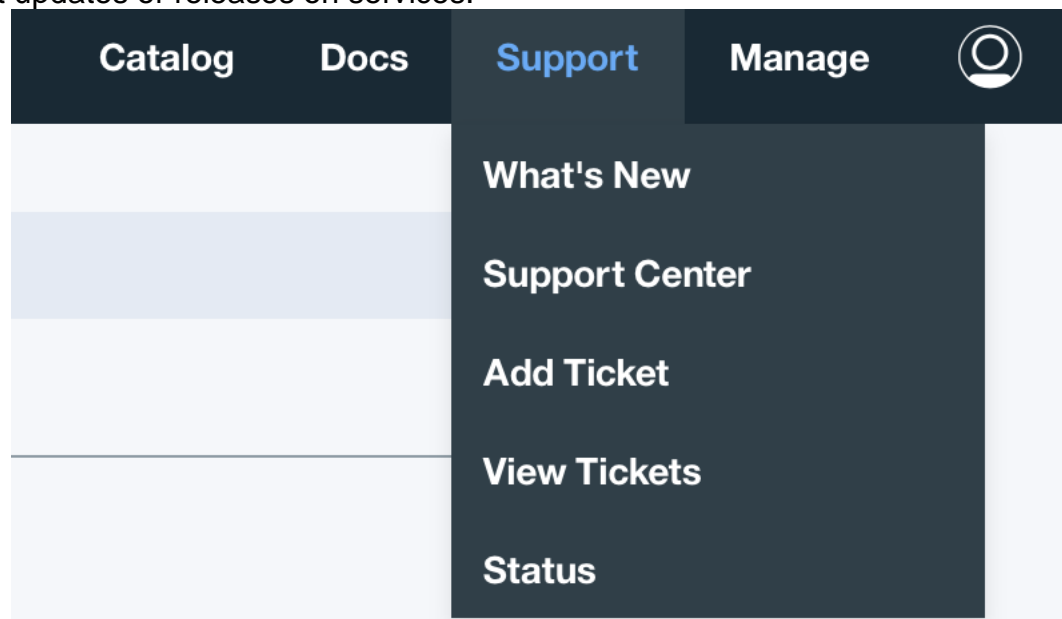
Step	Action
	 <p>e. The Catalog is a compilation of the services offered on the IBM Cloud.</p> 


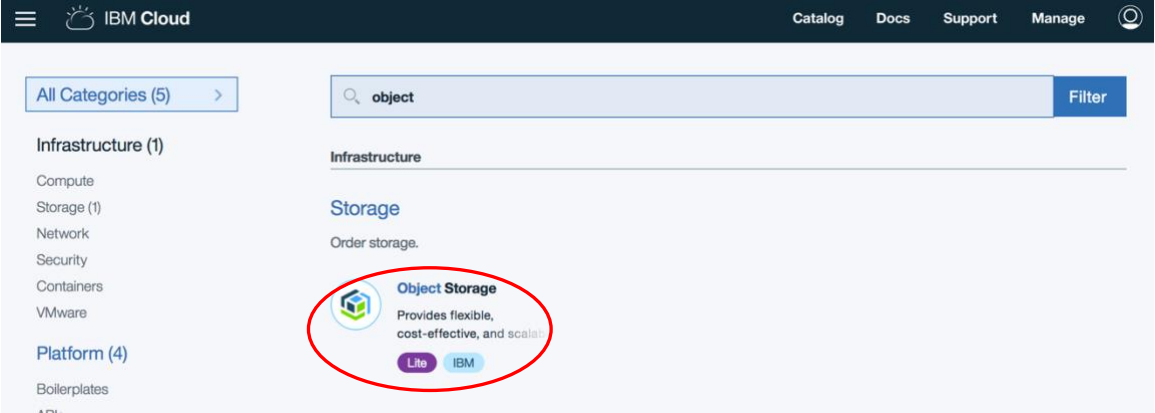
Step	Action
	<p>As you look around the catalog, there are a few places to observe. The page is laid out for simple navigation. We already selected the Catalog button to open the Catalog. The Docs link provides details on each of the services. We will touch on this when we initialize our service here 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.</p> <p>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.</p> <p>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.</p> <div data-bbox="310 814 693 890" data-label="Image">  </div> <p>Going along the same navigation bar as we found the catalog, we can see docs, support and manage.</p> <div data-bbox="310 1041 1456 1079" data-label="Image">  </div> <p>g. Click on "Docs".</p> <p>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.</p>

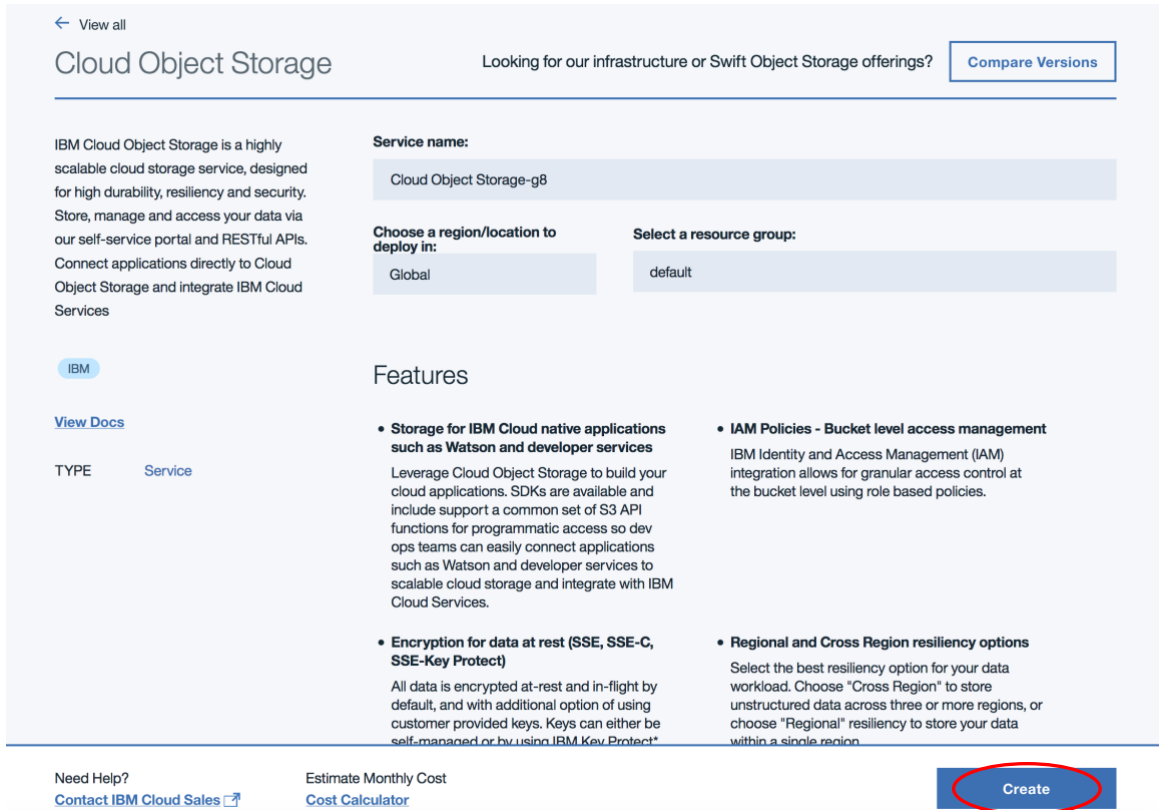


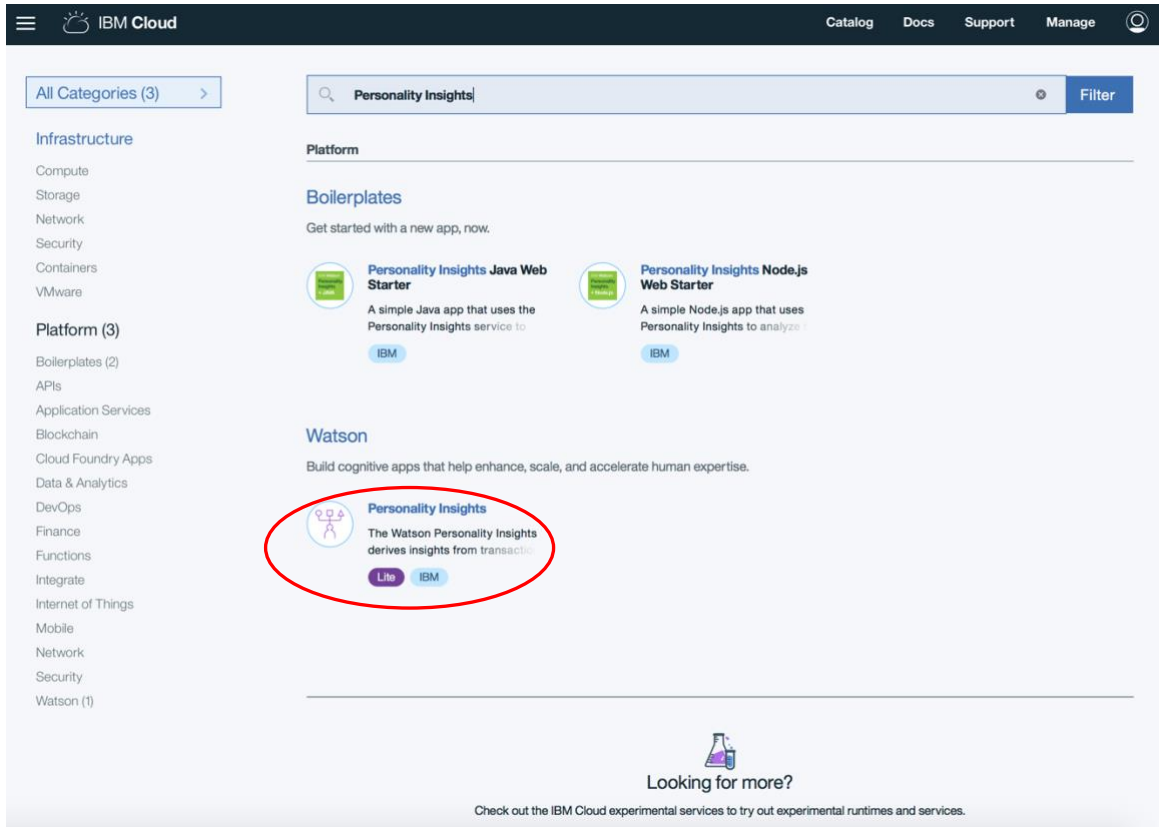
h. Click on “Support”.

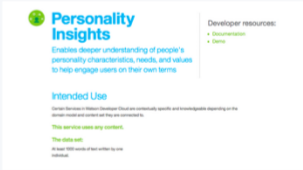
Support is a next level of information and help. When you click on it, it will display a drop down menu. If the answers cannot be solved by looking for Docs OR if an emergency situation arises with one of the services, this is where you go to open a ticket. Once the ticket is open, this is also where 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.

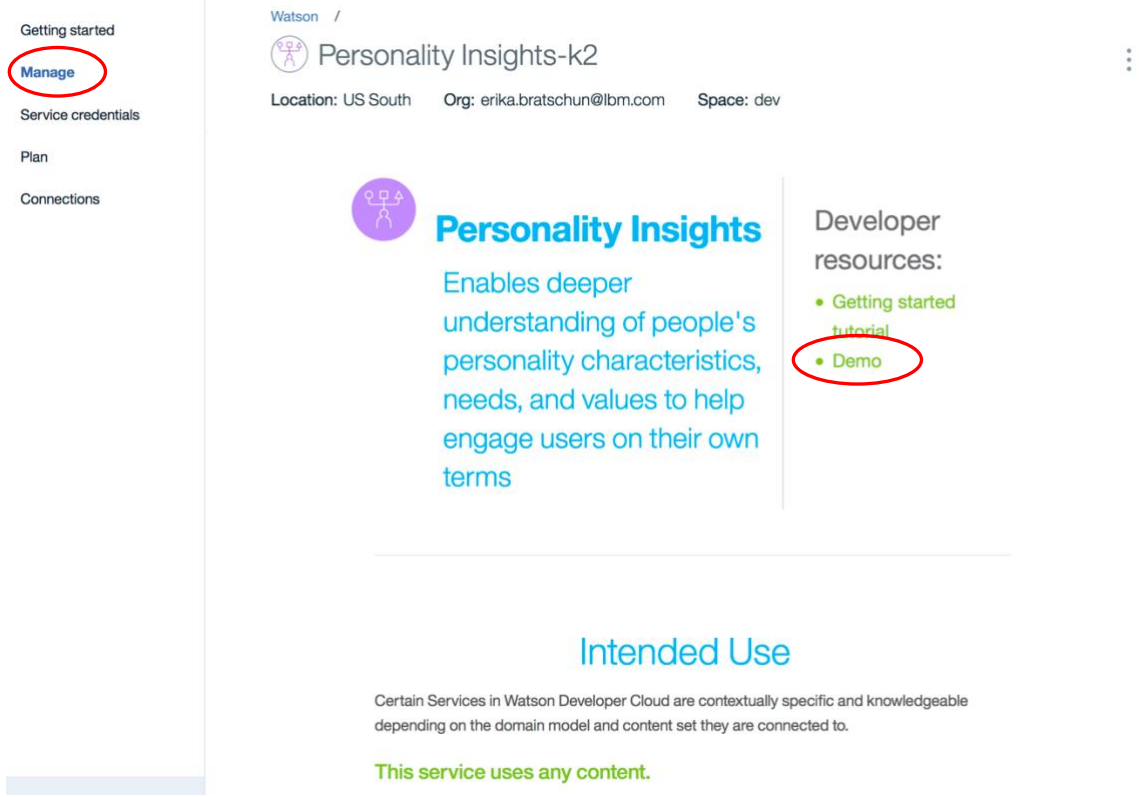









Step	Action
	<p>i. Click on “Manage”.</p> <p>Manage is where you can keep track of your own account, billing and usage and security. Within the account tab, you can monitor users, groups, organizations, etc.</p> <p>j. Click on the head icon.</p> <p>Finally, the head icon will bring you to your personal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

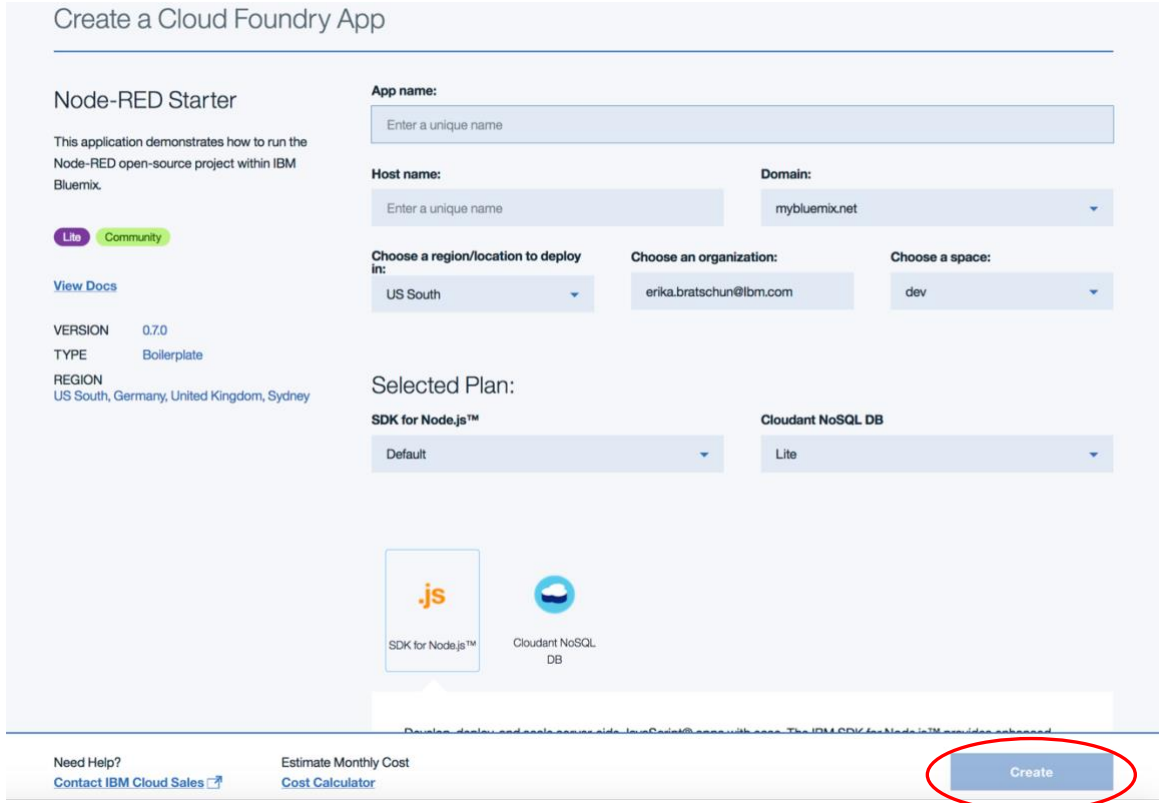
Step	Action
	<div data-bbox="305 304 1458 1108">  </div> <p data-bbox="354 1262 1377 1293">f. Return to your IBM Cloud page by clicking on the logo in the top left corner.</p>
4	<p data-bbox="310 1482 857 1514"><u>Launch Watson Personality Insights</u></p> <ol style="list-style-type: none"> <li data-bbox="358 1556 776 1587">Let's create our own service. <li data-bbox="358 1629 646 1661">Click on "Catalog". <li data-bbox="358 1703 862 1734">Type into the search bar: "Watson". <p data-bbox="310 1734 1430 1766">Alternative way: In the Categories sections, select Watson, Personality Insights.</p>

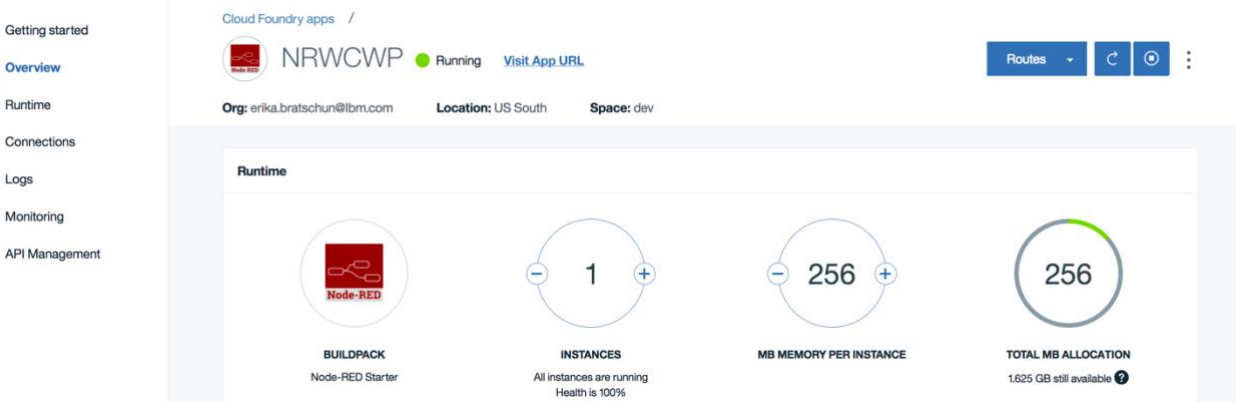

Step	Action
	<p>d. Click on “Personality Insights” under the Watson section.</p>  <p>Watson Personality Insights predicts personality characteristics, needs and values through written text. Understand your customers’ habits and preferences on an individual level, and at scale. We see it used quite frequently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



Step	Action
	<div data-bbox="310 275 1458 1178"> <p>← View all</p> <h2>Personality Insights</h2> <hr/> <div> <p>Watson Personality Insights: Personality Insights derives insights from transactional and social media data to identify psychological traits which determine purchase decisions, intent and behavioral traits; utilized to improve conversion rates.</p> <p>Service name: Personality Insights-k2</p> <p>Choose a region/location to deploy in: US South</p> <p>Choose an organization: erika.bratschun@ibm...</p> <p>Choose a space: dev</p> <p>Images Click an image to enlarge and view screen captures, slides, or videos. Screen caps show the user interface for the service after it has been provisioned.</p>  <p>Pricing Plans Monthly prices shown are for country or region: United States</p> <p>Need Help? Contact IBM Cloud Sales</p> <p>Estimate Monthly Cost Cost Calculator</p> <p>Create</p> </div> </div> <p>f. The “Free” plan is selected by default.</p> <p>g. Select “Create” to deploy the Personality Insights Service.</p> <p>This page indicates that the service had been created.</p> <div data-bbox="310 1352 1458 1661"> <p>Menu IBM Cloud Catalog Docs Support Manage</p> <p>Getting started</p> <p>Manage</p> <p>Service credentials</p> <p>Plan</p> <p>Connections</p> <p>Watson /</p> <p>Personality Insights-k2</p> <p>Location: US South Org: erika.bratschun@ibm.com Space: dev</p> <p>Getting started tutorial</p> <p>Last Updated: 2017-10-18 Edit in GitHub</p> </div>


Step	Action
	<p>h. Click on “Manage”.</p> <p>i. Click on “Demo”.</p>  <p>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.</p> <p>k. Click on one of the Twitter handles. (@faridyu is used below)</p> <p>l. Click “Analyze”.</p>

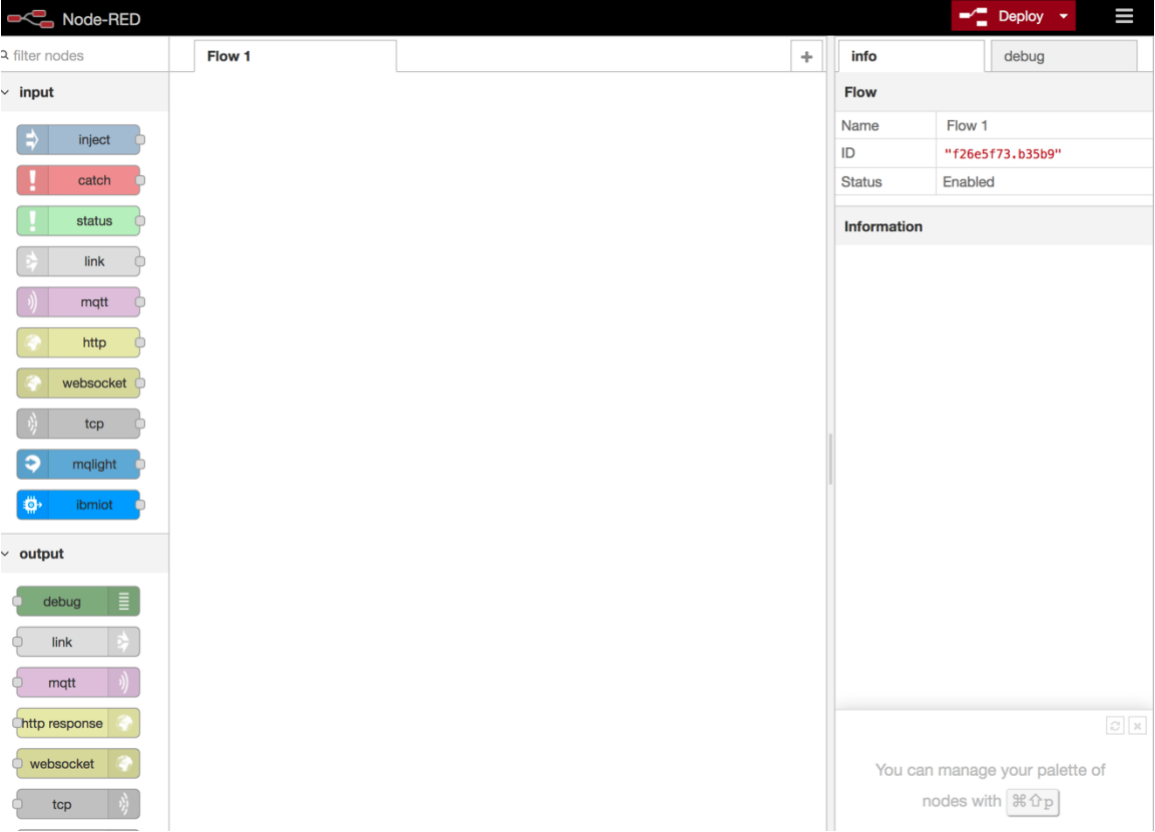
Step	Action
	<div data-bbox="492 306 724 346" data-label="Section-Header"> <h3>Try the service</h3> </div> <div data-bbox="492 365 1266 417" data-label="Text"> <p>You need text written by the person whose personality you're interested in. It should contain words about every day experiences, thoughts, and responses.</p> </div> <div data-bbox="492 430 1255 478" data-label="Text"> <p>You can play with the demo with as little as 100 words, but for a more accurate analysis, you need more words.</p> </div> <div data-bbox="1078 476 1271 506" data-label="Text"> <p>Reset Terms of use</p> </div> <div data-bbox="492 506 1258 940" data-label="Form"> <div> Tweets and Replies Body of Text Your Twitter Personality </div> <div> Choose: <div>  @Oprah (EN) <div>  @KingJames (EN) </div> </div> <div>  @DonFranciscoTV (ES) <div>  @pontifex_es (ES) </div> </div> <div>  @trikaofficial (AR) <div>  @faridyu (JA) <div>  @Kruny21 (KO) </div> </div> </div> <div>Analyze</div> </div> </div> <div data-bbox="347 978 737 1016" data-label="Text"> <p>m. Scroll down to the output.</p> </div> <div data-bbox="339 1071 461 1115" data-label="Section-Header"> <h2>Output</h2> </div> <div data-bbox="339 1140 1388 1236" data-label="Text"> <p>The scores you see are all percentiles. They are comparing one person to a broader population. For example, a 90% on Extraversion does not mean that the person is 90% extroverted. It means that for that single trait, the person is more extroverted than 90% of the people in the population.</p> </div> <div data-bbox="339 1257 1323 1323" data-label="Text"> <p><u>Our sample population consists of Twitter users who tweet in their respective languages</u> and whose personalities we calculated using our model.</p> </div> <div data-bbox="339 1352 748 1402" data-label="Section-Header"> <h2>Personality Portrait</h2> </div> <div data-bbox="339 1411 907 1449" data-label="Text"> <p>56698 words analyzed: Very Strong Analysis</p> </div>

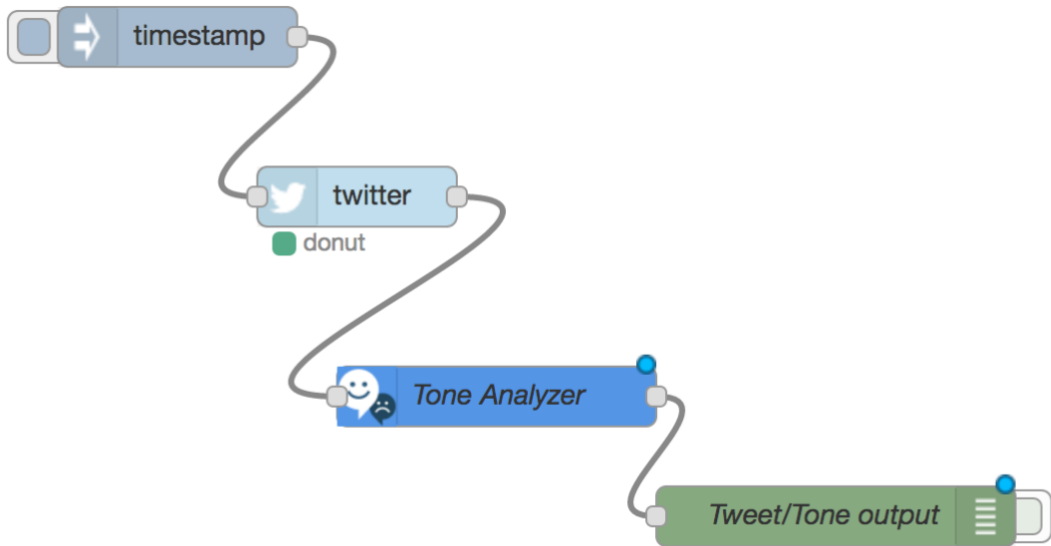




Step	Action
6	<p><u>Create a Node-RED Flow</u></p> <ol style="list-style-type: none"> Return to the Catalog. This time in the search bar, type in “Node-Red”. Node-Red Starter falls under the boilerplates section of the catalog. <p>Node-RED Starter provides a flow editor to make it easy to wire devices 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.</p> <ol style="list-style-type: none"> Click on “Node-RED Starter”. Fill in the required categories (once you type in an app name, it automatically becomes the host name as well). Click “Create”. 

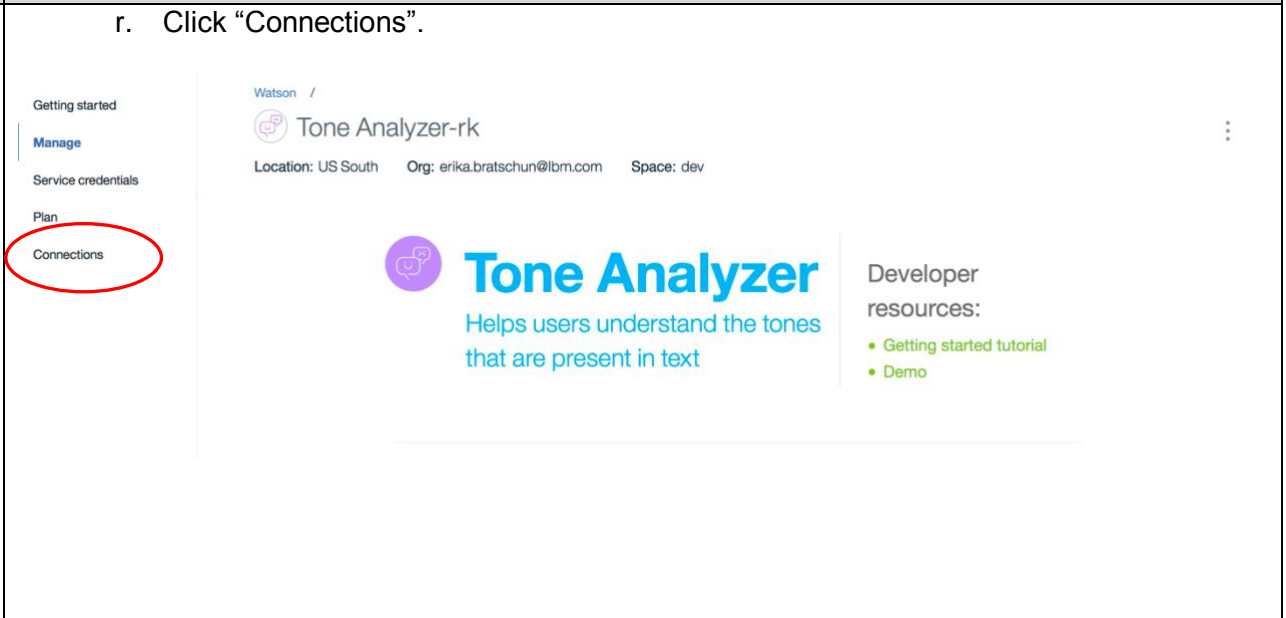
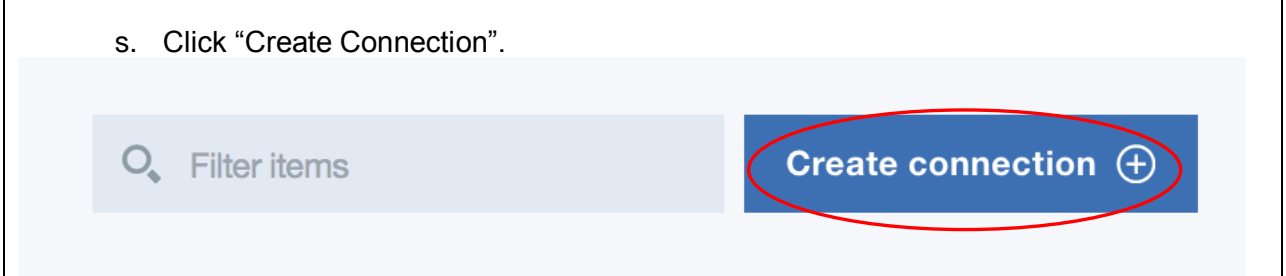
Step	Action
	<p>f. The app will take a few minutes to start, as indicated by the icon next to the apps name.</p> <p>g. Click “Connections”.</p> <p>Before we can add service to the flow, we need to make sure they are connected.</p>  <p>h. Click “Create Connection”.</p>  <p>A list of all your running application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







Step	Action																				
	<div><div><div><div>10</div><div>Items per page 1-4 of 4 items</div></div><div>1 of 1 pages</div><div><1></div></div><table><tr><th>SERVICES</th><th>RESOURCE GROUP</th><th>PLAN</th><th>SERVICE OFFERING</th></tr><tr><td>Cloud Object Storage-g8</td><td>default</td><td>Lite</td><td>Cloud Object Storage</td></tr><tr><td>Conversation-9d</td><td>--</td><td>Lite</td><td>Conversation</td></tr><tr><td>Personality Insights-k2</td><td>--</td><td>Lite</td><td>Personality Insights</td></tr><tr><td>Tone Analyzer-rk</td><td>--</td><td>Lite</td><td>Tone Analyzer</td></tr></table><div>Connect</div></div> <div><div>j. Click “Visit App URL”.</div><div><div><div>Getting started</div><div>Overview</div><div>Runtime</div><div>Connections</div><div>Logs</div><div>Monitoring</div></div><div><div>Cloud Foundry apps /</div><div><div></div><div>TesterAppForDemo</div><div><div>Starting</div><div>Visit App URL</div></div></div><div><div>Org: erika.bratschun@ibm.com</div><div>Location: US South</div><div>Space: dev</div></div><div><div>Start coding with Node-RED</div><div>Last Updated: 2017-06-15</div><div><div>1</div><div>After your application has started, click on the Routes URL or enter the following URL in a browser:</div></div></div></div></div></div> <div><div>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)</div><div><div>l. Click “Finish”.</div><div><div>Applying your settings and starting Node-RED</div><div></div><div>m. Click on “Go to your Node-RED flow editor”.</div></div></div></div>	SERVICES	RESOURCE GROUP	PLAN	SERVICE OFFERING	Cloud Object Storage-g8	default	Lite	Cloud Object Storage	Conversation-9d	--	Lite	Conversation	Personality Insights-k2	--	Lite	Personality Insights	Tone Analyzer-rk	--	Lite	Tone Analyzer
SERVICES	RESOURCE GROUP	PLAN	SERVICE OFFERING																		
Cloud Object Storage-g8	default	Lite	Cloud Object Storage																		
Conversation-9d	--	Lite	Conversation																		
Personality Insights-k2	--	Lite	Personality Insights																		
Tone Analyzer-rk	--	Lite	Tone Analyzer																		

Step	Action
	<div data-bbox="310 275 1458 951"> <p data-bbox="326 285 586 306">Node-RED on IBM Bluemix</p> <div data-bbox="310 327 1458 625">  </div> <div data-bbox="375 688 846 873"> <p data-bbox="375 688 846 737">Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.</p> <p data-bbox="375 758 846 806">This instance is running as an IBM Bluemix application, giving it access to the wide range of services available on the platform.</p> <p data-bbox="375 827 846 873">More information about Node-RED, including documentation, can be found at nodered.org.</p> </div> <div data-bbox="967 684 1352 814"> <div data-bbox="967 684 1352 772"> <p data-bbox="1027 720 1268 741">Go to your Node-RED flow editor</p> </div> <p data-bbox="1019 793 1276 814">Learn how to customise Node-RED</p> </div> </div>

Step	Action
	 <p>When you open the flow, you can see on the left all the nodes available in the palette that can contribute to a flow.</p> <p>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</p>

Step	Action
	<div data-bbox="349 289 1393 831">  </div> <p data-bbox="310 877 1240 947">o. Double click on twitter to input your twitter credentials. The tag is the hashtag that the service will scrape for from Twitter.</p> <p data-bbox="402 982 621 1014">p. Click "Done".</p> <div data-bbox="310 1014 1547 1675"> <div data-bbox="310 1014 1547 1087"> Edit twitter in node </div> <div data-bbox="310 1087 1547 1199"> <div data-bbox="326 1108 493 1184">Delete</div> <div data-bbox="1143 1108 1317 1184">Cancel</div> <div data-bbox="1360 1108 1511 1184">Done</div> </div> <div data-bbox="310 1199 1547 1297"> <div data-bbox="337 1230 643 1268"> v node properties </div> </div> <div data-bbox="354 1346 1409 1640"> <div data-bbox="354 1346 1409 1423"> <div data-bbox="354 1346 537 1398">  Twitter ID </div> <div data-bbox="613 1346 1409 1423"> <input type="text" value="@erikabratschun"/>  </div> </div> <div data-bbox="354 1451 1409 1528"> <div data-bbox="354 1451 509 1503">  Search </div> <div data-bbox="613 1451 1409 1528"> <input type="text" value="all public tweets"/> </div> </div> <div data-bbox="354 1556 1409 1640"> <div data-bbox="354 1556 448 1608">  for </div> <div data-bbox="613 1556 1409 1640"> <input type="text" value="olympics"/> </div> </div> </div> </div> <p data-bbox="402 1749 1240 1780">q. Open a new tab and return to Tone Analyzer from IBM Cloud</p>

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

Step	Action
	<div data-bbox="337 296 652 331"> node properties </div> <div data-bbox="354 428 1430 1108"> <div>  Name <input data-bbox="621 411 1430 495" type="text" value="Tone Analyzer"/> </div> <div>  Method: <div data-bbox="621 527 1430 611">General Tone</div> </div> <div>  version_date: <div data-bbox="621 642 1430 726">Dominant Tone</div> </div> <div>  Sentences <div data-bbox="621 758 1430 842">True</div> </div> <div>  Content type <div data-bbox="621 873 1430 957">Text</div> </div> <div>  Input Text Language <div data-bbox="621 1020 1430 1104">English</div> </div> </div> <p data-bbox="402 1157 1299 1192">w. Click on “Port Labels”, and copy “version=2016-05-19” into Inputs</p> <div data-bbox="337 1241 563 1276"> port labels </div> <div data-bbox="354 1367 456 1402">Inputs</div> <div data-bbox="402 1440 1446 1503"> <div>1. <input data-bbox="483 1419 1373 1503" type="text" value="version=2016-05-19"/></div> <div data-bbox="1398 1440 1446 1482">✕</div> </div> <div data-bbox="354 1541 485 1577">Outputs</div> <div data-bbox="402 1614 1446 1677"> <div>1. <input data-bbox="483 1593 1373 1677" type="text" value="none"/></div> <div data-bbox="1398 1614 1446 1656">✕</div> </div>

Step	Action
	<p>x. Click “Done”.</p> <p>y. Double click on the debug node.</p> <p>z. Change the output to “complete msg object”.</p> <div data-bbox="310 520 1547 1050"> <p>▼ node properties</p> <p>☰ Output ▼ complete msg object</p> <p>↔ to debug tab</p> <p>🏷️ Name Tweet/Tone output</p> </div> <p>aa. Connect the nodes by clicking on the dots and drag it to the input/output of the other.</p> <p>bb. Click “Deploy” in the top right corner.</p> <p>cc. To view the output, click the debug tab, found right under the deploy button.</p> <p>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.</p> <p>dd. To view the tweet and tone, click on one of the tweets and follow the arrow flow shown in the example below.</p>

Step	Action
	<pre> 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 /09oCsSksvq" 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] </pre> <p>Depending on the tweet, you can see that this example shows 2 tones: joy and confidence.</p> <p>Test out the tone analyzer with other tags!!</p>



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