

Lab 4: Create UI Toolchain from Deployed App

Objective

This lab manually deploys the UI microservice, creates a simple Toolchain from the deployed application and then configures the Toolchain. It assumes that the *DevOpsLabs* Organization and *dev*, *qa* and *prod* Spaces are already created.

Tasks:

- Task 1: Deploy UI Application
- Task 2: Create Toolchain
- Task 3: Create Code Repo
- Task 4: Build Application

Throughout the lab, the phrase *timestamp* is used to indicate the same timestamp string that was appended to *simple-order-toolchain*. While a timestamp string is not required, it does help make the name of the created objects unique.

Task 1: Deploy UI Application

1. If you are not already logged into IBM Bluemix, log into IBM Bluemix (https://www.ibm.com/cloud-computing/bluemix/).



2. Open a terminal Window by selecting **Activities** from the panel and then select **Byobu Terminal**.





3. The sample code that you will be using is in a github repository. We will clone (make a copy) onto our local machine, in a terminal window, enter the following command:

git clone https://github.com/open-toolchain/Microservices_UI

- 4. Change into the just created directory. cd Microservices_UI
- 5. If you are curious, you can enter the Is command to see the files.
- 6. Login to Bluemix from the command line by entering the following command:

```
cf login -a https://api.ng.bluemix.net -u userid@domain.com -o DevOpsLab -s
prod
```

7. Push the application to Bluemix with the following command:

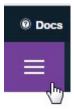
cf push prod-ui-toolchain-lab-timestamp

```
requested state; started
instances: 1/1
usage; 64M x 1 instances
urls: prod-ui-toolchain-lab-1489116414381.mgbluemix.net
last uploaded; Fri Mar 17 16:02:13 UTC 2017
stack; cflinuxfs2
buildpack: php_buildpack
state since cpu memory disk details
or running 2017-03-17 11:03:40 AM 3.8% 33M of 64M 127.7M of 16
becaser@bluecompute:"/Microservices.UU}
```

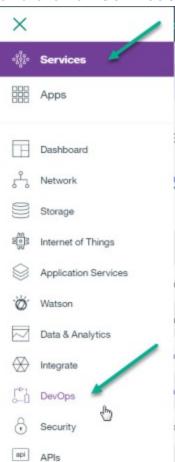


Task 2: Create Toolchain

- 1. Return to the Bluemix console.
- 2. If you are not on the Toolchains page (if you don't see a button called *Create a Toolchain*), click on the **Bluemix menu bar** in the upper left corner.



and click on **Services** then **DevOps**



and click on Toolchains.

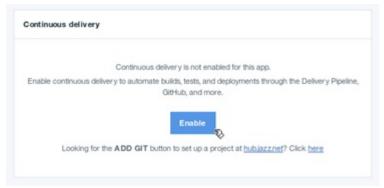
- 3. Click Create a Toolchain.
- 4. Click on Create a toolchain from an application.



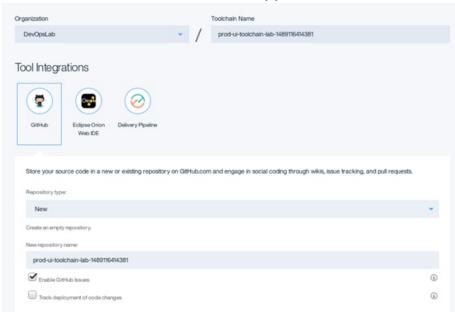
- 5. Click on the application to display the application dashboard.
- 6. Click on your (just created) application to display the application overview page.



7. Click on the **Enable** button for *Continuous Delivery*.

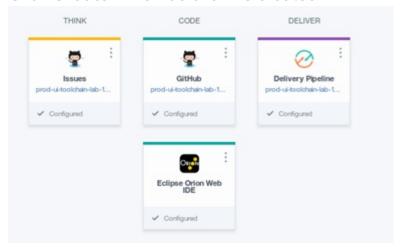


8. The Continuous Delivery Toolchain creation page is displayed and prefilled with information about the application.





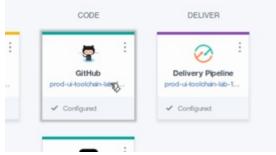
8. Click **Create**. The Toolchain is created.



Task 3: Create Code Repo

We need to create a repo and link that to the Toolchain (remember, we just cloned the repo locally).

1. In the Toolchain, click on the GitHub tile.



to display the GitHub repo.

2. Click the **Import Code** button to import the code from the original repo.

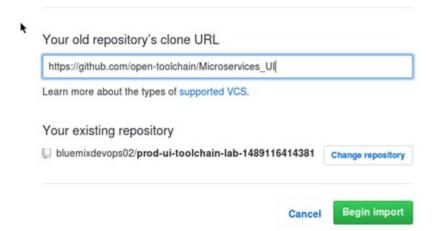
```
...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.
```

3. Enter https://github.com/open-toolchain/Microservices_UI as the clone URL.

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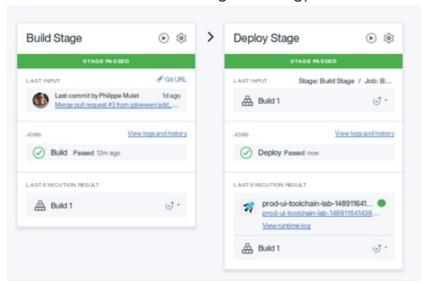
4. Wait for the import to complete.



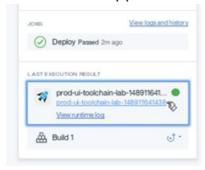


Task 4: Build Application

- 1. Click the browser back button to return to the Toolchain.
- 2. Click on the Delivery Pipeline tile.
- 3. Run the Build Stage.
- 4. The *Build* and *Deploy* stages complete (the *Deploy Stage* was started as a result of the *Build Stage* running).



5. Click on the application URL.



6. Assuming the microservices names match up, the application works. If not, don't worry, somewhere along the way the *timestamp* may have been mistyped.

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7. If you wish, you can add more jobs or stages.