



# 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.

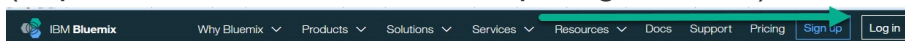
### Tasks:

- [Task 1: Deploy UI Application](#)
- [Task 2: Create Toolchain](#)
- [Task 3: Create Code Repo](#)
- [Task 4: Build Application](#)

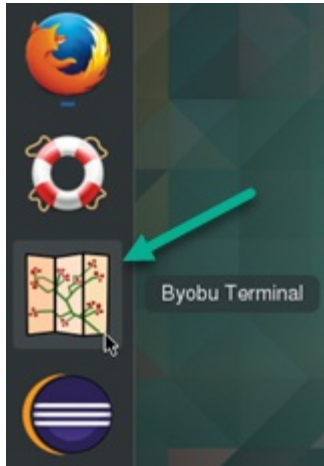
Throughout the lab, the phrase *timestamp* is used to indicate the same timestamp string that was appended to *simple-order-toolchain*. While a timestamp string is not required, it does help make the name of the created objects unique.

## 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 ls 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 _org_name_ -s prod
```

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

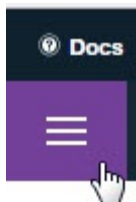
```
cf push prod-ui-toolchain-lab-timestamp
```

```
requested state: started
instances: 1/1
usage: 64M x 1 instances
urls: prod-ui-toolchain-lab-1489116414381.mybluemix.net
last uploaded: Fri Mar 17 16:02:13 UTC 2017
stack: cflinuxfs2
buildpack: php_buildpack

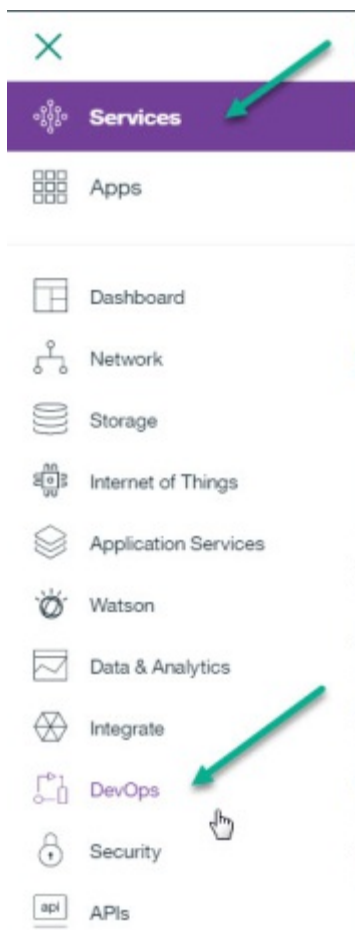
state since cpu memory disk details
# running 2017-03-17 11:03:40 AM 3.8% 33M of 64M 127.7M of 1G
```

## 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.



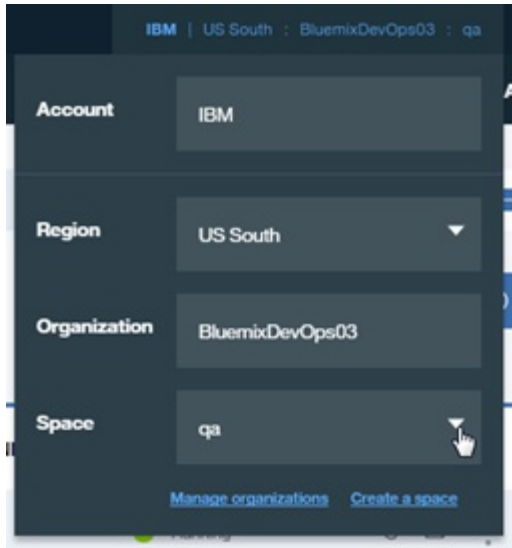
and click on **Services** then **DevOps**



and click on **Toolchains**.

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

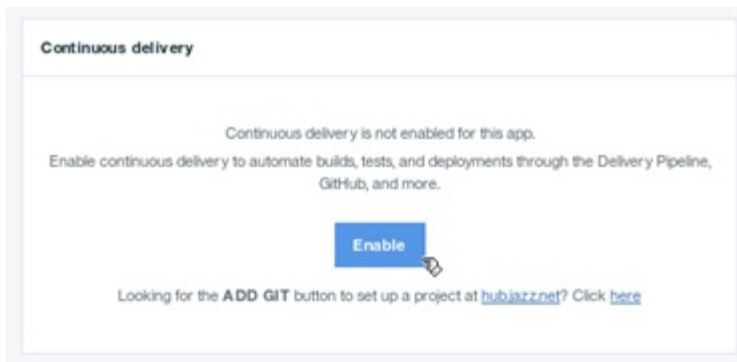
5. Click on the application to display the application dashboard.
6. If the *prod* space is not displayed in the upper right hand corner, click the upper-right hand corner account settings and select **prod** as the *Space*.



7. Click on your (just created) application to display the application overview page.



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





9. The Continuous Delivery Toolchain creation page is displayed and pre-filled with information about the application.




Organization: DevOpsLab / Toolchain Name: prod-ui-toolchain-lab-1489116414381

### Tool Integrations

  
GitHub

  
Eclipse Orion  
Web IDE

  
Delivery Pipeline

Store your source code in a new or existing repository on GitHub.com and engage in social coding through wikis, issue tracking, and pull requests.

Repository type:  
New

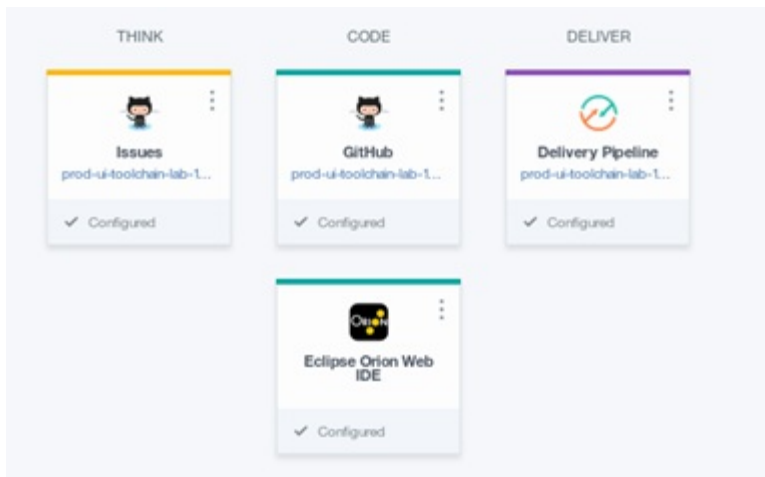
Create an empty repository.

New repository name:  
prod-ui-toolchain-lab-1489116414381

☒ Enable GitHub Issues ⓘ

☐ Track deployment of code changes ⓘ

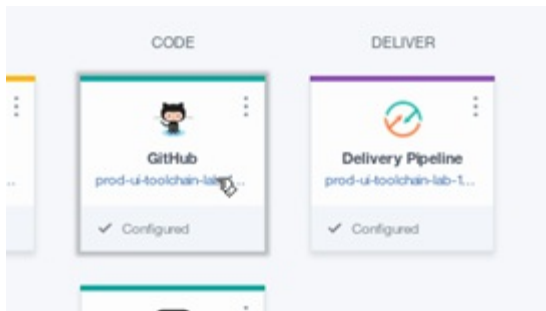
8. Click **Create**. The Toolchain is created.



## Task 3: Create Code Repo

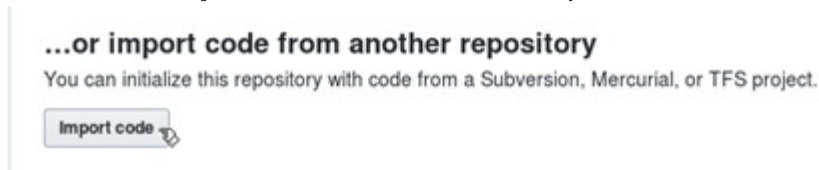
We need to create a repo and link that to the Toolchain (remember, we just cloned the repo locally).

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.




3. Enter **[https://github.com/open-toolchain/Microservices\\_UI](https://github.com/open-toolchain/Microservices_UI)** as the clone URL.



🖱️ Your old repository's clone URL

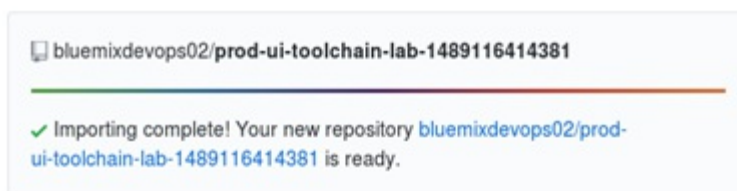
Learn more about the types of [supported VCS](#).

Your existing repository

 bluemixdevops02/prod-ui-toolchain-lab-1489116414381 [Change repository](#)

[Cancel](#) [Begin import](#)

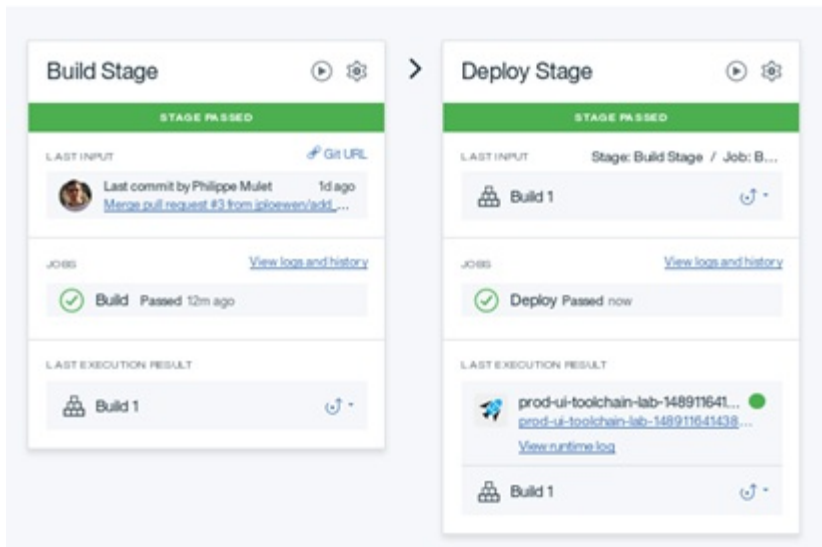
4. Click **Begin Import**.
5. Wait for the import to complete.



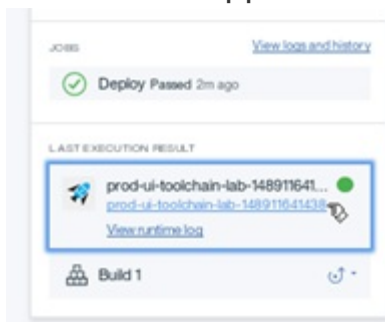
6. Close the GitHub browser tab.
7. Close the Bluemix application dashboard browser tab.

## Task 4: Build Application

1. On the Bluemix *Create a Toolchain* page, click the blue arrow to the left of *Toolchains* to return to the Toolchains.
2. Click the just created Toolchain (*prod-ui-toolchain-lab-timestamp*).
3. Click on the *Delivery Pipeline* tile.
4. Run the *Build Stage*.
5. The *Build* and *Deploy* stages complete (the *Deploy Stage* was started as a result of the *Build Stage* running).



6. Click on the application URL.



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





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