IBM Bluemix Lab

- Java Cache Web Application

Tony Yang
Today’s Lab includes...

Part 1: Setup accounts and prerequisites
Part 2: Start your first APP on Bluemix
Part 3: Cloud Foundry CLI
Part 4: Modify APP using DevOps
Lab #0: Pre-requisites

1. Create Bluemix account (IBM ID)
2. Register IBM DevOps Services and link to Jazz ID
3. Install the cf command line interface
Login IBM Bluemix:

http://www.bluemix.net
Register for your free service

Create an IBM id to get started.

Already have an IBM id?

Asterisk (*) denotes required field:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>User name</td>
<td><a href="mailto:bm_nccu03@yahoo.com.tw">bm_nccu03@yahoo.com.tw</a></td>
</tr>
<tr>
<td>Full name</td>
<td>NCCU03</td>
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<tr>
<td>Password</td>
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Please enter a security question that only you can answer. Then, enter the answer to the question. Occasionally, you may be asked to answer this question to confirm your identity.

<table>
<thead>
<tr>
<th>Security question</th>
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<td>bluemix</td>
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</tbody>
</table>

Please keep me informed of products, services and offerings from IBM companies worldwide.

- [ ] by email
- [ ] by telephone or postal mail

I accept IBM's Privacy Statement and Terms and Conditions.

Submit
Registration has been completed

Registration Complete

Check your email to activate your account.

You should receive your confirmation email in a few minutes. If you have any issues, click the following link to get help: https://developer.ibm.com/bluemix/support/
Check the e-mail notification from IBM Bluemix
Hi NCCU03,
Thank you for signing up for a subscription to IBM Bluemix Trial using the following organization account: NCCU03 Yang's Company. This n with the opportunity to try the full services, as a proof of concept before your purchase. Please validate this email address in the next 28 days (by Jun 8, 2015) to use the service. You only need to do this once and it's just for you.

Once your email address is validated:
**Trial Subscription Duration (30 days)**
This service is governed by the following Terms and Conditions.
For future reference, use these links:
Launch Service | Get Support | Learn About

Regards,
IBM Bluemix Team
Tip: If the above "Validate Email Address" button does not work in your email client, copy this URL into your browser:
Use your IBM ID to sign-in

IBM id

One key, many possibilities.

Your IBM id provides access to services, communities, support, online purchasing, and much more.

Sign in

IBM id (user@company.com)

Password

Forgot password?

Sign in

Help and FAQ

IBM Employees:
Sign in with your intranet ID.
Link your Intranet ID and IBM id
Congratulations!
Register IBM DevOps Services and link to Jazz ID
Login IBM DevOps Services:

https://hub.jazz.net/
DevOps Made Easy
Integrated Agile Planning, Coding, Building, Deploying

Sign up for free
Use your IBM ID to log in to DevOps Services
IBM id

One key, many possibilities.

Your IBM id provides access to services, communities, support, online purchasing, and much more.

Sign in

IBM id (user@company.com)

Password

Forgot password?

Create IBM id

Sign in

Help and FAQ

IBM Employees:
Sign in with your intranet ID.

Link your Intranet ID and IBM id
Welcome to Bluemix DevOps Services

Before you get started, we need to associate your IBM id with an alias. An alias is a unique, publicly visible short name used in Git repository paths, Track & Plan, and desktop and command line clients.

ncu01

Finish  Cancel

IBM Bluemix™ DevOps Services

Enhance your Bluemix experience.
Develop and deploy software in the cloud.
Code with the Web IDE in your browser.
Push your applications to Bluemix, IBM's cloud platform.
Ask questions and get answers in our forum.
Get started by forking projects or following a tutorial.

Learn more
Success!

✓ You are now ready to start using Bluemix™ DevOps Services

- IBM id: bm_nccu01@yahoo.com.tw
- Alias: nccu01

**Important:** When signing in from desktop and command line clients such as Git and Team Concert, use your alias with your IBM password. [Why?](#)

[Continue]
Install CloudFoundry (cf) Command Line Interface
Download cf Command Line Interface

https://github.com/cloudfoundry/cli/releases

(請下載適合您作業系統的Installer)
CF version v6.11.2

Installers

- Debian 32 bit
- Debian 64 bit
- Redhat 32 bit
- Redhat 64 bit
- Mac OS X 64 bit
- Windows 32 bit
- Windows 64 bit
Completing the Cloud Foundry CLI Setup Wizard

Setup has finished installing Cloud Foundry CLI on your computer.

Click Finish to exit Setup.
We are ready!

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Lab #1:
Create a Java Cache Web Application on Bluemix
Step 1: Login Bluemix
Step 2: select “CATALOG” tab
Step 3: Select “Java Cache Web Starter” in Boilerplates
Step 4: Name your application and click “CREATE”
Step 5: Check your application status
Step 6: Play with your new application on Bluemix
Lab #1 completed!

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Lab #2: Use cf Command Line Interface
Step 1: Click on the Java Web Application you just created
Step 2: Click “View Quick Start”
Step 3: Download the Java Web Application package
Step 4: Please follow the steps listed in Quick Start

1. **Install the cf command-line tool.**
2. **Download the starter application package.**
3. **Extract the package and cd to it.**
4. **Connect to Bluemix:**

   https://api.ng.bluemix.net
Extract the package and cd to the directory
Summary of cf commands used

• Connect to Bluemix API end point
cf api

• Log into Bluemix
cf login

• Setup organization and space target (optional)
cf target

• Deploy your application
cf push
Demo (if time permits)

• Use Eclipse to update and re-build the code, and use cf command to push it to Bluemix.
Lab #2 completed!

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Lab #3: Modify and Deploy Application using IBM DevOps Services
Step 1: Click on the sample application on the DASHBOARD tab
Step 2: Click “ADD GIT”
Step 3: Input IBM ID information
Step 4: Continue to create git repository

Press **Continue** to create a Git repository associated with the **javaCache-garylin** application. Pushing changes to this repository will trigger automatic deployment to the application.

- Populate the repository with the starter application package and enable build and deploy.
Step 5: Confirm success.

Success! The Git repository for your application has been created. The application starter code is now being added to the repository. The application will then be deployed and restarted.
Step 6: Click “EDIT CODE” to connect to the JazzHub
Step 7: On the JazzHub web editor, find WebContent > index.html
Step 8: Change the content of the <h1> title
(Hint: use Ctrl-F to search for “h1”)

*** Modified using IBM DevOps Services ***
Step 9: Save the changes using File > Save
Step 10: Switch to “Git Repository” view
Step 11: View the changes, add comment, and COMMIT
Step 12: Click FETCH to sync with remote master
Step 13: PUSH the outgoing changes to remote repository
Step 13 (cont’d)
Step 14: Switch to BUILD & Deploy
Step 15: Request a build and auto deploy it to Bluemix

Note: It may take some time to complete the build and deployment.
Step 15: Request a build and auto deploy it to Bluemix (cont’d)

Note: It may take some time to complete the build and deployment.
Step 16: Check your changes on Bluemix
Lab #3 completed!

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Next step

• Start play with the **Starters** and **Services** on Bluemix
  • Click “**VIEW DOCS**” to find all the information you need

• Visit **COMMUNITY** resource to interesting samples, discussions, Q&As, and related events.