

Cloud Foundry & Cloud-Native Architecture Workshop Prerequisites

[Reference Information](#)

[Cloud Foundry Connectivity Verification](#)

[Cloud Foundry Test Application Deployment](#)

[Local Machine Setup](#)

[Required](#)

[Optional \(but recommended\)](#)

Reference Information

Please use the following reference information as appropriate throughout the rest of this document:

If credentials haven't been setup, use username as "testuser" and password as "testpassword"

Key	Value
CF Username	<your e-mail address>
CF Password	password (literally, the word "password" is the password)
CF Apps Manager URL	https://login.run.haas-64.pez.pivotal.io
CF CLI Login Command	cf login --skip-ssl-validation -a https://api.run.haas-64.pez.pivotal.io
Workshop Contact	Vinay Upadhya < vupadhya@pivotal.io >

Cloud Foundry Connectivity Verification

1. Log in to **Apps Manager**, the Cloud Foundry Developer UI

URL: See "Reference Information" section

Username: See "Reference Information" section

Password: See "Reference Information" section

This environment uses self-signed certificates, so you'll need to trust the site.

Pivotal

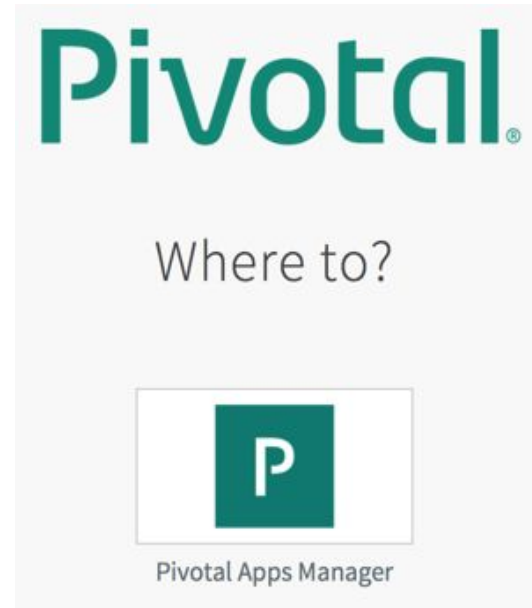
Welcome!


Email

Password

SIGN IN

[Create account](#) [Reset password](#)



**Pivotal Apps Manager**

ORG
cna-workshop

SPACES
test-space

Marketplace
Docs
Tools

Welcome to Pivotal Apps Manager

Step 1: Download and Install the CLI

[Windows 64 bit](#)[Mac OSX 64 bit](#)[Linux 64 bit \(.deb\)](#)[Linux 64 bit \(.rpm\)](#)

[Windows 32 bit](#)[Linux 32 bit \(.deb\)](#)[Linux 32 bit \(.rpm\)](#)

Step 2: Login to the CLI

```
$ cf login -a https://api.pcf7.cloud.fe.pivotal.io
Email: test-user
Password: .....
```

Step 3: Push your app

[Visit Getting Started](#)

ORG
cna-workshop

QUOTA
Usage Report
0%
0 Bytes of 10 GB Limit

1 Space 1 Domain 3 Members

SPACE
test-space

APPS
0

SERVICES
0

0% of Org Quota

2. Download and install the Cloud Foundry command line interface (cf CLI). The link to the binary/installer is in the 'Welcome to Pivotal Apps Manager' frame or in the 'Tools' section of the UI
3. From a command/terminal window, test the CLI using 'cf --version' or 'cf --help'

```
o → cf --version
cf version 6.19.0+b29b4e0-2016-06-08
```

4. Use the cf CLI to log in to Cloud Foundry

Command: See "Reference Information" section

Credentials: See "Reference Information" section (same as those used above)

```
o → cf login --skip-ssl-validation -a https://api.pcf7.cloud.fe.pivotal.io
API endpoint: https://api.pcf7.cloud.fe.pivotal.io

Email> test-user

Password>
Authenticating...
OK

Targeted org cna-workshop

Targeted space test-space

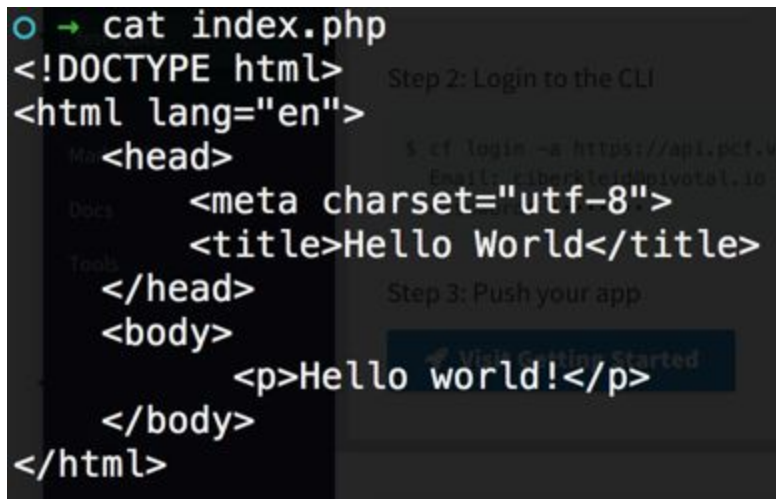
API endpoint: https://api.pcf7.cloud.fe.pivotal.io (API version: 2.54.0)
User: test-user
Org: cna-workshop
Space: test-space
```

Note that you are targeting the same org (e.g. cna-workshop{-#}) and space (e.g. test-space) as you see through Apps Manager. The cf CLI and Apps Manager are two clients to the same instance of Cloud Foundry.

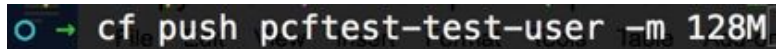
Cloud Foundry Test Application Deployment

1. Create a new and empty directory on your computer. In it, create a file called index.php with the following content:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <title>Hello World</title>
  </head>
  <body>
    <p>Hello world!</p>
  </body>
</html>
```

A screenshot of a terminal window with a dark background. The prompt is a blue circle followed by a green arrow. The command 'cat index.php' has been executed, and the output is the HTML code from the previous block. In the background, there is a blurred image of a document titled 'Step 2: Login to the CLI' and 'Step 3: Push your app'.

2. From the same directory, type 'cf push pcftest-*<your name>* -m 128M'

A screenshot of a terminal window showing the command 'cf push pcftest-test-user -m 128M' being entered at the prompt.

3. Note the output of the push command: 'cf push' will upload your PHP application to Cloud Foundry, which will stage and start your app. When the command completes, type 'cf apps' to get a snapshot of the state of all of the apps in the space 'test-space':

A screenshot of a terminal window showing the output of the 'cf apps' command. It shows the application 'pcftest-test-user' in the 'test-space' with a state of 'started', 1 instance, 128M memory, and 1G disk. The URL is 'pcftest-test-user.pcf7.cloud.fe.pivotal.io'.

```
cf apps
Getting apps in org cna-workshop / space test-space as test-user...
OK

name           requested state  instances  memory  disk  urls
pcftest-test-user  started          1/1        128M    1G    pcftest-test-user.pcf7.cloud.fe.pivotal.io
```


4. Return to the Apps Manager UI. Click on 'test-space' and verify that you see your app deployed.

SPACE **test-space** ● 1 Running ● 0 Stopped ● 0 Crashed

App (1) Services Settings

Apps				
NAME	INSTANCES	MEMORY	LAST PUSH	ROUTE
pcftest-test-user ● Running	1	128MB	3 minutes ago	http://pcftest-test-user.pcf7.cloud.fe.pivotal.io ➤

- Click on the name of the app or the arrow (➤) on the right of the route to see detailed information about your app.



APP
pcftest-test-user

last push: 07/01/16 @ 14:10 UTC
<https://pcftest-test-user.pcf7.cloud...>

CONFIGURATION [Scale App](#)

Instances	Memory Limit	Disk Limit
1	128 MB	1 GB

STATUS

#	STATUS	CPU	MEMORY	DISK	UPTIME
0	Running	0%	23 MB	126 MB	3 min

ABOUT

BUILDPACK php 4.3.10
START CMD Set by the buildpack
STACK cflinuxfs2 (Cloud Foundry Linux-based files...)

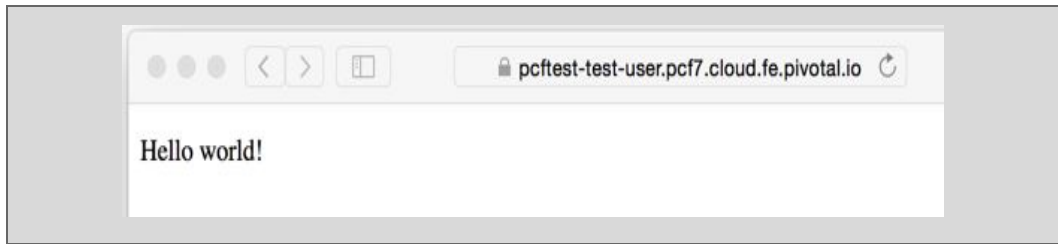
Events Services Env Variables Routes Logs [Delete App](#)

RECENT EVENTS

- started app
test-user 07/01/2016 at 02:10 PM UTC
- updated app
test-user 07/01/2016 at 02:10 PM UTC
- created app
test-user 07/01/2016 at 02:10 PM UTC

END OF AVAILABLE EVENTS

- Click on the link to your app and verify that your app is working as expected



7. Congrats! You've pushed your first app to Cloud Foundry! If you make changes to your HTML test app, simply push the app again using the CLI. Your changes will be uploaded and your app will be automatically updated and restarted.

Local Machine Setup

Required

1. 4GB Memory
2. Installation of [JDK 1.8](#)
3. Installation of [Maven](#)
4. Installation and experience with [git](#) and
5. [Github Account](#)
6. Installation of [curl](#)
7. Installation of [cf](#)

Optional (but recommended)

1. And IDE (e.g. [SpringSource Tool Suite](#), Eclipse, IntelliJ...)
2. [Json Formatter](#)