Bluemix Hands-On Workshop

Section 7 - How it works

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Table of Contents

Exercise 7.a – Specifying a buildpack when deploying an application

You can control which buildpack your application uses by specifying options at deploy time.

cf buildpacks allows you to see the internal buildpacks available, and the order they will be tried to run your application.

You can specify a specific internal buildpack or a link to an external buildpack using the '-b' option on the command line or the 'buildpack:' option in a manifest.yml file.

To test this we will deploy a go application to Bluemix. To do this we will use the command line tools.

Create a new directory to work in.

Create a new text file and copy or type the following content:

```go
package main

import (
    "fmt"
    "log"
    "net/http"
    "os"
)

func main() {
    http.HandleFunc("/", hello)
    err := http.ListenAndServe(":"+os.Getenv("PORT"), nil)
    if err != nil {
        log.Fatal("ListenAndServe:", err)
    }
}

func hello(w http.ResponseWriter, req *http.Request) {
    fmt.Fprintln(w, "hello, world!")
}
```
name this file app.go

Create a new text file and copy or type the following content:

```
web: app
```
name this file Procfile

Create a new text file and copy or type the following content:

```
app
```
Name this file .godir

These 3 files make up a simple Hello World application using the Go language. The Procfile provides the name of the application the Go buildpack will run when it starts the application. The .godir file provides the name of the application when the application is built.

To deploy this application use the following command line command:

```
cf push GoTest -b https://github.com/cloudfoundry/buildpack-go.git
```

replace 'GoTest' with the application name and hostname you want to use for your deployed application.

Check the application works by launching the application from the Bluemix Web UI.

hello, world!

Once you have confirmed the application is working then delete the application:

```
cf d GoTest
```

replace 'GoTest' with the name you used to deploy the application.

To use a **manifest.yml** file to deploy the application create the manifest.yml text file and use the following content:

```
---
applications:
  - name: GoTest
    memory: 64M
    instances: 1
    host: GoTest
    path: .
    buildpack: https://github.com/cloudfoundry/buildpack-go.git
```

Again replace 'GoTest' with the name and host you want to use for your deploy.

Deploy the application using the manifest:

```
cf push
```

Check the application deployed successfully by launching it from the Bluemix Web UI.