



Week 2: Microservices

Unit 6: Deploying the Application to Cloud Foundry

Deploying the Application to Cloud Foundry

Demo: Deploy a service to Cloud Foundry



Deploying the Application to Cloud Foundry

Manifest.yml: deployment descriptor

A manifest specifies application parameters to Cloud Foundry.

Example manifest.yml

```
---
applications:
- name: appname
  memory: 800M
  instances: 2
  path: target/ appname.war // to avoid that other unnecessary files gets uploaded
  buildpack: https://github.com/cloudfoundry/java-buildpack.git#v4.6 // specify version via tag e.g. "v4.6"
  env:
    VCAP_APPLICATION: '{}'
  services:
    - my_mongodb
```

➤ Purpose: obtain a reliable and reproducible deployment

[Deploying with Manifests](#)

Deploying the Application to Cloud Foundry

Reference: CF commands to deploy a service

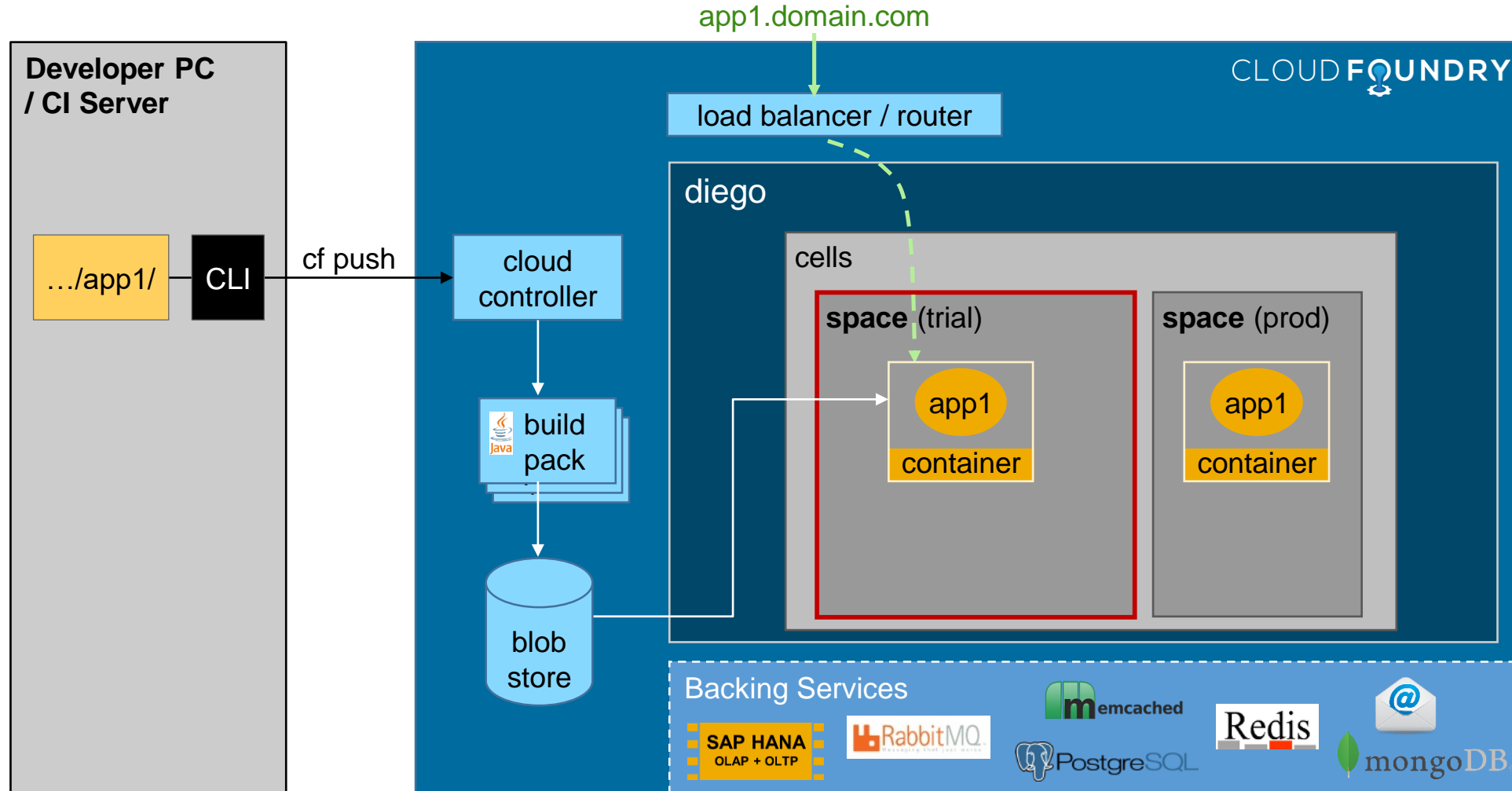
cf api https://api.cf.sap.hana.ondemand.com	Connect to a Cloud Foundry provider (URL of cloud controller)
cf login [-u username -o org]	Log in as user (use SAP domain user and password) and pass org
cf target [-s space]	Show or set a target space (where CF apps are deployed)
cf buildpacks	Show supported buildpack versions
cf apps	Show running microservices
cf push [-n hostname]	Push app in current directory to CF using local manifest
cf scale appname -i 2	Scale app to 2 running instances

Further References

- [Cloud Foundry Command Line Cheat Sheet](#)
- [Cloud Foundry CLI Plugins](#)
- [SAP Cloud Platform Cloud Foundry CLI Plugins](#)

Deploying the Application to Cloud Foundry

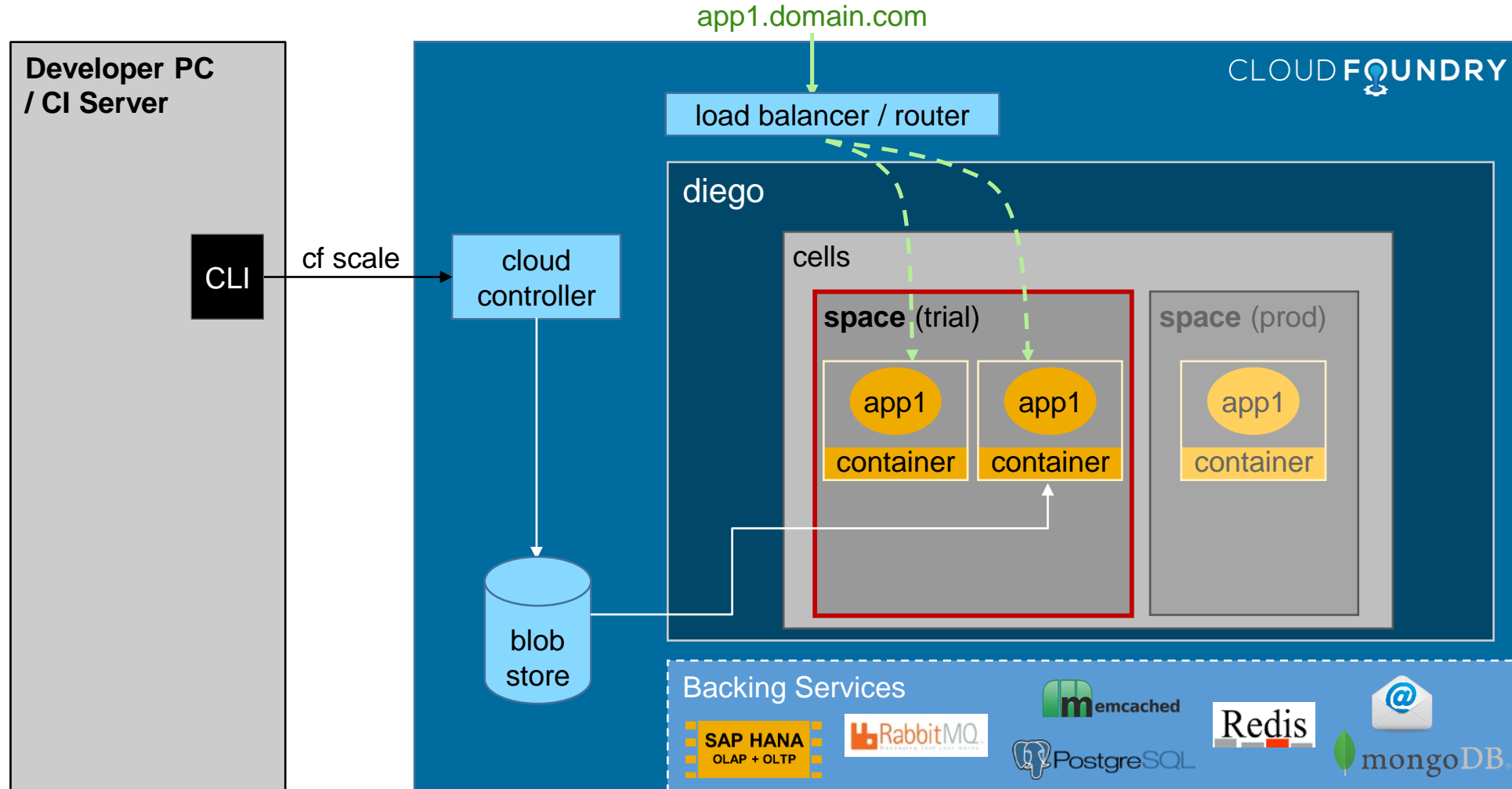
Deploy your application: cf push



[CF Doc – About Starting Applications](#)

Deploying the Application to Cloud Foundry

Scale your application: `cf scale <appname>`



[CF Doc – Scaling an Application](#)

Deploying the Application to Cloud Foundry

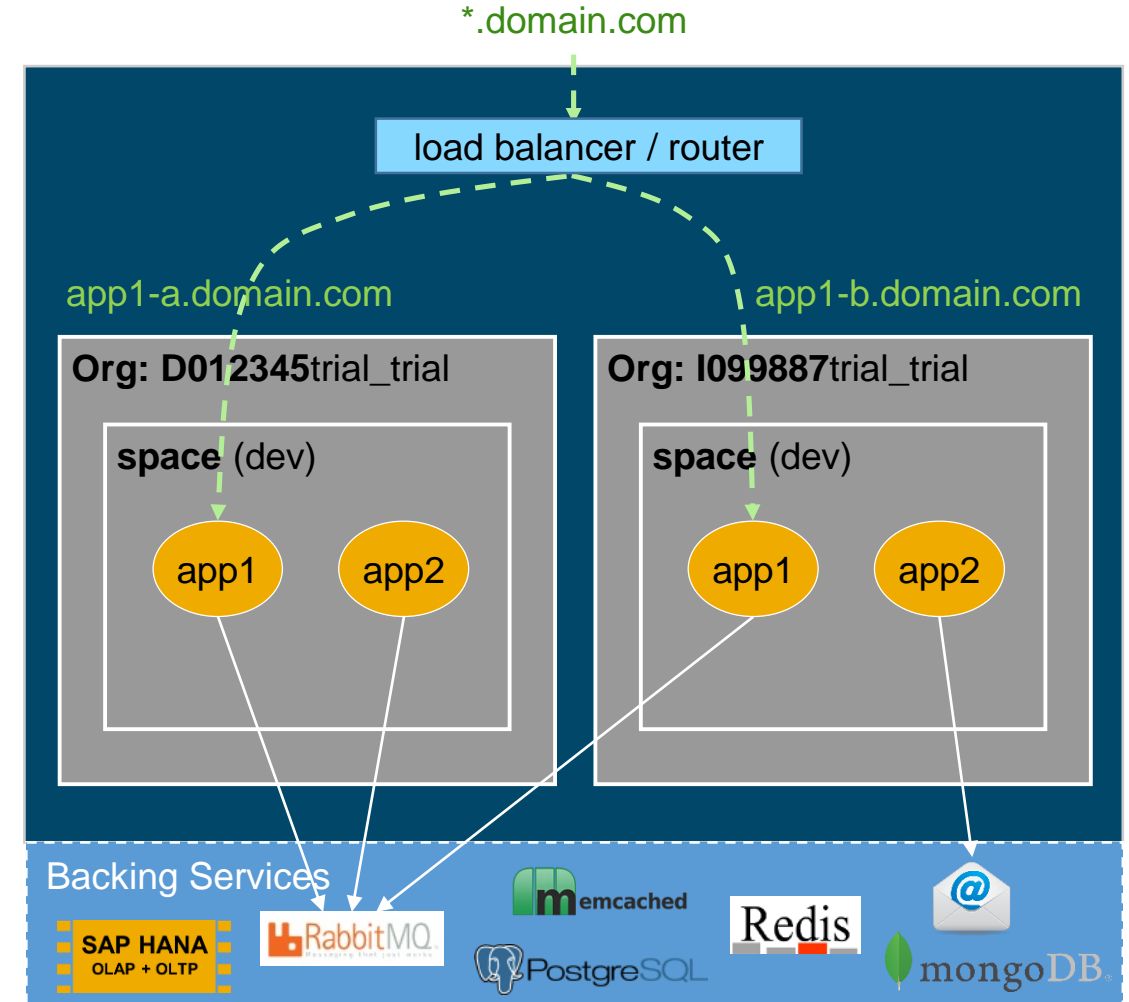
Orgs and spaces

Org defines resource quota, billing account, users etc.

Spaces

- Spaces contain running apps
- Users are assigned to spaces, can deploy, start, stop, scale,...
- Use **cf push -n <hostname>** to specify unique route for your app and to avoid URL conflicts

[SAP Cloud Platform Cockpit](#)

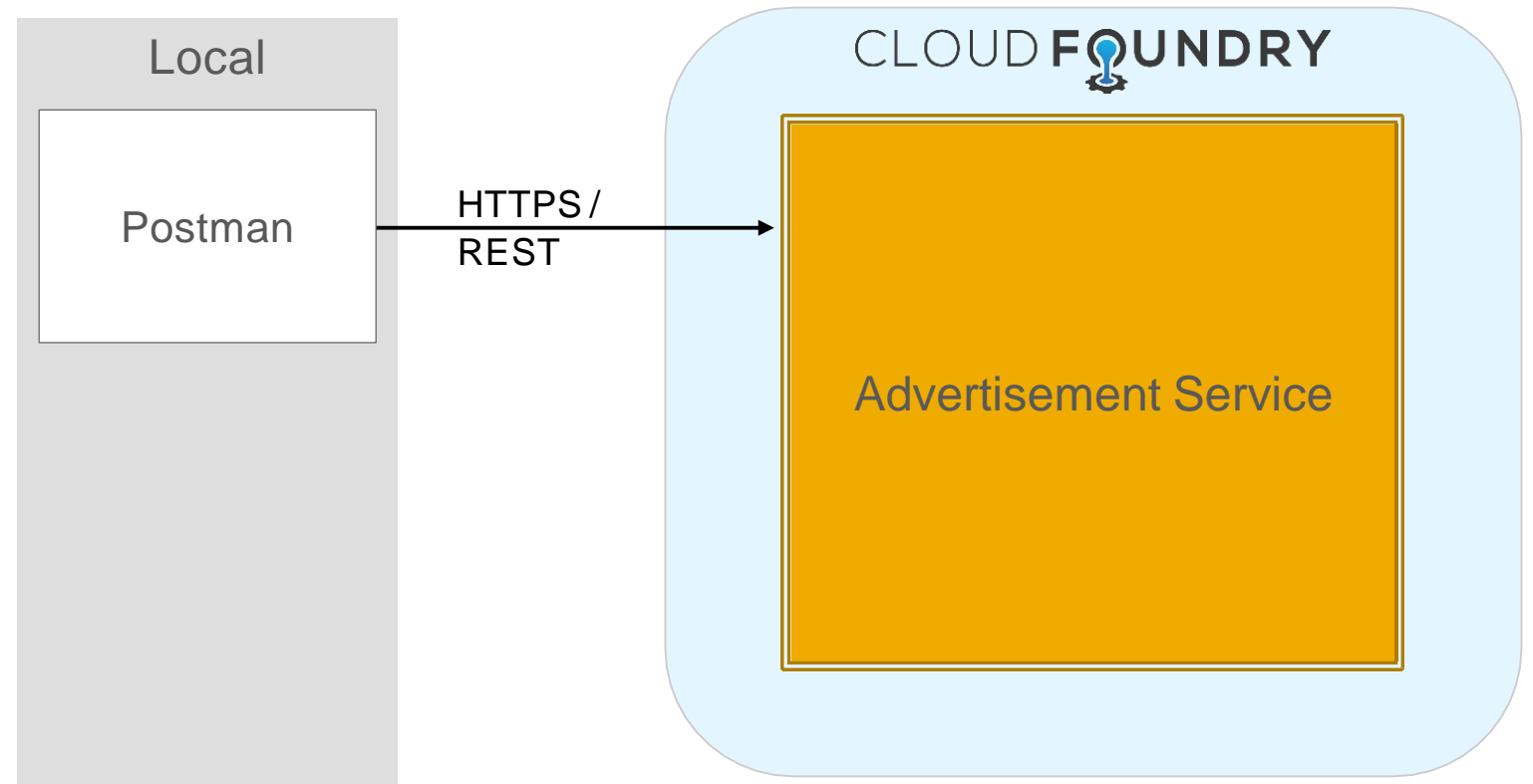


Deploying the Application to Cloud Foundry

Exercise



Exercise 6: Deploy Service to Cloud Foundry



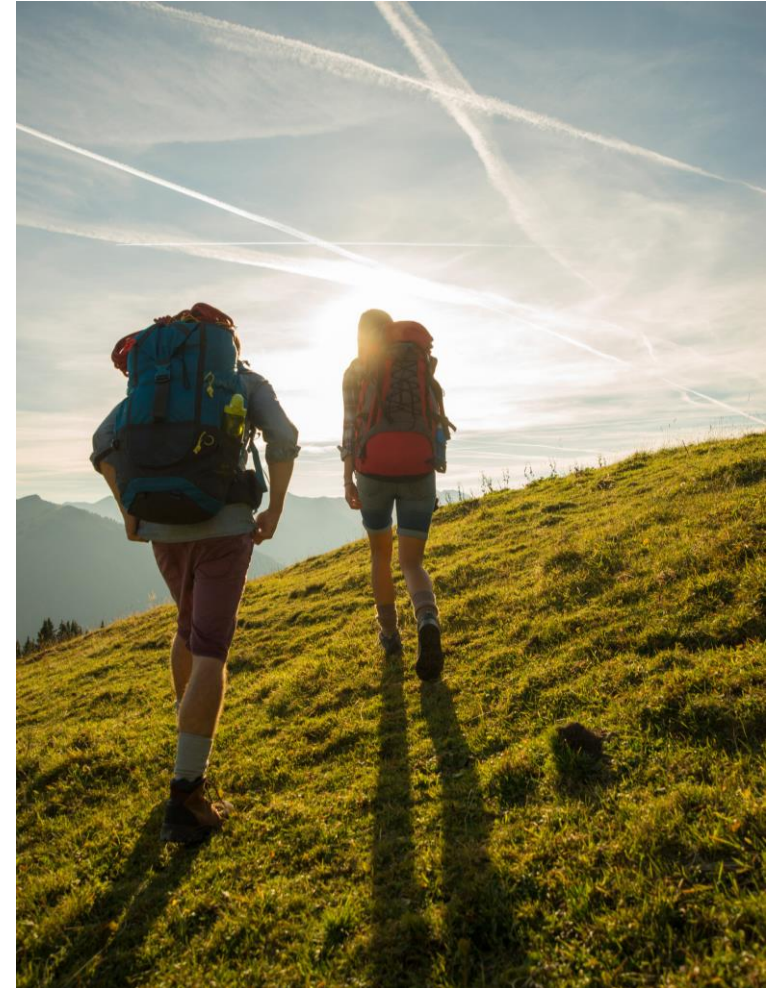
Deploying the Application to Cloud Foundry

Further reading



Additional Material

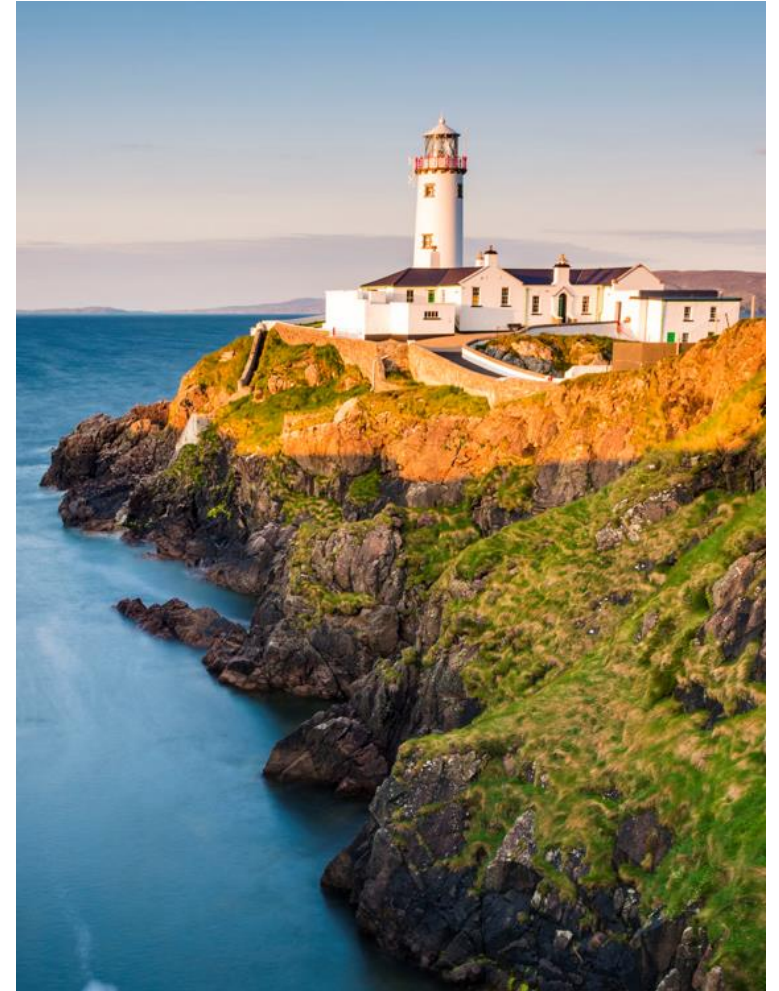
- [Cloud Foundry \(CF\) Documentation \(Docs\)](#)
- [CF Docs – About Starting Applications](#)
- [CF Docs – Scaling an Application](#)
- [SAP Cloud Platform Cockpit](#)
- [SAP Cloud Platform Documentation](#)
- [SAP Cloud Platform Documentation – Regions](#)
- [Cloud Foundry Command Line Cheat Sheet](#)
- [Cloud Foundry CLI Plugins](#)
- [SAP Cloud Platform Cloud Foundry CLI Plugins](#)



Deploying the Application to Cloud Foundry

What you've learned in this unit

- How to deploy a service to Cloud Foundry using CF CLI
- What the deployment descriptor is and how to write one
- How to scale a service on Cloud Foundry



Thank you.

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