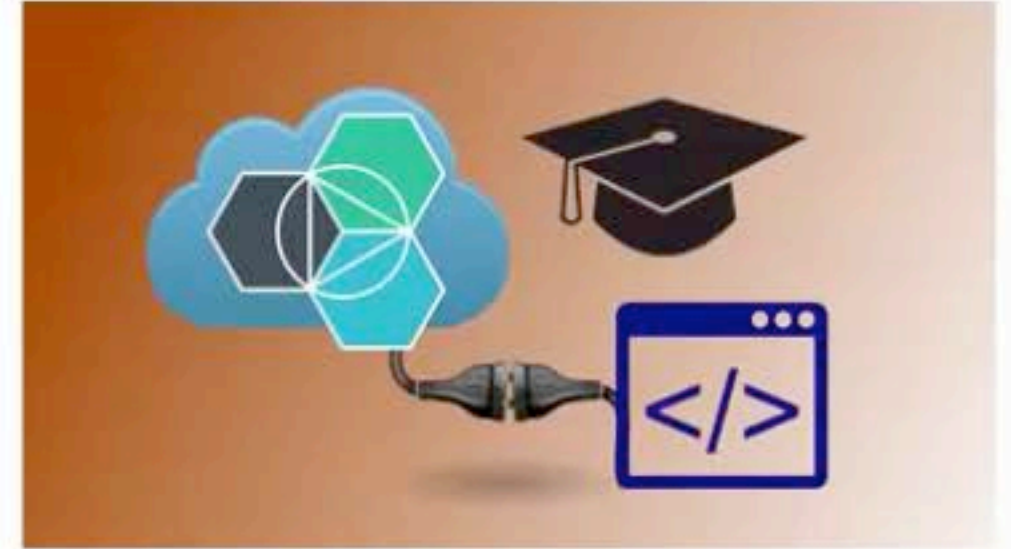# CLI Walkthrough – Getting Started

Learning Objectives:

1. CF CLI overview

2. CF login

3. CF target

CLI Overview

- CLI = Command Line Interface

- Deploy & Manage applications

- Manage users, organization, spaces

- Setup domains, routes

CLI Commands - basic

cf -help, -h   Prints the help

cf --version, -v   Prints CLI version

cf   logout   Logs out the user

cf   passwd   Change the account password

Summary

- CLI login logs to a specific region – targets specific Org and Space

- CF target allows to change the target Org and Space for the subsequent commands.

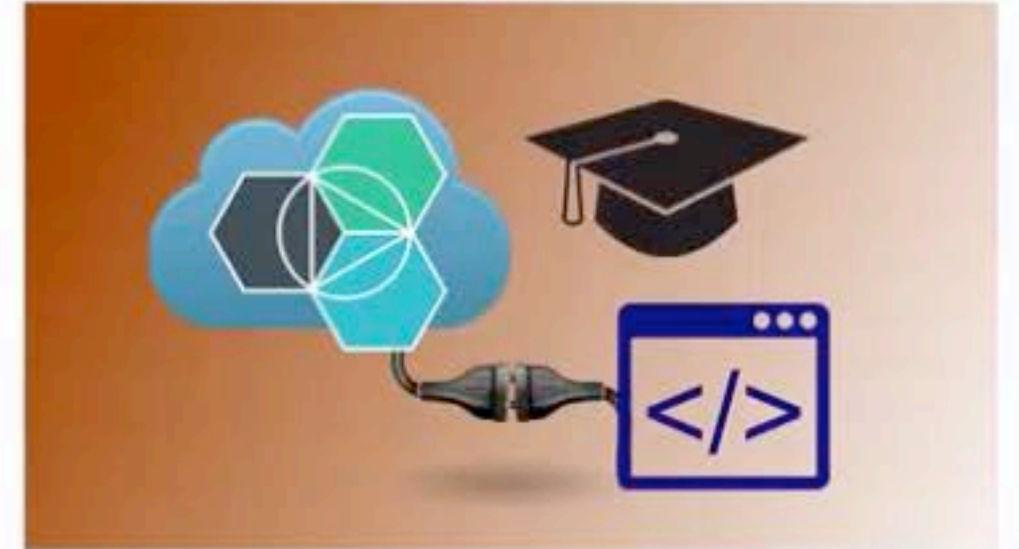- CF target without Org/Space shows the currently selected Org/Space

CLI – Account Management
(Part -2)

Learning Objectives:

1. CF Commands
   - Domains
   - Routes
   - Quotas
   - Organizations
   - Spaces

Please Note

- **NOT** all Cloud Foundry CLI commands are supported on Bluemix

- For some you may get message "Access Denied" or "Unauthorized" message

```
$ cf delete-org "Cloud Warrior"

Really delete the org Cloud Warrior and everything associated with it?> y
Deleting org Cloud Warrior as                              .
FAILED
Server error, status code: 403, error code: 10003, message: You are not authorized to perform the request
```

CLI Commands - Domains

cf domains   Lists the domains

cf create-domain   ORG   domain
Creates the domain under the ORG

cf   delete-domain   domain   -f
Deletes the domain if –f for forced deletion

cf   create-shared-domain
cf   delete-shared-domain
Only PaaS admin can use these commands

CLI Commands - Routes

cf routes	Lists all routes in the current space or organization
cf create-route	Create a url route in a space for later use
cf check-route	Checks if route exists
cf map-route	Maps the route to an application
cf unmap-route	Remove a url route from an app
cf delete-route	Delete a route
cf delete-orphaned-routes	Delete the orphaned route(s)

CLI Commands - Quotas

Quota plans = named sets of memory, service, and instance usage quotas.

cf quotas	Lists available usage quotas
cf quota	Show quota info
cf set-quota	Assign a quota to an org
cf create-quota	Define a new resource quota
cf delete-quota	Delete a quota
cf update-quota	Update an existing resource quota

CLI Commands - Organizations

cf orgs

List all orgs

cf org

Show org info

cf create-org

Create and org

cf rename-org

Rename the org

cf delete-org

Delete the org

Summary

- CLI Commands for account management

  - Domains management

  - Route management

  - Quota management

  - Organization management

  - Space management

Please Note

- **NOT** all Cloud Foundry CLI commands are supported on Bluemix

- For some you may get message "Access Denied" or "Unauthorized" message

```
$ cf delete-org "Cloud Warrior"

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Deleting org Cloud Warrior as              .
FAILED
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```

CLI Command – Application Information

cf apps   Lists the apps under the selected target (Organization & Space)

cf app APP_NAME   Shows the health/information for selected App

CLI Commands - Application Management

cf start, stop	Start and stop application
cf logs, events, files	View logs, files & events related to an app
cf delete	Delete the application
cf restart-app-instance	Restart the application
cf restage	Restage an application

03:06/19:29

CLI Command - Application push

cf push APP [-b URL] [-c COMMAND] [-d DOMAIN] [-i NUM_INSTANCES] [-m MEMORY]
[-n HOST] [-p PATH] [-s STACK]
[--no-hostname] [--no-route] [--no-start]

Pushes the application to Bluemix/Cloud Foundry PaaS

You may push with or without the **manifest** file

You may push multiple apps with the manifest file

Manifest File – manifest.yml

- Manifest tells *cf* push what to do with the applications

- Manifest file contains the various arguments in YML format

- By default *cf push* uses a mainifest file in current directory

- Applications may be pushed without the manifest as well
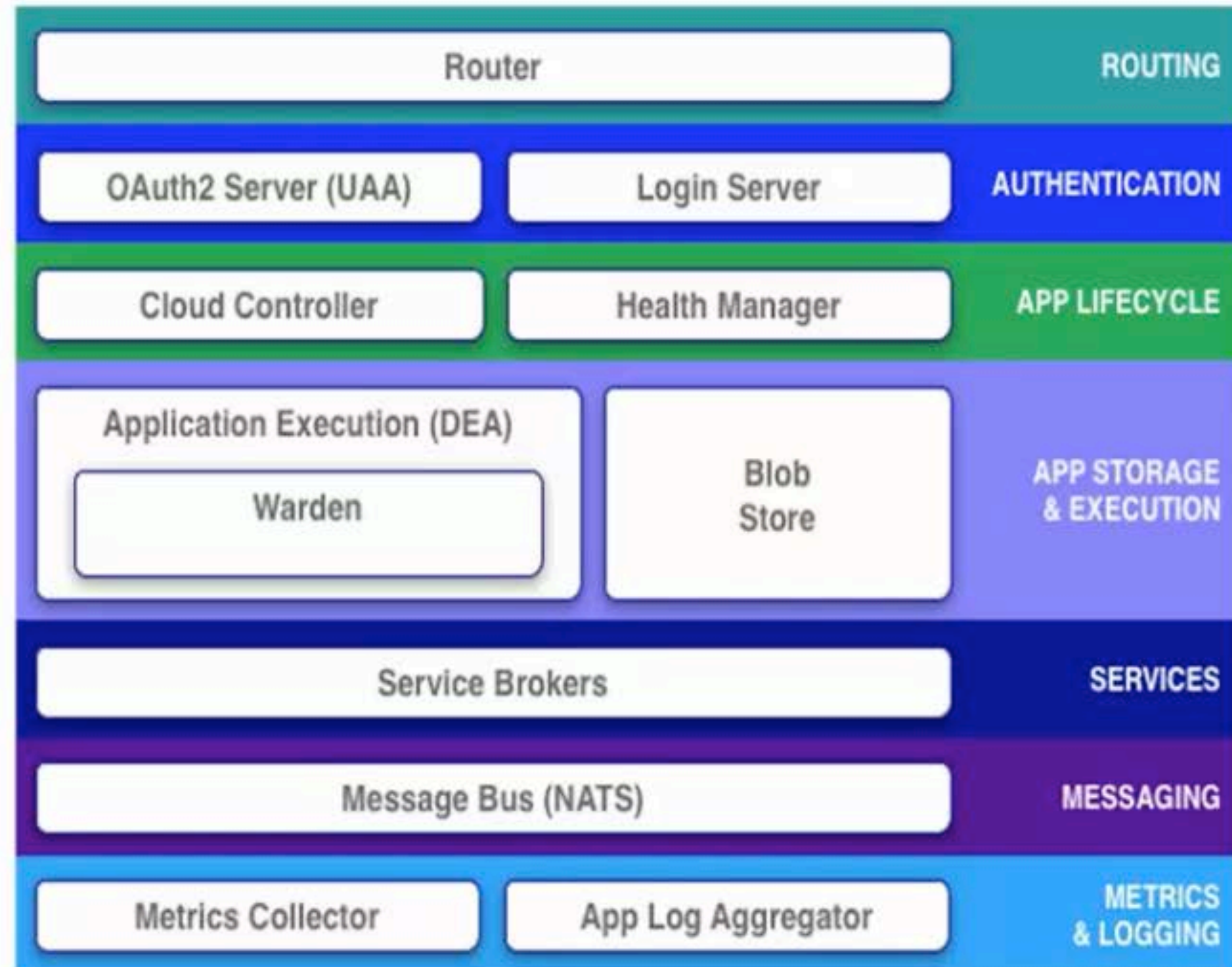
Automate the deployment

Reproducibility

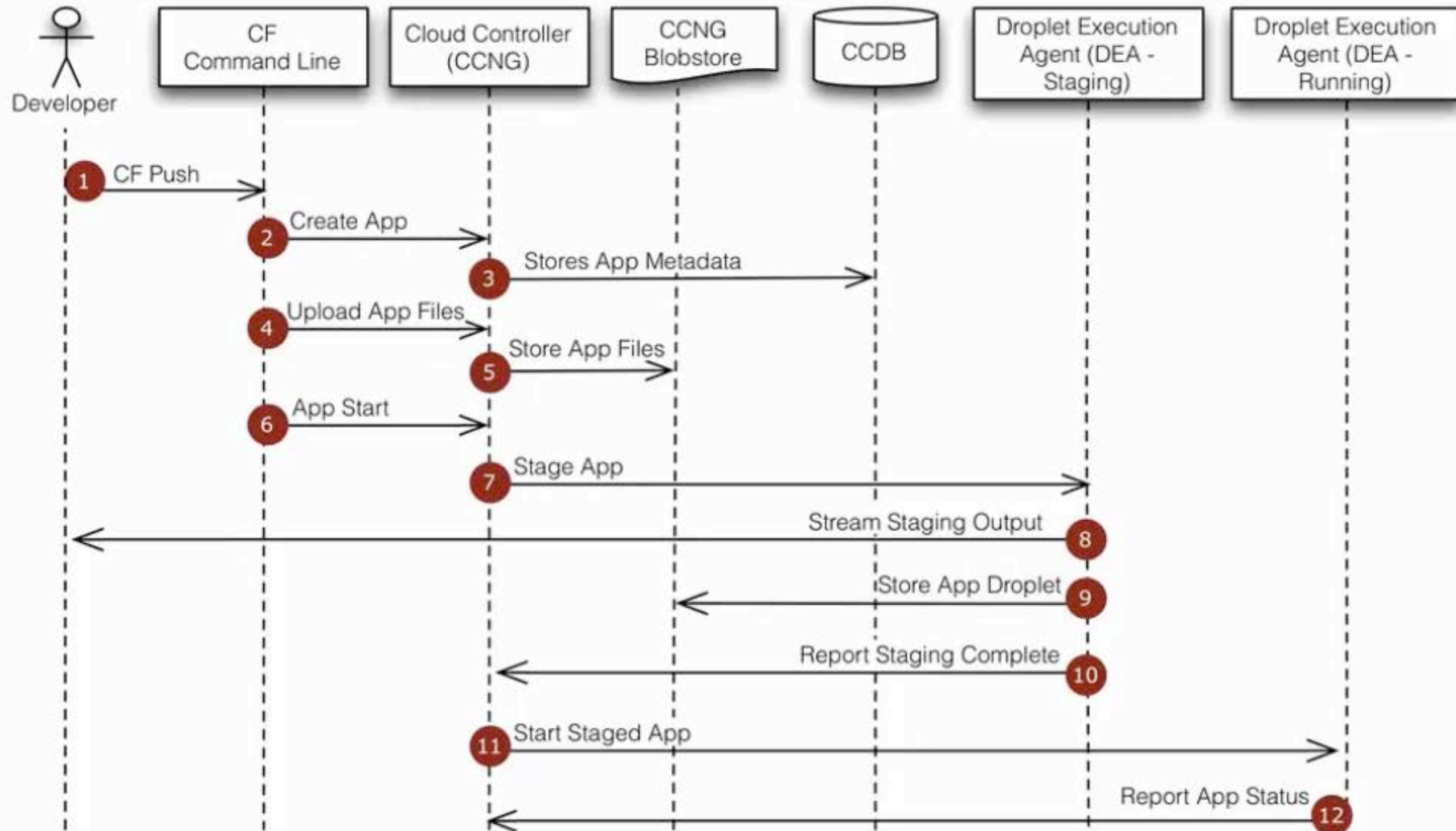Consistency

Cloud Foundry Architecture
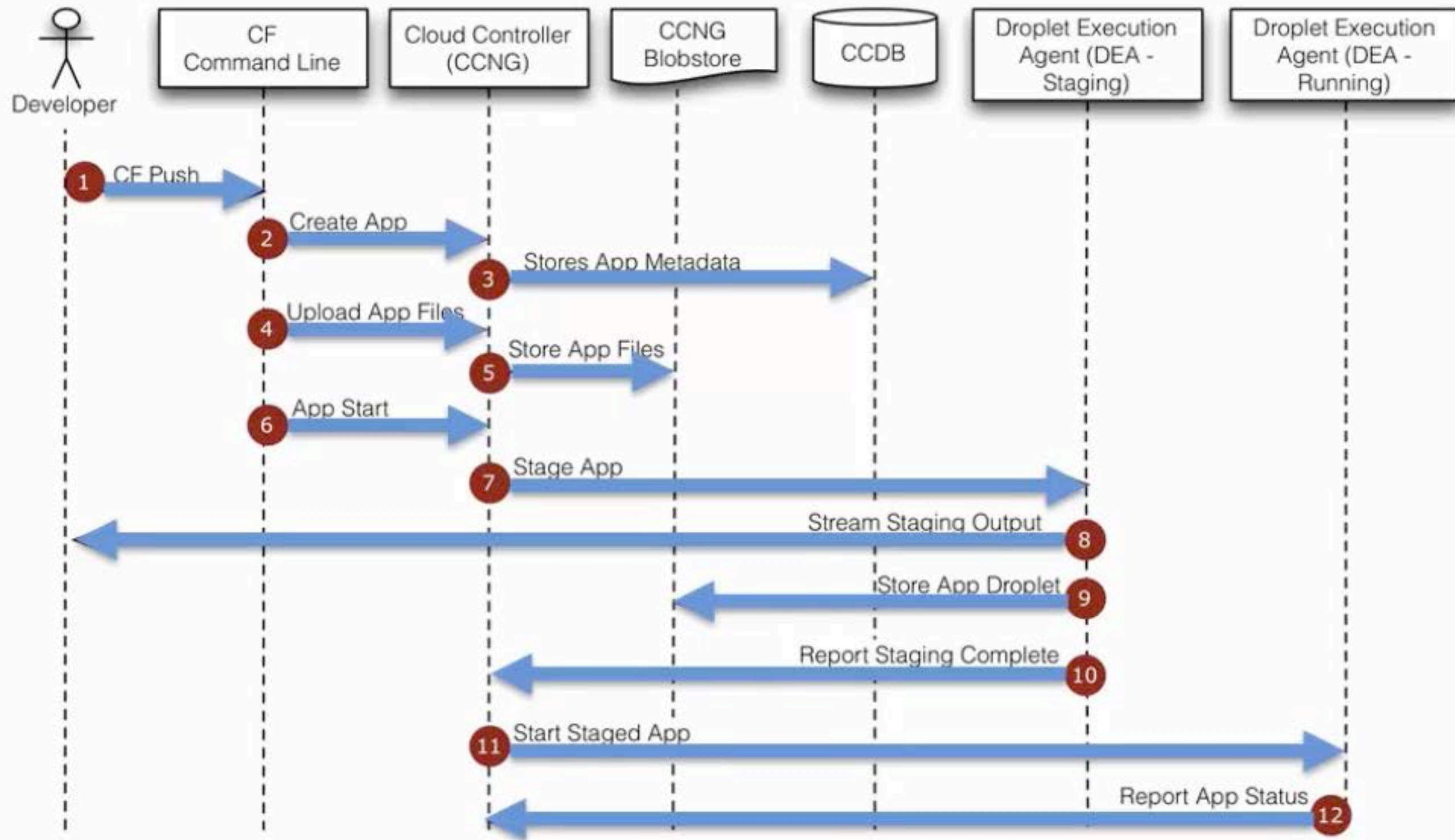
api.ng.bluemix.net →

commands →

Stage & Start →

Router — ROUTING

OAuth2 Server (UAA) | **Login Server** — AUTHENTICATION

Cloud Controller | **Health Manager** — APP LIFECYCLE

Application Execution (DEA)
Warden
Blob Store — APP STORAGE & EXECUTION

Service Brokers — SERVICES

Message Bus (NATS) — MESSAGING

Metrics Collector | **App Log Aggregator** — METRICS & LOGGING

cf push

cf push

Summary

- Use of **cf apps** , **cf app** , **cf stop** , **cf start** commands

- Learned the use of **cf logs**, **cf events**

- **Manifest.yml** file and its benefits

- Flow of **cf push** command