Command Line Interface

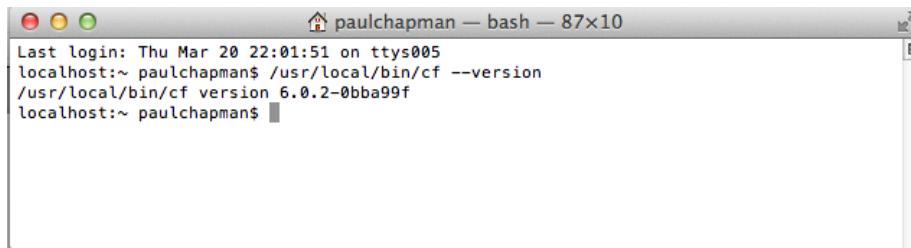Installation, help and logging in

1

Overview

- After completing this lesson, you should be able to:
  - Install the cf Command Line Interface (CLI)
  - Get help on any cf CLI command
  - Log into the Pivotal Web Services (PWS) installation

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Topics

- **Getting Started with the Command Line Interface**
- Login to Pivotal Web Services (PWS)

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Cloud Foundry –Command Line Interface (cf CLI)

- A simple, text-based Cloud Foundry client

- Used by operators and developers to access and work with any Cloud Foundry installation

- Anything you do with the cf CLI can be scripted/automated

```
● ● ●                    🏠 paulchapman — bash — 87×10
Last login: Thu Mar 20 22:01:51 on ttys005
localhost:~ paulchapman$ /usr/local/bin/cf --version
/usr/local/bin/cf version 6.0.2-0bba99f
localhost:~ paulchapman$
```
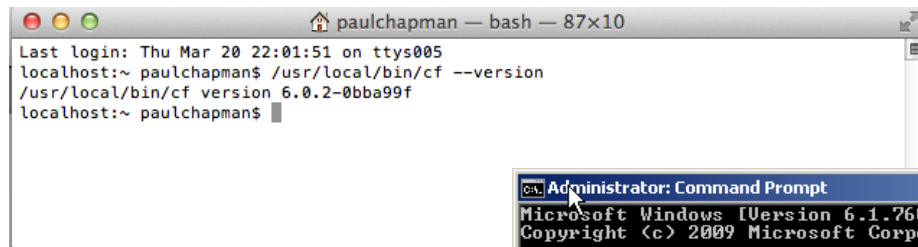
4

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Installing the cf CLI

- To install the cf CLI:
  - Visit https://console.run.pivotal.io/tools
    - or https://github.com/cloudfoundry/cli
  - Download and run installer for your platform
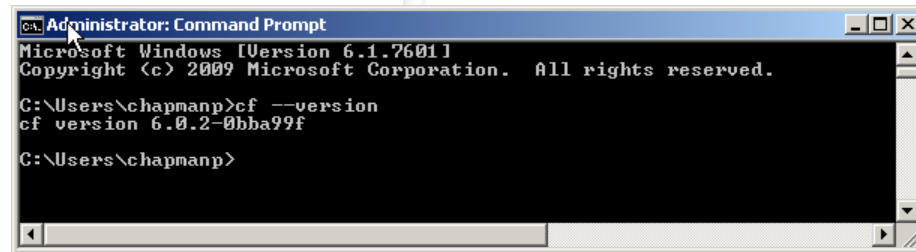
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Test the cf CLI Client

- The CLI is accessed with cf
  - Open a Terminal/Command/Shell window
  - At the prompt type: `cf --version`
  - Or use the alias: `cf -v`

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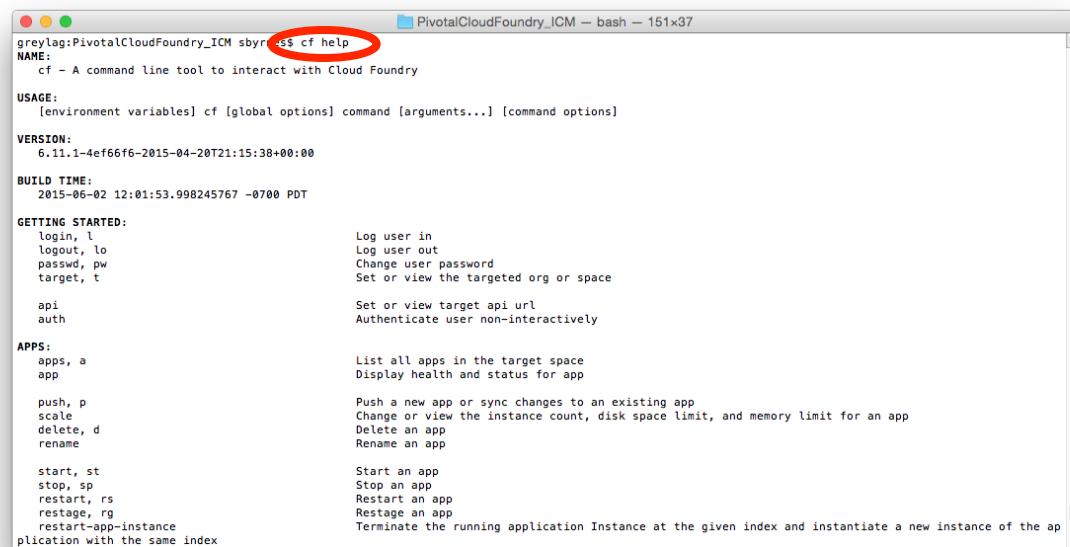
Getting Help- In General

- Get help at any time via **`cf help`**
- See an organized list of commands

Getting Help- Specific Commands

- **cf help *<command>***

Topics

- Getting Started with the Command Line Interface
- **Login to Pivotal Web Services (PWS)**

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Pivotal Web Services (PWS)

- The cf CLI needs to point to a Cloud Foundry installation
- Pivotal provides a hosted installation at https://run.pivotal.io
- We will use this installation for part of this course
  - Visit https://run.pivotal.io
  - Sign up for a trial account

Login to Cloud Foundry

- The cf CLI needs to know:
  - What Cloud Foundry installation you are using
  - What your account details are
- Use `cf login`

```
 cf login -a api.run.pivotal.io -u <username>
API endpoint: api.run.pivotal.io
Authenticating...
OK

Targeted org Cloud Foundry Course

Targeted space development

API endpoint: https://api.run.pivotal.io (API version: 2.0.0)
User:           qzqz2020@yahoo.com.au
Org:            Cloud Foundry Course
Space:          development
```

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Finding the API Endpoint URL

- URL of your Cloud Foundry instance
  - On Apps Manager homepage on first login
  - Or click *Tools*
- Shows how to run `cf login`, including the API endpoint

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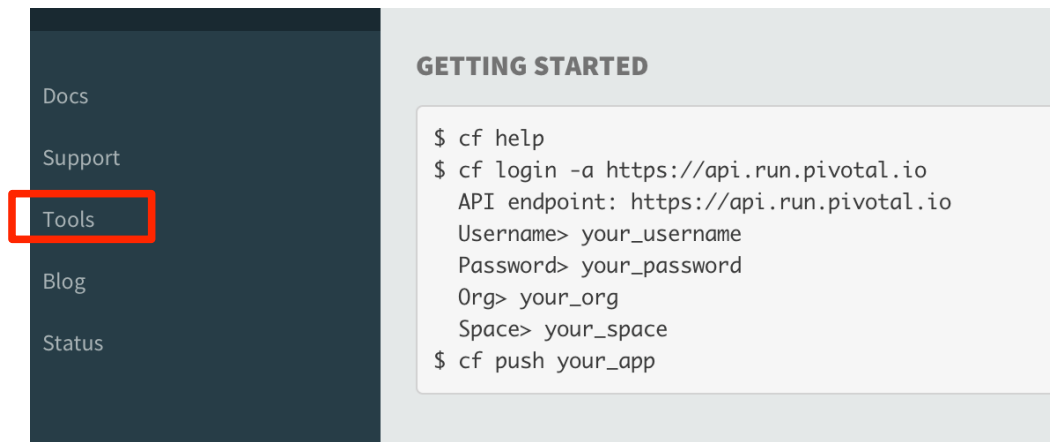
Current Targets

- When you first login, you see output shown below
  - Notice it shows *current* organization and space
  - At any time, run cf target to get the same information
- By default your organization only has one space (development)
- **Note:** On PWS you are set up as your own organization and can add more organizations

```
API endpoint: https://api.run.pivotal.io (API version: 2.6.0)
User:         pchapman@pivotal.io
Org:          pivotaledu
Space:        development
```

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Using a Proxy

- Your company may require a proxy for internet access
  - Look in the *Network* or *Internet* settings for your browser
- To configure this for `cf`
  - `set HTTP_PROXY=...proxyurl...` (Windows)
  - `export HTTP_PROXY=..proxyurl` (Unix/MacOS)

```
localhost:dev$ set HTTP_PROXY=proxy.mycompany.com:8080

localhost:dev$ echo %HTTP_PROXY%
proxy.mycompany.com:8080
localhost:dev$                              Windows
```

```
dev$ export HTTP_PROXY=proxy.mycompany.com:8080
dev$ echo $HTTP_PROXY
proxy.mycompany.com:8080
dev$                                Unix/MacOS
```

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Cloud Controller

- When you set a target, you are connecting to a component of Cloud Foundry called the Cloud Controller

- The Cloud Controller has a REST API

- The commands of the cf CLI make Cloud Controller API calls behind the scenes

cf CLI → Cloud
Controller
API → Cloud Controller
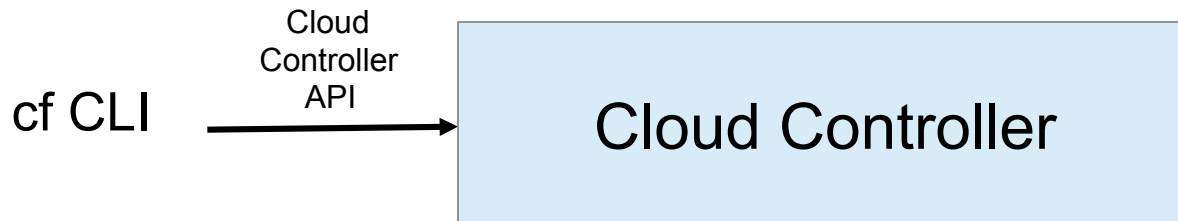
(the Cloud Foundry entry points of a load balancer and router are not shown in diagram)

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The .cf Directory

- **`cf`** creates a *.cf* directory in your *home* directory of your computer

  - Stores context, logs, crash reports …

  - Remembers your CF API endpoint

    - Don't need to specify **`-a`** option at next login

```
localhost:dev$ ls -l ~/.cf
total 48
-rw-------  1 paulchapman  staff   2491 15 Aug 14:06 config.json
-rw-r--r--  1 paulchapman  staff  11737 29 Nov  2013 crash
drwxr-xr-x  3 paulchapman  staff    102 12 Sep  2013 logs
-rw-r--r--  1 paulchapman  staff     26 12 Sep  2013 target
-rw-r--r--  1 paulchapman  staff   2084 29 Nov  2013 tokens.yml
```

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16

Topics

- Getting Started with the Command Line Interface
- Login to Pivotal Web Services (PWS)

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Lab

Install the cf CLI and log in to PWS

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