

INSTALLING CF-CLI

INTRODUCTION

CF CLI is the command line tool from where you can do admin operations on your PCF environment. To make use of it, you must install cf cli in your linux terminal.

The following guide will help you to install the latest version of cf cli.

GET THE CF CLI

You can download the CF packages for Linux\MacOS or Windows from here.

<https://github.com/cloudfoundry/cli/releases>

Else you can run following commands in your linux machine:

```
$ curl -L "https://cli.run.pivotal.io/stable?release=linux64-binary&source=github" | tar -zx
```

It will download the latest version of cf cli in the extracted location.

```
[root@acadbld000321b tmp]# curl -L "https://cli.run.pivotal.io/stable?release=linux64-binary&source=github" | tar -zx
% Total    % Received % Xferd Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left   Speed
100 6703k  100 6703k    0     0  5777k      0  0:00:01  0:00:01 --:--:-- 7561k
[root@acadbld000321b tmp]# ls -ltr
total 23984
-rwxr-xr-x. 1 root      root      24201088 May 10 18:42 cf
drwxr-xr-x. 2 dd-agent dd-agent   4096 May 13 06:04 hspecdata_dd-agent
-rw-r--r--. 1 root      root        304 May 15 20:36 esmsetup.log
-rw-r--r--. 1 root      root        154 May 22 13:01 local_users.out
-rw-r--r--. 1 root      root         0 May 22 13:01 sudo_users.out
-rw-r--r--. 1 root      root        154 May 22 13:01 users.out
-rw-r--r--. 1 root      root        154 May 22 13:01 allusers.out
-rw-r--r--. 1 root      root       2208 May 22 13:05 prep_REPORT.out
-rw-r--r--. 1 root      root      75784 May 23 12:16 opt-config-trace.log
-rw-r--r--. 1 root      root     40023 May 23 12:22 opt-config-delete.log
-rw-r--r--. 1 root      root     75932 May 23 12:26 opt-ei-create-config-trace.log
drwxr-xr-x. 2 sscope2  sscope2   4096 May 23 14:06 hspecdata_sscope2
-rw-r--r--. 1 root      root         15 May 23 22:27 bash.output
[root@acadbld000321b tmp]#

[root@acadbld000321b tmp]# ./cf version
cf version 6.18.0+b22884b-2016-05-10
[root@acadbld000321b tmp]#
```

To check the version you have downloaded, you need to run the following command:

```
# ./cf -version.
```

But we do not want to run the command as a script rather we want it to be a service. This part is easy.

Copy the cf file to /usr/bin

```
# cp cf /usr/bin/
```

ADDING PLUGINS

To extend capabilities of CF CLI you can add plugins to it. There are various plugins available for various tasks. For example, you can generate usage-report by adding usage-report plugin. Similarly, you can add diego-enabler plugin to help apps and spaces to move to diego or DEA according to the need.

To do so, the first step is to add the plugin repo. The command for that is:

```
[root@aoadbldooo32lb tmp]# cf add-plugin-repo CF-Community http://plugins.cloudfoundry.org  
  
FAILED  
Plugin repo named "CF-Community" already exists, please use another name.  
[root@aoadbldooo32lb tmp]#
```

We have already added the plugin repo, hence the message came. We are good here.

TO CHECK ALL THE AVAILABLE PLUGINS IN THE REPO

To CF CLI is the command line tool from where you can do admin operations on your PCF environment.

```
[root@aoadbldooo32lb tmp]# cf repo-plugins  
Getting plugins from all repositories ...  
  
Repository: CF-Community  
name          version  description  
Firehose Plugin  0.9.0   This plugin allows you to connect to the firehose (CF admins only)  
Scaleover       1.0.4   Roll traffic from one app to another by scaling over time  
antifreeze      0.2.1   Detect if an app has unexpected ENV vars or services bound which are missing from the manifest  
cf-willitconnect 1.1.0   Can CF connect to a thing?  
Diego-Enabler   1.1.0   Enable/Disable Diego support for an app (CLI v6.13.0+)  
Usage Report    1.3.0   Report on memory usage and application instances for orgs and spaces  
fastpush       1.0.0   Fast, non-persistent, smart and incrementally updating of your application  
doctor          1.0.2   doctor scans your deployed applications, routes and services for anomalies and reports any issues found. (CLI v6.7.0+)  
Download Droplet 1.0.1   Download droplets to your local machine  
manifest-generator 1.0.0   Help you to generate a manifest from o (CLI v6.7.0+)  
kibana-me-logs  0.4.3   Launches the Kibana UI (from kibana-me-logs) for an application.  
Cloud Deployment Plugin 1.0.1   This plugin allows you to manage application deployment details and manifests in a github repo (like spring cloud config server for deployments)  
CLI-Recorder    1.0.2   Records and playbacks CLI commands.
```

Buildpack Management	1.0.0	Provides a declarative way to configure system buildpacks in a Cloud Foundry installation
Targets	1.1.0	Easily manage multiple CF targets
blue-green-deploy	1.0.4	Zero downtime deploys with smoke test support
Statistics	1.0.0	Display live metrics/statistics about an app
wildcard_plugin	1.0.0	Allows user to search and delete apps using wildcard(*)
CF App Stack Changer	1.1.0	Allows admins to list and update applications with outdated lucid64 stacks.
cf-download	1.0.0	Plugin for downloading your application contents after staging.
Copy Env	1.0.0	Expose remote VCAP_SERVICES on the client environment
Buildpack Usage	1.0.0	View all buildpacks used in the current CLI target context.
Test User	0.0.1	Create a user and assign all possible permissions, organisation and space are created if they do not already exist as well. If no organisation or space name are specified then the default value of 'development' is used
Brooklyn	0.1.1	Interact with Service Broker for Apache Brooklyn
autopilot	0.0.1	zero downtime deploy plugin for cf applications
Open	1.1.0	Open app url in browser
Console	1.0.0	Start a tmate session on an application container
Live Stats	1.0.0	Monitor CPU and Memory usage on an app via the browser.

[root@aoadbldoo032lb tmp]#

```

root@aoadbldoo032lb tmp# cf help-plugins
Setting plugins from all repositories ...

Repository: CF-Community
name      version  description
Firehose Plugin  0.9.0    This plugin allows you to connect to the firehose (CF admins only)
Rollover        1.0.4    Roll traffic from one app to another by scaling over time
unifreeze       0.2.1    Detect if an app has unexpected ENV vars or services bound which are missing from the manifest
cf-willitconnect 1.1.0    Can CF connect to a thing?
Diego-Enabler   1.1.0    Enable/Disable Diego support for an app (CLI v6.13.0+)
Sage Report     1.0.0    Report on memory usage and application instances for orgs and spaces
Fastpush        1.0.0    Fast, non-persistent, smart and incrementally updating of your application
Doctor          1.0.2    doctor scans your deployed applications, routes and services for anomalies and reports any issues found. (CLI v6.7.0+)
Download Droplet 1.0.1    Download droplets to your local machine
manifest-generator 1.0.0    Help you to generate a manifest from 0 (CLI v6.7.0+)
kibana-no-logs   0.4.3    Launches the Kibana UI (from kibana-no-logs) for an application.
Cloud Deployment Plugin 1.0.1    This plugin allows you to manage application deployment details and manifests in a github repo (like spring cloud config server for deployments)
CLI-Recorder    1.0.2    Records and playbacks CLI commands.
Buildpack Management 1.0.0    Provides a declarative way to configure system buildpacks in a Cloud Foundry installation
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red then the default value of 'development' is used
Brooklyn         0.1.1    Interact with Service Broker for Apache Brooklyn
autopilot        0.0.1    zero downtime deploy plugin for cf applications
Open             1.1.0    Open app url in browser
Console          1.0.0    Start a tmate session on an application container
Live Stats       1.0.0    Monitor CPU and Memory usage on an app via the browser.

```

ADDING DIEGO-ENABLER PLUGIN

```
[root@aoadbld00032lb tmp]# cf install-plugin Diego-Enabler -r CF-Community
```

****Attention: Plugins are binaries written by potentially untrusted authors. Install and use plugins at your own risk.****

Do you want to install the plugin Diego-Enabler? (y or n)> yes

Looking up 'Diego-Enabler' from repository 'CF-Community'

12741304 bytes downloaded...

Installing plugin /tmp/ filename=diego-enabler_linux_amd64...

OK

Plugin Diego-Enabler v1.0.1 successfully installed.

```
[root@aoadbld00032lb tmp]#
```

ADDING USAGE-REPORT PLUGIN

```
[root@aoadbld00032lb tmp]# cf install-plugin "Usage Report" -r CF-Community
```

****Attention: Plugins are binaries written by potentially untrusted authors. Install and use plugins at your own risk.****

Do you want to install the plugin Usage Report? (y or n)> yes

Looking up 'Usage Report' from repository 'CF-Community'

8908816 bytes downloaded...

Installing plugin /tmp/usagereport-plugin...

OK

Plugin usage-report v1.3.0 successfully installed.

```
[root@aoadbld00032lb tmp]#
```

```
[root@acadblid000321b tmp]# cf plugins
Listing Installed Plugins...
OK

Plugin Name   Version   Command Name   Command Help
[root@acadblid000321b tmp]# cf install-plugin Diego-Enabler -r CF-Community

**Attention: Plugins are binaries written by potentially untrusted authors. Install and use plugins at your own risk.**

Do you want to install the plugin Diego-Enabler? (y or n)> yes
Looking up 'Diego-Enabler' from repository 'CF-Community'
12741304 bytes downloaded...
Installing plugin /tmp/ filename=diego-enabler_linux_amd64...
OK
Plugin Diego-Enabler v1.0.1 successfully installed.
[root@acadblid000321b tmp]# cf install-plugin "Usage Report" -r CF-Community

**Attention: Plugins are binaries written by potentially untrusted authors. Install and use plugins at your own risk.**

Do you want to install the plugin Usage Report? (y or n)> yes
Looking up 'Usage Report' from repository 'CF-Community'
8908816 bytes downloaded...
Installing plugin /tmp/usage-report-plugin...
OK
Plugin usage-report v1.3.0 successfully installed.
[root@acadblid000321b tmp]#
```

CF STATISTICS

How about knowing the stats of an application? Here is the plugin called "Statistics".

- Install using:

```
#cf install-plugin "Statistics" -r CF-Community
```

- Target an org & space:

```
#cf target -o EnterpriseIntegration -s TibcoCloudDev
```

- Run against an application

```
#cf statistics HTTP-JMS-JDBC.application
```



CF KIBANA-ME PLUGIN

```
[root@aoadbld00032lb openplatform]# cf add-plugin-repo community http://plugins.cfapps.io/
OK
http://plugins.cfapps.io/list added as 'community'
[root@aoadbld00032lb openplatform]# cf install-plugin kibana-me-logs -r community
**Attention: Plugins are binaries written by potentially untrusted authors. Install and use plugins at your own
risk.**
Do you want to install the plugin kibana-me-logs? (y or n)> yes
Looking up 'kibana-me-logs' from repository 'community'
8872680 bytes downloaded...
Installing plugin /tmp/ filename=cf-plugin-kibana-me-logs_linux_amd64...
OK
Plugin kibana-me-logs vo.4.3 successfully installed.
[root@aoadbld00032lb openplatform]#
```

CF TARGETS PLUGIN

Plugin Name: Targets

Version: 1.1.0

Purpose: Easily manage multiple CF targets

ADD THE PLUGIN:

```
#cf add-plugin-repo CF-Community http://plugins.cloudfoundry.org/
```

```
#cf install-plugin targets -r CF-Community
```

TARGET & SAVE THE INTENDED ENVIRONMENT

Example:

```
#cf login --skip-ssl-validation -a https://api.devcloudwest.inbcu.com
```

Provide username and password and then execute following command:

```
#cf save-target NAME
```

```
#cf save-target devcloudwest
```

CHECK THE TARGETS

#cf targets

```
[root@aoaapl00336 openplatform]# cf targets
cloudeast
cloudwest
devcloudwest (current, modified)
```

Add more targets if you have.

POINT TO THE INTENDED TARGET

#cf set-target devcloudwest