

# **Munich D Programmers**

## **Ozan N. Süel**



# **D and the Cloud**



<http://ons-security.com/>

Ozan Nurettin Süel, Dipl.-Ing. (Univ.)  
Stranded in Munich  
Working for SAP SE Germany

21 years in Digital Business  
6 years in Cyber Security  
2 years D-Hobbist

Main focus

- Security
- Cloud
- Web
- And all stuff around these topics



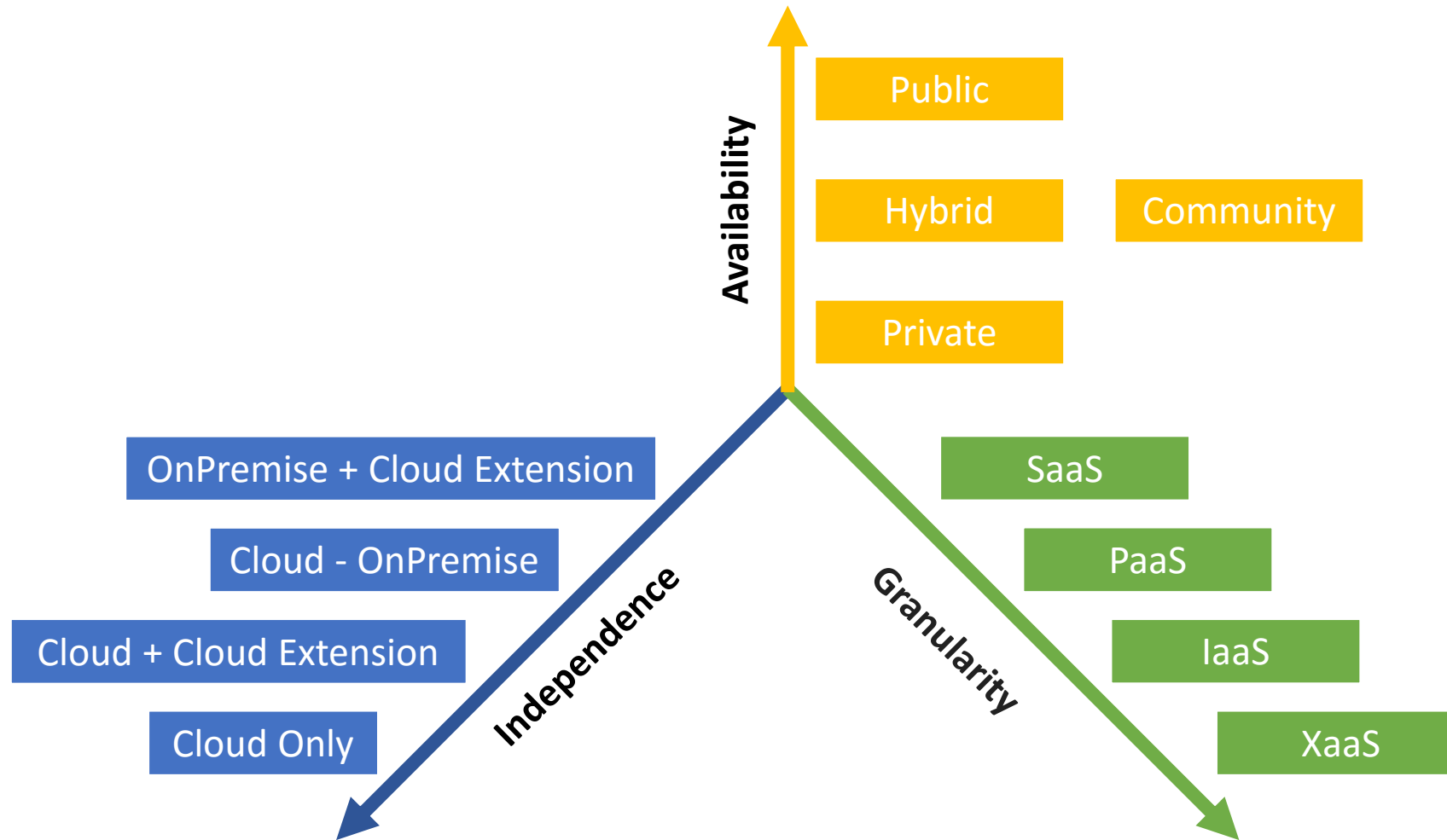
# Today

- ✓ 18:00: Get together with Pizza and beer
- 18:45: D and the Cloud,  
by Ozan
  - Understand D and the Cloud
  - Scenarios for D and the Cloud
  - D and the Cloud Foundry
- 19:30: Short Break
- 19:40: Usage of the D Compiler in the Cloud without installation,  
by Stefan
- ~~○ 20:00: D Heroku Pack + Deploy your own D Web Server within 15 minutes,  
by Seb (Next D-Meetup)~~





# The 3-dimensional Cloud



# Services in the Cloud



Collaboration



User Experience



Integration



Internet of Things



Analytics



Security



Mobile



Data & Storage



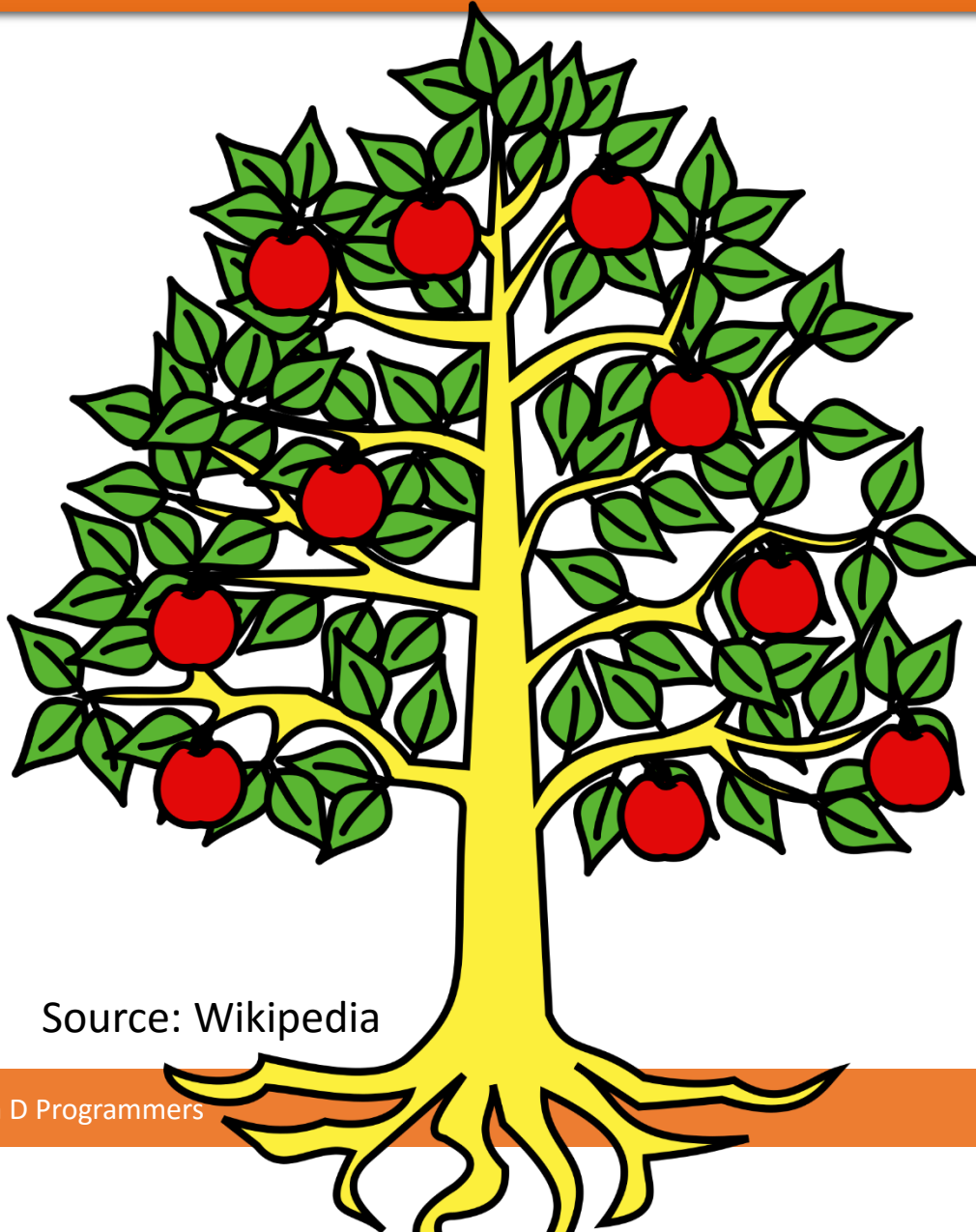
Business Services



Dev & Ops



# Low hanging fruits – How to pick them?

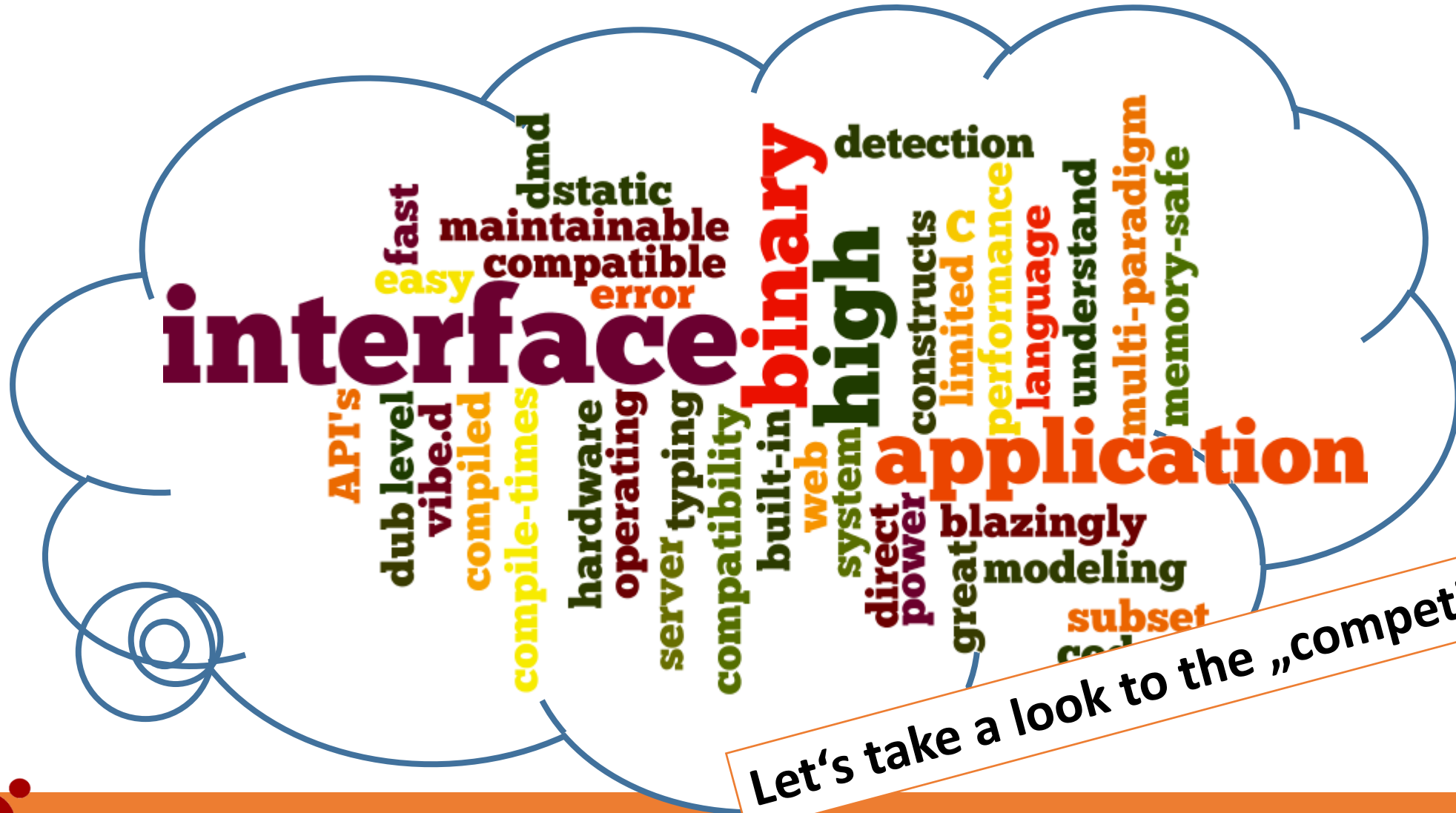


Source: Wikipedia





# (Simple) Scenarios for D and the Cloud



Let's take a look to the „competitors“



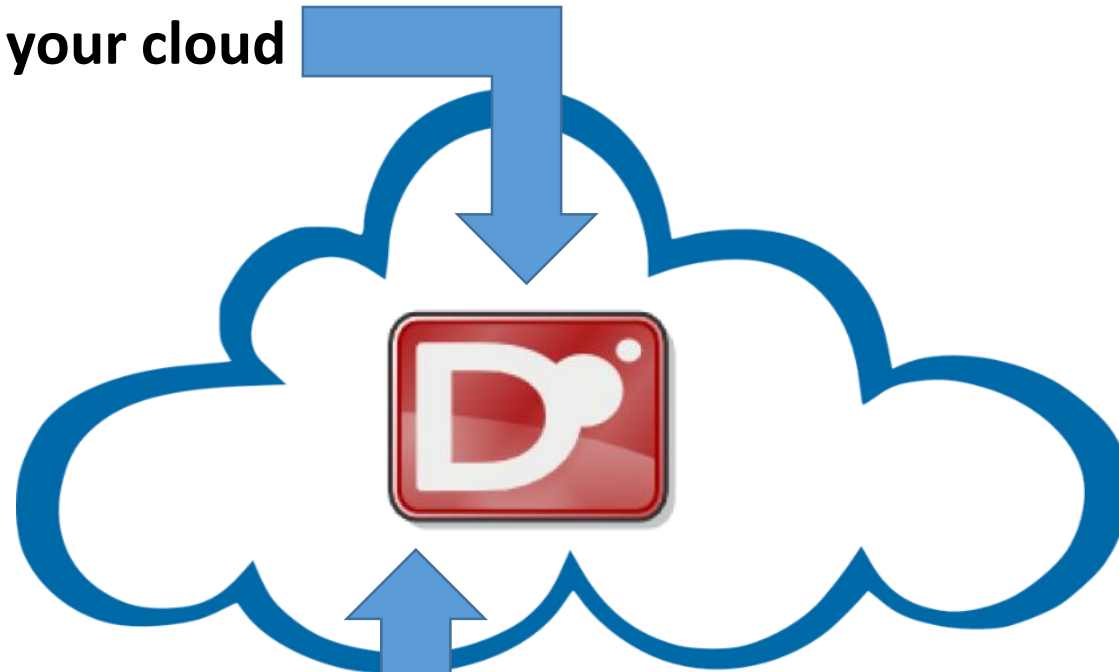


# Szenario 1: Put inside Cloud

Put „X“ in a „Y“ container

➡ Deploy the Container to your cloud

<https://www.docker.com/products/docker-cloud>



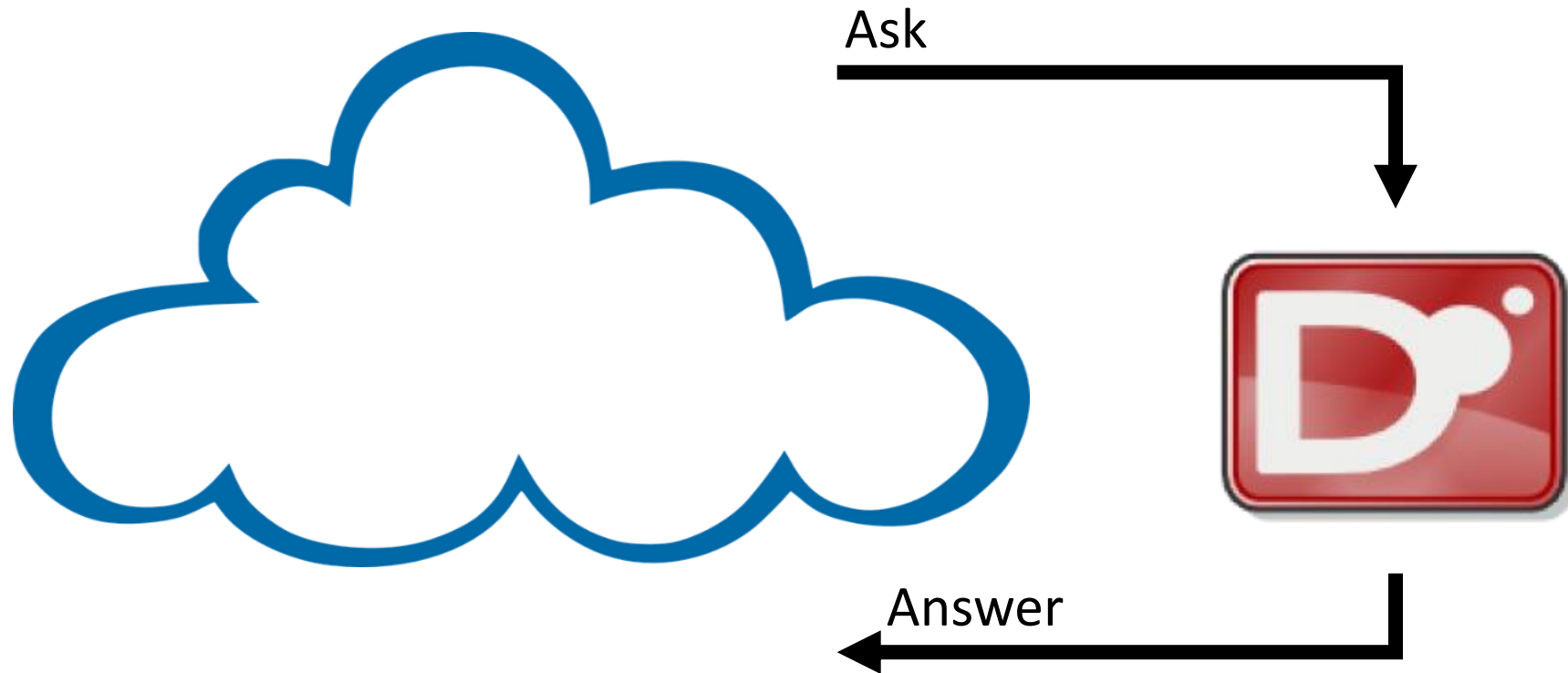
Put „X“ in a „VM“ Image

➡ Deploy the image to your cloud

<https://azure.microsoft.com/de-de/services/virtual-machines/>



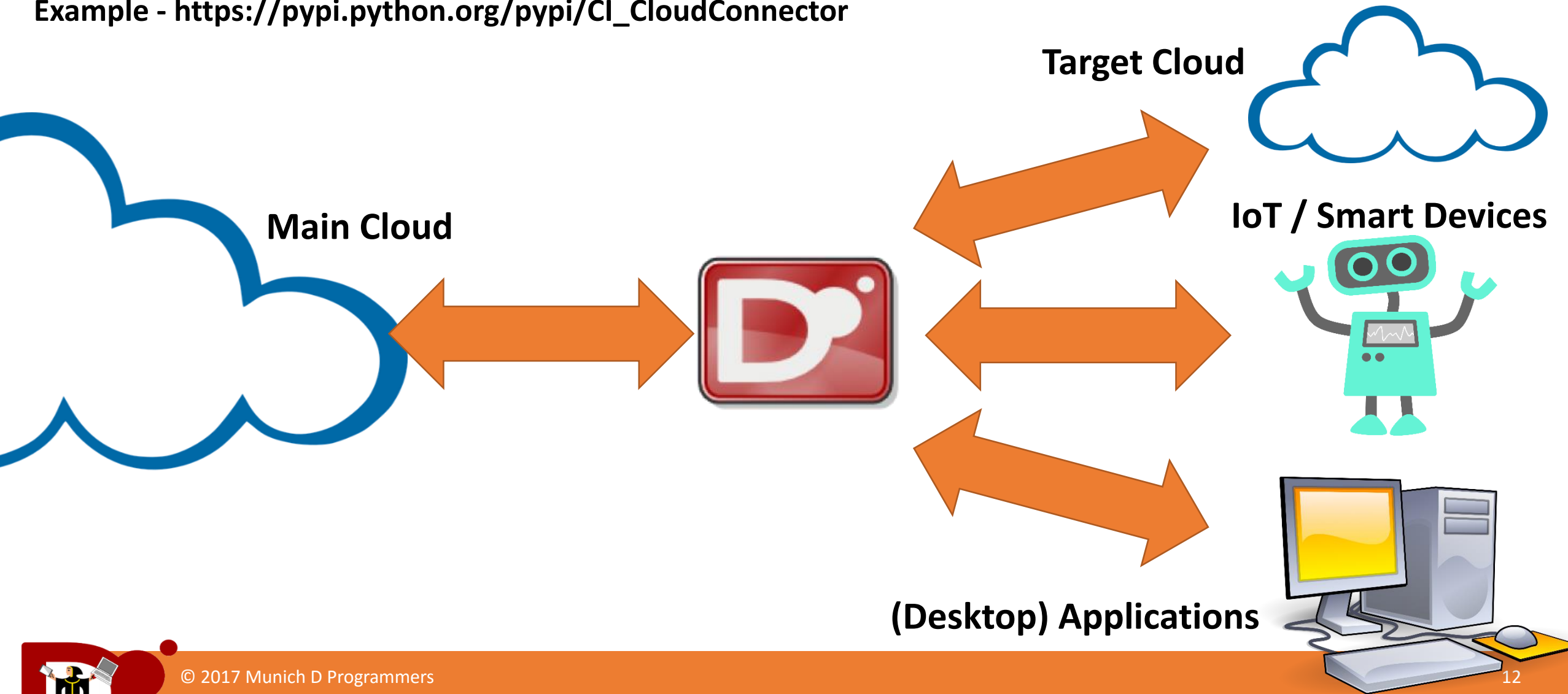
## Szenario 2: D embedded in Cloud



**Example: Embedding R Engine**

# Szenario 3: D connects to the Cloud

Example - [https://pypi.python.org/pypi/CI\\_CloudConnector](https://pypi.python.org/pypi/CI_CloudConnector)





CLOUD **FOUNDRY**



# What's a Cloud Foundry?

**Cloud Foundry** is an open source, multi cloud application platform as a service (PaaS) governed by the Cloud Foundry Foundation, a 501(c)(6) organization.

Great community!



## List of Cloud Foundry Certified Provider (2016):

- Atos Canopy
- CenturyLink App Fog
- GE Predix
- HPE Helion Stackato 4.0
- Huawei FusionStage
- IBM Bluemix
- Pivotal Cloud Foundry
- SAP HANA Cloud Platform
- Swisscom Application Cloud


Source:

[https://en.wikipedia.org/wiki/Cloud\\_Foundry](https://en.wikipedia.org/wiki/Cloud_Foundry)



# The Cloud Foundry Community

<https://github.com/cloudfoundry-community/cf-docs-contrib/wiki/Buildpacks>

 This repository Search Pull requests Issues Gist

cloudfoundry-community / cf-docs-contrib Watch 66 Star 115 Fork 26

[Code](#) [Pull requests 0](#) [Projects 0](#) [Wiki](#) [Pulse](#) [Graphs](#)

## Buildpacks

Wenxin Liu edited this page on Nov 22, 2016 · 64 revisions

[Edit](#) [New Page](#)

### Buildpack information for Cloud Foundry v2

[Custom buildpacks](#)

### List of available buildpacks

**Built-in:**

- <https://github.com/cloudfoundry/java-buildpack>
- <https://github.com/cloudfoundry/ruby-buildpack>
- <https://github.com/cloudfoundry/nodejs-buildpack>
- <https://github.com/cloudfoundry/php-buildpack>
- <https://github.com/cloudfoundry/go-buildpack>
- <https://github.com/cloudfoundry/python-buildpack>
- <https://github.com/cloudfoundry/staticfile-buildpack>

Pages 84

### Search

### Contents

- [Home](#)
- [Editing HOWTO](#)

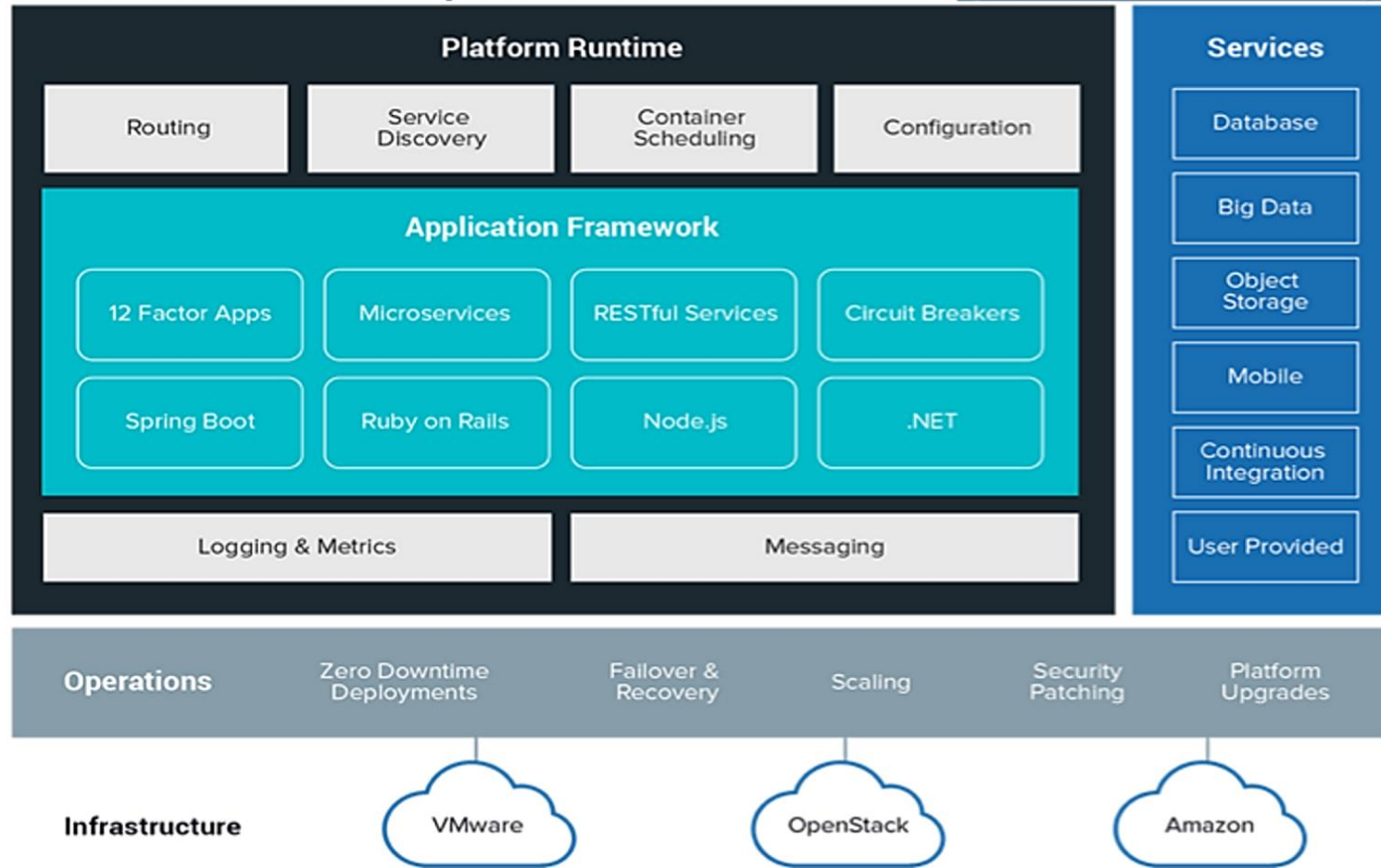
### Community Advisory Board, PMC Schedules

- [PMC HTML Calendar View](#)
- [PMC ICAL Address](#)
- [CAB: agenda, slack](#)
- [PMC notes](#)



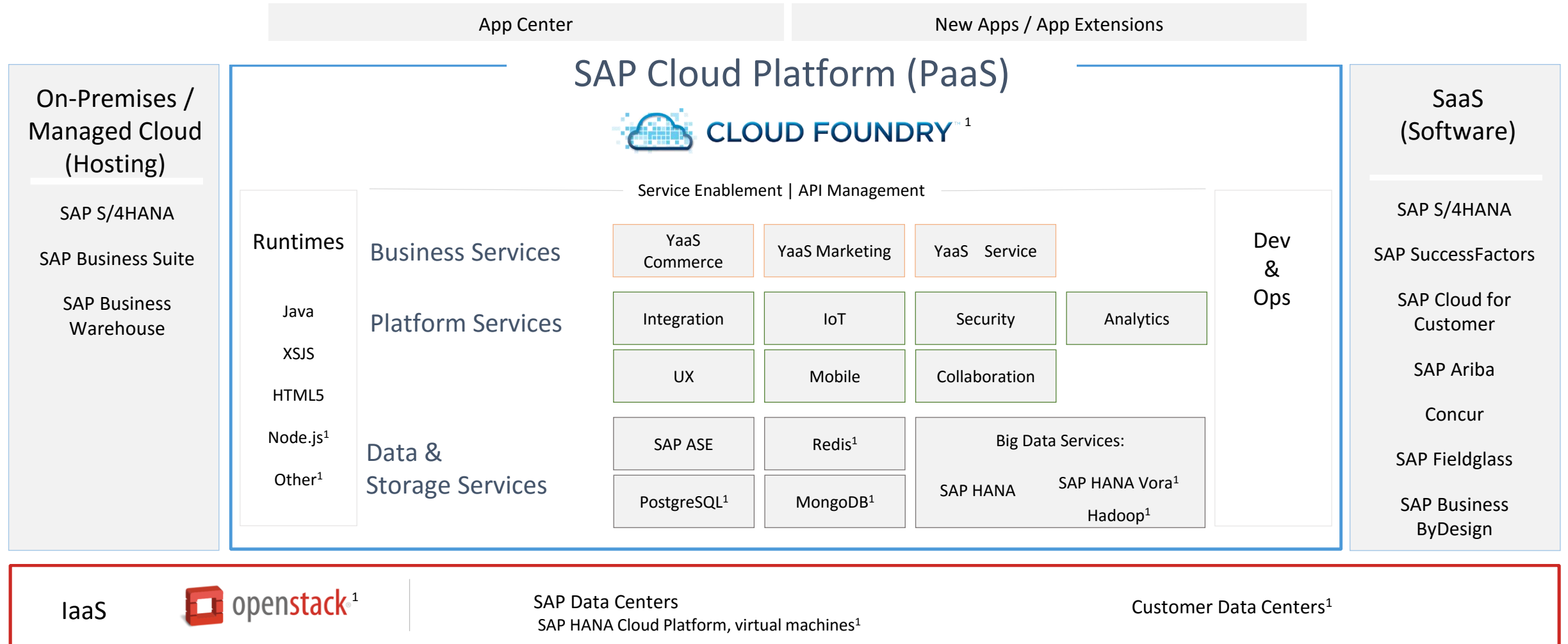
# Cloud Foundry Architecture

## Pivotal Cloud Foundry - Architecture



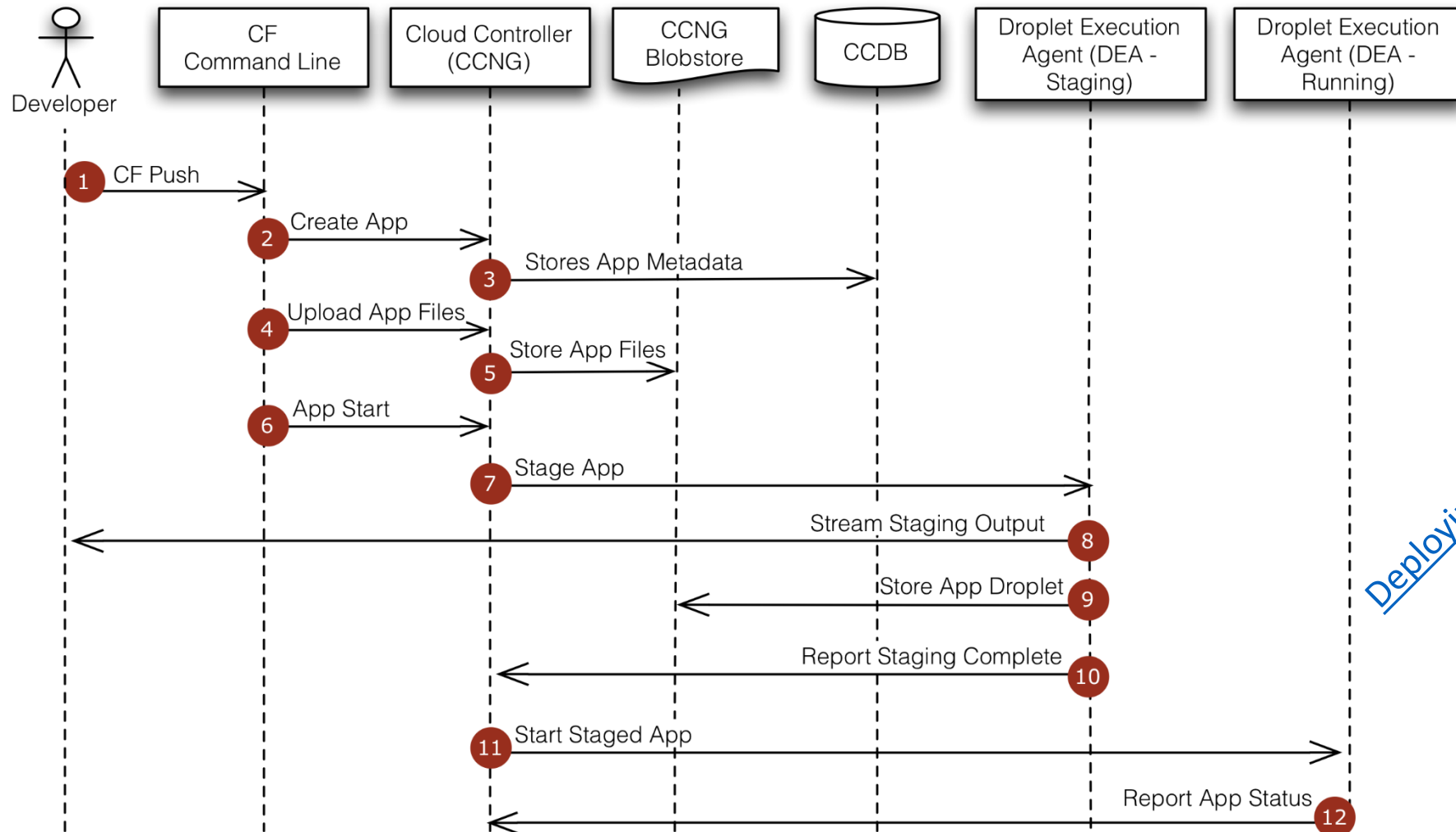


# Technical and Business Services (Source: SAP 2016)



1) planned innovations / future direction

# The Cloud Foundry process



*Deploying a D App to the Cloud*



# Q&A

Can I use vibe-d in the cloud?

→ <http://forum.dlang.org/post/istrufucekbmhkimltlm@forum.dlang.org>

Can I also use D in the **Amazon Web Services (AWS)** cloud environment?

→ Yes, <https://github.com/tamedigital/vibe-s3> (alpha!), <https://github.com/braddr/downloads.dlang.org>

Can I run vibe.d in Heroku?

→ Yes, <https://tour.dlang.org/tour/en/vibed/deploy-on-heroku>

Cloud-foundry is great, but where are tutorials?

→ Here: <https://docs.cloudfoundry.org/devguide/> o. <https://github.com/SAP/hcp-cloud-foundry-tutorials>

→ <https://devportal.yaas.io/tools/saphanacloudplatform/>

I see, Cloud-foundry has his own container called „runners“. Are there other containers for „D in the Cloud“?

→ Yes, Docker – Kubernetes – Rkt – Mesos – Packer – Shipyard – CloudSlang – Linux Container

Something for the Google Cloud?

Yes, <https://github.com/sigod/gcm> (Google Cloud Messaging (GCM))



# Key Takeaways



The **power** of  
D



The **possibilities** of  
the CLOUD



The **platform** to build, extend, and run  
great internet applications



# **Munich D Programmers**

## **Ozan N. Süel**

