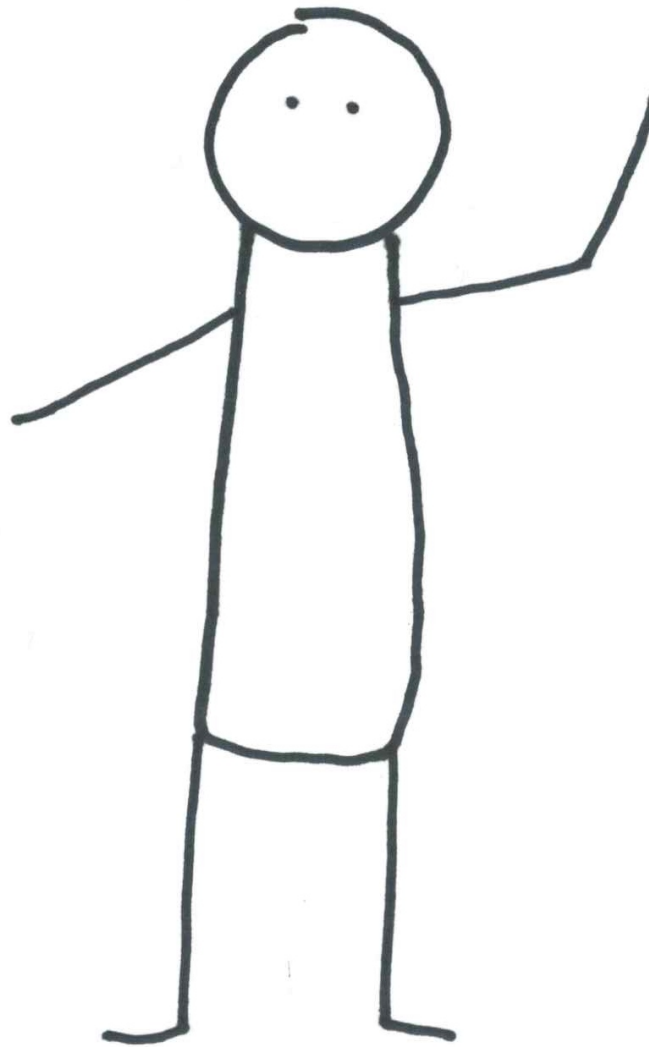
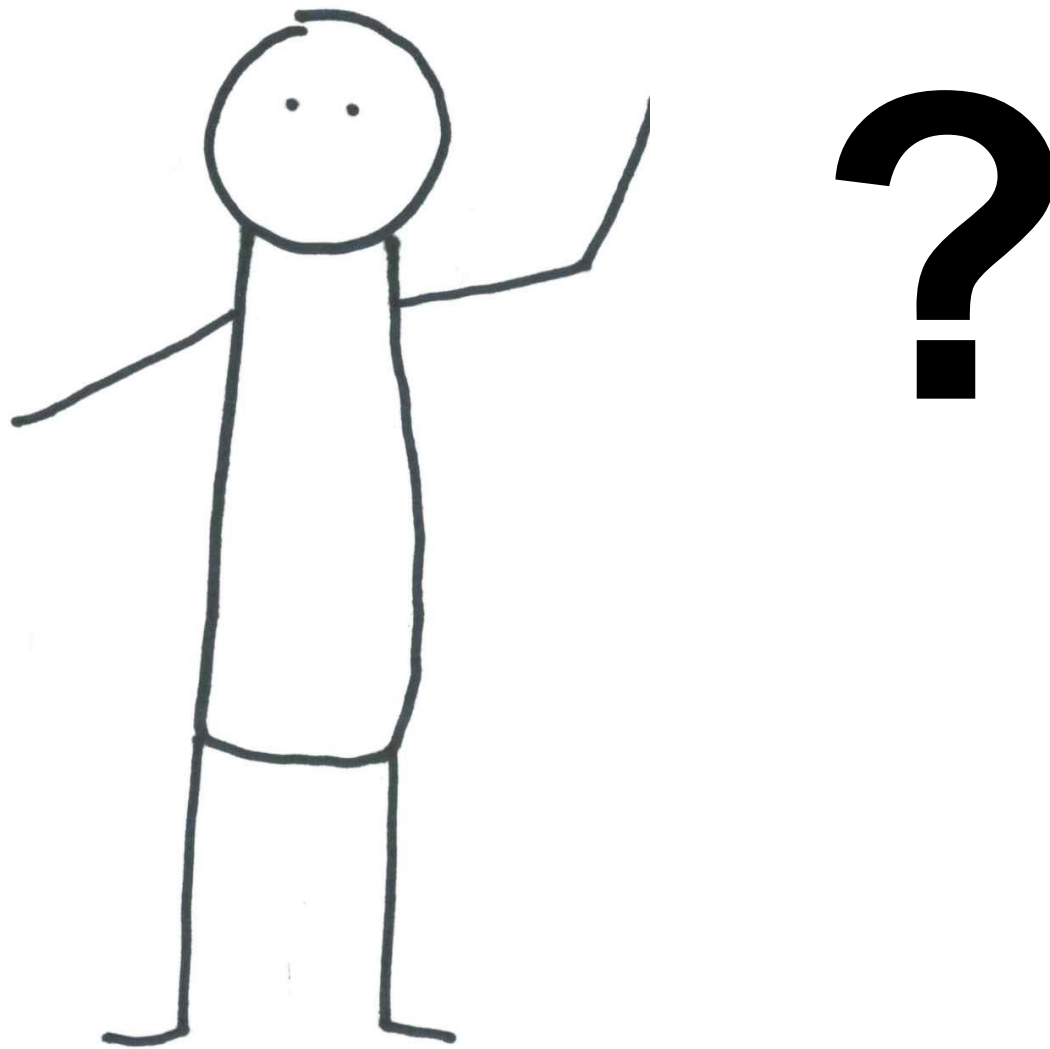
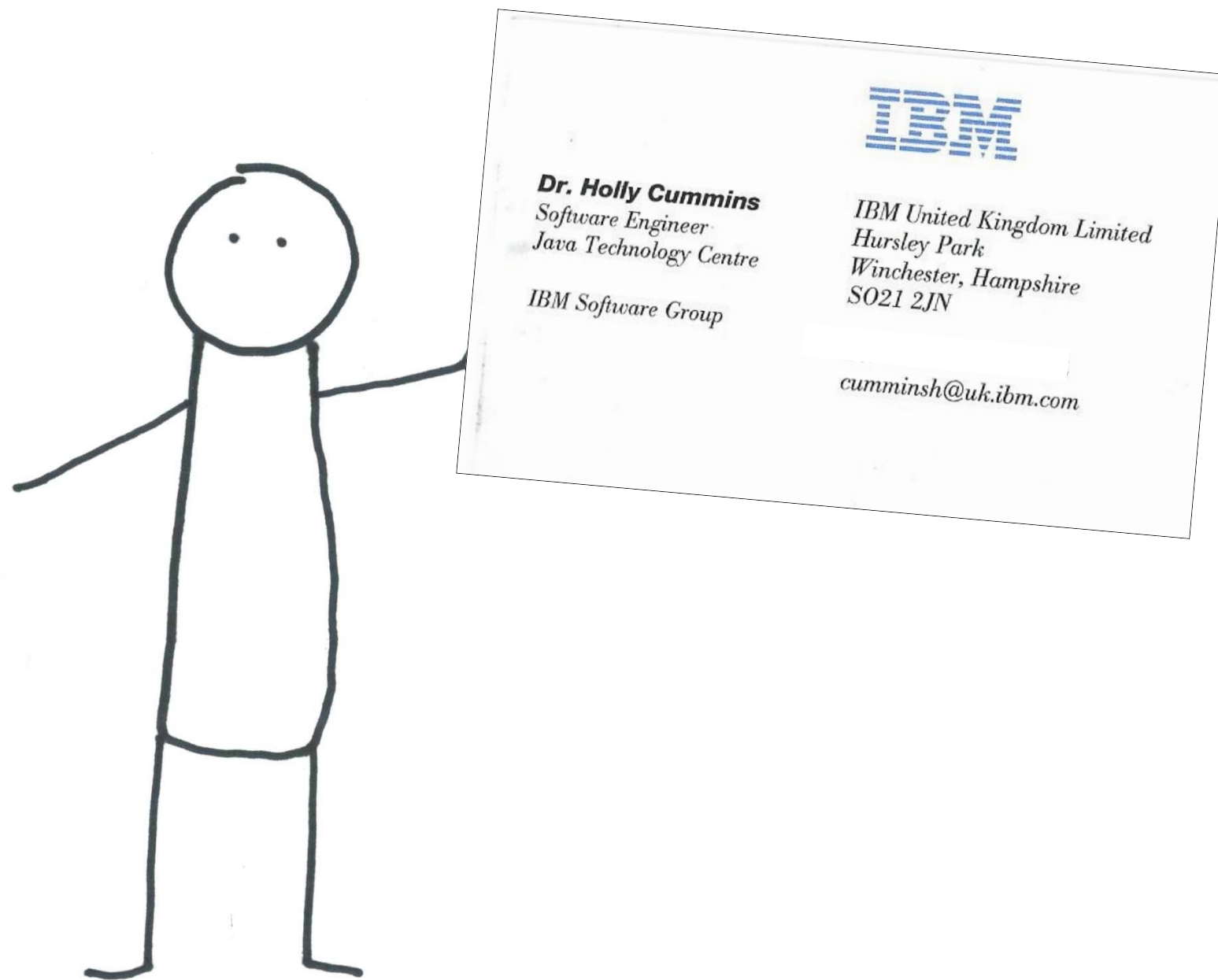


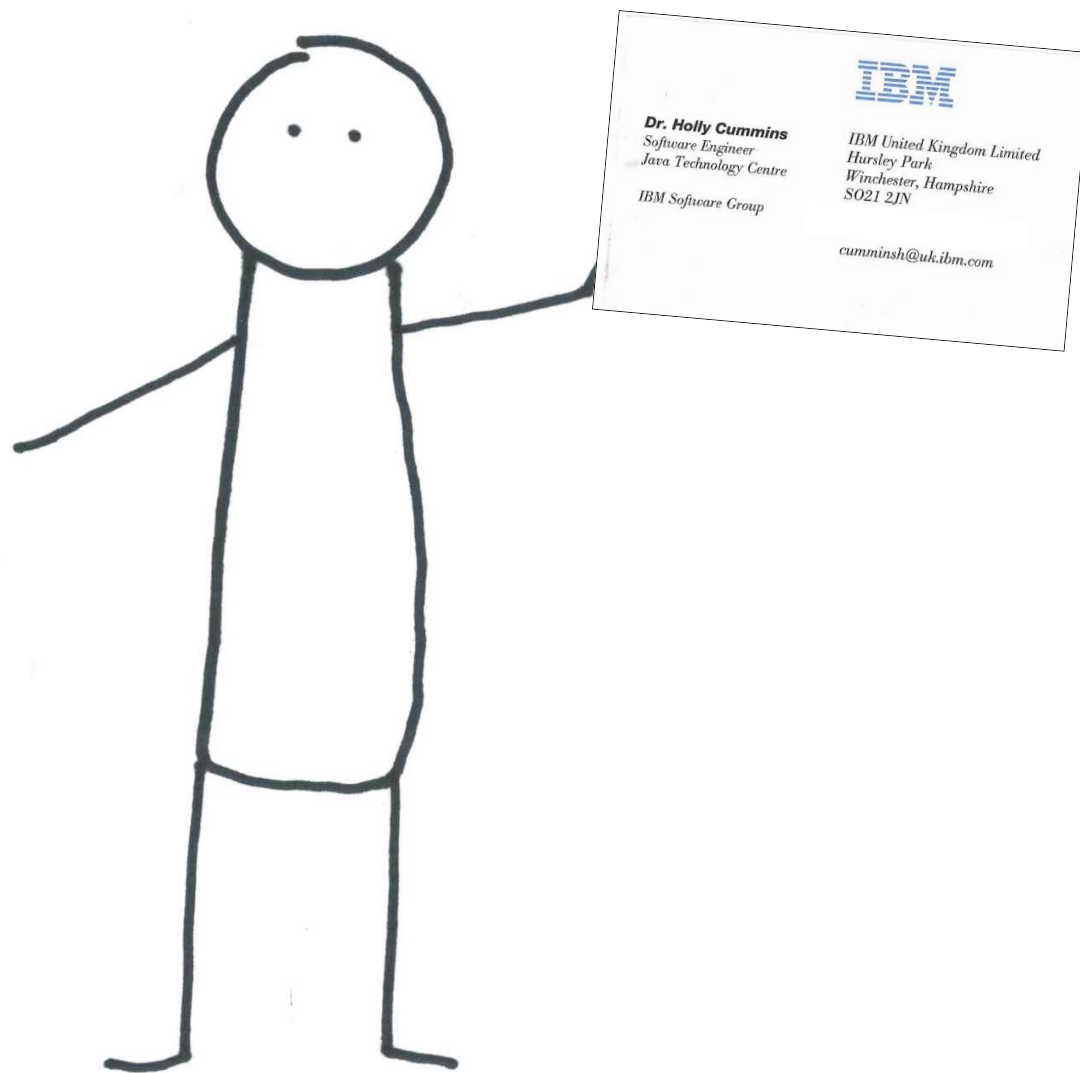
The Lazy Developer's Guide to Cloud Foundry

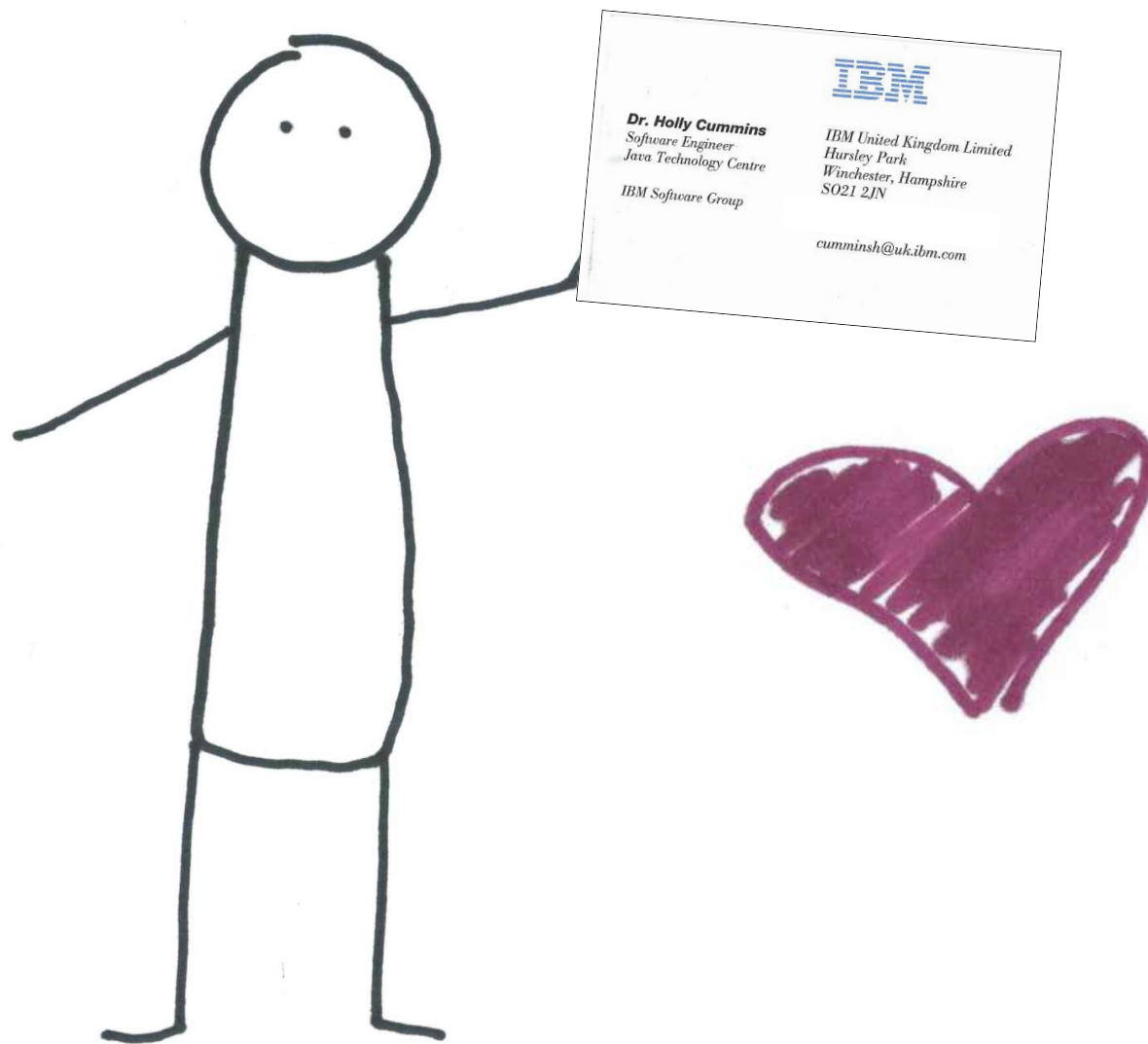
Holly Cummins
@holly_cummins

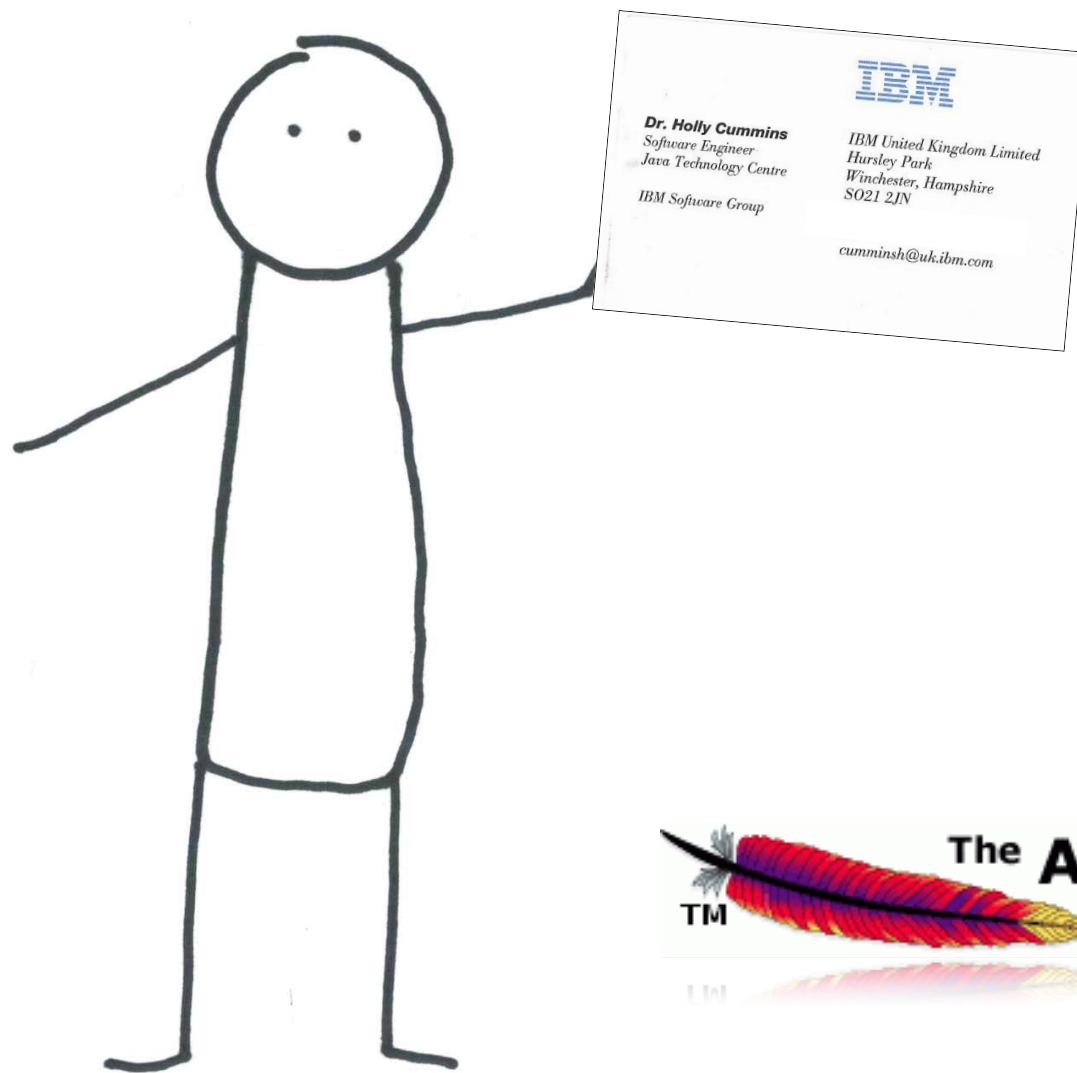


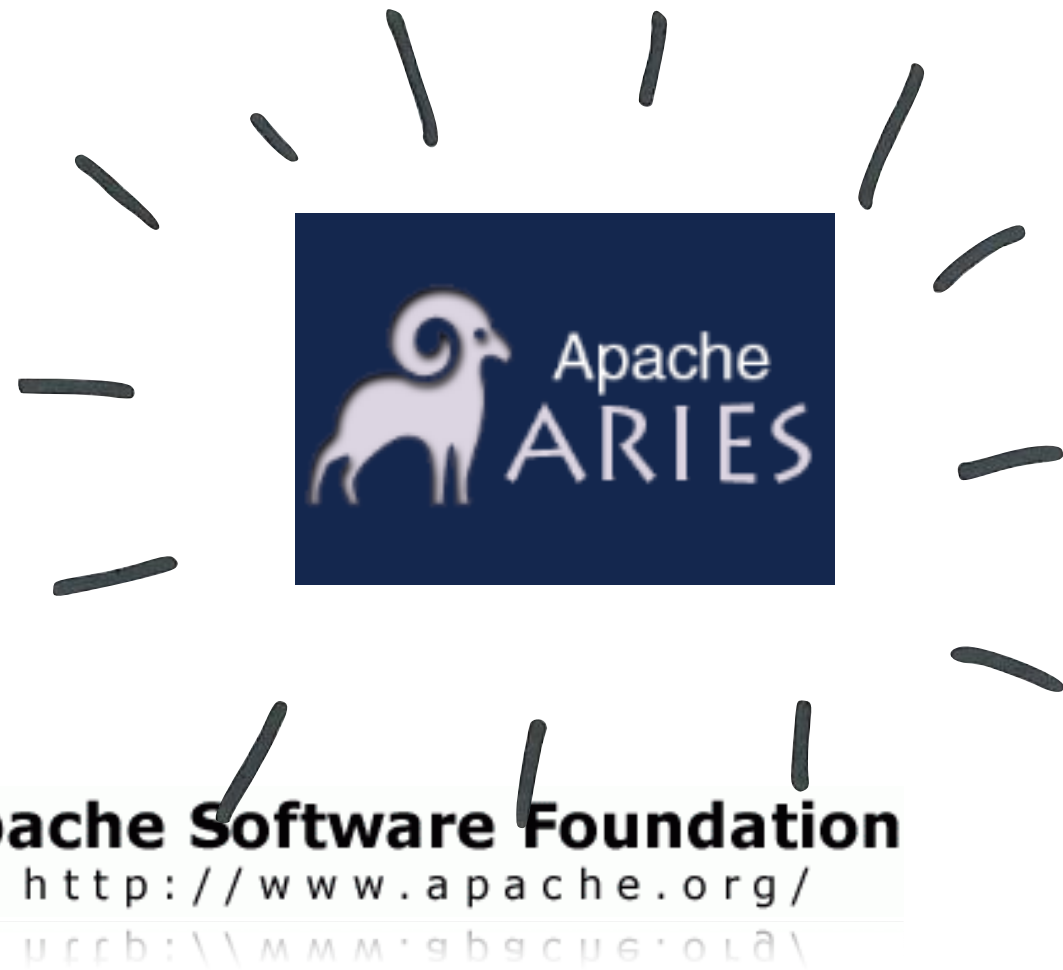
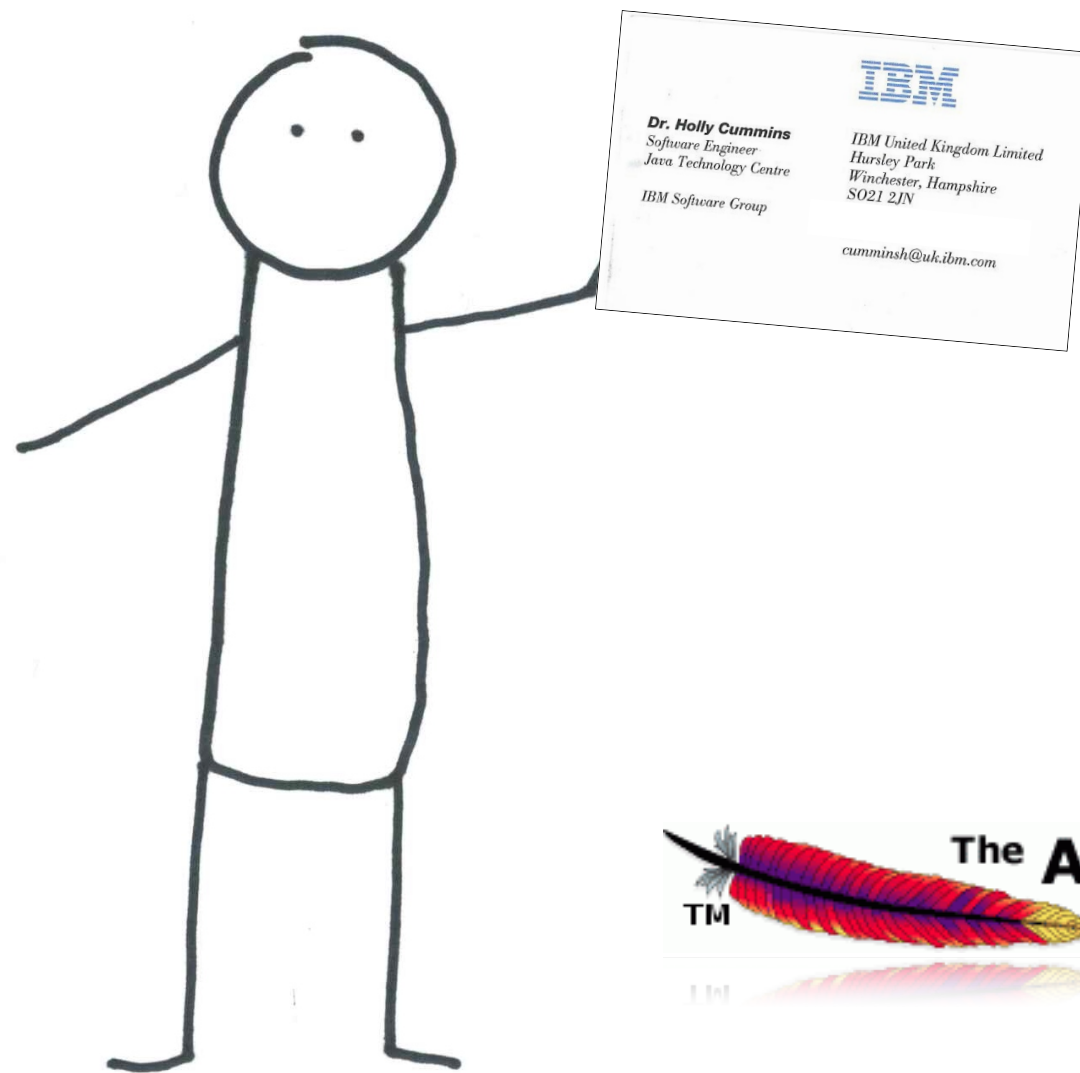


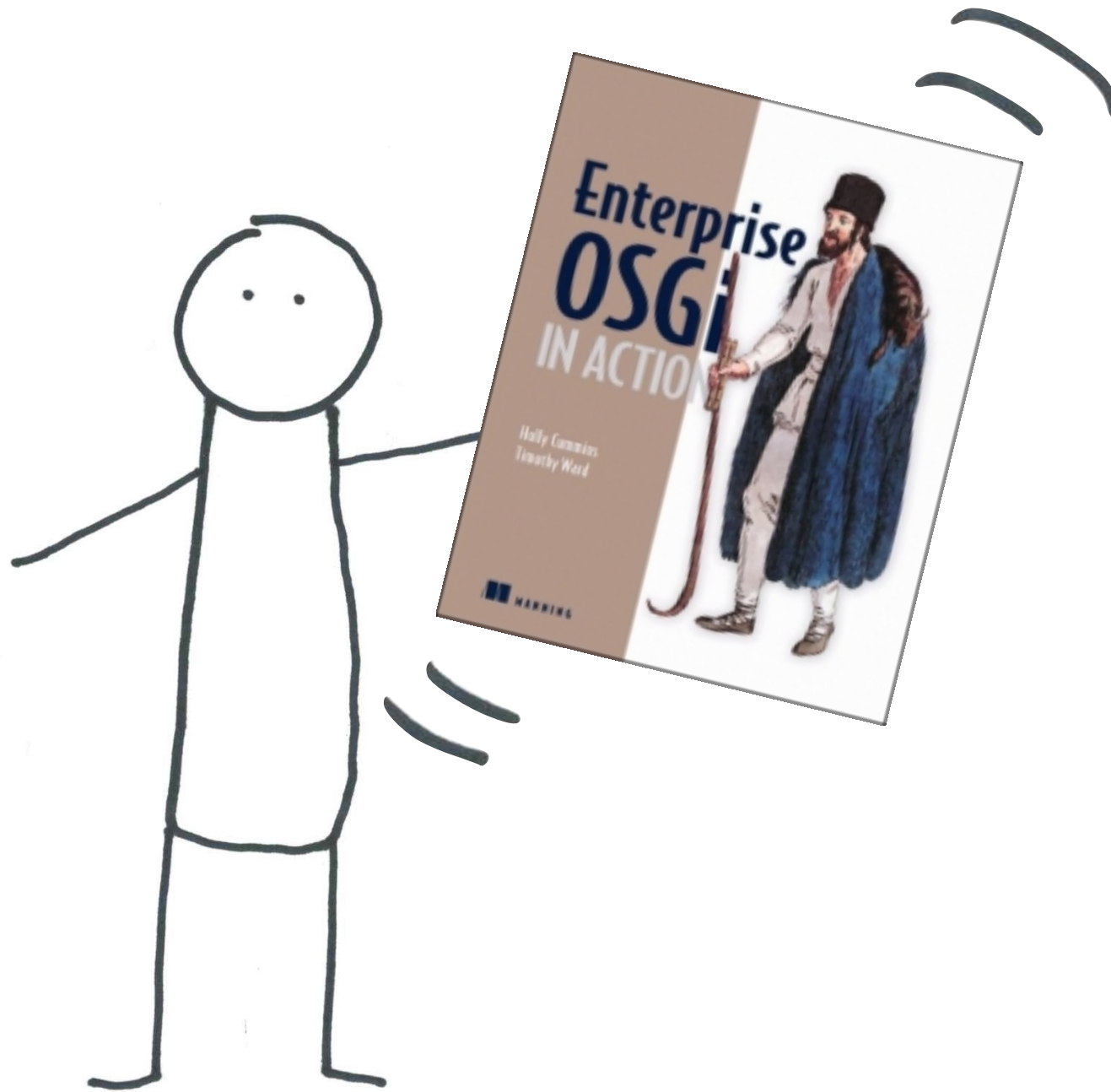




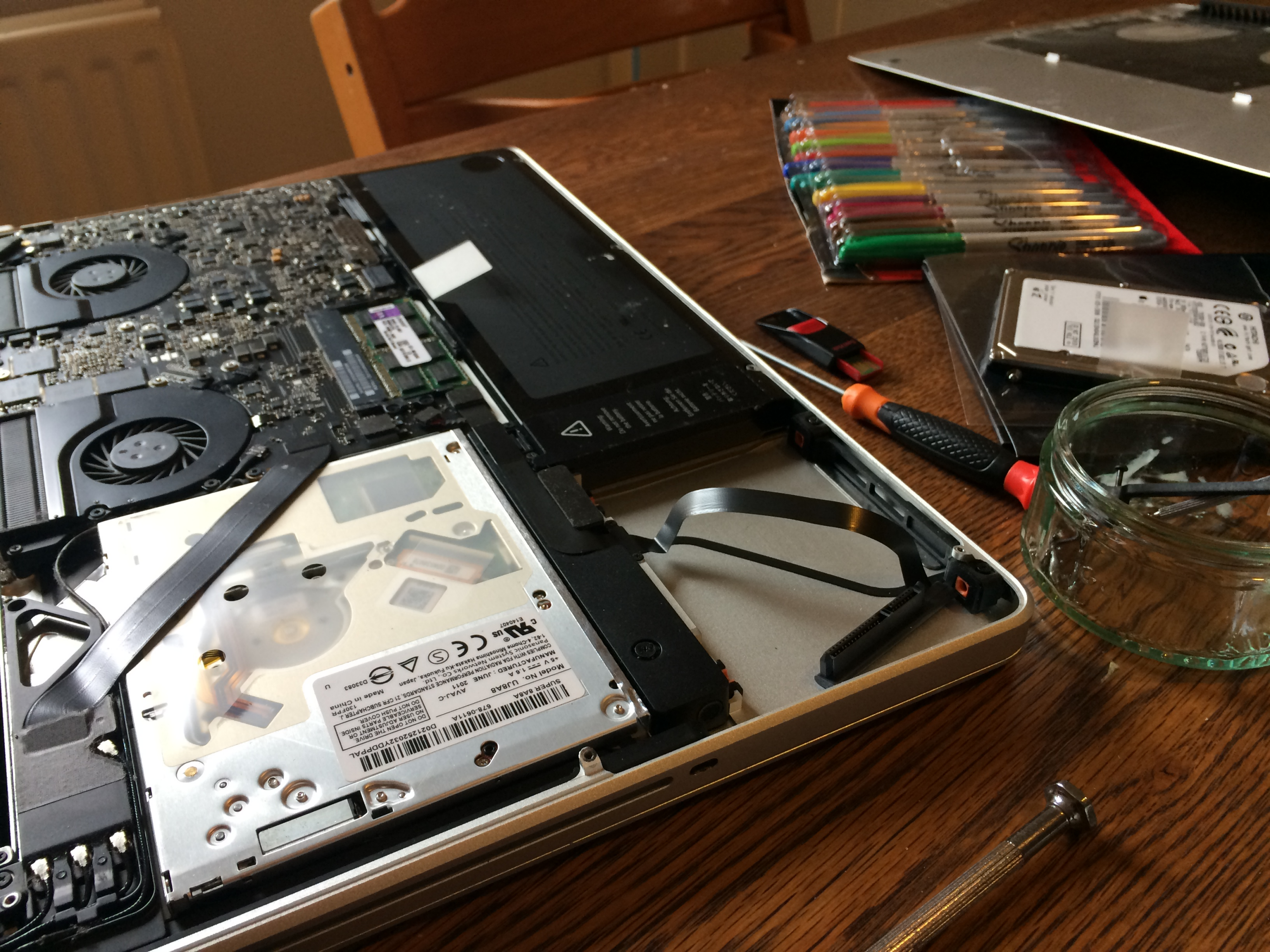












Model No. U38A8
SUPER 8A8A
678-0611A
D021252032YDDPPAL
DO NOT OPEN THE DRIVE
DO NOT PUSH COVER.
NO USER ADJUSTMENT OR
SERVICEABLE PARTS INSIDE.
MADE IN CHINA
D33083
U
+6V 1.5A
MANUFACTURED: JUNE 2011
AVAJ-C
COMPLIES WITH FCC RADIATION PERFORMANCE STANDARDS, 21 CFR SUBCHAPTER J
Panasonic System Networks Co., Ltd.
1-2, 4-Chome Minoshima Hakata-Ku Fukuoka, Japan
CE
E140407

The Art of Destroying Software

Date: Tuesday, October 14, 2014 - 14:00 to 14:30

Room: Auditorium

One of the most important "ilities" in software is the ability to delete it and start over. In this talk we will look at this "ility", why it is important, and how we can optimize for it. Imagine never being afraid of your code ever again!



Greg Young

Independent Consultant

A model for excellence in public speaking

The Art of Destroying Software

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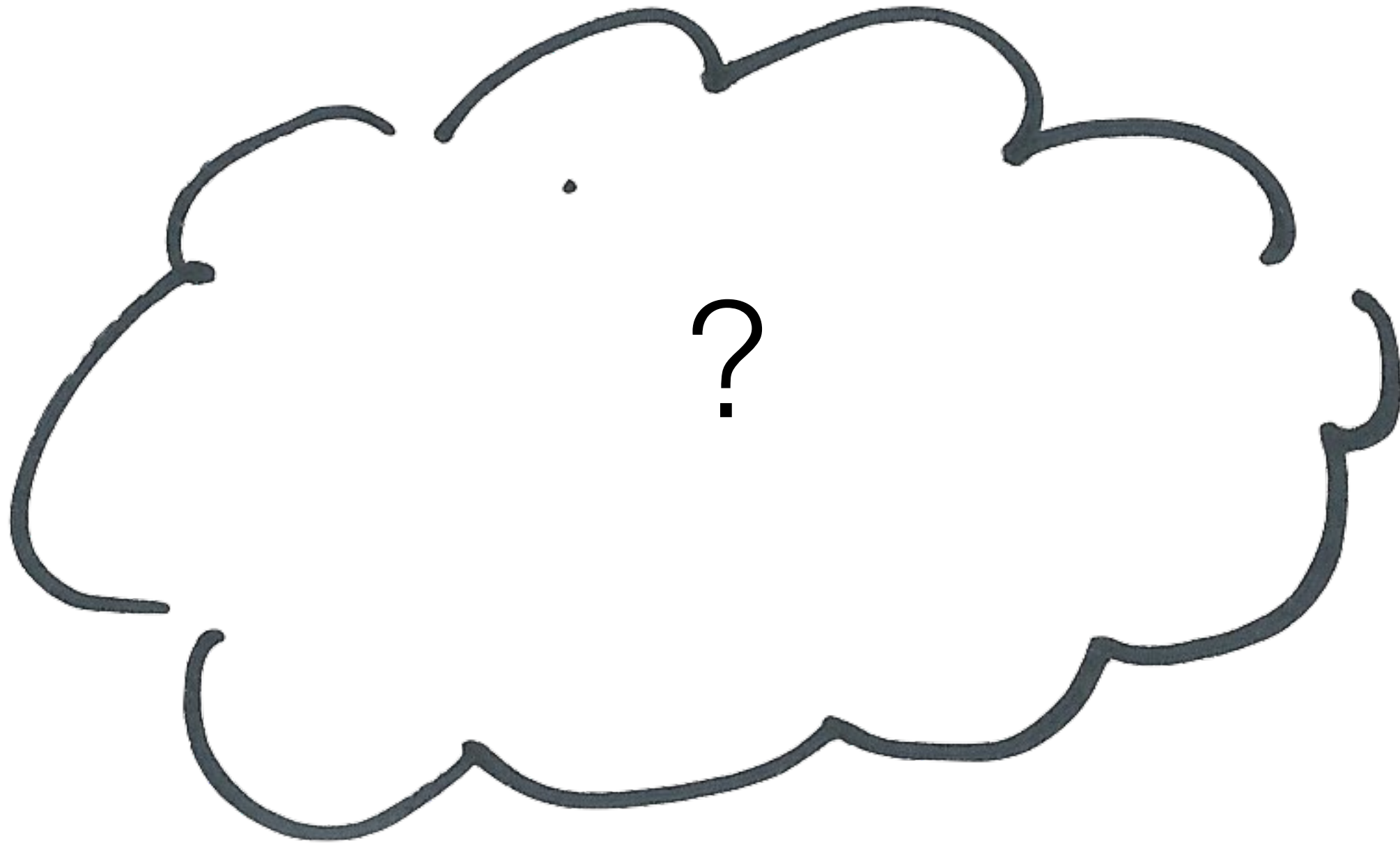
Greg Young

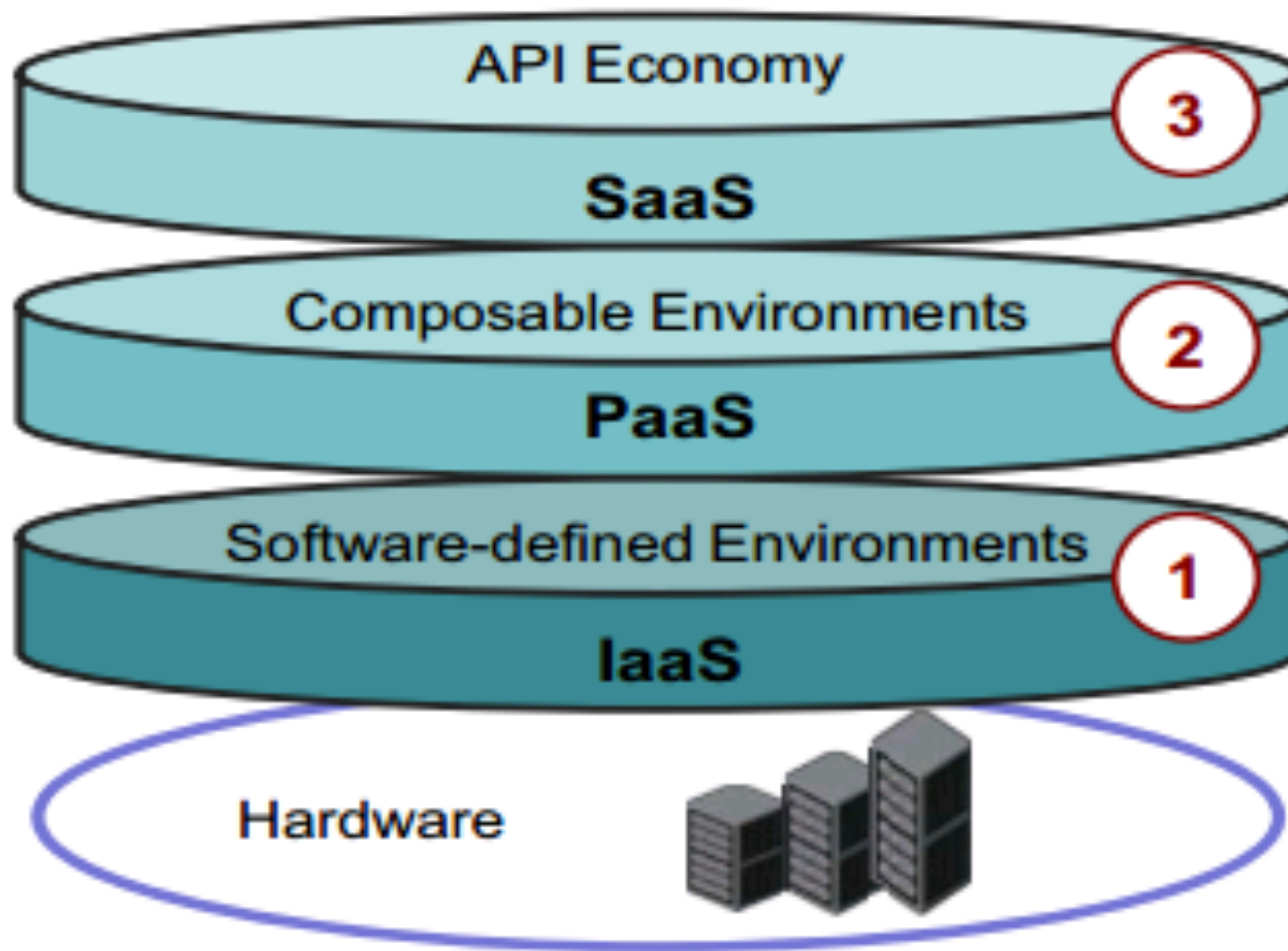
Independent Consultant

Cloud Foundry

```
> cf push
```

Any questions?





IaaS

SOFTLAYER
an IBM Company

OUR PLATFORMPRODUCTS & SERVICESSOLUTIONSPROGRAMSABOUT US

LIVE CHAT

Configure your Cloud Server (Hourly)

System ConfigurationNetwork OptionsSystem AddonsStorage AddonsService Addons

[Expand All](#) | [Collapse All](#)

Quantity:

Virtual Server

Location

System Configuration

Required selections

Computing Instance

☒ 1 x 2.0 GHz Core [\$0.021]

☐ 2 x 2.0 GHz Cores [\$0.041]

Summary

\$0.040 /hr.
+ \$0.00 in one-time fees

[ADD TO ORDER](#)

Currency

USD - United States dollar

Update Currency

Configuration

Data Center

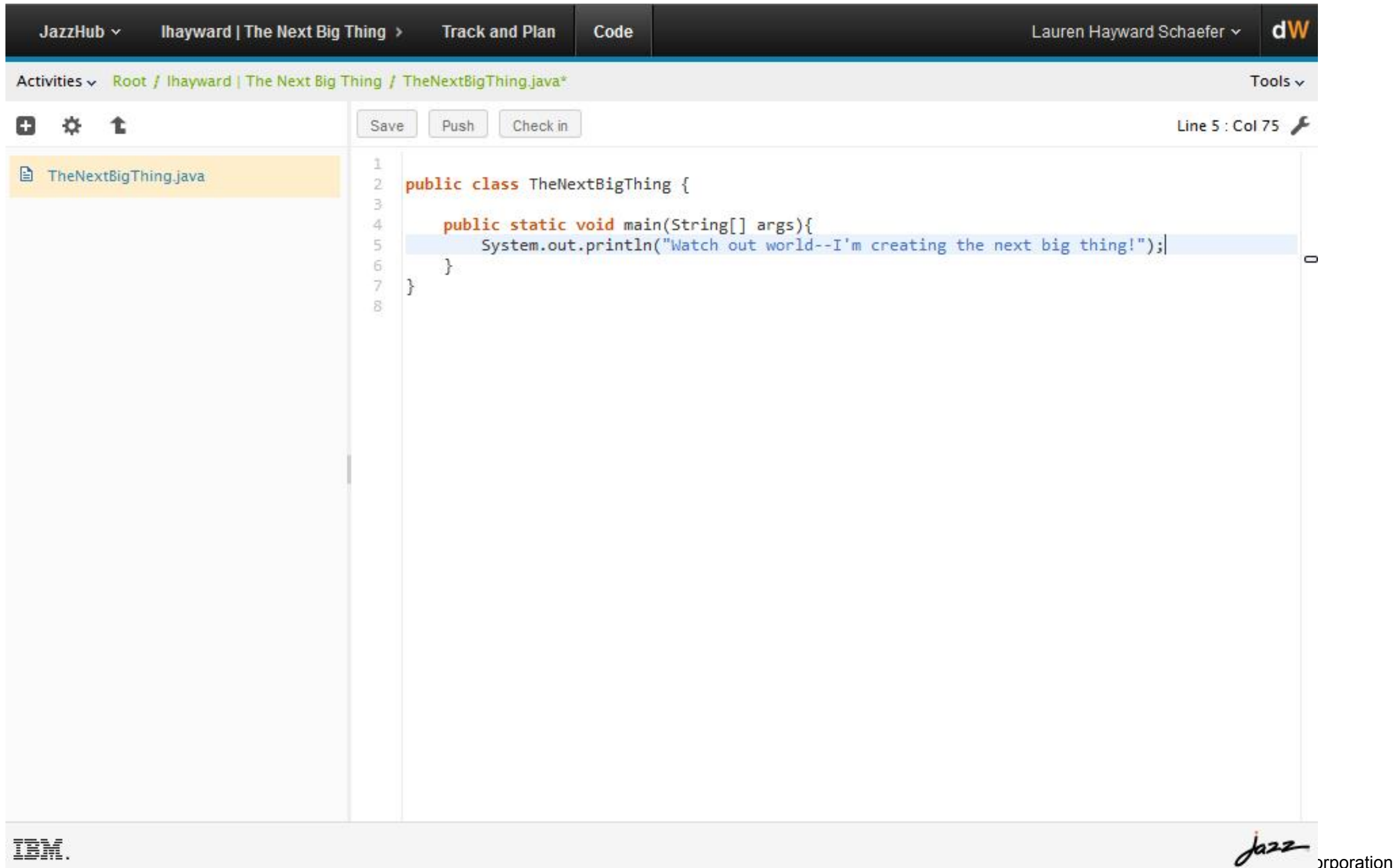
AMS01

PaaS



**CLOUD
FOUNDRY™**

SaaS

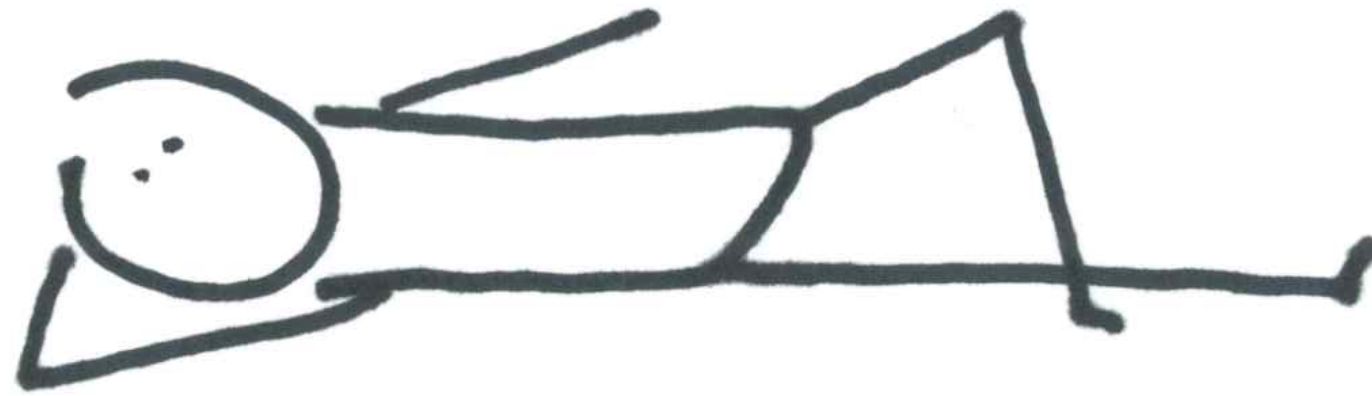


The screenshot displays the IBM JazzHub Code editor interface. The top navigation bar includes 'JazzHub', 'lhayward | The Next Big Thing', 'Track and Plan', 'Code', and a user profile for 'Lauren Hayward Schaefer'. Below this, a breadcrumb trail shows 'Root / lhayward | The Next Big Thing / TheNextBigThing.java*'. The editor area shows a file named 'TheNextBigThing.java' with the following Java code:

```
1 public class TheNextBigThing {
2
3
4     public static void main(String[] args){
5         System.out.println("Watch out world--I'm creating the next big thing!");
6     }
7 }
8
```

The code is displayed with line numbers on the left. The editor includes a toolbar with icons for adding files, settings, and uploading, as well as buttons for 'Save', 'Push', and 'Check in'. The status bar at the bottom right indicates 'Line 5 : Col 75'. The IBM logo is visible in the bottom left corner, and the 'jazz' logo is in the bottom right corner.

The joy of cloud



Introducing Cloud Foundry



**CLOUD
FOUNDRY™**

The Cloud Foundry Foundation

The Cloud Foundry Foundation

Platinum

Pivotal™

IBM

EMC²



rackspace.
HOSTING

SAP

vmware

Gold

accenture
High performance. Delivered.



BNY MELLON

Capgemini
CONSULTING. TECHNOLOGY. OUTSOURCING

CenturyLink™



ERICSSON

ActiveState

NTT

verizon

swisscom

Silver

TELUS

CANONICAL

mongoDB

bluebox

Piston
PISTON(CLOUD)COMPUTING

ALTOROS

JFrog



redislabs

APPDYNAMICS

anynines

AZUL
SYSTEMS

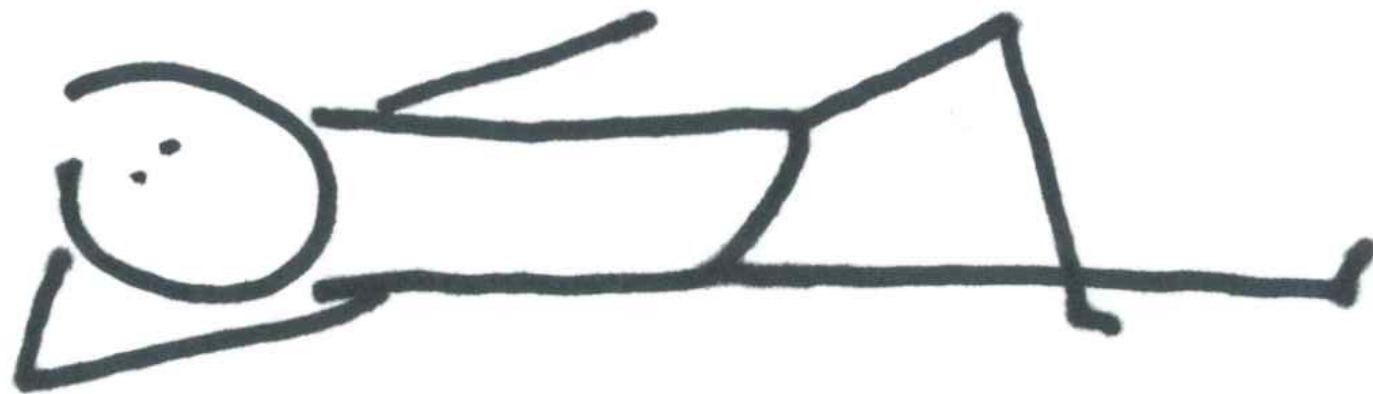
Stark&Wayne.

魔泊网
ANCHORA MoPaaS

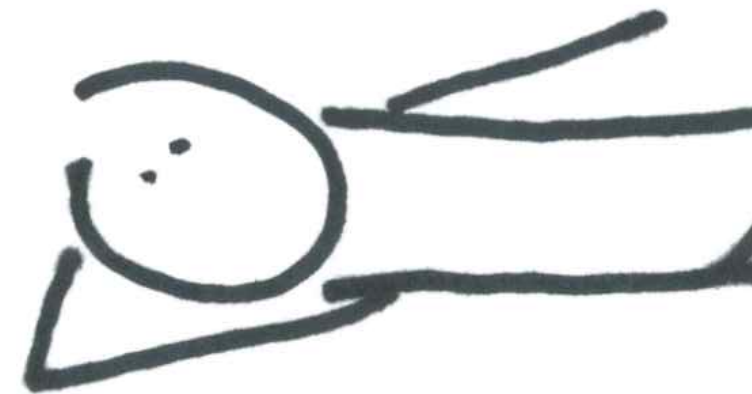
CloudCredo

Public or private cloud?

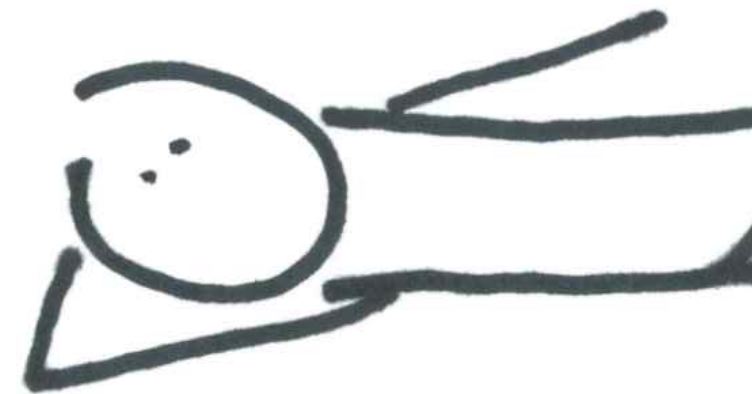
Public cloud



Public cloud

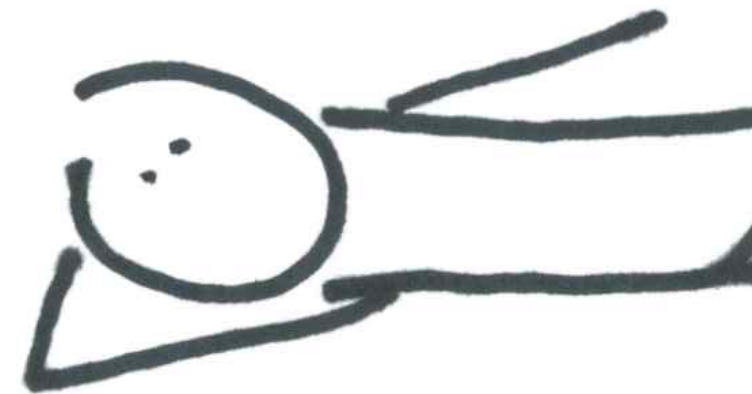


Public cloud

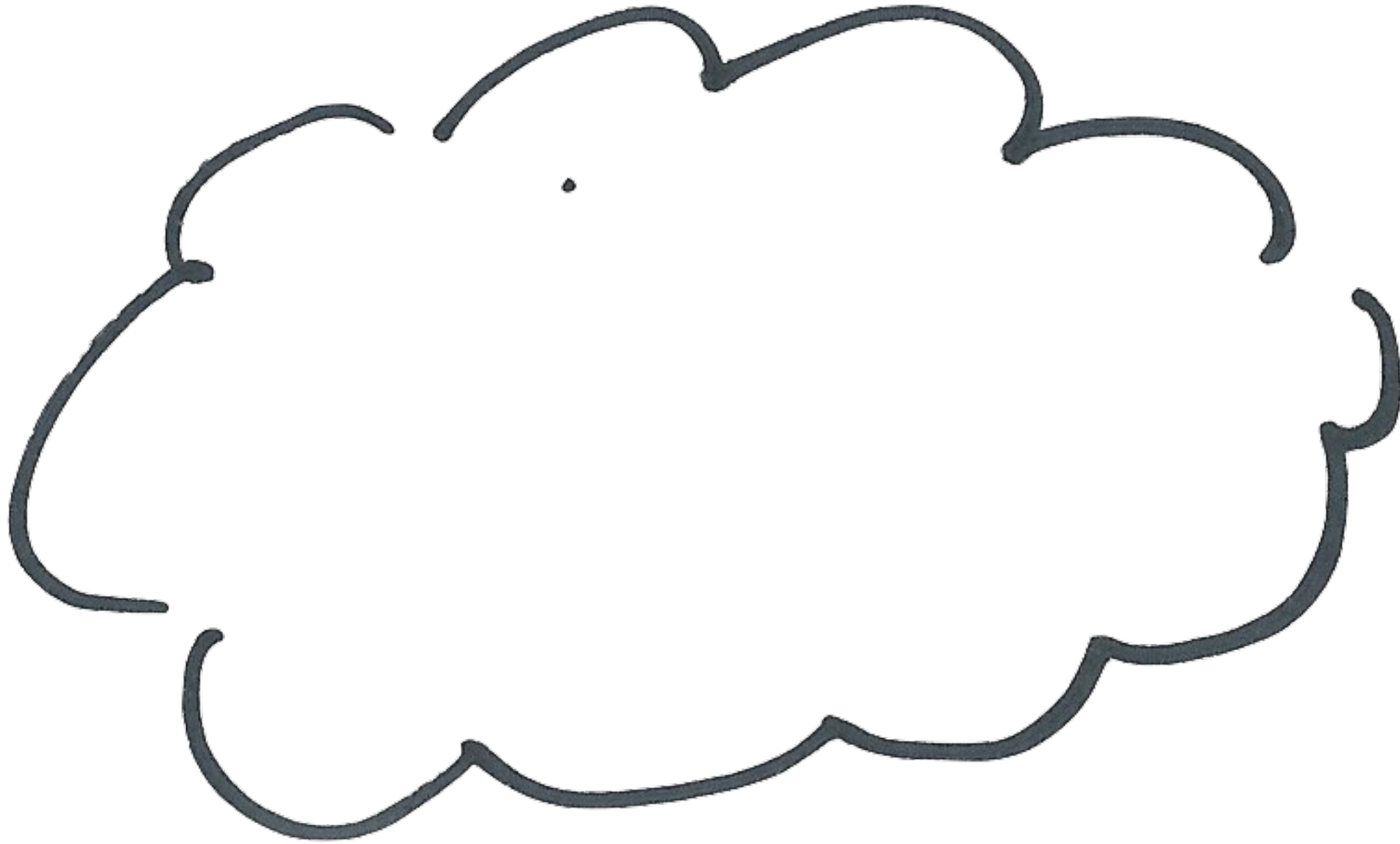


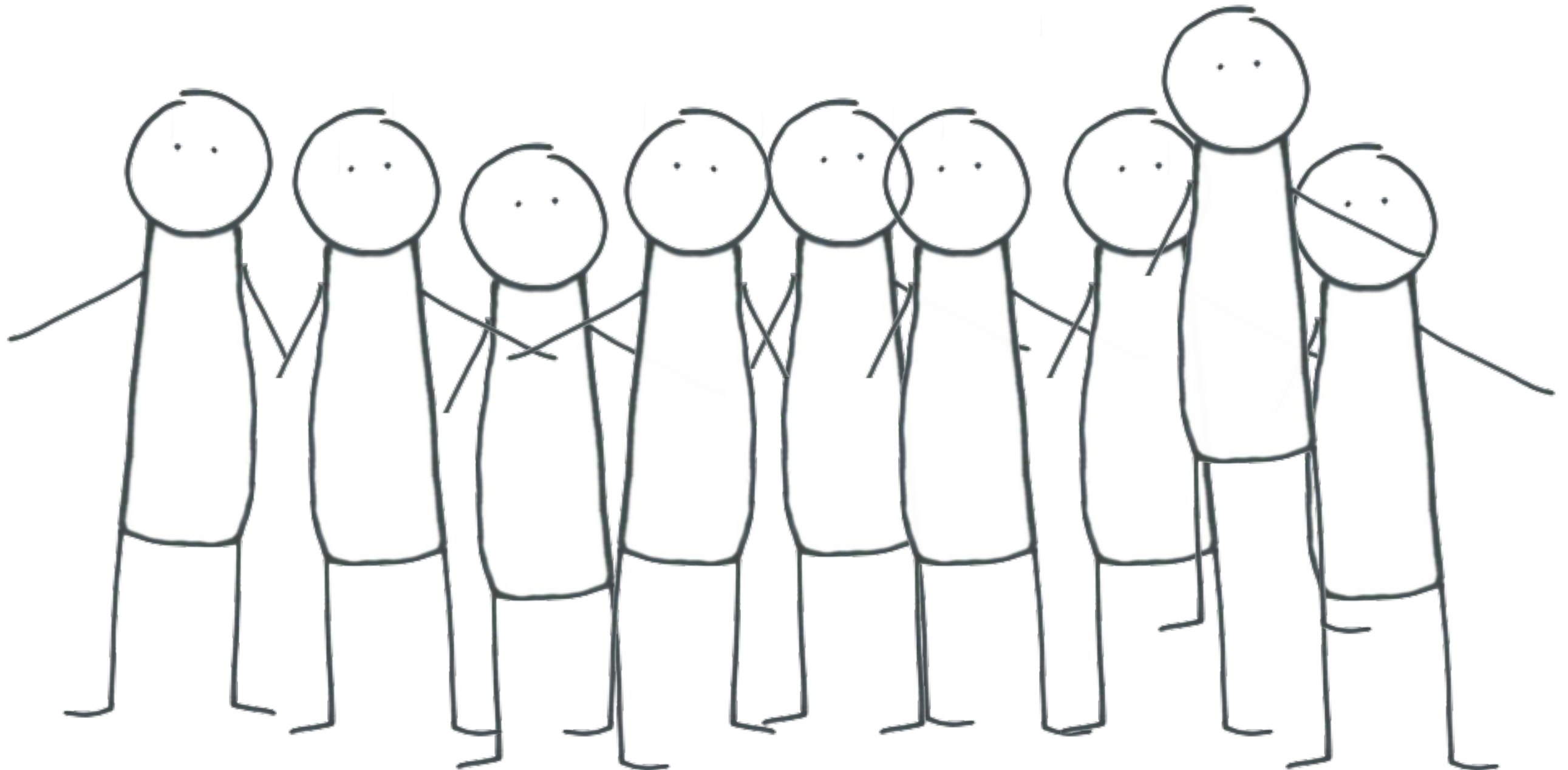
This is supposed to show it's easy to get going.

Public cloud



This is supposed to show it's easy to get going.
It's a bad graphic but a great benefit.

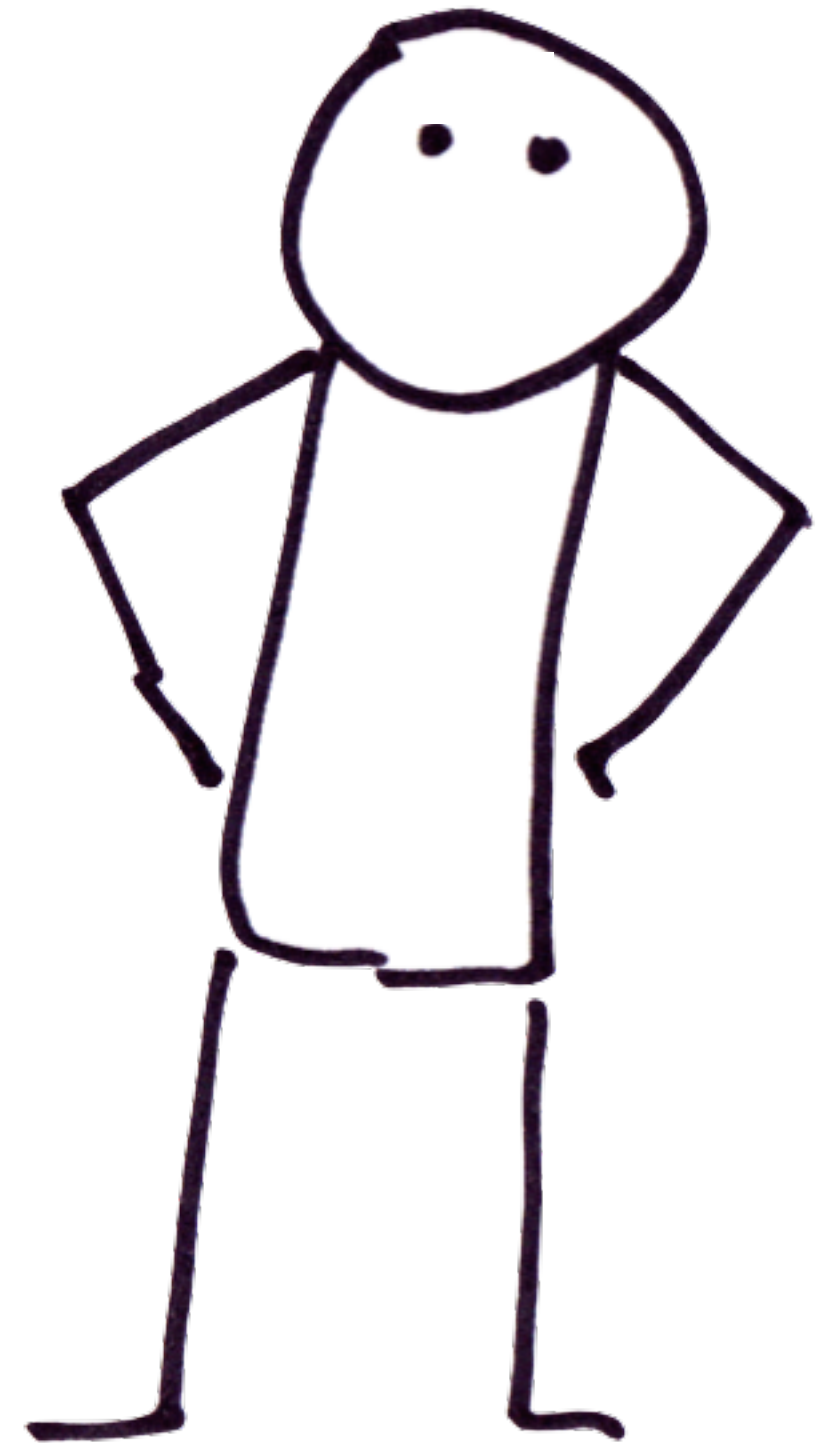






System capacity still matters





My manager



My manager

Security

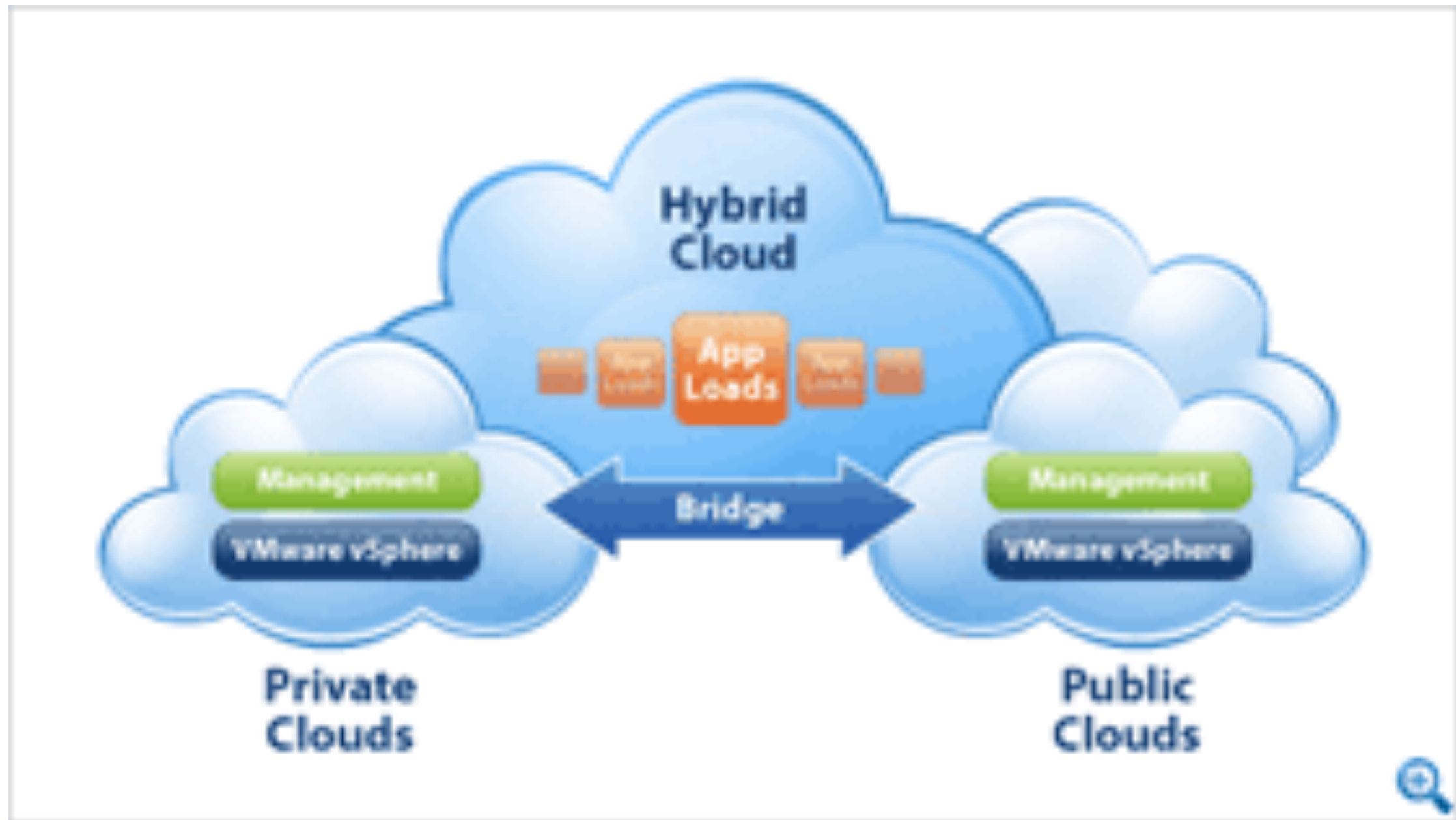


My manager

Security is not just physical

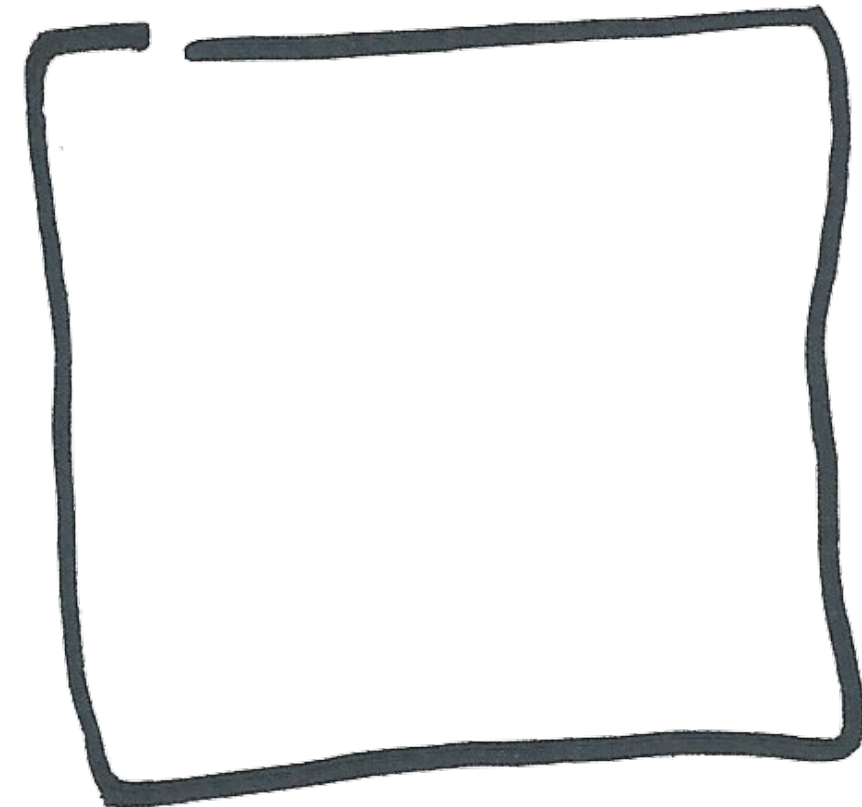
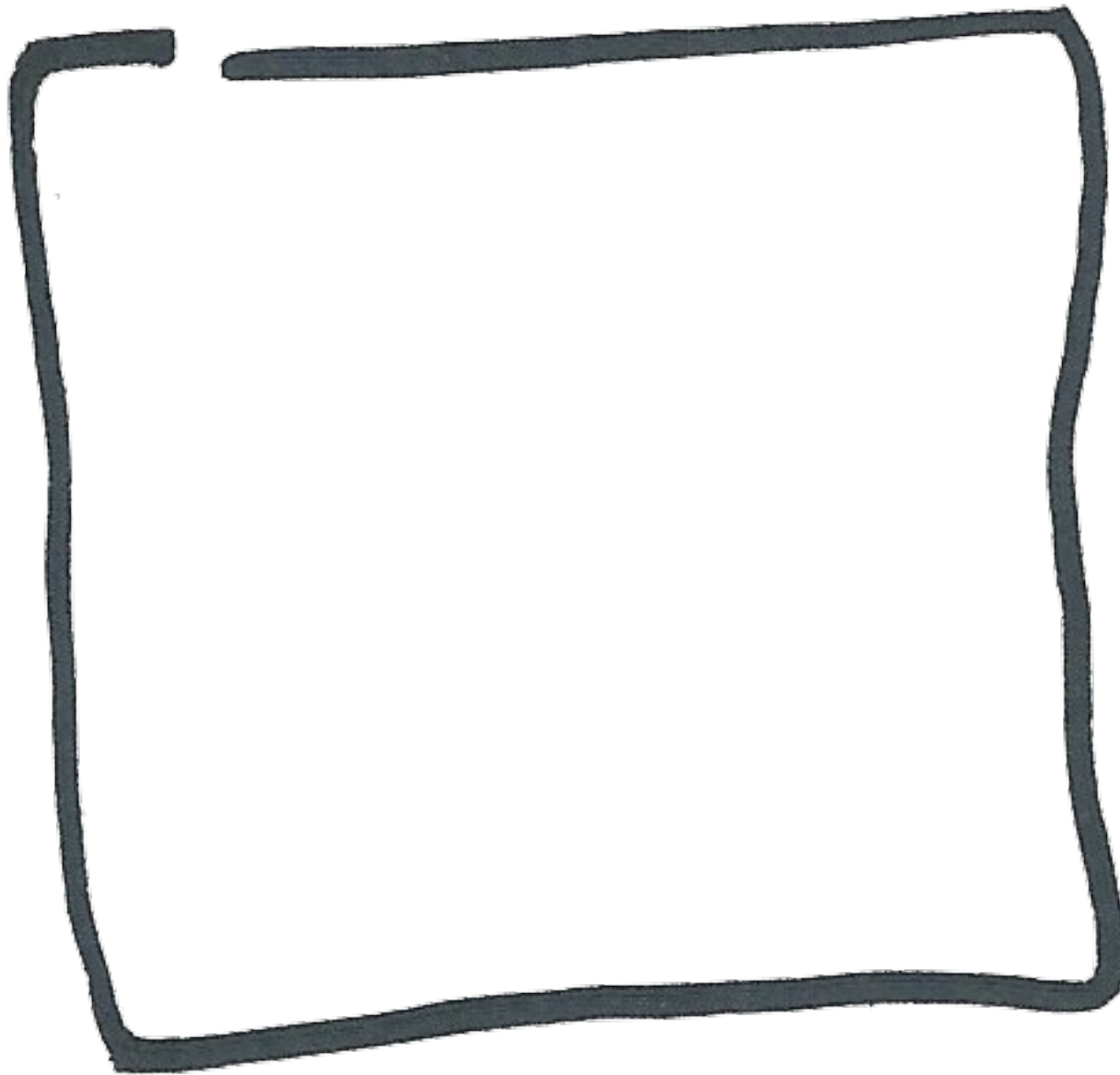
- Who has access to the data?
- Who manages the servers?
- What's the patching policy?

Hybrid cloud

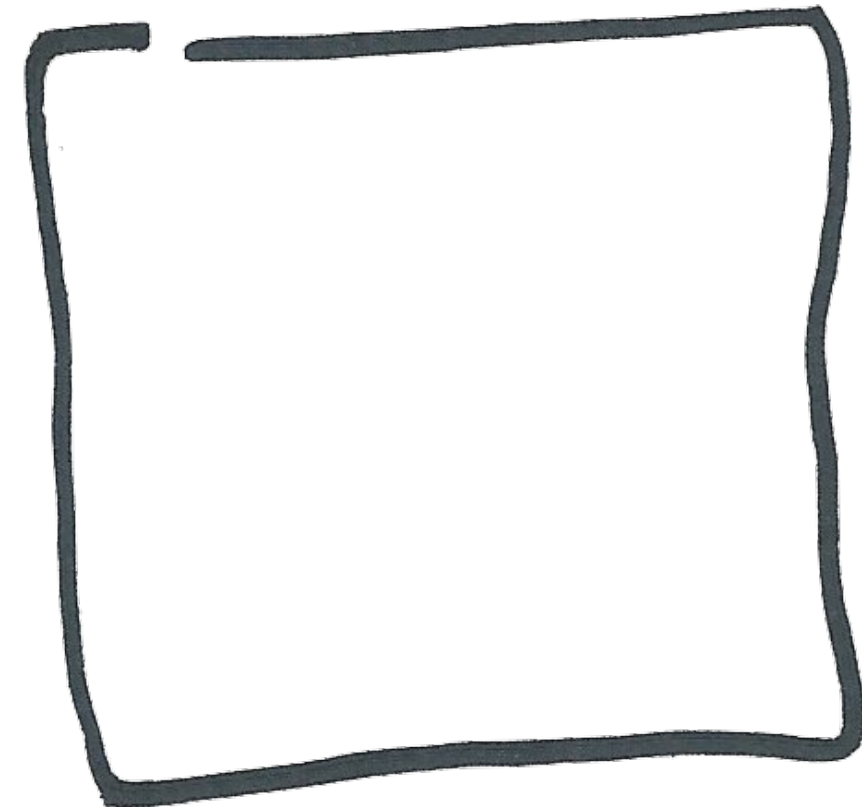
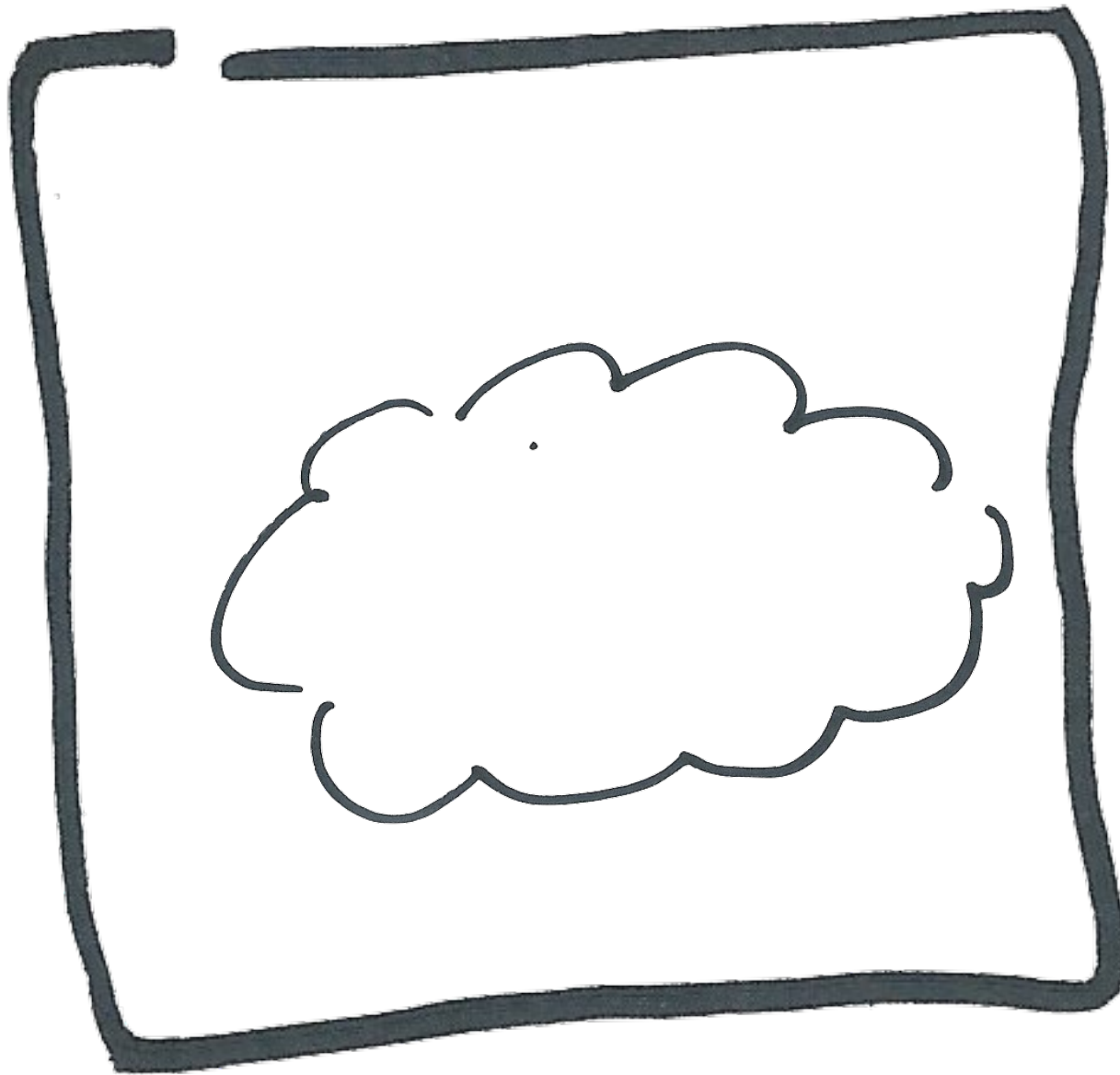


Public or private cloud?

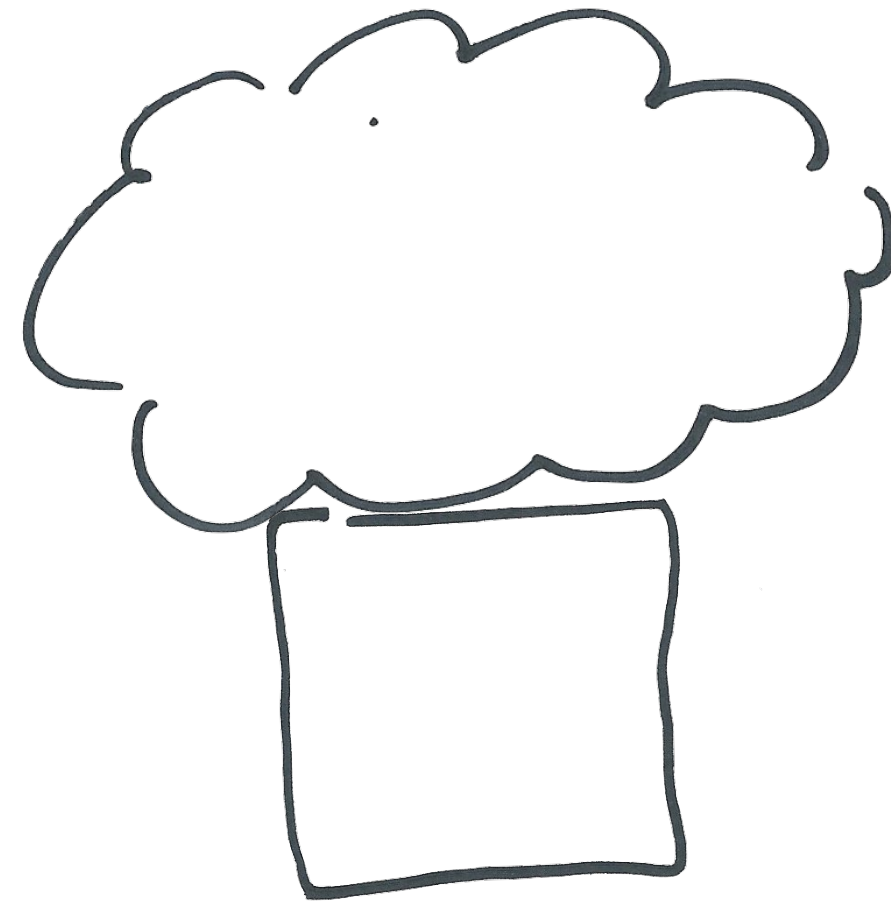
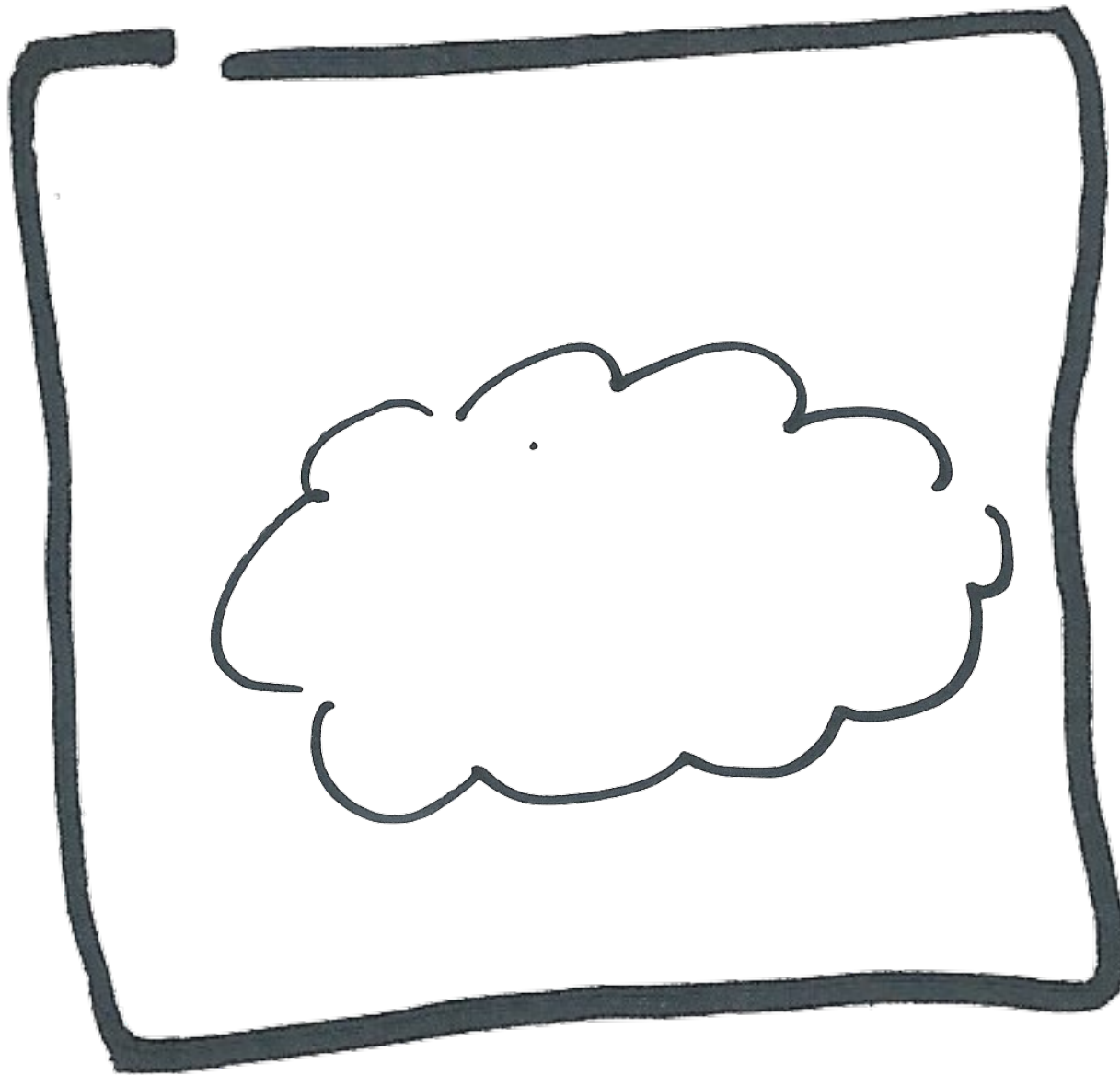
How big is your organisation?

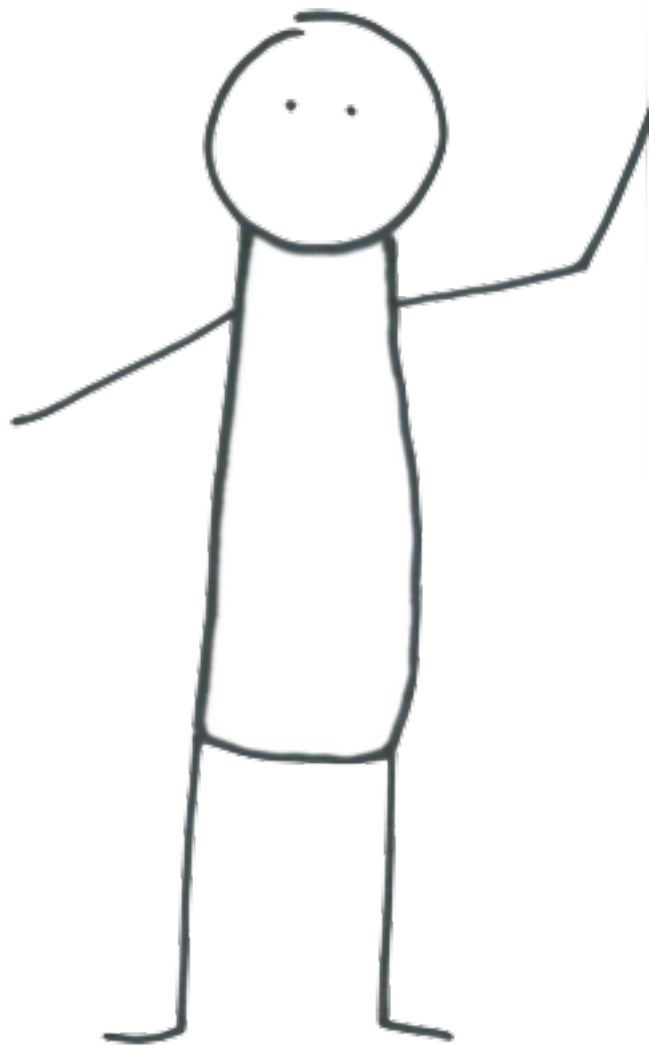


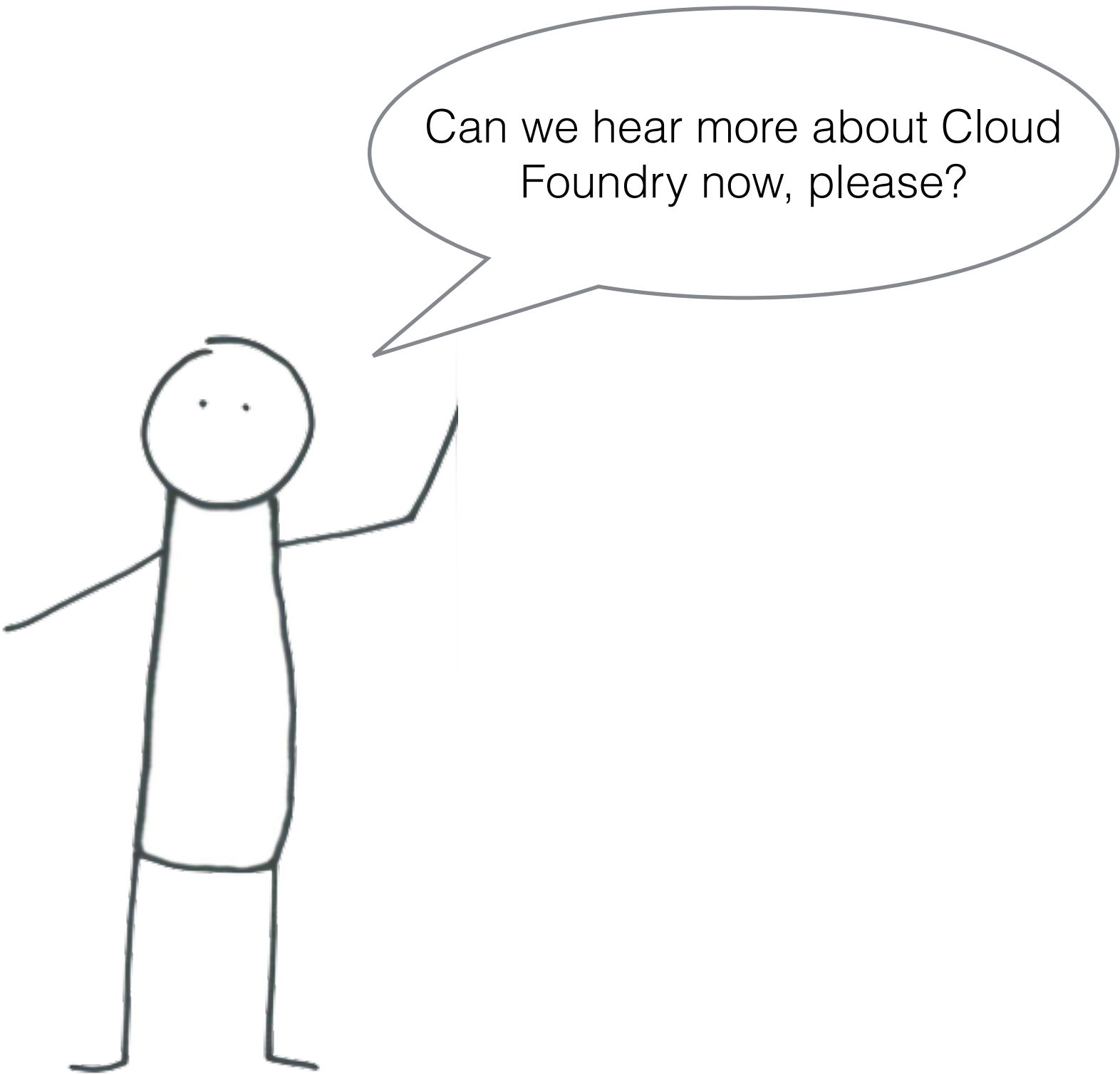
How big is your organisation?



How big is your organisation?

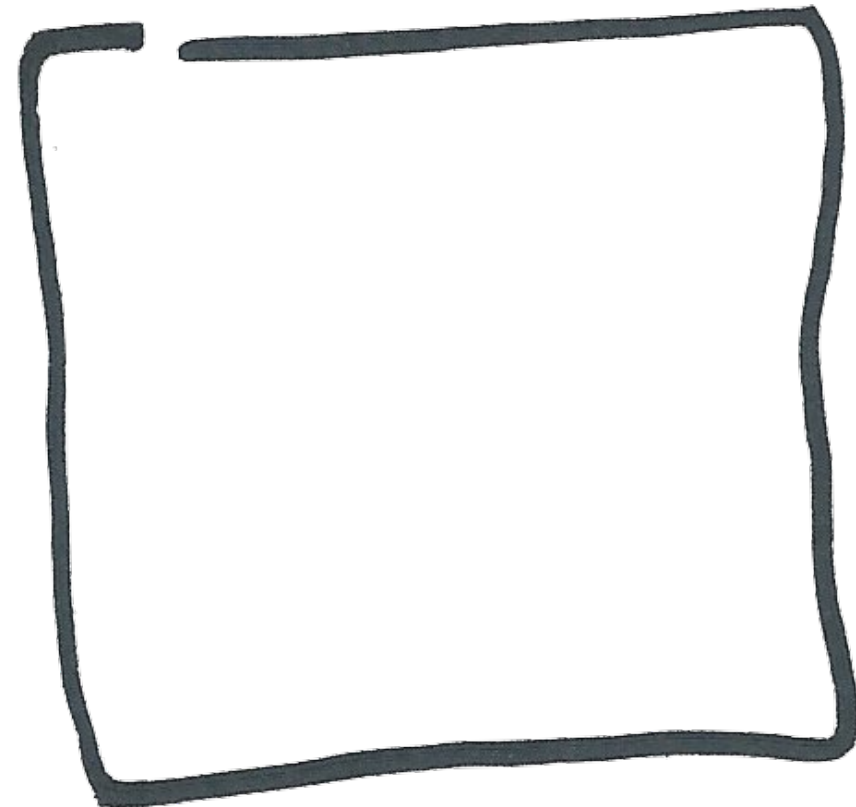
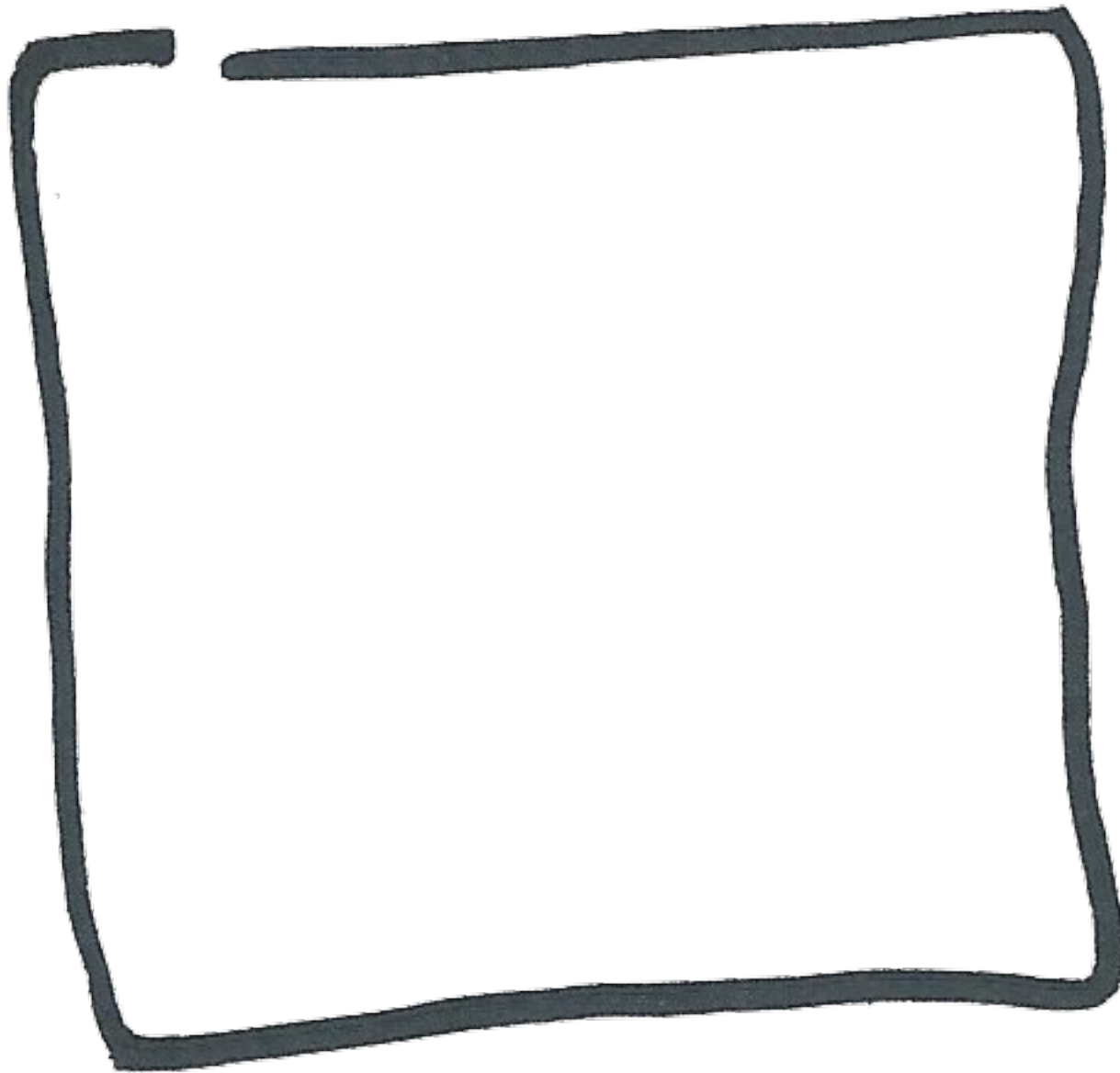




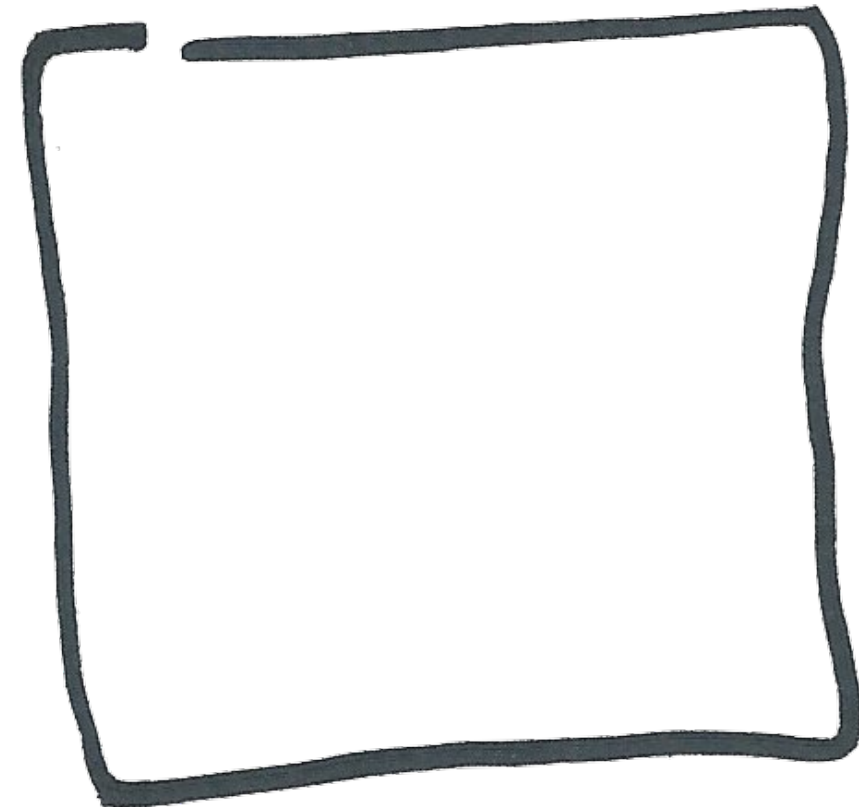
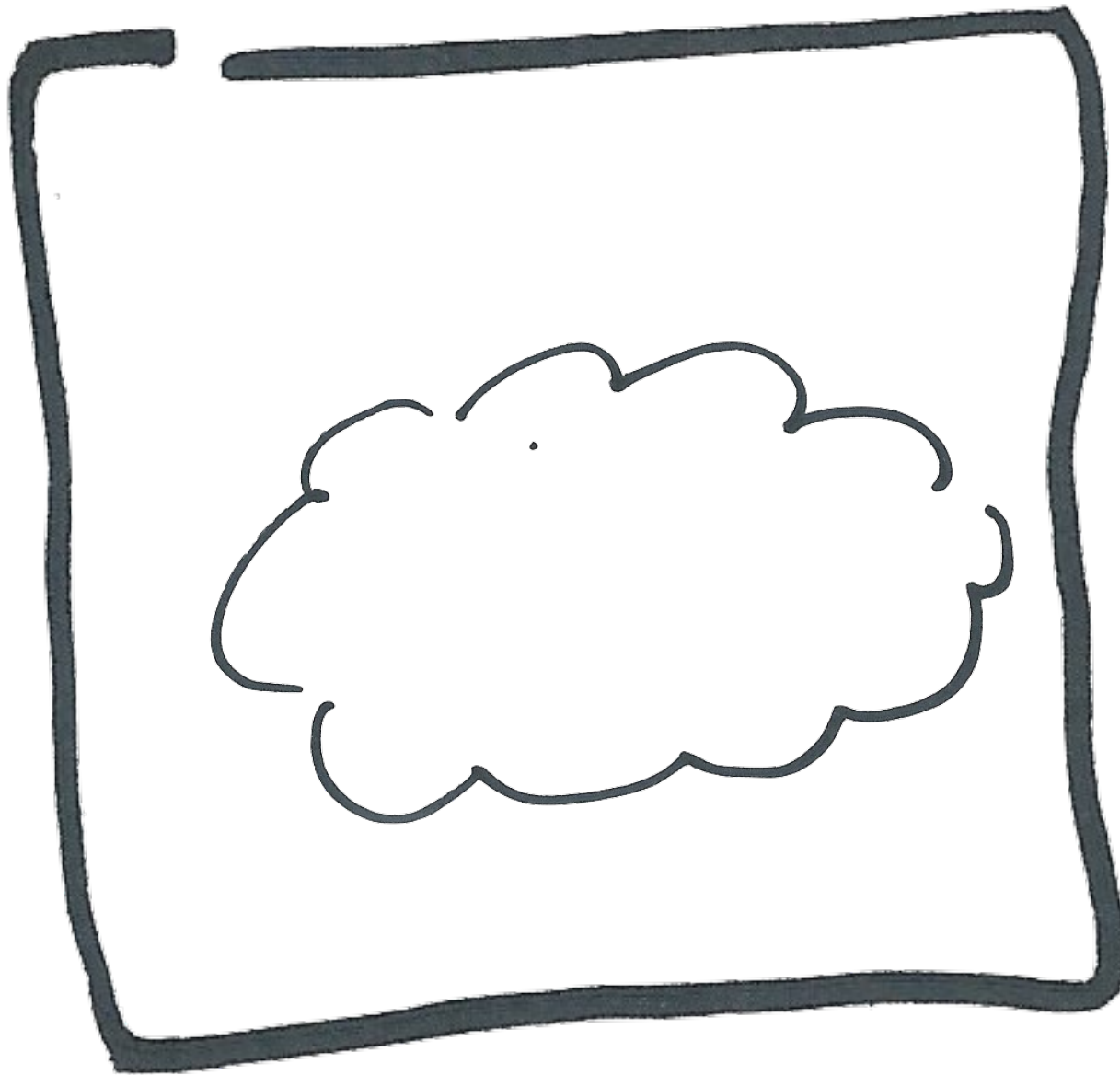
A simple line drawing of a stick figure with its right arm raised, pointing towards a speech bubble. The speech bubble is an oval shape with a tail pointing to the figure's hand.

Can we hear more about Cloud Foundry now, please?

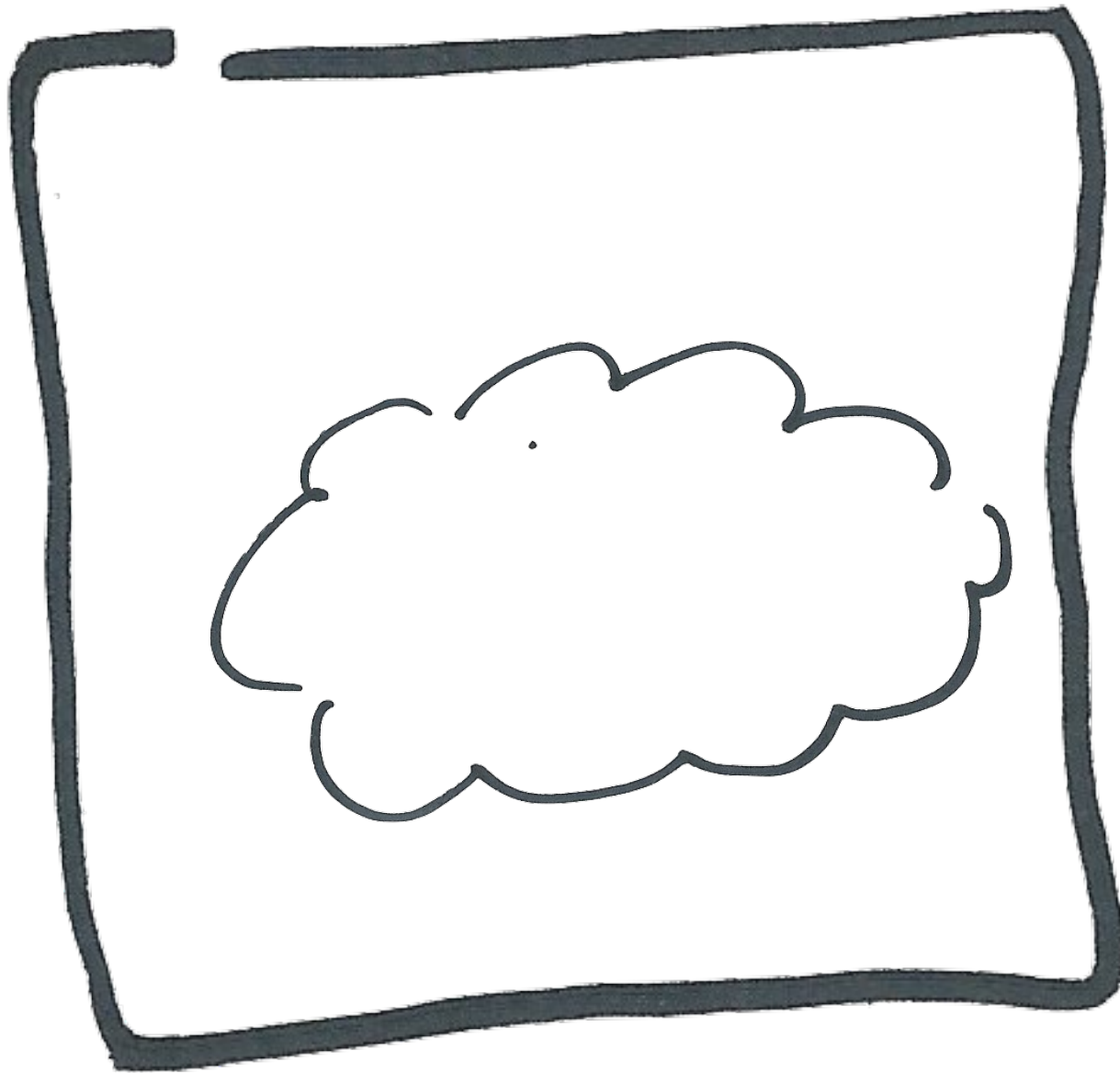
Public or private Cloud Foundry?



Public or private Cloud Foundry?



Public or private Cloud Foundry?



Cloud Foundry

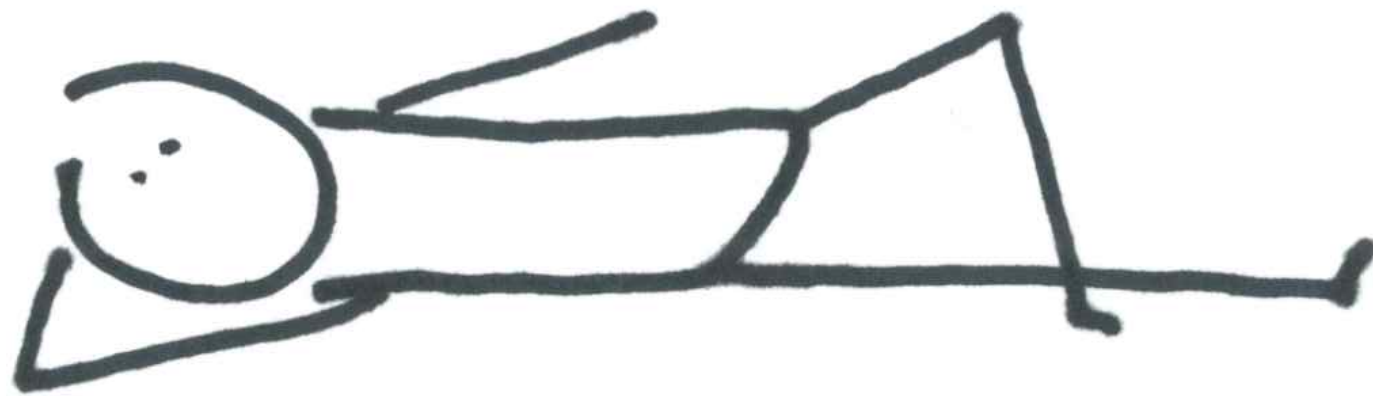
```
> cf push
```

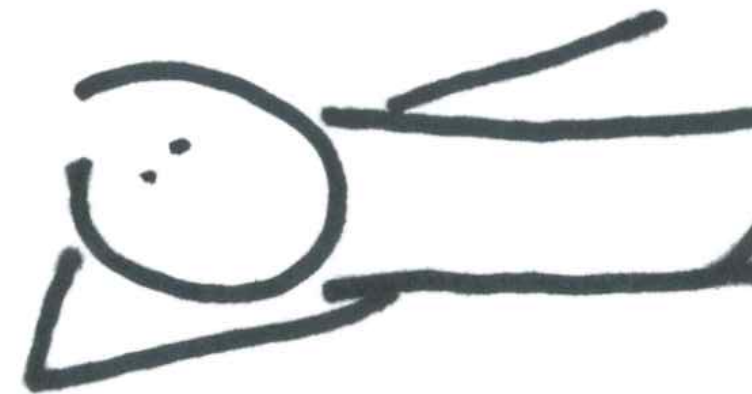
Putting your demo
where your mouth is

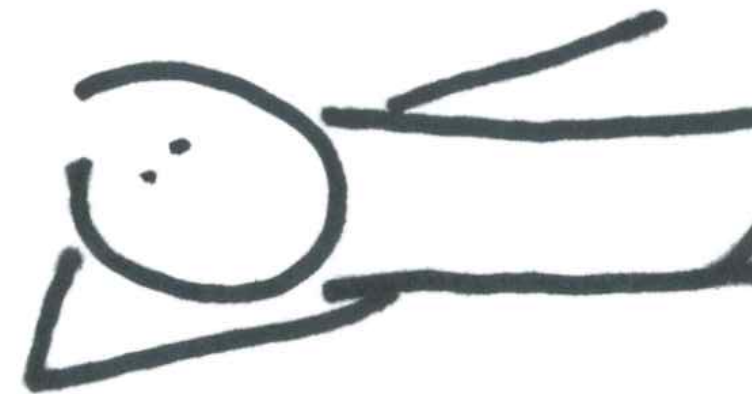
No really, that was cool

No really, that was cool



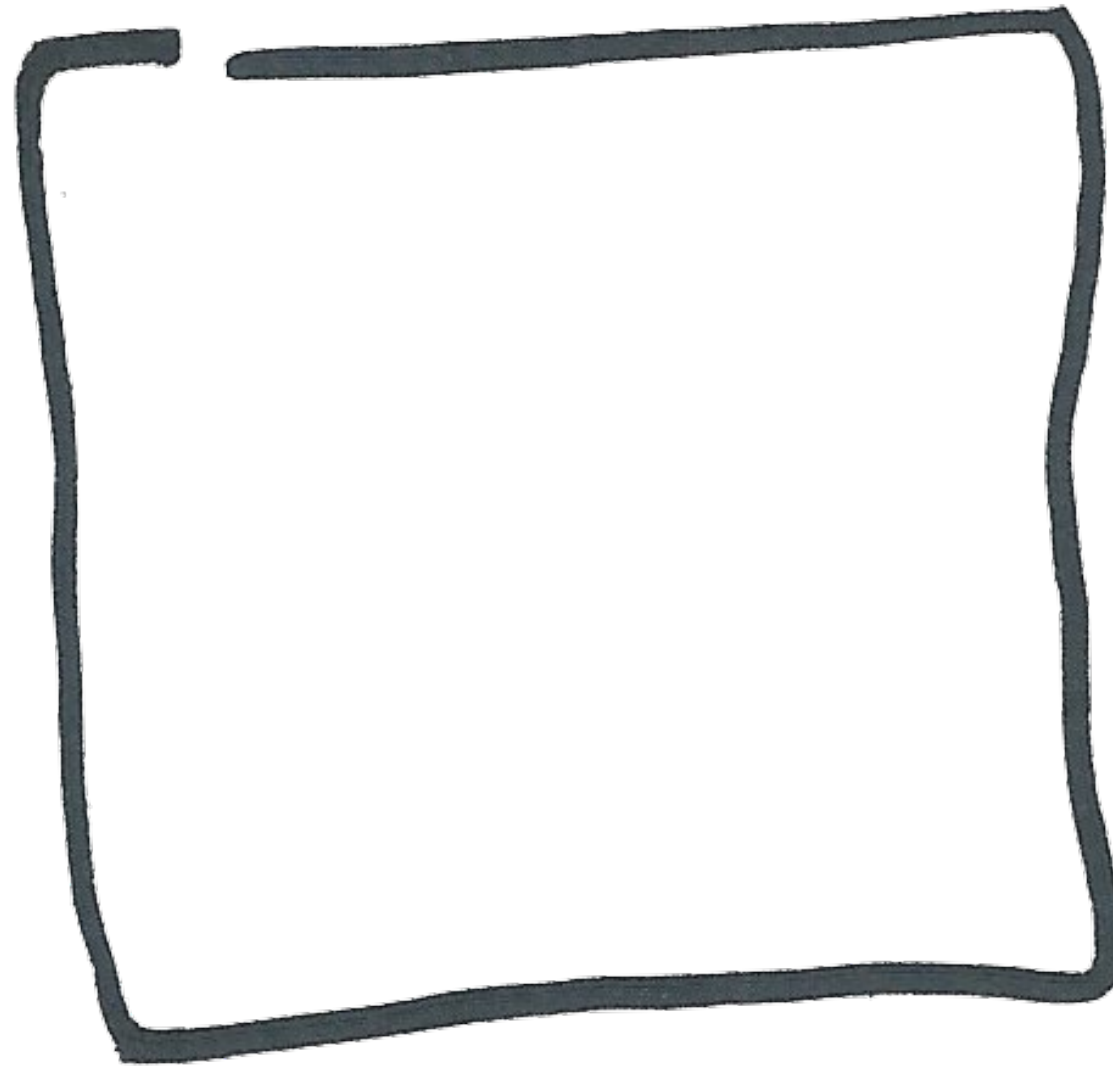




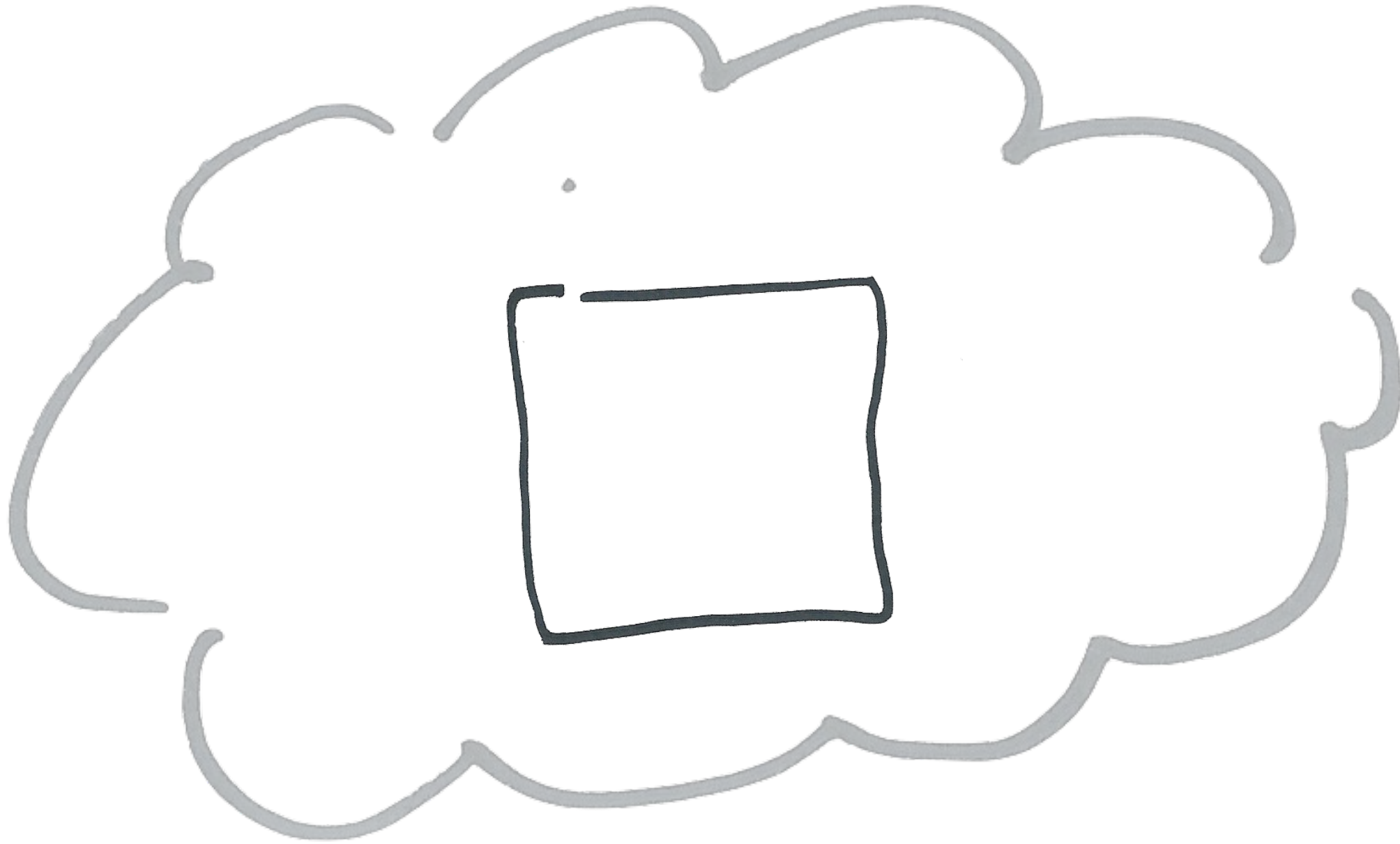


Remember that I said it was easy to get going?

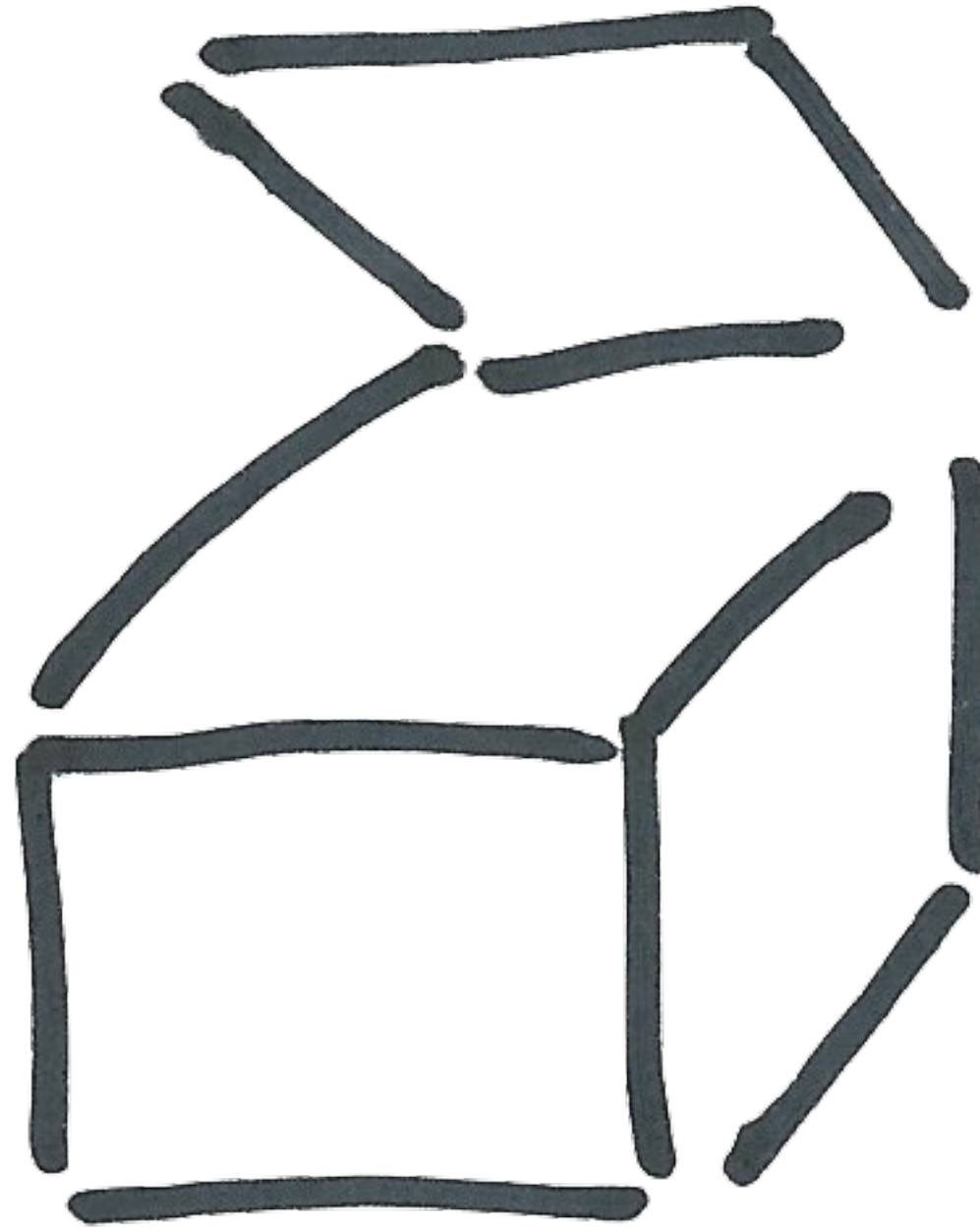
Buildpacks



Buildpacks

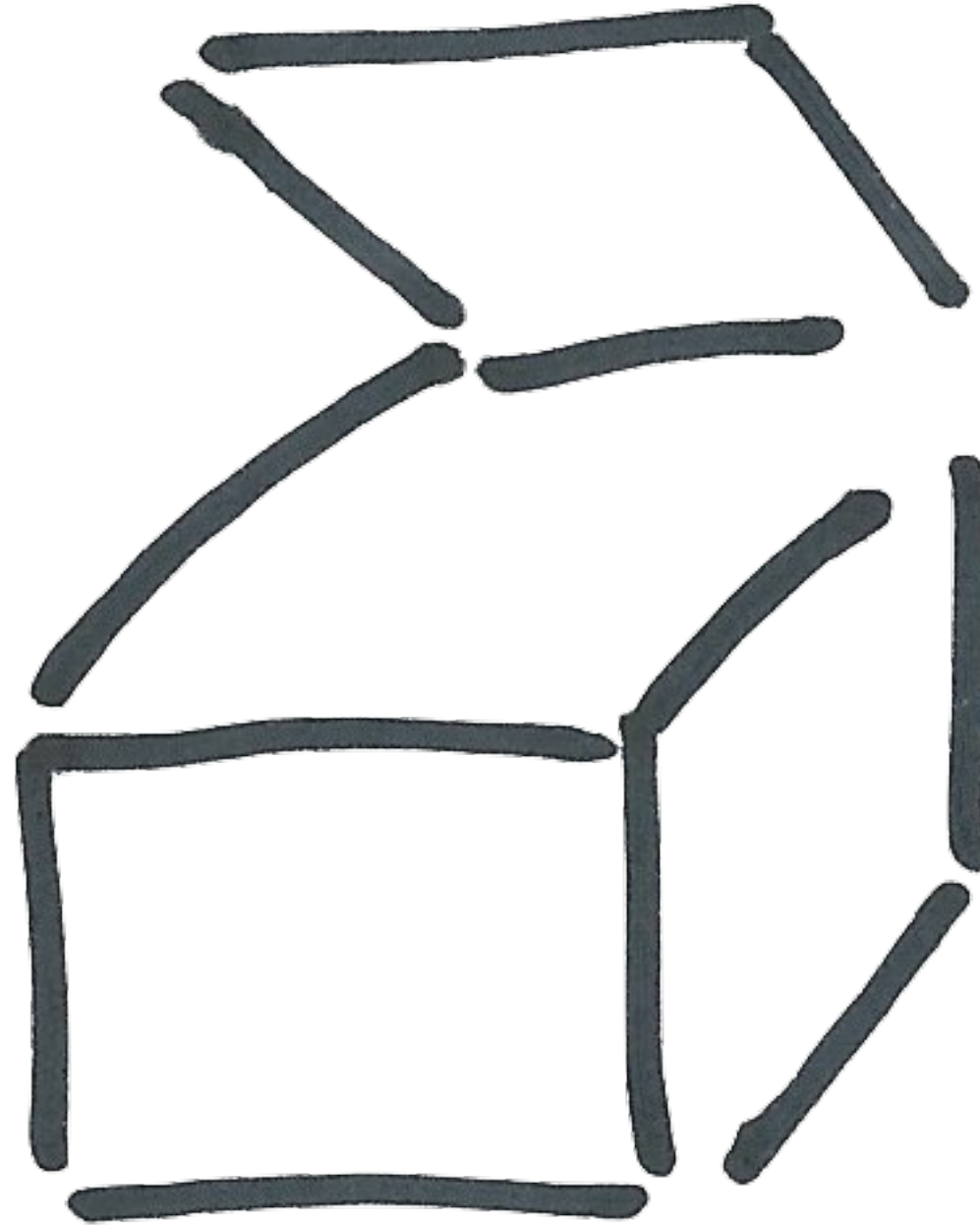


Out of the box



Out of the box

■ Java



Out of the box

- Java
- Node.js



Out of the box

- Java
- Node.js
- PHP



Out of the box

- Java
- Node.js
- PHP
- Python



Out of the box

- Java
- Node.js
- PHP
- Python
- Ruby



Out of the box

- Java
- Node.js
- PHP
- Python
- Ruby
- Go



Bring your own

Bring your own

- Your preferred app server flavour

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell
 - Clojure

Bring your own

- Your preferred app server flavour
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 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell
 - Clojure
 - Scala

Bring your own

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 - nginx
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 - Haskell
 - Clojure
 - Scala
- That thing you saw Greg Young talk about yesterday

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell
 - Clojure
 - Scala
- That thing you saw Greg Young talk about yesterday
 - Erlang

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell
 - Clojure
 - Scala
- That thing you saw Greg Young talk about yesterday
 - Erlang
- The dark side

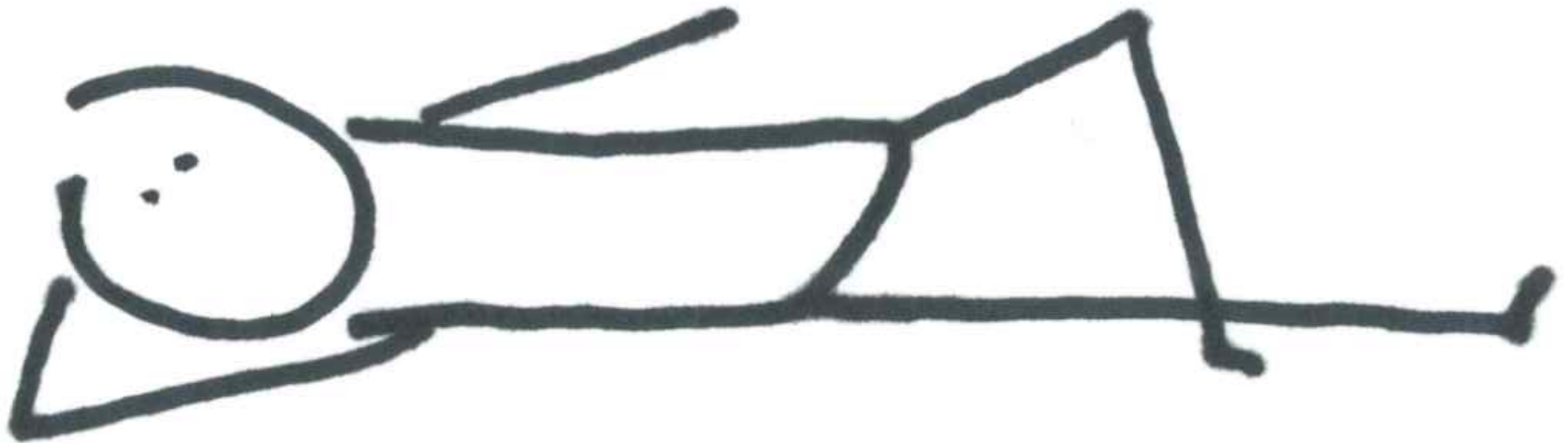
Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell
 - Clojure
 - Scala
- That thing you saw Greg Young talk about yesterday
 - Erlang
- The dark side
 - .NET

Bring your own

- Your preferred app server flavour
 - WebSphere Liberty Profile (of course!)
 - Jetty
 - nginx
- The functional language to impress your colleagues with
 - Haskell
 - Clojure
 - Scala
- That thing you saw Greg Young talk about yesterday
 - Erlang
- The dark side
 - .NET
-

Bring someone else's

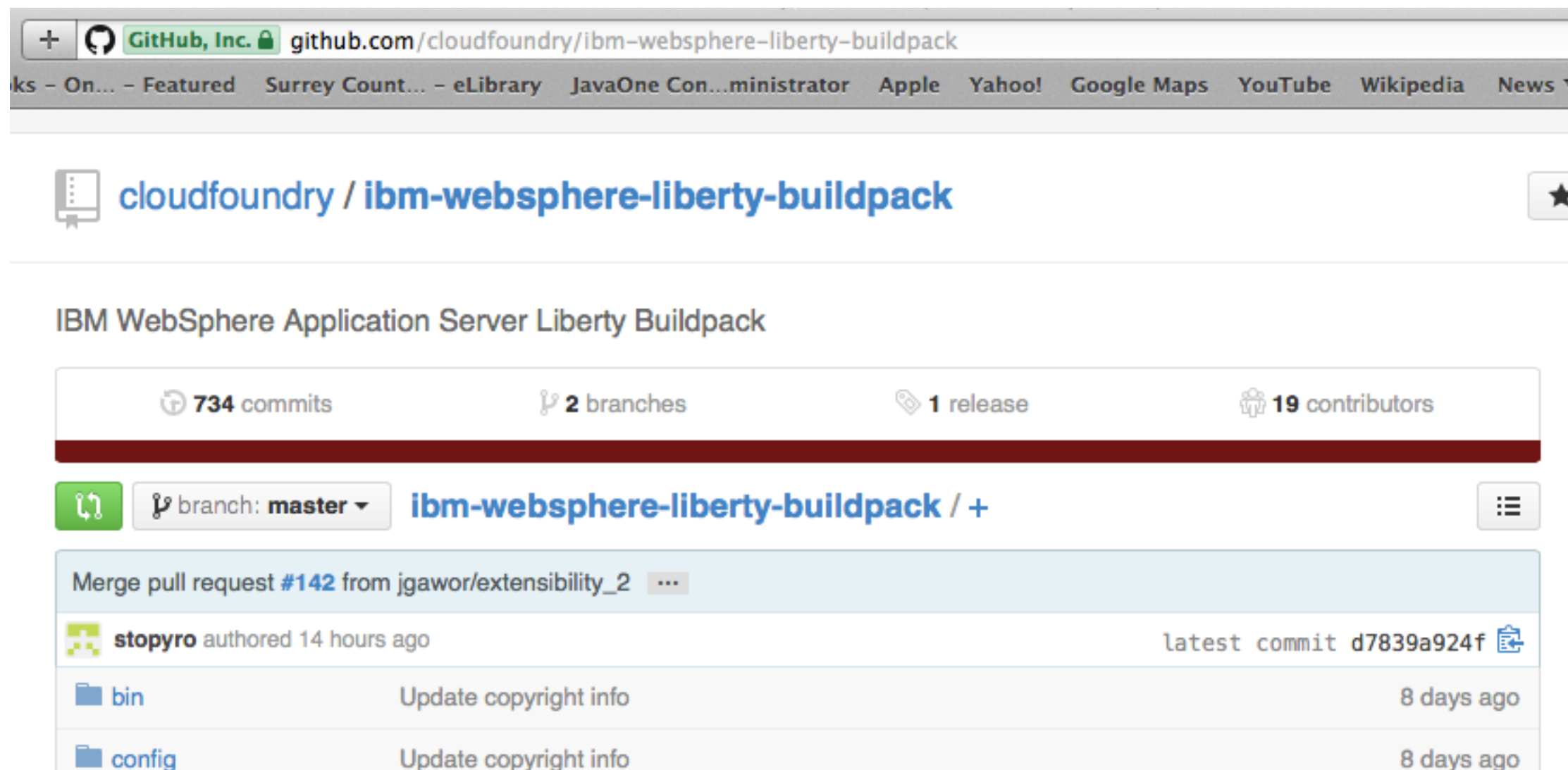


Bring someone else's



No really, bring your own

- Start with someone else's.
- Cut, paste, fork.



The screenshot shows a web browser window displaying the GitHub repository page for `cloudfoundry/ibm-websphere-liberty-buildpack`. The browser's address bar shows the URL `github.com/cloudfoundry/ibm-websphere-liberty-buildpack`. The repository page header includes the repository name and a star icon. Below the header, the repository title "IBM WebSphere Application Server Liberty Buildpack" is displayed. A summary bar shows statistics: 734 commits, 2 branches, 1 release, and 19 contributors. The main content area shows a merge pull request #142 from `kgawor/extensibility_2`. Below the merge message, the commit history is shown, with the latest commit `d7839a924f` authored 14 hours ago. The commit details show two files, `bin` and `config`, both with the message "Update copyright info" and committed 8 days ago.

github.com/cloudfoundry/ibm-websphere-liberty-buildpack

cloudfoundry / **ibm-websphere-liberty-buildpack**

IBM WebSphere Application Server Liberty Buildpack

734 commits 2 branches 1 release 19 contributors

branch: master **ibm-websphere-liberty-buildpack** / +

Merge pull request #142 from kgawor/extensibility_2

stopyro authored 14 hours ago latest commit d7839a924f

bin	Update copyright info	8 days ago
config	Update copyright info	8 days ago

buildpack: [http://
my.cool.pack.git](http://my.cool.pack.git)

Life of a buildpack

Life of a buildpack

- Detect

Life of a buildpack

- Detect
 - Do I understand this application?

Life of a buildpack

- Detect
 - Do I understand this application?
- Compile

Life of a buildpack

■ Detect

- Do I understand this application?

■ Compile

- I do understand this application! Let's package it up into a self-contained unit ("droplet")

Life of a buildpack

■ Detect

- Do I understand this application?

■ Compile

- I do understand this application! Let's package it up into a self-contained unit ("droplet")

■ Release

Life of a buildpack

■ Detect

- Do I understand this application?

■ Compile

- I do understand this application! Let's package it up into a self-contained unit ("droplet")

■ Release

- Ok, let's go!

Services

Services

- You didn't want to provide an app server ...

Services

- You didn't want to provide an app server ...
- ... so you don't want to provide the database ...

Services

- You didn't want to provide an app server ...
- ... so you don't want to provide the database ...
- ... or the email provider ...

Services

- You didn't want to provide an app server ...
- ... so you don't want to provide the database ...
- ... or the email provider ...
- ... or the monitoring








Some are generic



Some are not ...

Watson

Build cognitive apps that help enhance, scale, and accelerate human expertise

 Concept Expansion IBM BETA	 Language Identification IBM BETA	 Machine Translation IBM BETA	 Message Resonance IBM BETA	 Question and Answer IBM BETA
 Relationship Extraction IBM BETA	 User Modeling IBM BETA			

... and there are a lot

Mobile

Quickly get started with your next app



Mobile Application Sec...

IBM



Mobile Data

IBM



Mobile Quality Assurance

IBM



Push

IBM



Twilio

Third Party

Web and Application

Deliver new web and apps



Business Rules

IBM



Data Cache

IBM



Gamification

IBM BETA



MQ Light

IBM



RapidApps

IBM BETA



Session Cache

IBM



Workflow

IBM BETA



Workload Scheduler Beta

IBM BETA



BlazeMeter

Third Party



CloudAMQP

Third Party

Binding services

```
services:  
- instance_ABC  
- instance_XYZ
```

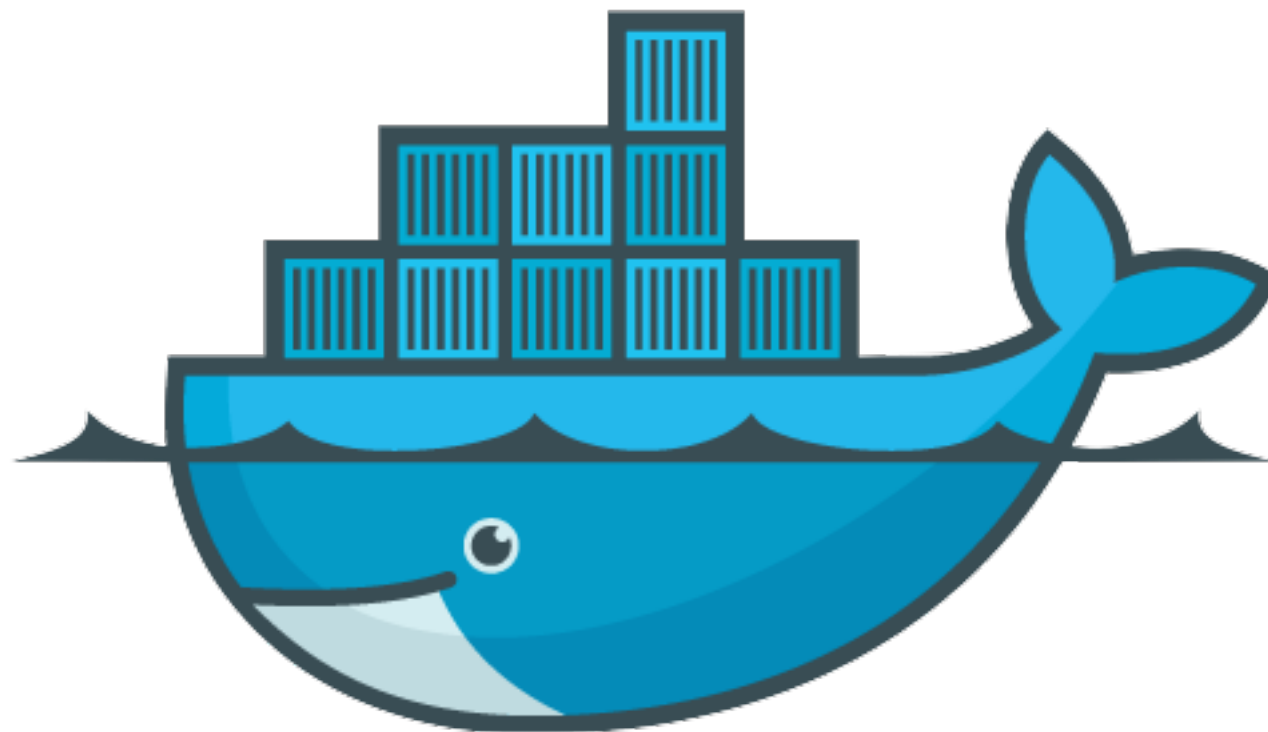
Using a bound service

Using a bound service

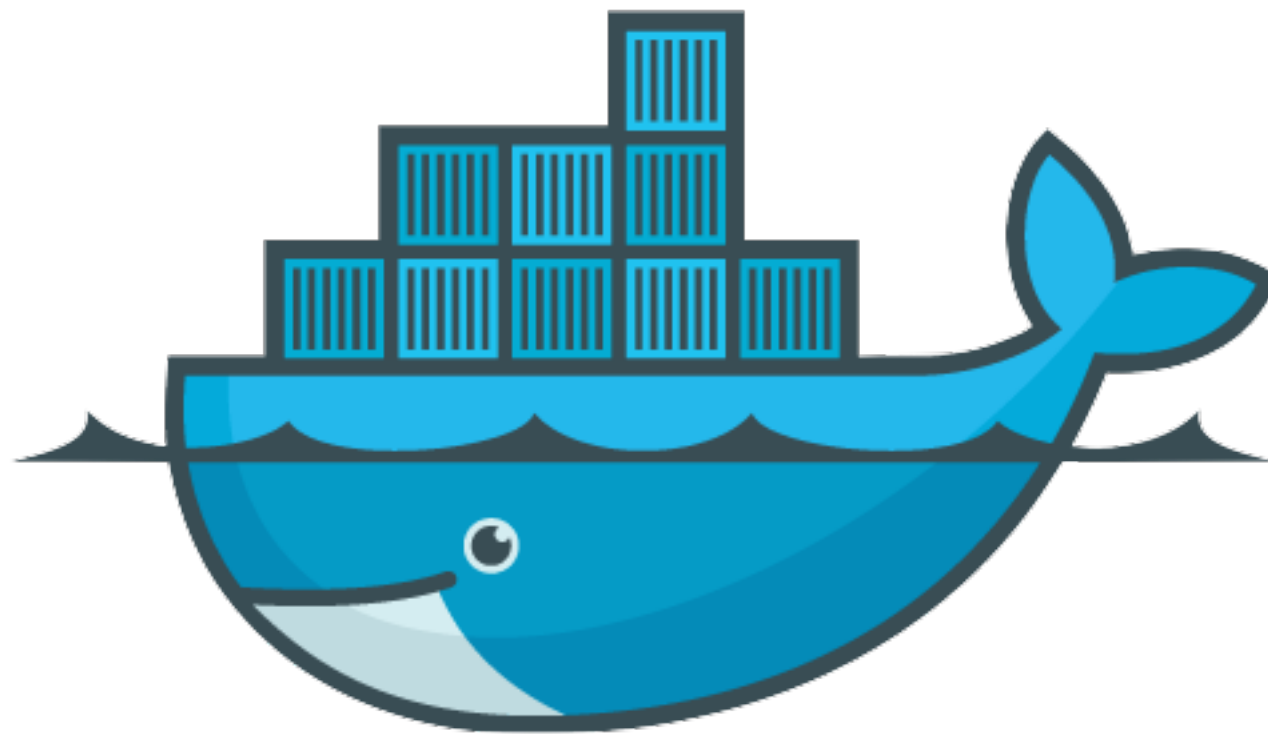
```
System.getProperty(VCAP_SERVICES);
```

```
{
  sqldb": [
    {
      "name": "SQLDB-myDB",
      "label": "sqldb"
      "plan": "sqldb_small"
      "credentials": {
        "hostname": "75.126.155.139",
        "host": "75.126.155.139",
        "port": 50000,
        "username": "u123456",
        "password": "CasDQ5v72u",
        "db": "I_012345",
        "jdbcurl": "jdbc:db2://75.126.155.139:50000/I_012345",
        "uri": "db2://u123:CasD@75.126.155.139:50000/I_012345"
      }
    }
  ]
}
```

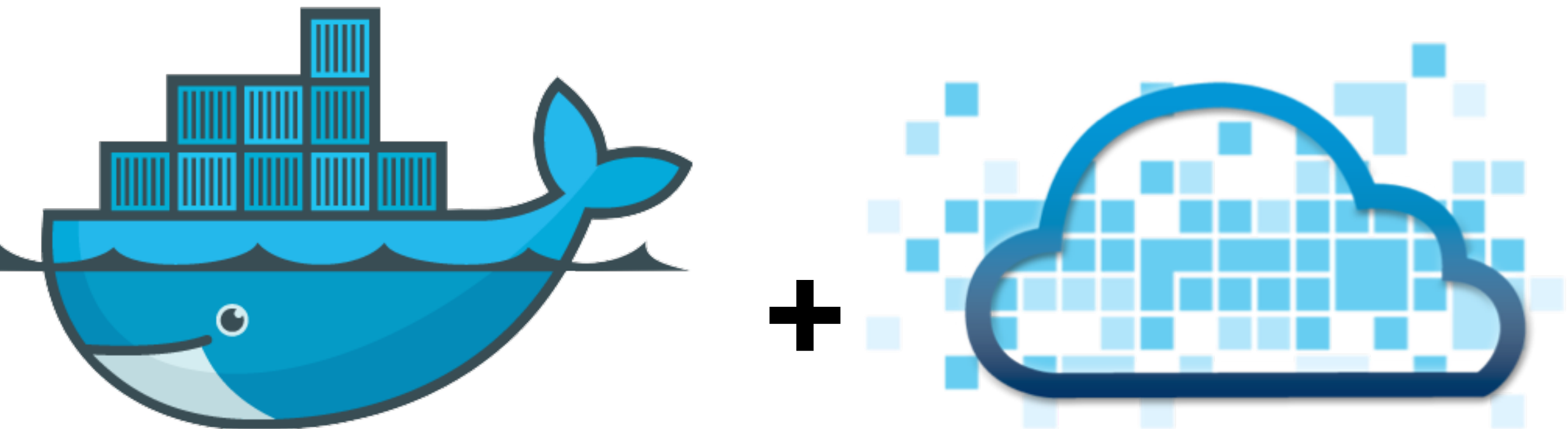
Docker



Decker



Decker

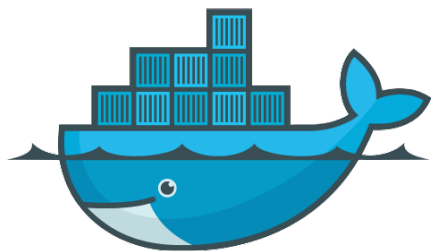


Decker

```
> cf push
```

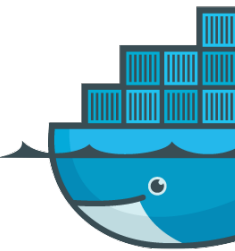
Decker

```
> cf push
```



Decker

```
> cf push
```



In the future

In the future

- More convergence

In the future

- More convergence
- Cloud Foundry will have first class support for pushing docker images

In the future

- More convergence
- Cloud Foundry will have first class support for pushing docker images
- Cloud Foundry will use Docker's lib container internally

Thank you.
Any questions?

@holly_cummins