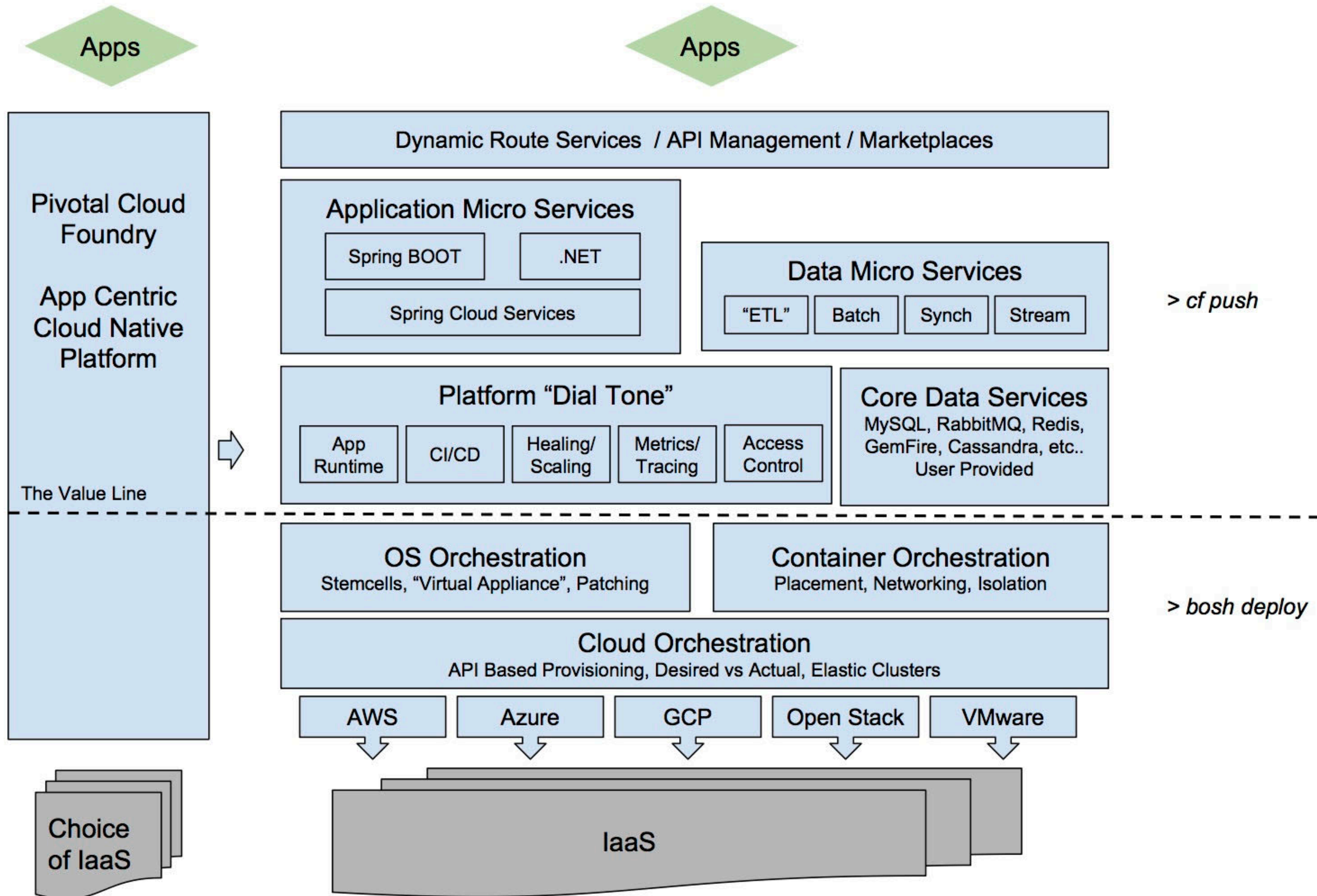


Pivotal

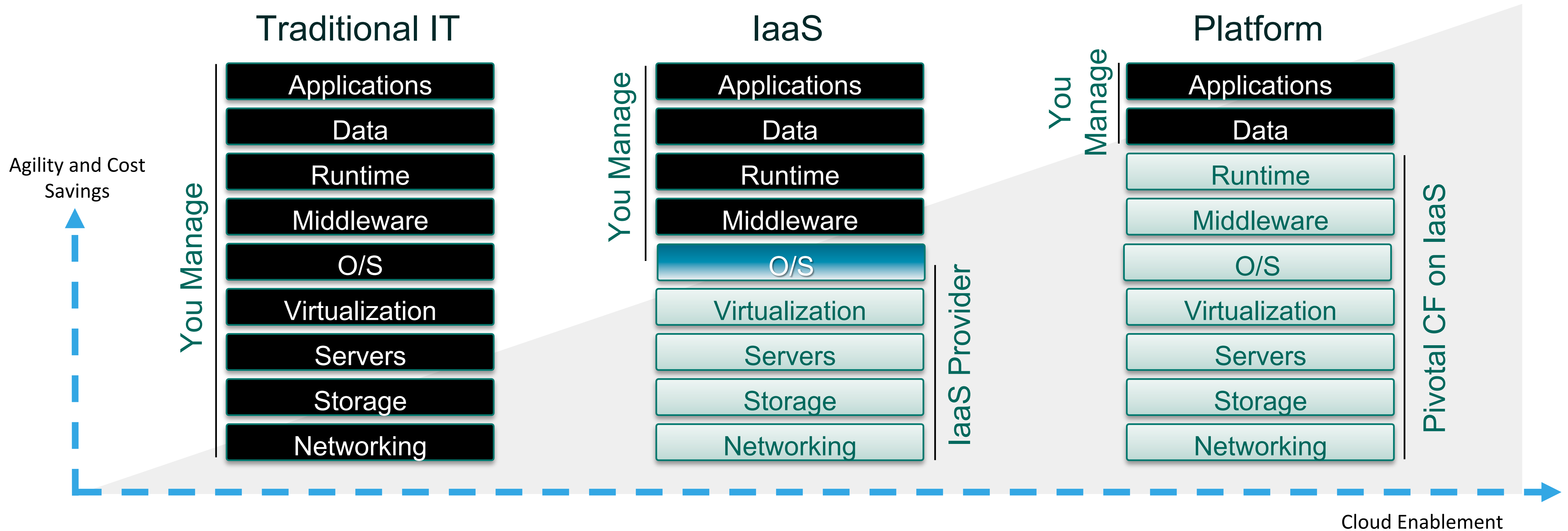
A NEW PLATFORM FOR A NEW ERA

Intro to Pivotal CF



THE POWER OF STRUCTURED PLATFORM

THE "IT JUST WORKS" EXPERIENCE



Cloud Foundry in Action

The “It Just Works” Experience

Pivotal **CF**[™]

- ⌚ Provision VM
- ⌚ Install Application Runtime
- ⌚ Deploy Application
- ⌚ Configure Load Balancer
- ⌚ Configure SSL Termination
- ⌚ Configure Service Connectivity
- ⌚ Configure Firewall

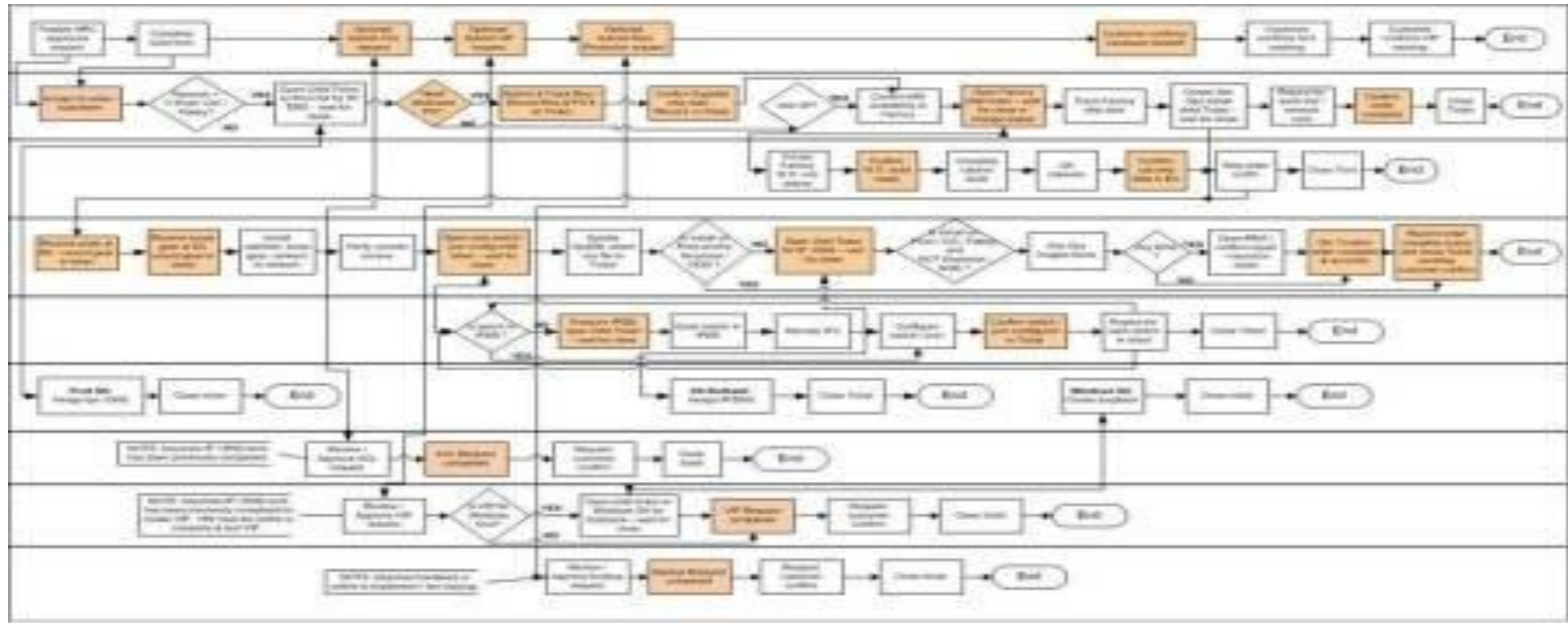
● cf push

Pivotal **CF**[™]

- 🕒 Provision New VM
- 🕒 Install Application Runtime
- 🕒 Deploy Application
- 🕒 Configure Load Balancer / Update Route
- 🕒 Configure Service Connectivity
- 🕒 Configure Firewall

● cf scale

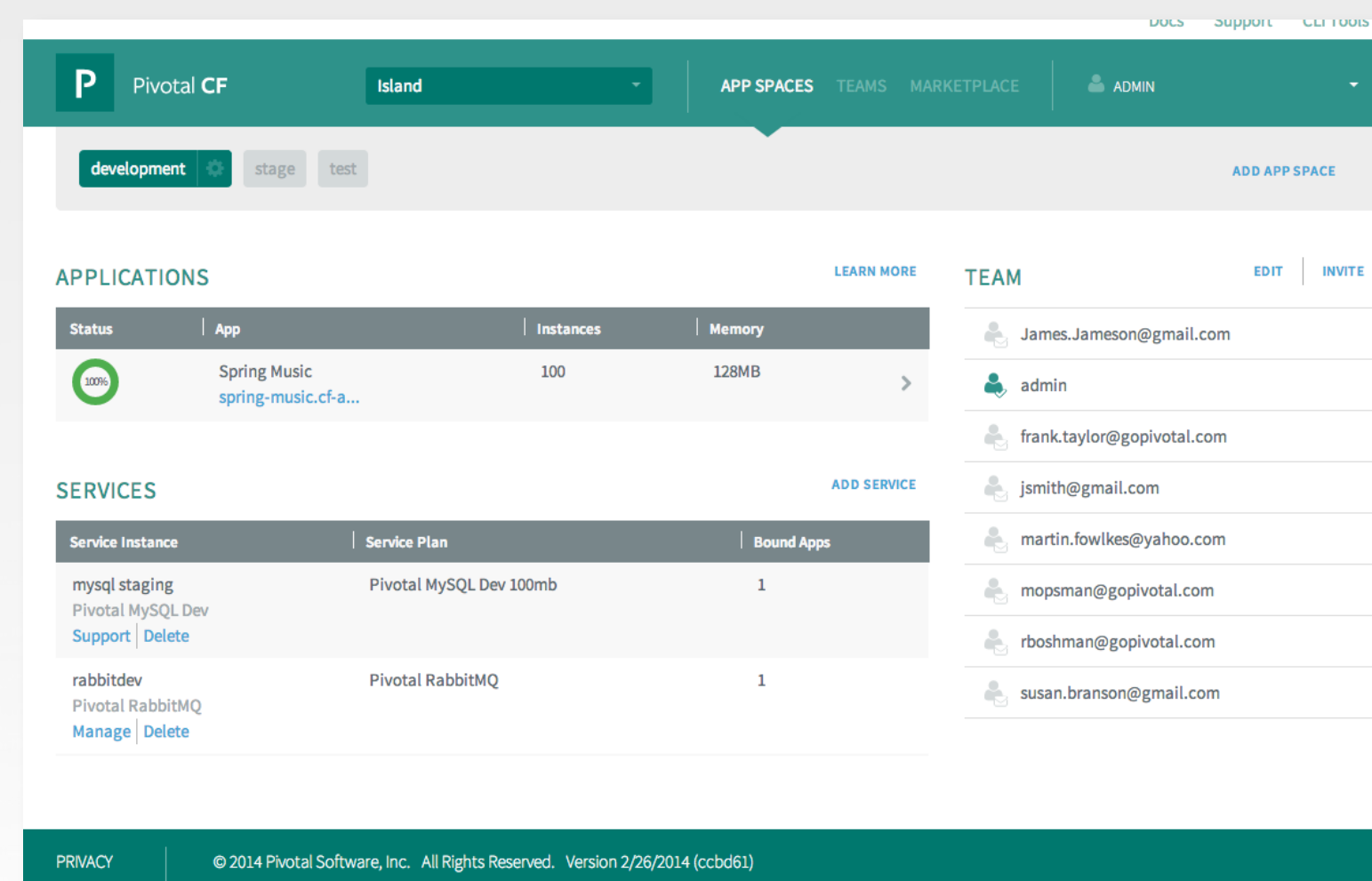
Taking the Application Lifecycles From Months...



...to Hours and Minutes

DEVELOPER

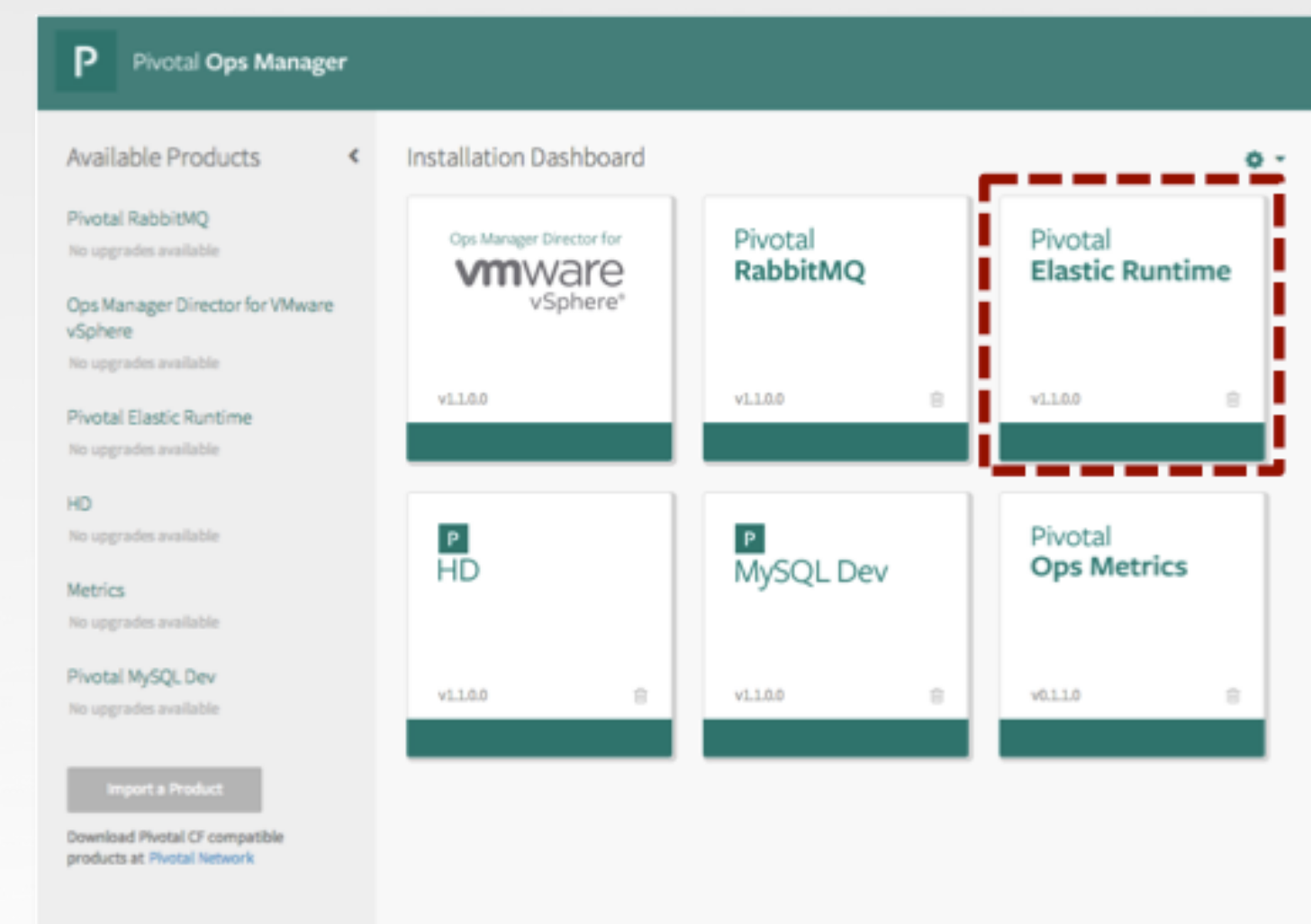
Auto-select runtimes
Deploy app
Select and bind middleware
Scale app



App Deployment: 30-90 seconds

OPERATOR

Establish infrastructure
Provision
Add capacity
Control Auth, Policies, HA



Cloud Deployment: 2-4 hours

Pivotal CF

Enterprise Cloud Foundry

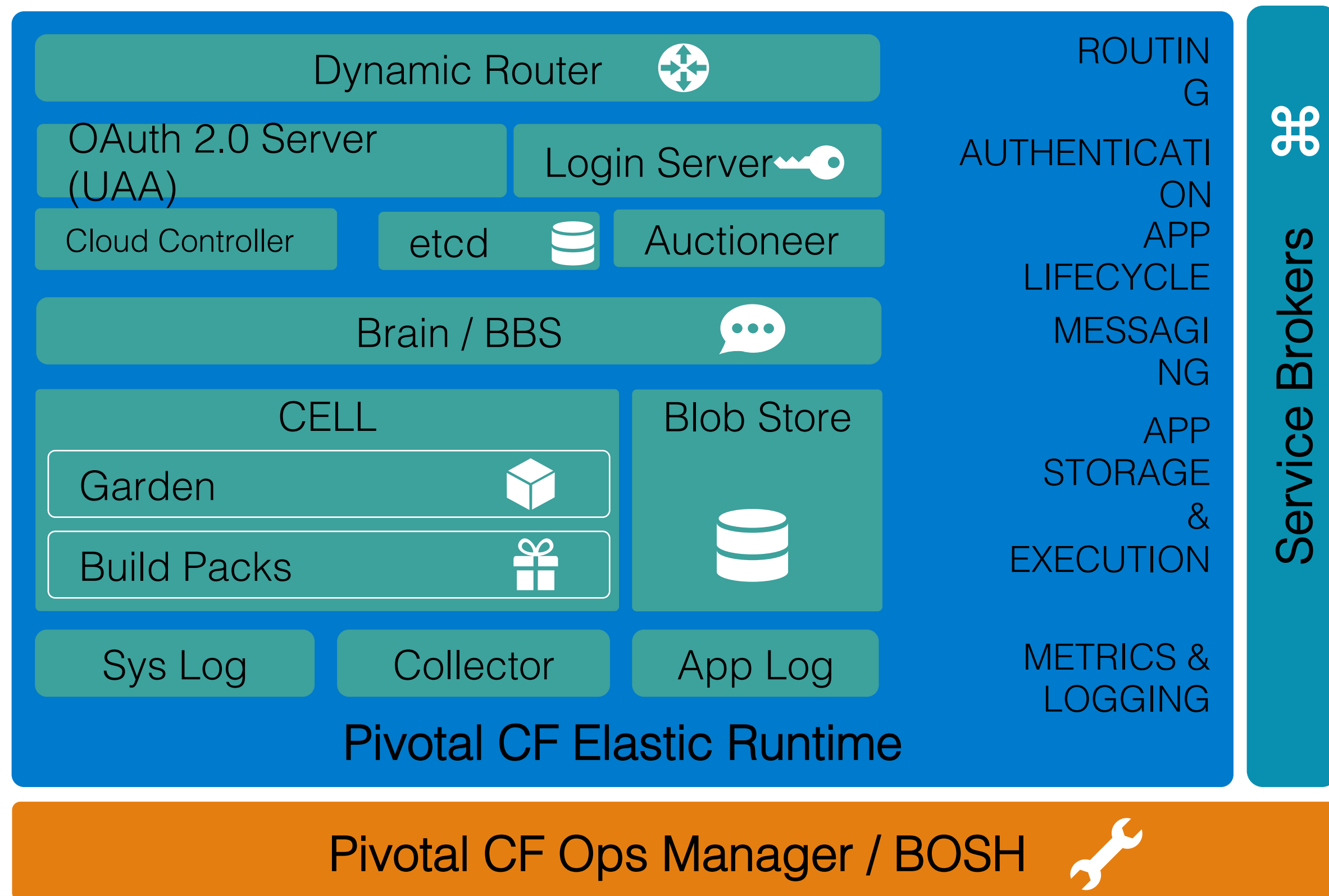


The leading
enterprise distribution
of Cloud Foundry is..
Pivotal CF

Pivotal **CF**TM



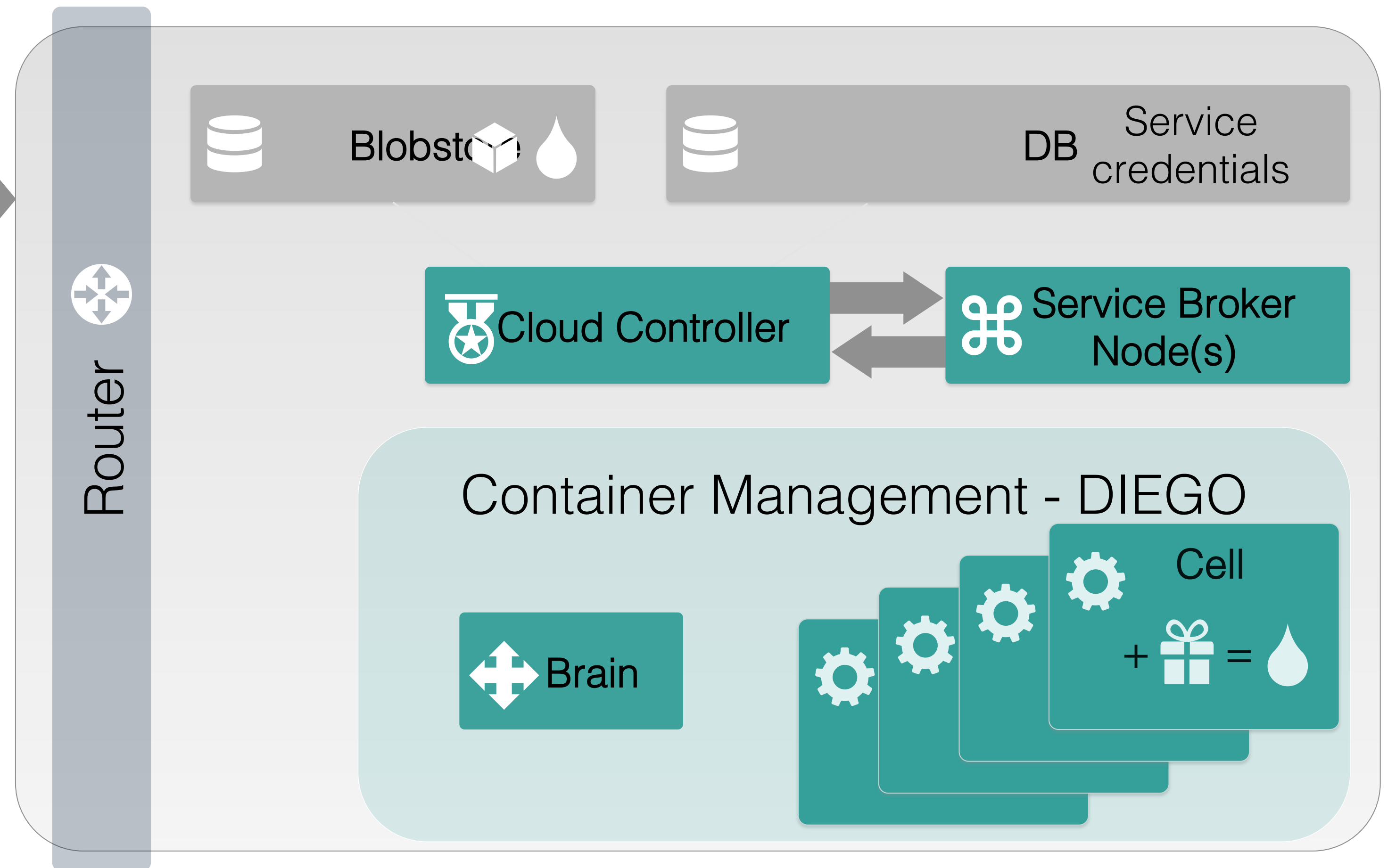
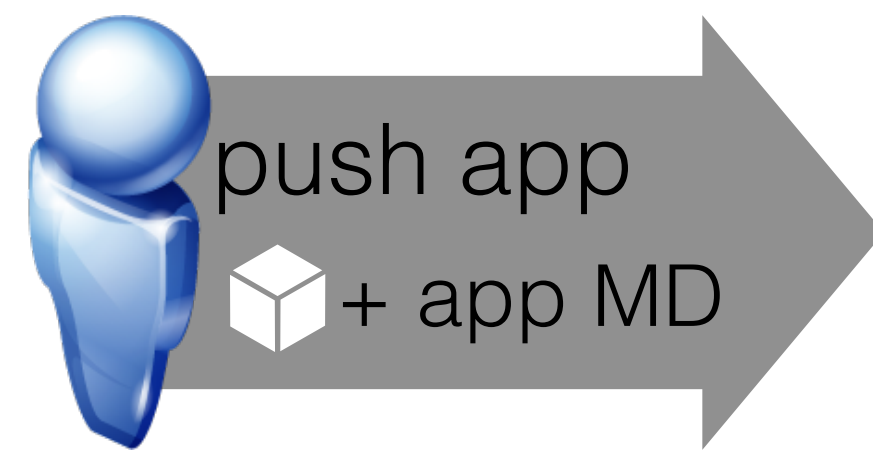
Elastic Runtime Architecture



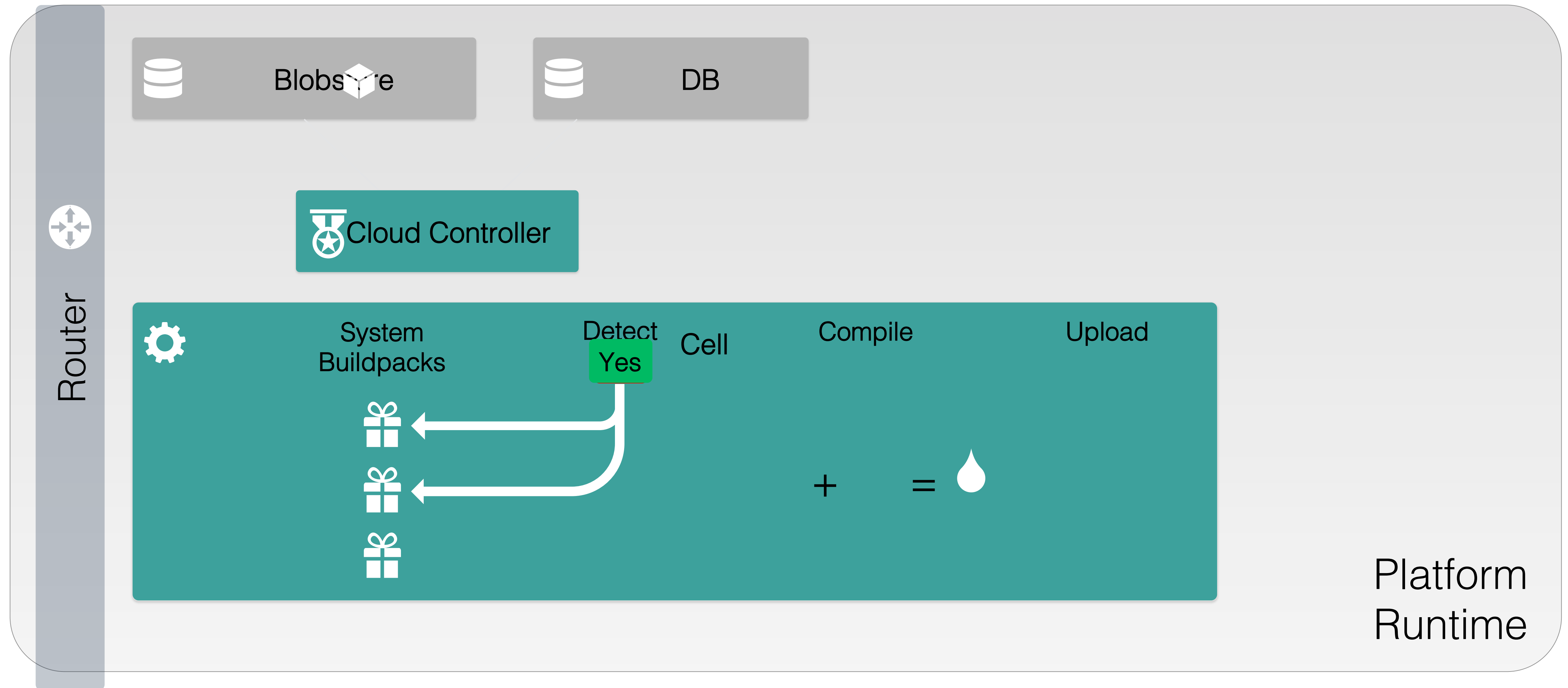
- Turnkey, Fully automated Cloud Native Platform
- Scalable runtime environment, extensible to modern framework and languages
- Instant scalable with updates and upgrades with no downtime
- Deploy, scale and manage applications with services

Deploying an Application

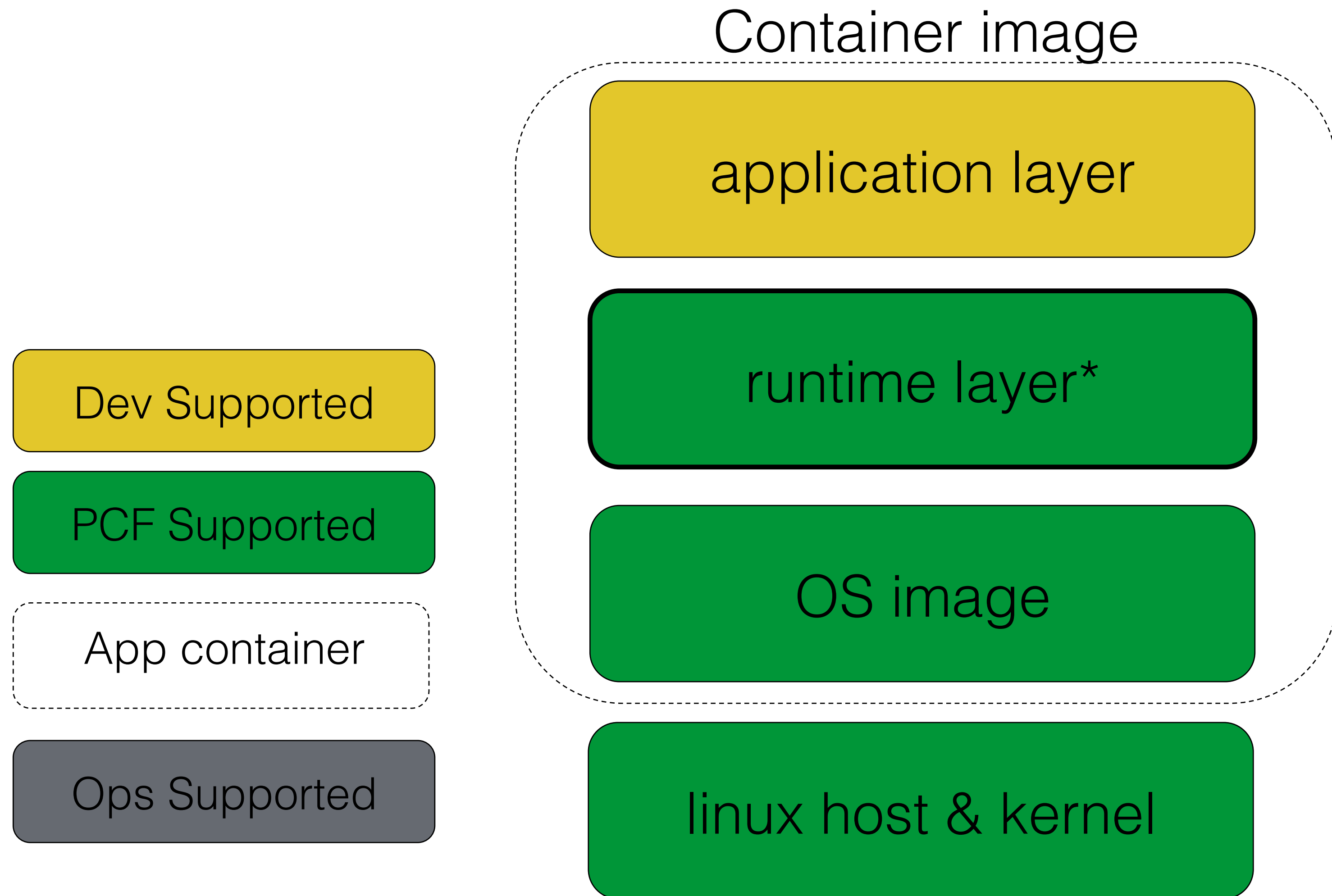
- ① Upload app bits and metadata
- ② Create and bind services
- ③ Stage application
- ④ Deploy application
- ⑤ Manage application health



Staging an *Application*



Platform Runtime – Application Frameworks



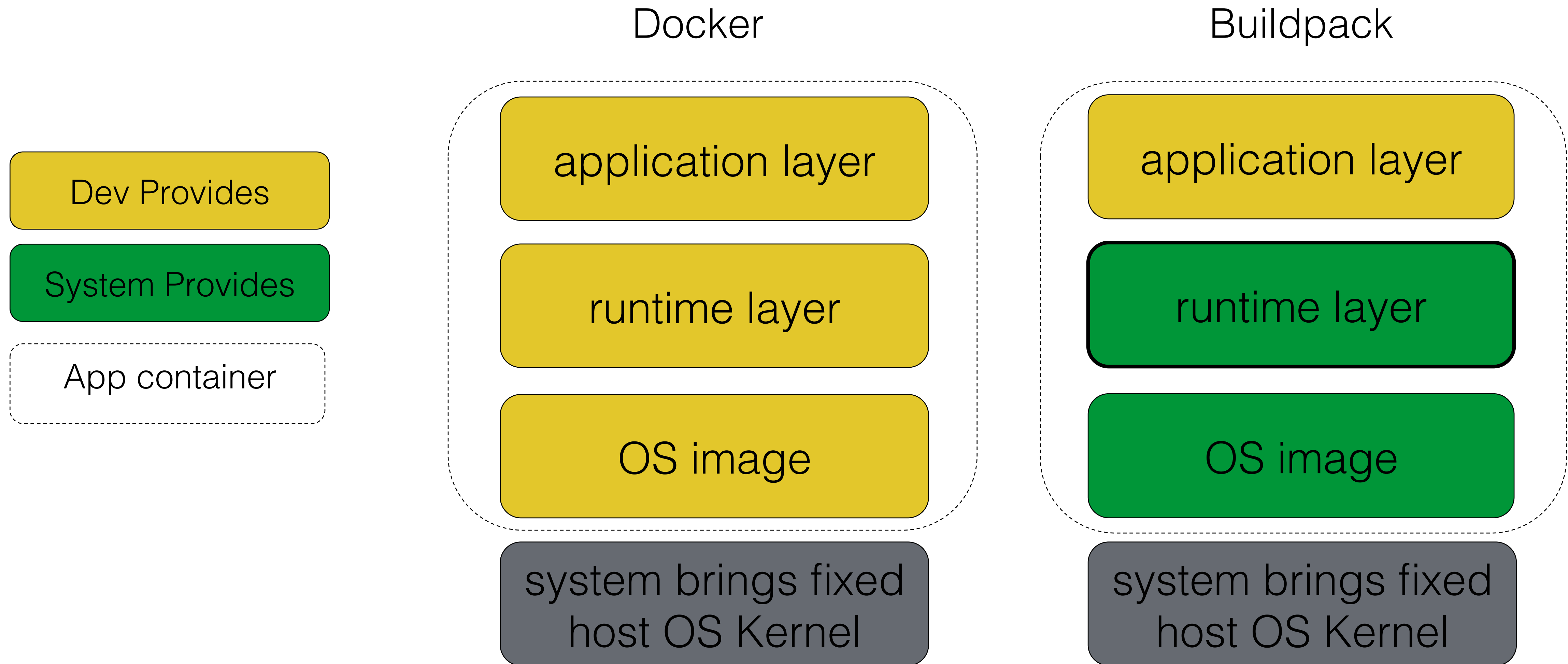
PCF buildpacks provide full support and maintenance for 3 of the 4 layers of the container stack

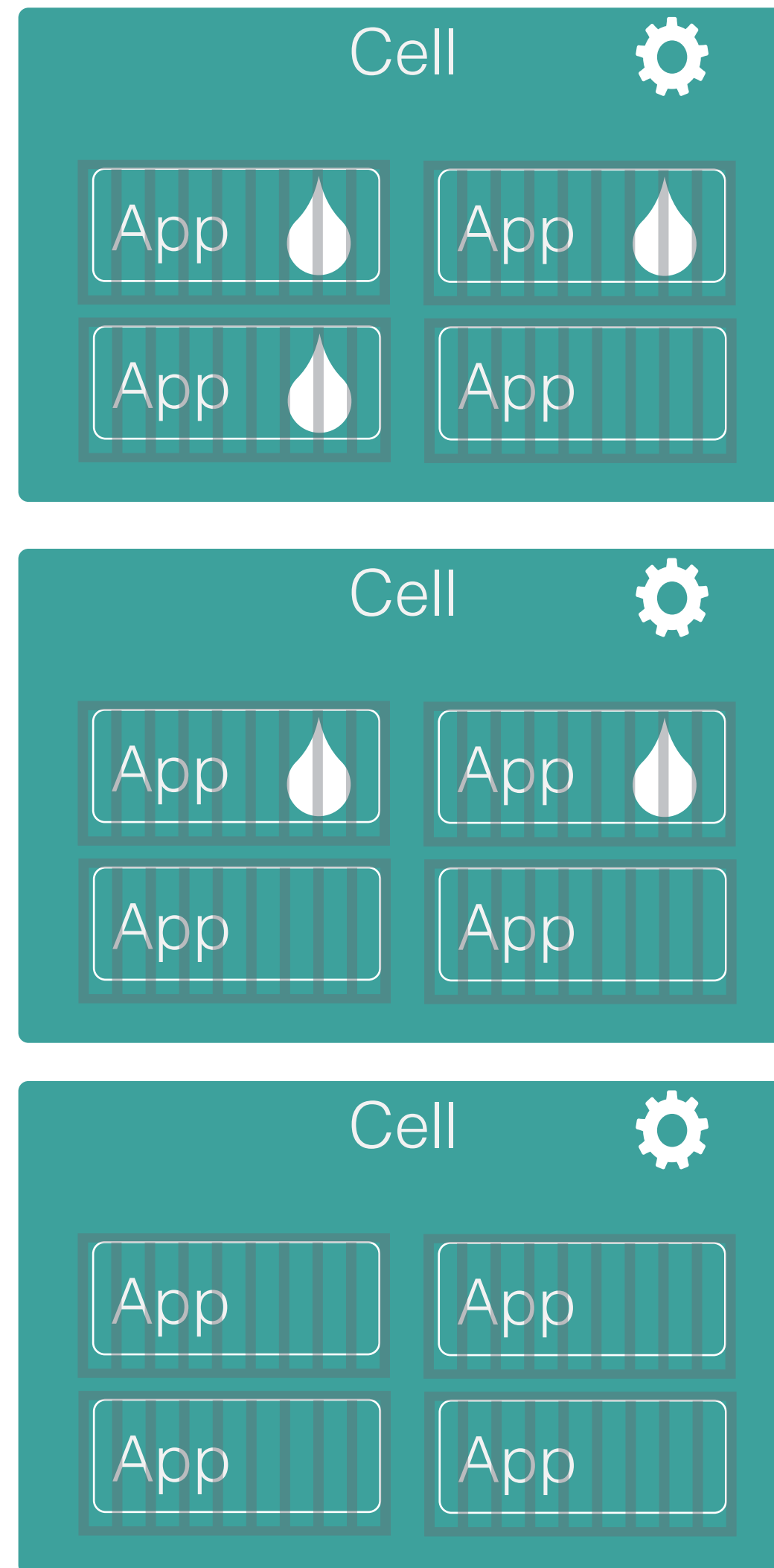
Devs can focus on just the app code

PCF creates the container image for you

* Devs may bring a custom buildpack

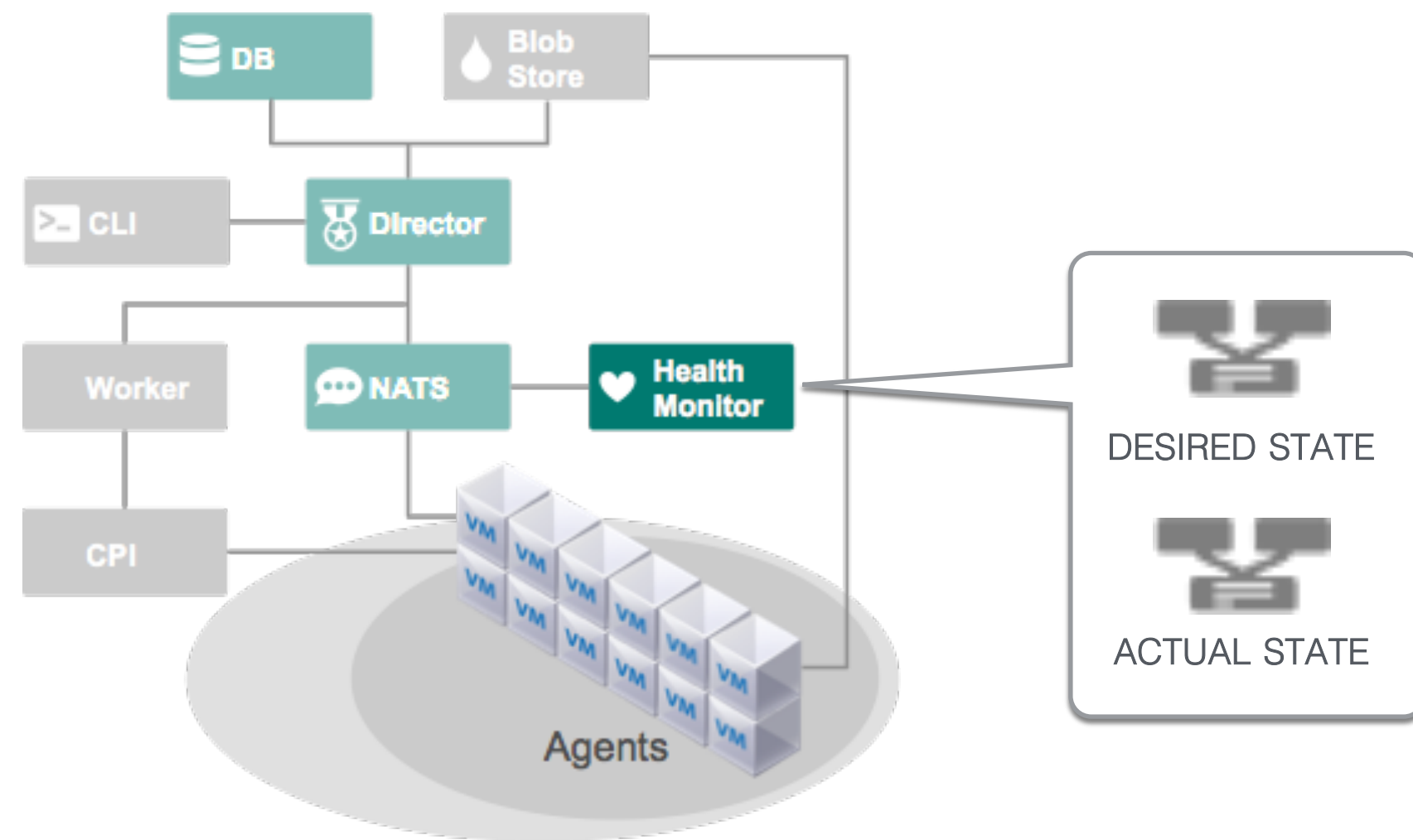
Bring your Container(BYC) vs Buildpacks



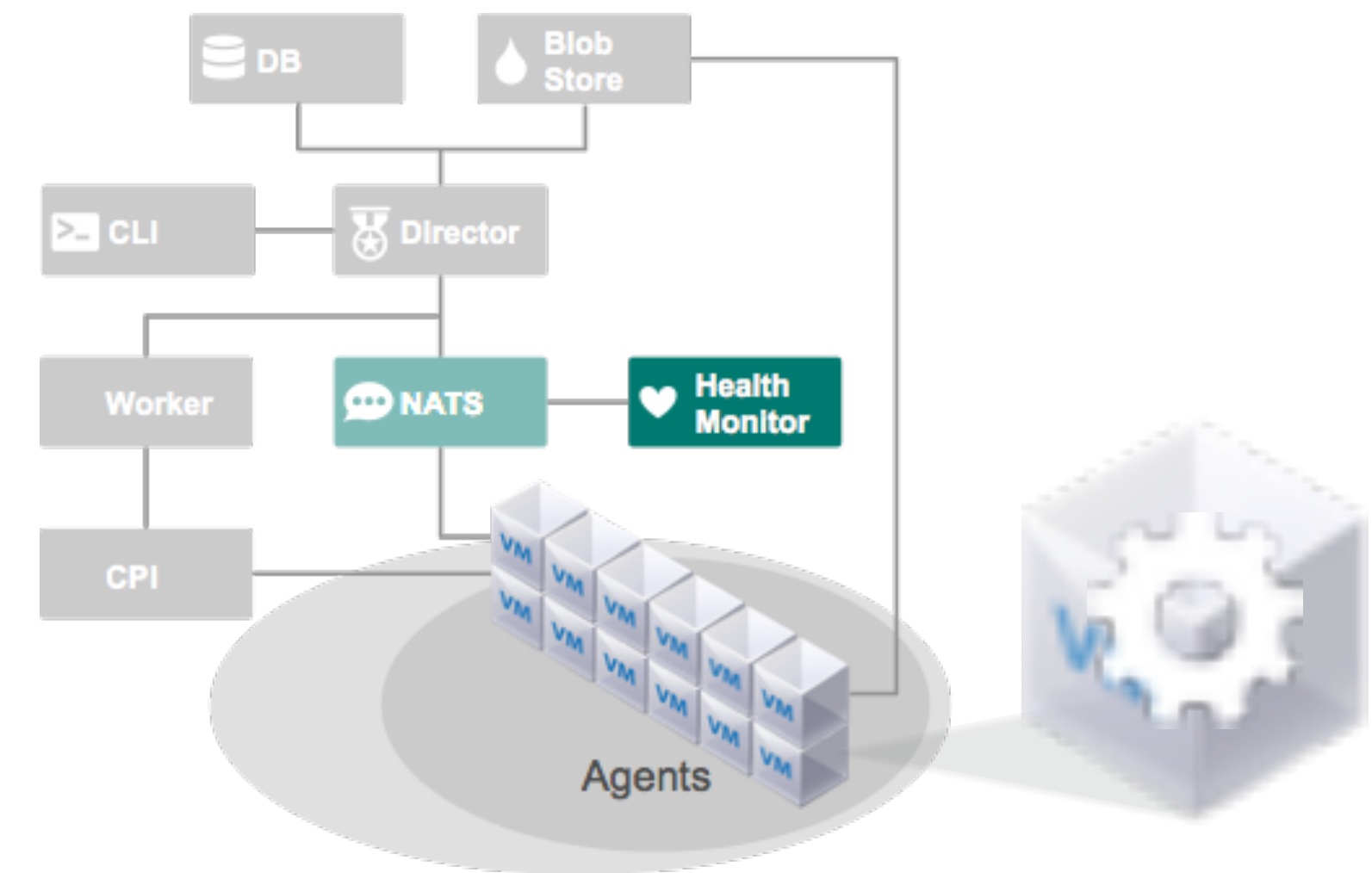


- Docker is:
 - Image format
 - A runtime/interpreter for Docker images leveraging linux container support
- Garden is a runtime/interpreter, leveraging linux container support, for:
 - Droplets (linux containers)
 - Docker images (linux containers)
 - .Net applications (windows “containers”)
- Windows cells installed via msi

4 LEVELS OF HIGH AVAILABILITY

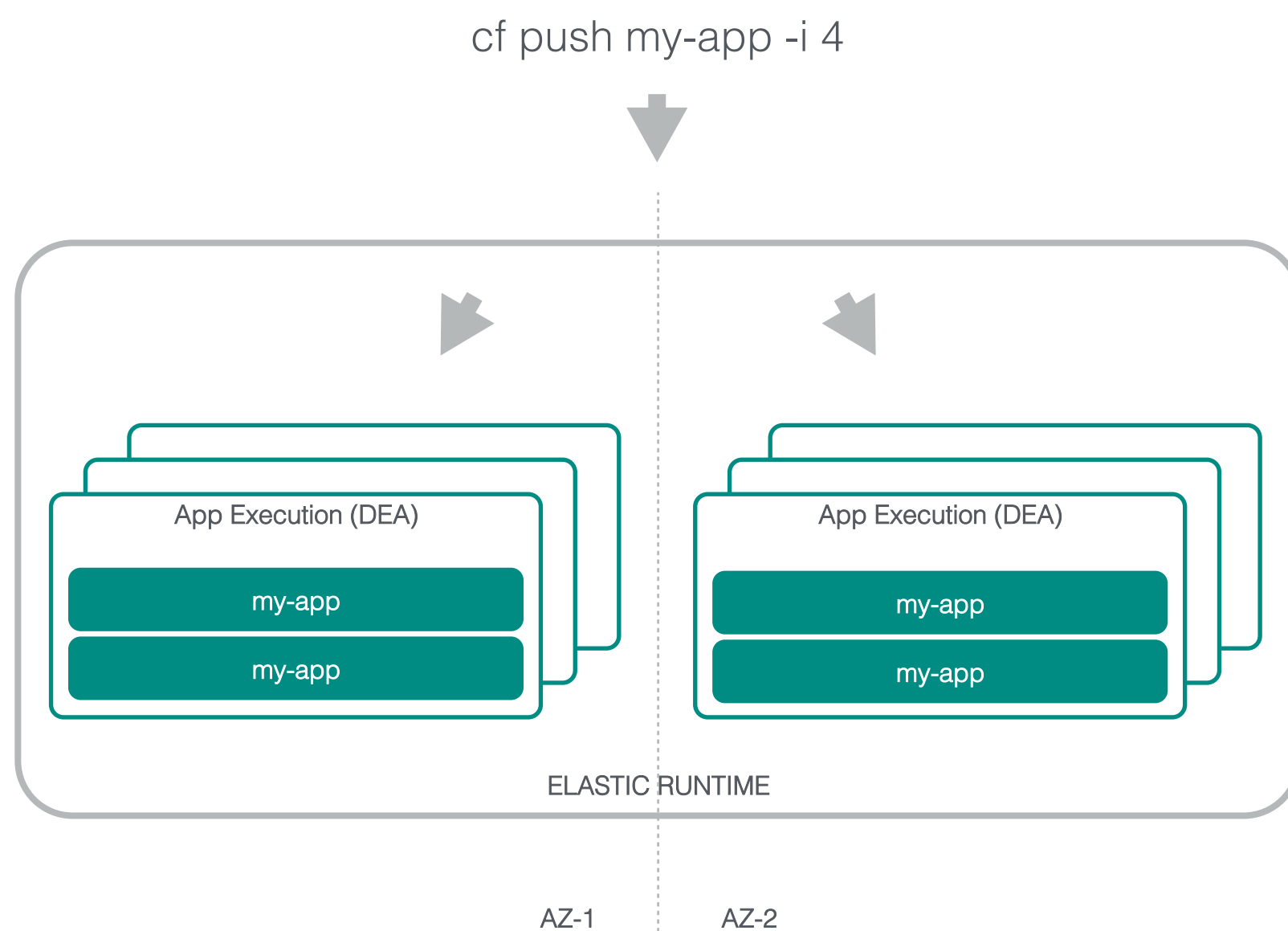


FAILED VMs ARE RECOVERED

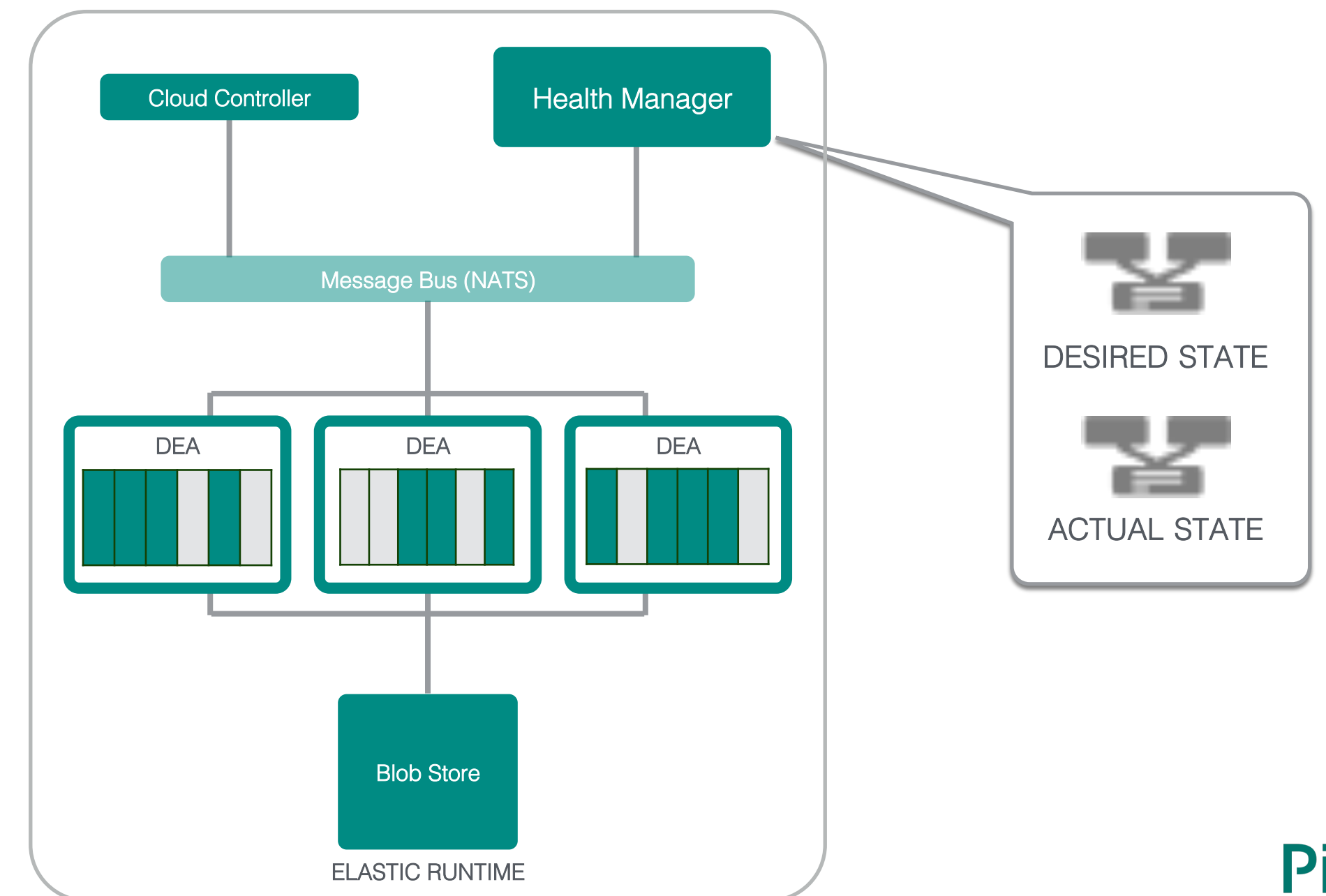


FAILED PROCESSES ARE RECOVERED

APPLICATION INSTANCES BALANCED ACROSS AVAILABILITY ZONES



FAILED APPLICATION INSTANCES ARE RECOVERED



Services

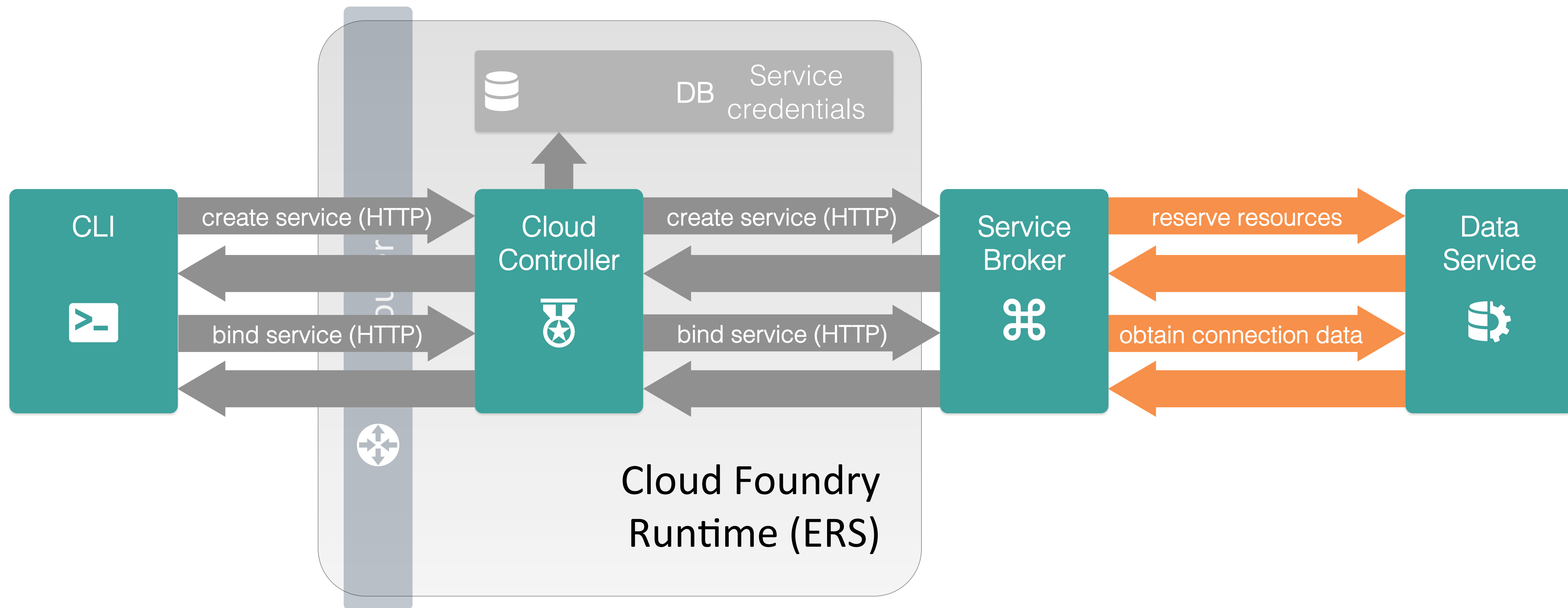
Any attached resource such as a database, message queue, web service, legacy database, log sink, mobile back-end, etc.

MANAGED SERVICES

- Available 'out-of-the-box'
- Selected from 'Marketplace catalog'
- Instances **Provisioned** by the platform
- Can be custom created

USER PROVIDED SERVICES

- Runs outside the platform
- Connection information stored and provided to the applications
- PCF does not provision the service but just provides the Connection information



VCAP_SERVICES

- Create service
- Bind to an app
- Modify app (if necessary) to read connection info from env

```
VCAP_SERVICES=" {  
  "p-mysql": [  
    {  
      "name": "music-db",  
      "label": "p-mysql",  
      "tags": [ "mysql", "relational" ],  
      "plan": "100mb-dev",  
      "credentials": {  
        "hostname": "192.168.1.147",  
        "port": 3306,  
        "name": "cf_aceae021_7f27_48db_9844_d7c151f29195",  
        "username": "Tr12ZI4hPu4OPJPY",  
        "password": "fuTWBqpGeyvv0qge",  
        "uri": "mysql://Tr12ZI4hPu4OPJPY:fuTWBqpGeyvv0qge@192.168.1.147:3306/  
                cf_aceae021_7f27_48db_9844_d7c151f29195?reconnect=true"  
      }  
    }  
  ]  
}
```

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