



Pivotal

Cloud Native Workshop

Publish, Secure, & Monitor APIs with Pivotal Cloud Foundry Route Services

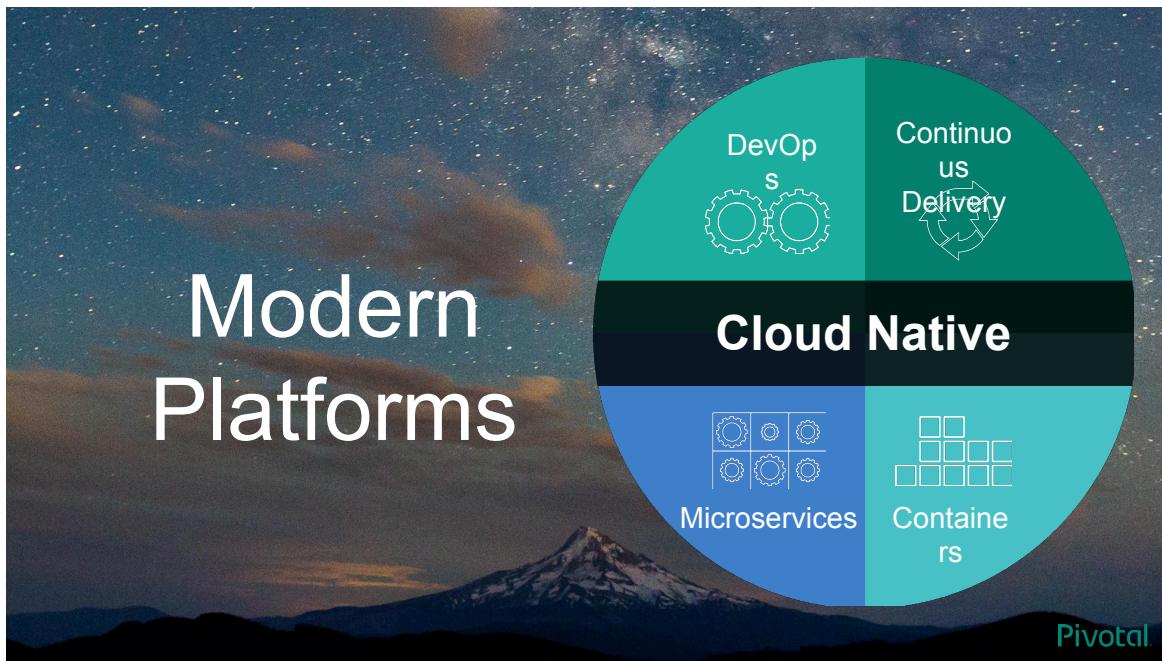
Pivotal Cloud Foundry

Pivotal.

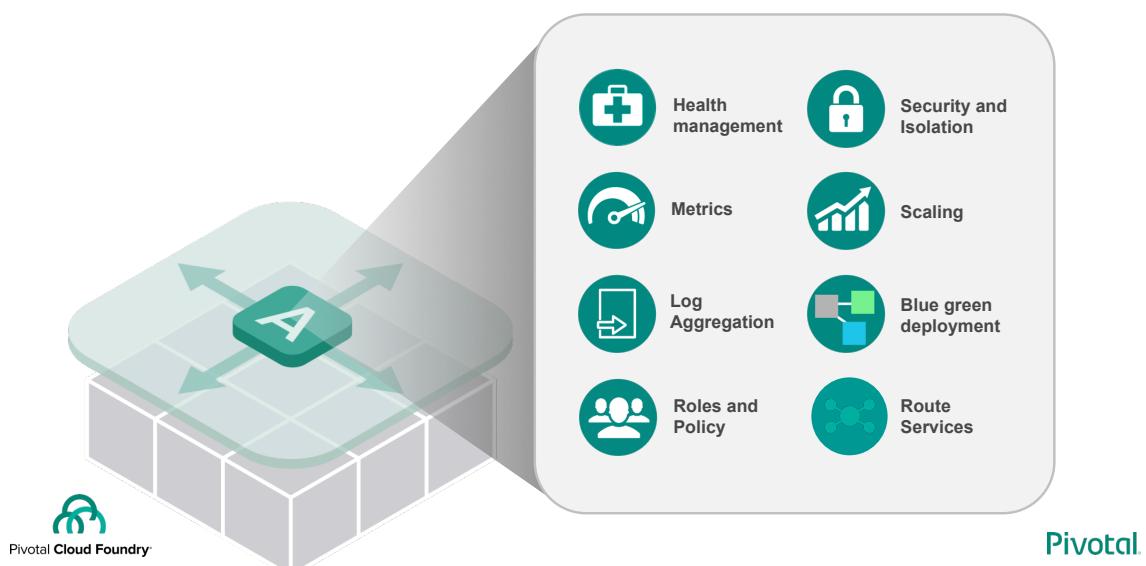
Agenda

1. Pivotal Cloud Foundry
2. PCF Route Services
3. Apigee Edge with PCF
4. Demo
5. Conclusion

Pivotal.

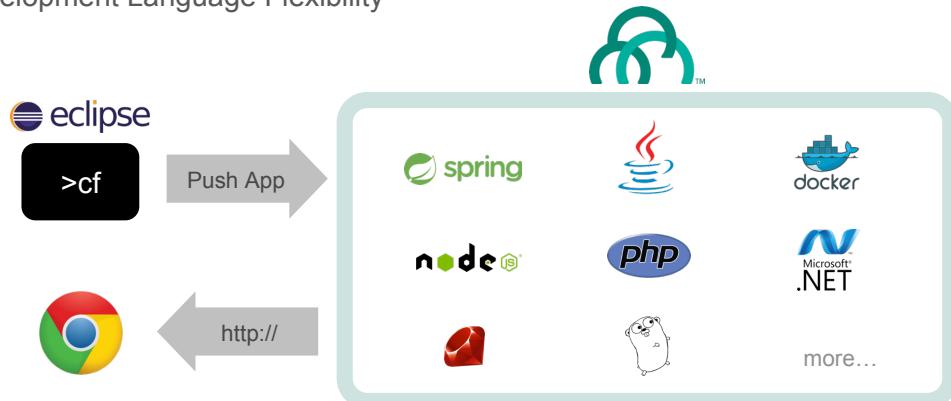


Pivotal Cloud Foundry – an API Centric Platform



Implement APIs your way

Development Language Flexibility



Push your app and it just works...no “snowflakes”, no waiting.

5

Pivotal.

Why APIs?

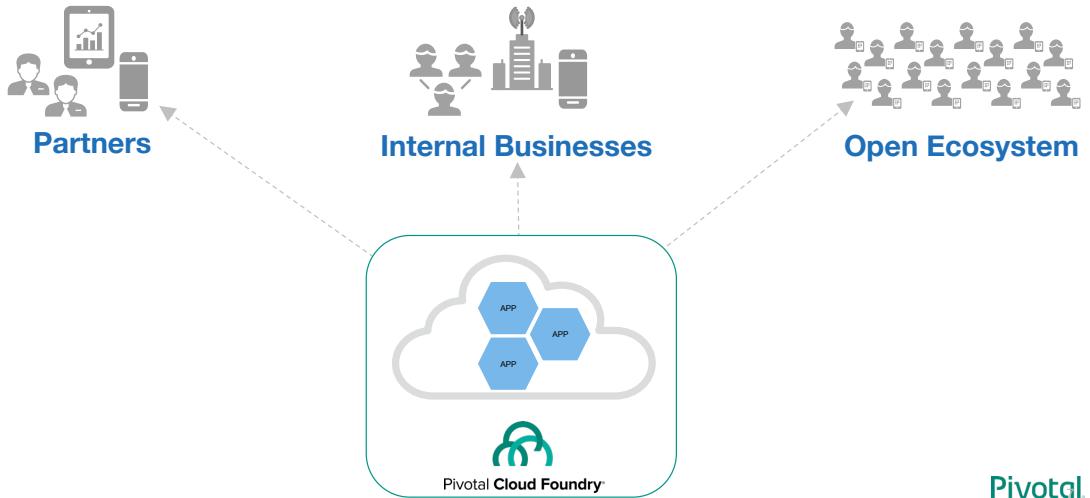


- Simple
- Universal
- Every developer understands them

Pivotal.

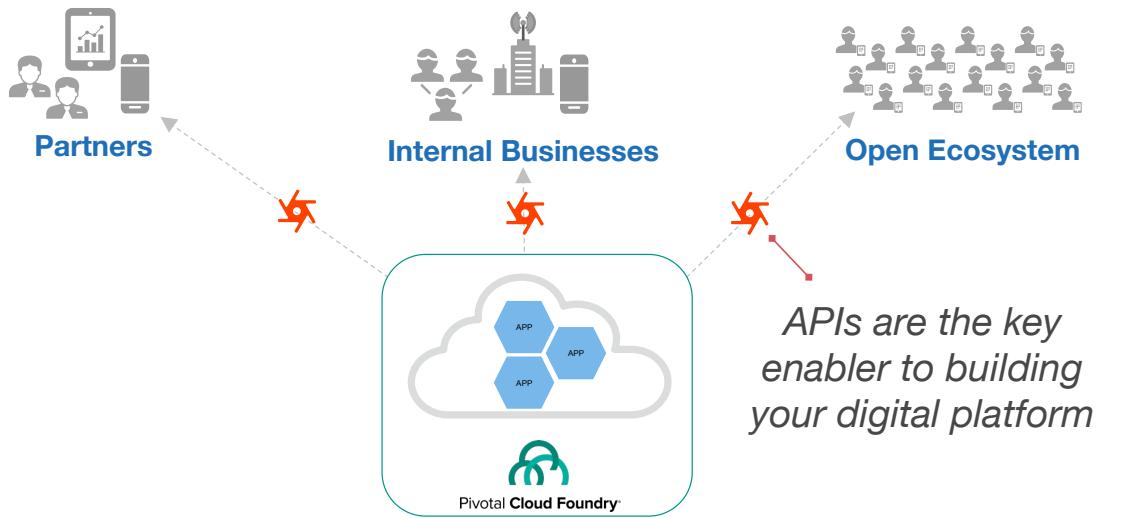
The Gap : How to Scale Adoption of Software

Total Cost = (Cost of Onboarding + Cost of Management) * # of consumers of your software * Churn



Pivotal.

Scale Adoption Of Your Software with Modern APIs



Pivotal.

Agenda

1. Pivotal Cloud Foundry
2. PCF Route Services
3. Apigee Edge with PCF
4. Demo
5. Conclusion

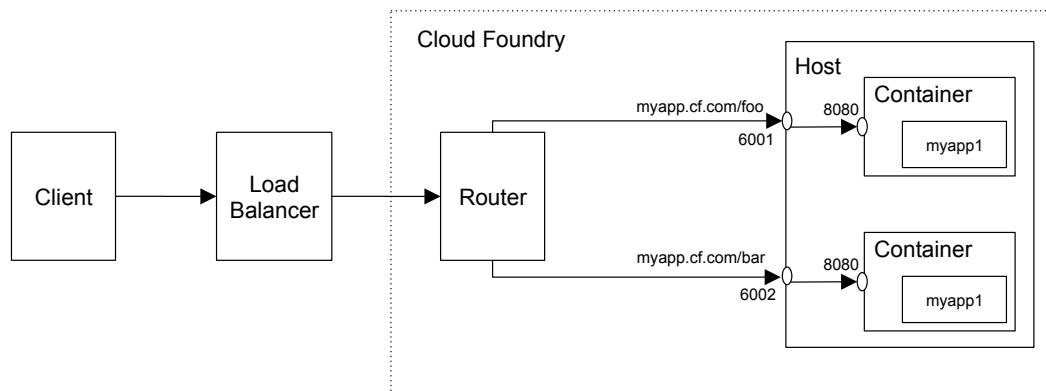
Pivotal.

Routing in PCF

- Routing in Cloud Foundry is the process by which requests to applications are forwarded to their intended destination
- A dynamic routing tier is necessary because Cloud Foundry may move application instances between hosts for high availability
- Developers manage the URLs their applications receive requests
- Requests to Cloud Foundry system components are managed this way

Pivotal.

Application Request Path in PCF



Pivotal.

What are PCF Route Services?

A new kind of marketplace service that can be injected in the application request path

How are PCF Route Services used?

Ensure
Performance,
Reliability



Real Time
Analytics,
Metering



Compliance,
Security,
Audit



Pivotal.

Operators

Developers

Pivotal

Operators

- Given a compatible service, simply register the service broker

```
cf create-service-broker  
NAME USERNAME PASSWORD URL
```

- Grant or revoke access to service plans per CF organization

```
cf enable-service-access  
SERVICE -p PLAN -o ORG
```

- Log and audit use of services

```
cf curl /v2/events?  
q=type:audit.service_insta  
nce.create
```

Pivotal

Developers

- Discover service in marketplace

```
cf marketplace
```

- Create a CUPS or a Marketplace service

```
cf create-user-provided-service  
SERVICE_INSTANCE -r  
ROUTE_SERVICE_URL
```

or

```
cf create-service SERVICE_PLAN  
SERVICE_INSTANCE
```

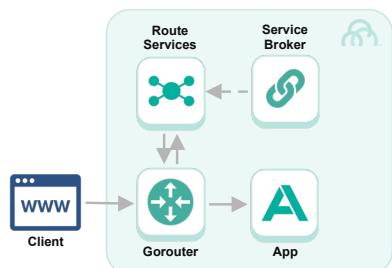
- Bind Routing Service to the Route

```
cf bind-route-service DOMAIN --  
hostname HOST SERVICE_INSTANCE
```

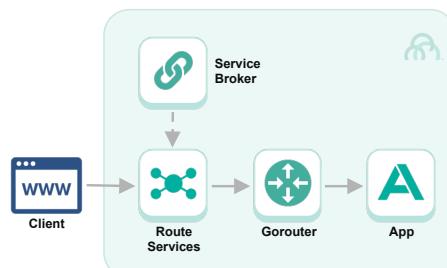
Pivotal

How Route Services work

Simple



Dynamic

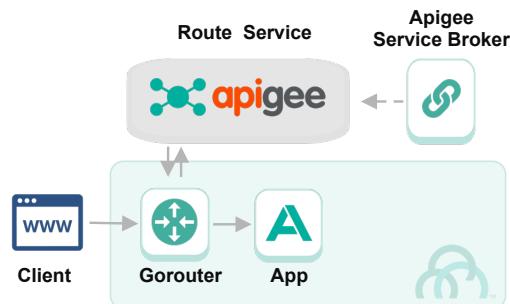


Pivotal.

How can I obtain Route Services?

- DIY
- Vendors

Apigee Edge as a PCF Route Service

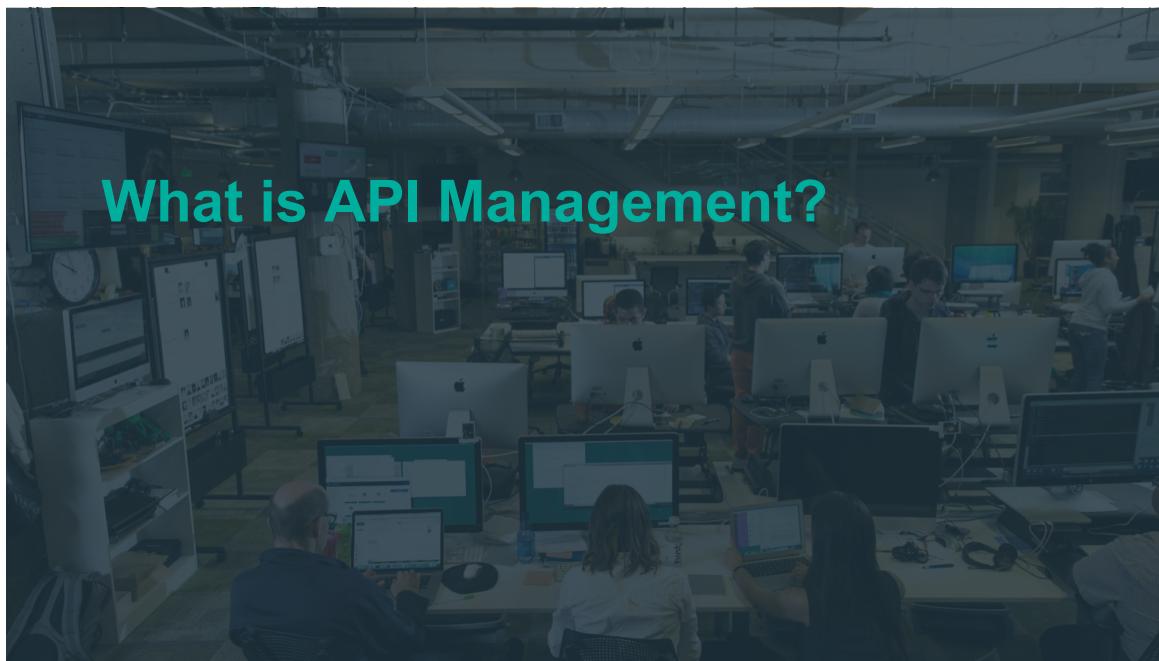


Pivotal.

Agenda

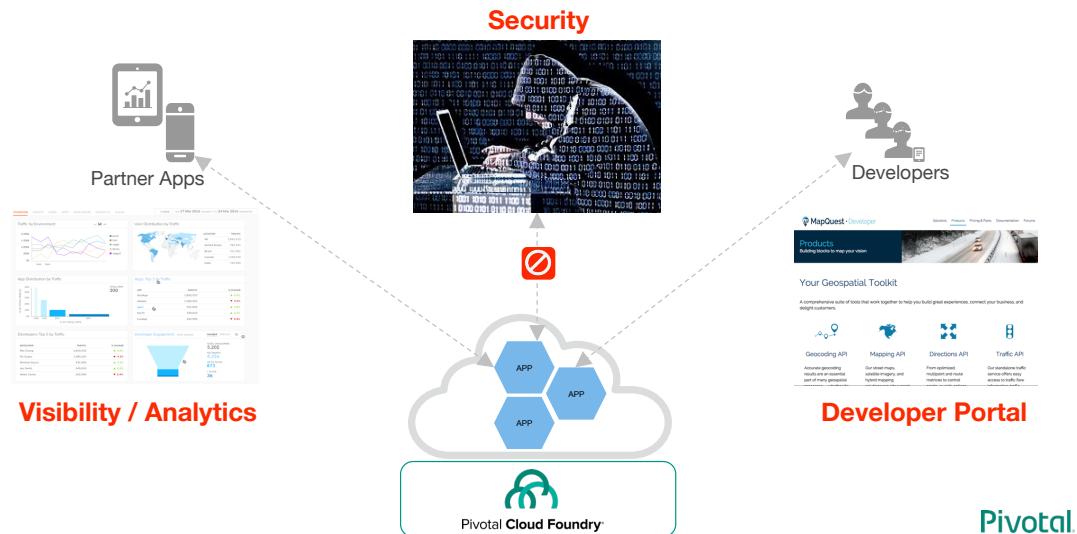
1. Pivotal Cloud Foundry
2. PCF Route Services
3. Apigee Edge with PCF
4. Demo
5. Conclusion

Pivotal.



What is API Management?

Scalable Adoption Needs API Management



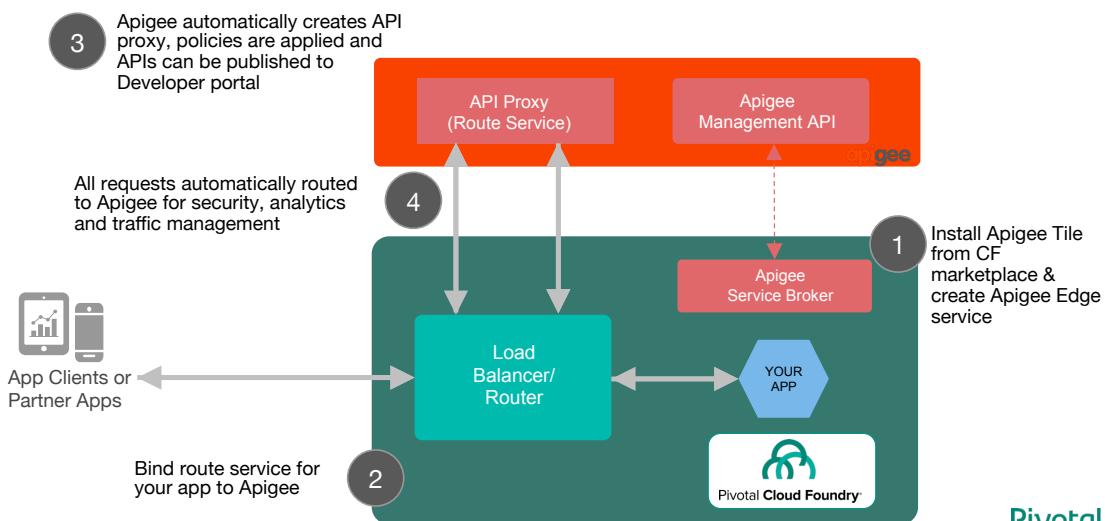
Apigee Enables Hundreds of Enterprises



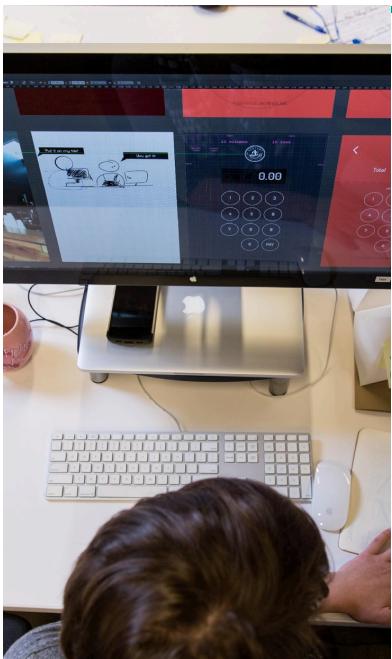
Updated 1/26/15

Pivotal.

Seamless API Management with Apigee



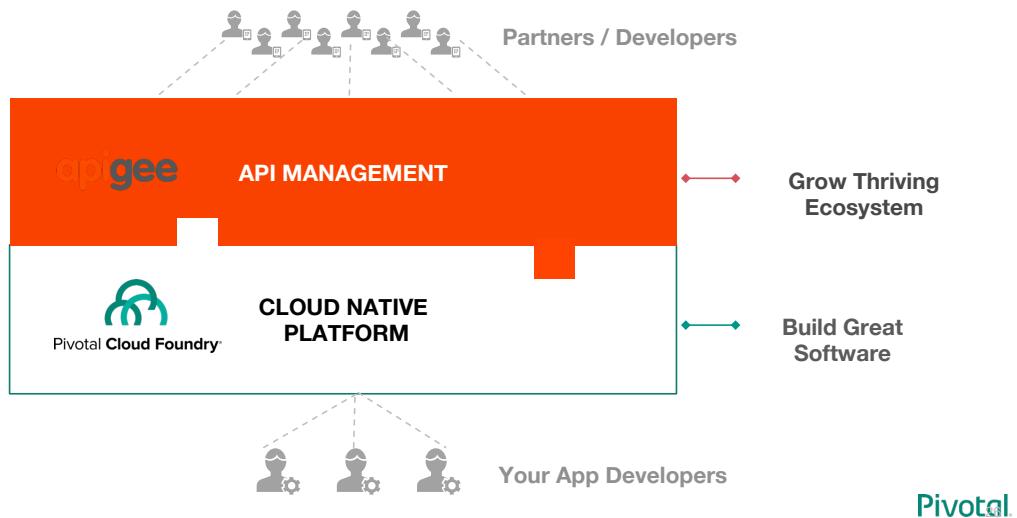
Pivotal.



DEMO



APIs: Building Blocks for Modern Apps





Pivotal®

Transforming How The World Builds Software