

Kubernetes Crossing the Chasm

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Ian Crosby
@IanDCrosby



info@container-solutions.com
container-solutions.com



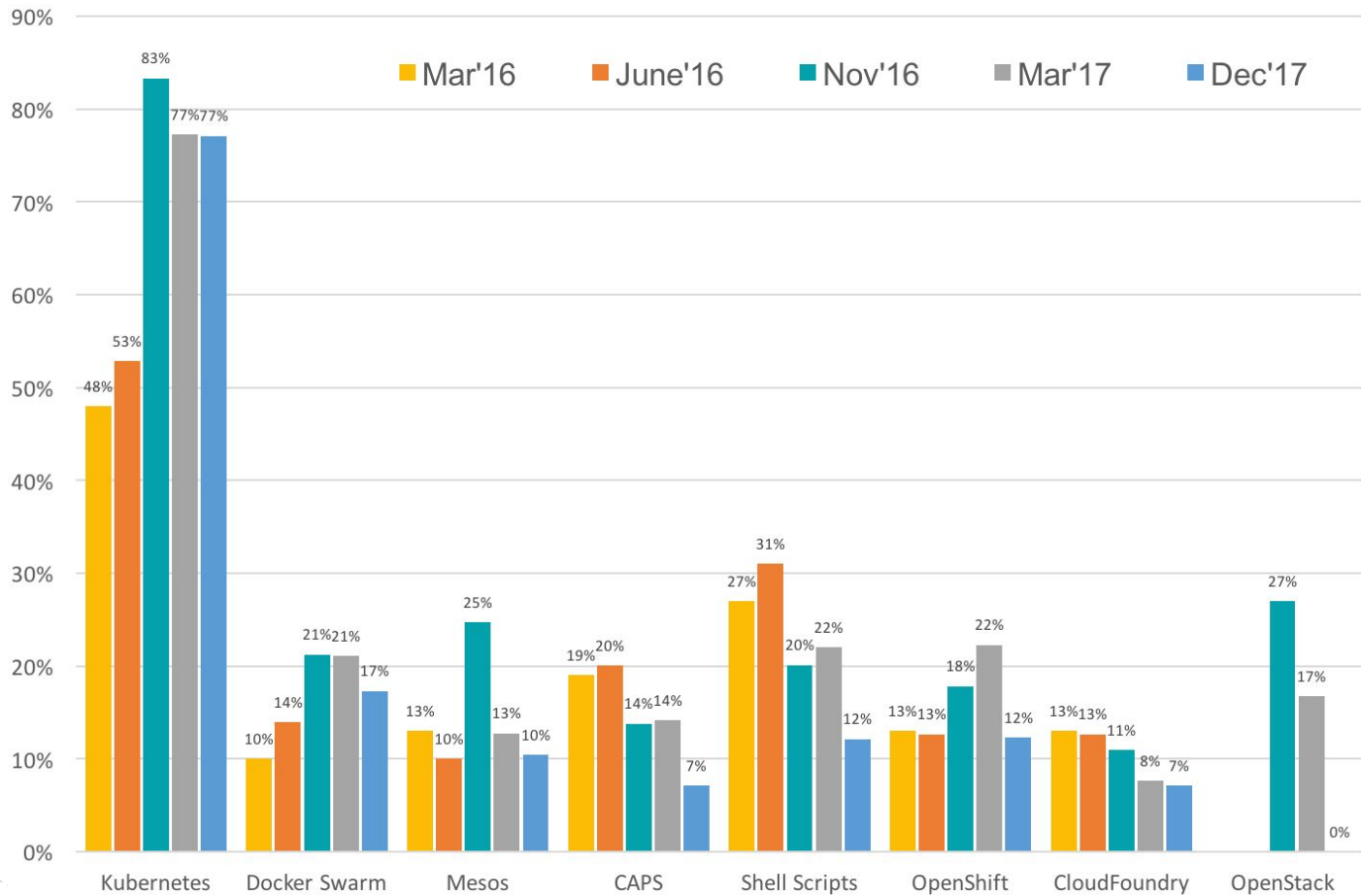




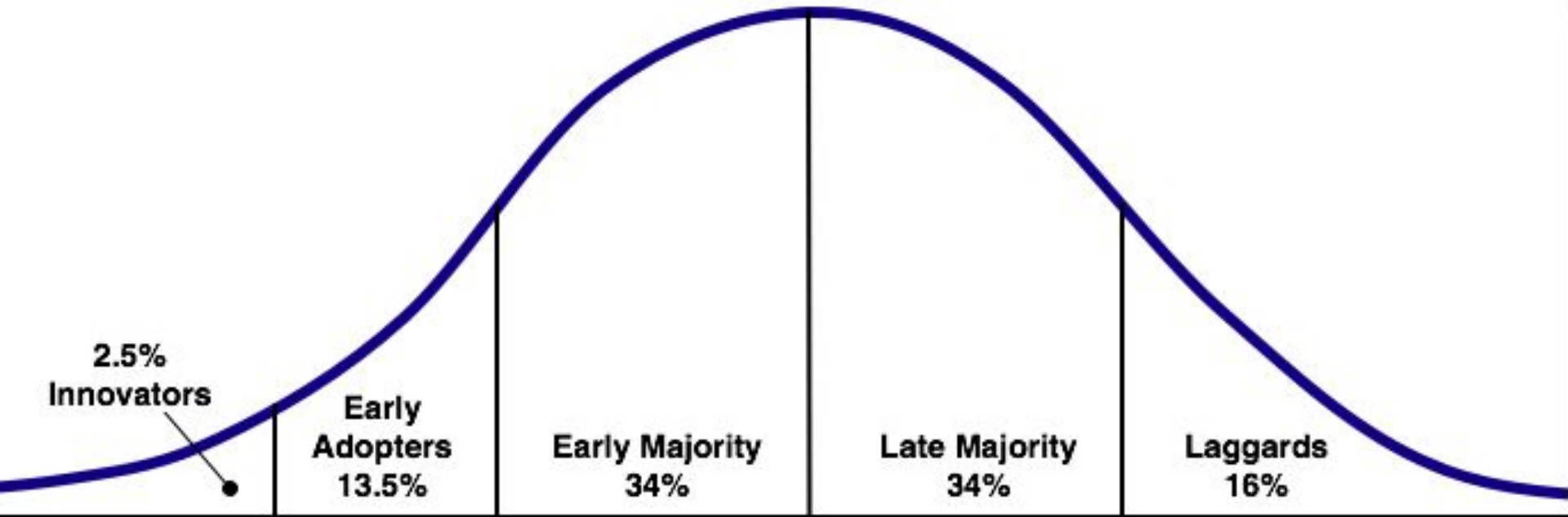
Kubernetes

- Container Management Platform
- Automate Deployment, Scaling, Management of Applications
- Across a cluster of hosts
- Built by originally by Google, maintained by CNCF

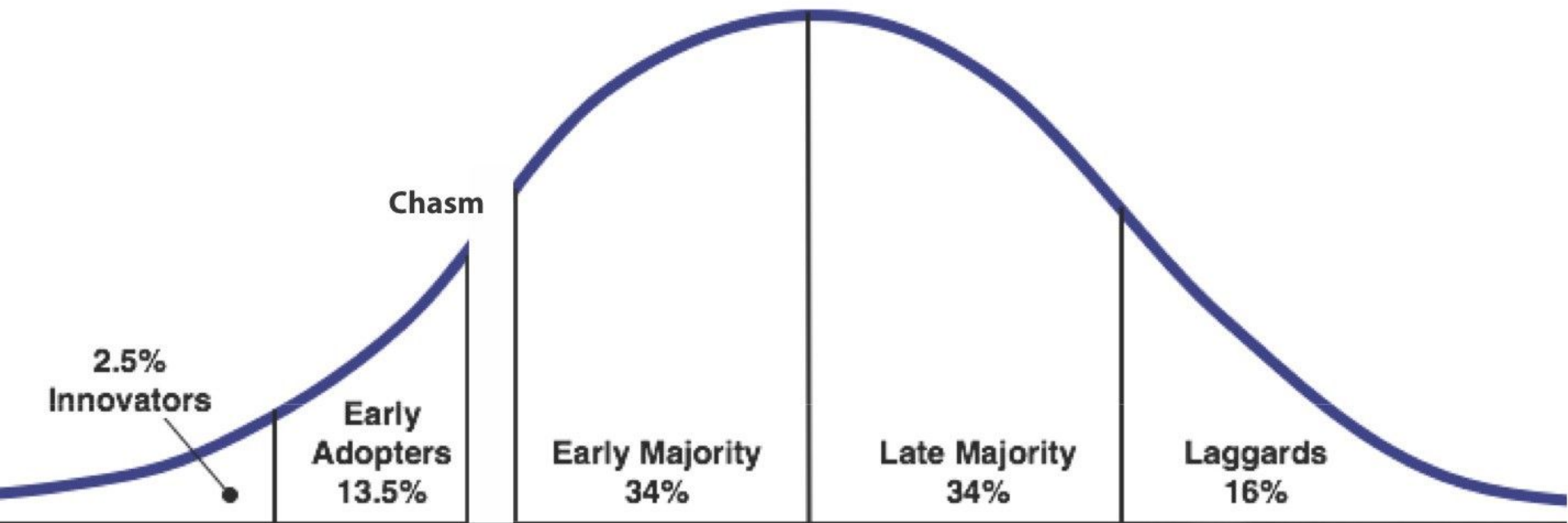




Technology Adoption Lifecycle



Technology Adoption Lifecycle





Will Kubernetes Cross the Chasm?



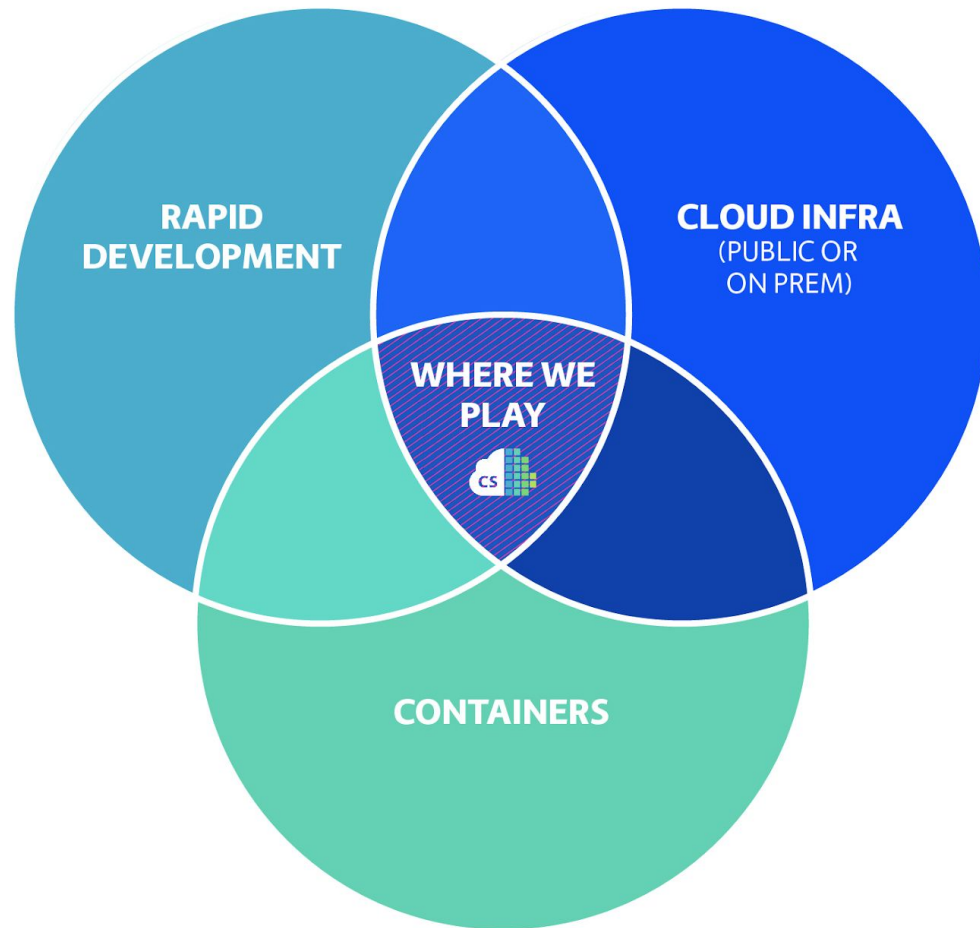
So What?

A bright blue sky with scattered white clouds and sun rays. The sun is positioned behind a large cloud formation at the bottom center, creating a lens flare effect with rays of light extending upwards and outwards. The clouds are fluffy and white, contrasting against the deep blue of the sky.

Cloud Native is the Future of Software

Real World Examples

- Organisations we've worked with in the past year.
- Do not fit the normal Cloud Native model
- Come with interesting challenges
- How (if?) they can be solved



What is the Ideal Use Case?



**THE DIGITAL WHOLESALING
PLATFORM WHERE YOU CAN
CONNECT, TRADE & GROW.**

I AM A

BRAND

RETAILER



Ideal Cloud Native Use Case

- No Legacy
- 100% Cloud / SaaS
- Stateless applications
- Cloud Services (e.g. Databases)



- 15 Developers to 1 Ops
- Focus on adding Business Value
- Fault tolerance, Auto Scaling, Service Discovery Out of the Box

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The Great Chinese Firewall



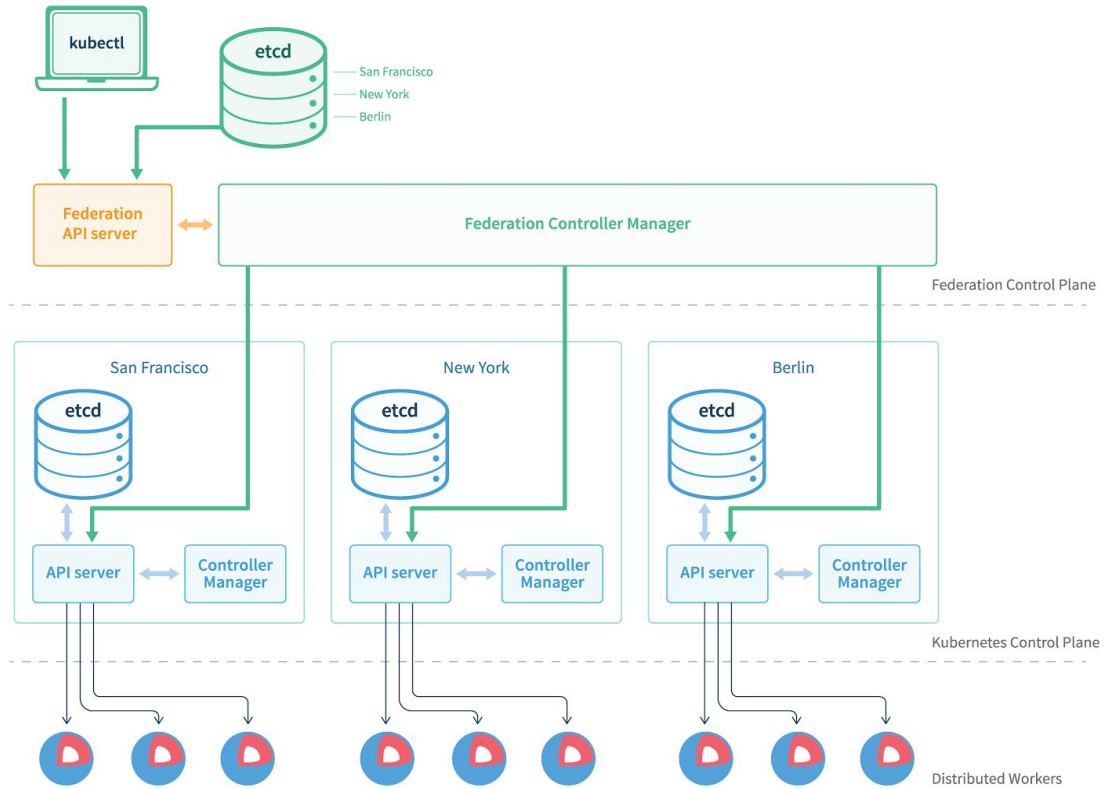
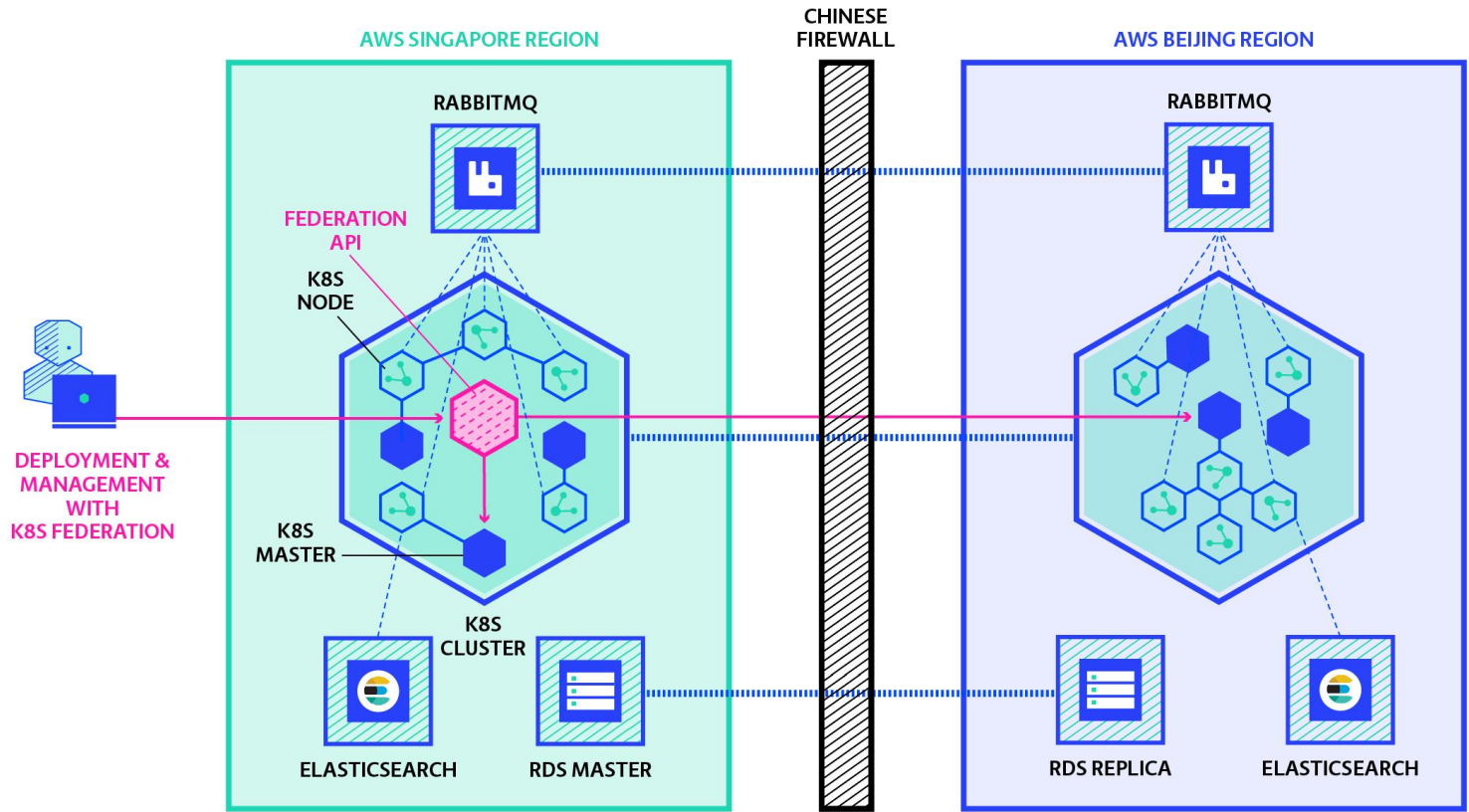


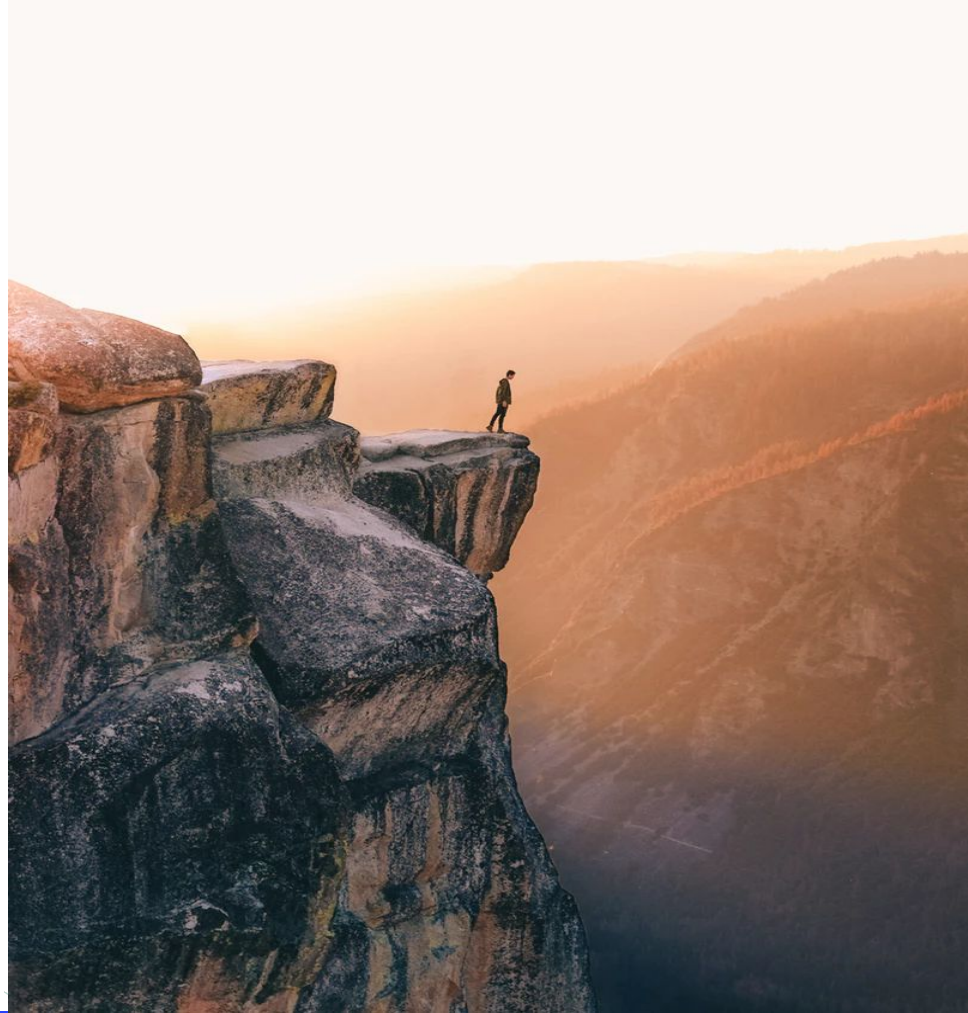
Image courtesy of CoreOS



To Cross the Chasm

“Whole Product”

- Mature Tooling
- Advanced Features
- Active Community





COMPAÑIA TELEFONICA
NACIONAL DE ESPAÑA
2007
NO GIRAR EL DISCO
HASTA QUE LA
SEÑAL BARRA MARCA



From Traditional Enterprise to Cloud Native.





[DOCS](#)



The package manager for Kubernetes

Helm is the best way to find, share, and use software built for Kubernetes.





- Vastly improve the upgrade process
 - No more supporting versions for 10 years
 - No Ericsson engineers needed
- The 'new' model for enterprise software
- Kubernetes as O/S



```
<?xml version="1.0" encoding="UTF-8"?>
<rad angle_unit="degree">
  <System>
    <system camera_switch_mode="off" layer_switch_distance="0"/>
  <!-- Camera / Lights -->
  <camera id="camera" type="perspective" vfov="53" znear="0.1" zfar="10000" position="15.9 9.5 47" direction="0 0 2" up="0 1 0"/>
  <light id="light1" type="point" color="1 1 1" position="27.6 34.3 56.3" attenuation="1.7 0 0"/>
  <light id="light2" type="ambient" color="1 1 1"/>
  <light id="light3" type="edge" color="1 1 1" exponent="3"/>

```

ACCESS DENIED

```
<model id="bg" file="bg.obj">
```

```
<material id="bt_1" effect="pure_texture alpha_1_depth_0">
```

```
<texture file="14.dds"/>
```

```
</material>
```

```
<material id="bt_15" effect="pure_texture alpha_1_depth_0">
```

```
<texture file="15.dds"/>
```

```
</material>
```

```
<material id="bt_16" effect="pure_texture alpha_1_depth_0">
```

```
<texture file="16.dds"/>
```

```
</material>
```

```
<!-- Actors -->
```

```
<actor id="actor1" model="bg" material="bt_1" scale="0 0 0"/>
```

```
<actor id="actor5" model="bg" material="bt_5" scale="0 0 0"/>
```

```
<actor id="actor6" model="bg" material="bt_6" scale="0 0 0"/>
```

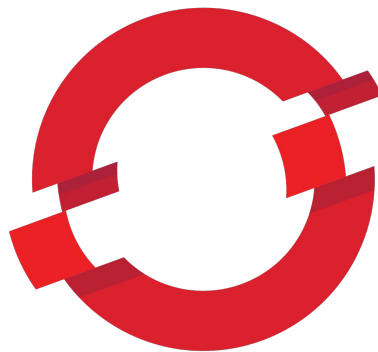
```
<actor id="actor7" model="bg" material="bt_7" scale="0 0 0"/>
```

What the heck is a pause container?





Giant Swarm



OPENSIFT



APPRENDA

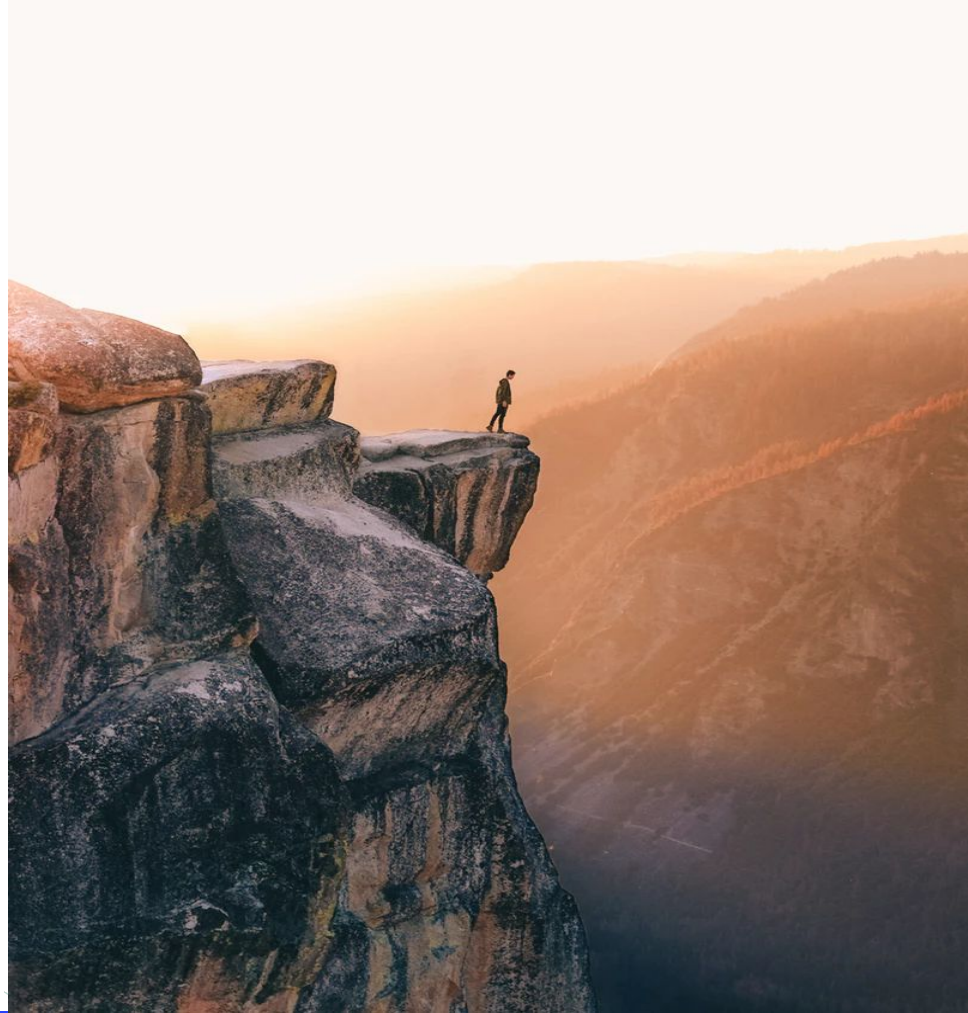
More Challenges

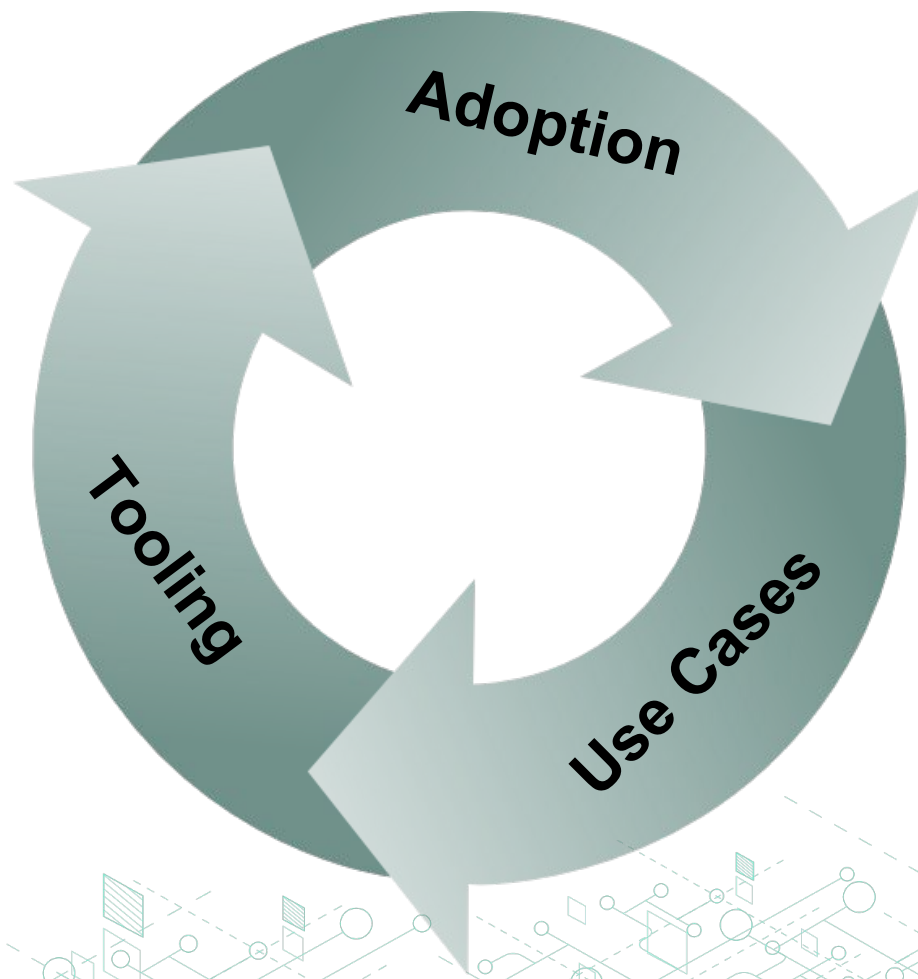
- Support for Windows
- Integration with Legacy/Vendor Software
- Hybrid Cloud
- ???

To Cross the Chasm

“Whole Product”

- Mature Tooling
- Advanced Features
- **Active Community**





Will Kubernetes Cross the Chasm?



When Will Kubernetes Cross the Chasm?



Thanks.

Kubernetes Crossing the Chasm

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container-solutions.com

