CNCF Founded* in Mid 2015: 22 Members

“New Cloud Native Computing Foundation to Drive Alignment Among Container Technologies; Google Donates Kubernetes To Newly Formed Cloud Native Computing Foundation…”
141 Members (~2 years, 6x+ growth)

Platinum Members

- AWS
- Cisco
- Core
- OS
- Dell Technologies
- Docker
- Fujitsu
- Google
- Huawei
- IBM
- Intel
- Joyent
- Mesosphere
- Microsoft
- Oracle
- Pivotal
- Red Hat
- SAP
- Samsung
- Samsung SDS
- Supernap
- VMware

Gold Members

- AT&T
- Alibaba Cloud
- NetApp
- SUSE
- Tencent Cloud
- ZTE

End Users Members

- Bloomberg
- Capital One
- eBay
- GitHub
- Goldman Sachs
- Morgan Stanley
- NCsoft
- Twitter
- Wikimedia

End Users Supporters

- Box
- Concur
- GitHub
- Kuelap
- New York Times
- Reddit
- Ticketmaster
- Vevo
- Zalando
- Zendesk

Academic/Non-profit

- Cloud Foundry
- SEL
- Wikimedia Foundation

CLOUD NATIVE COMPUTING FOUNDATION
141 Members (~2 years, 6x+ growth)
CNCF + Top 6* Public Cloud Providers

*https://www.gartner.com/doc/reprints?id=1-2G2O5FC&ct=150519
Kubernetes self-hosted on itself at GitHub!

https://githubengineering.com/kubernetes-at-github/

Over the last year, GitHub has gradually evolved the infrastructure that runs the Ruby on Rails application responsible for github.com and api.github.com. We reached a big milestone recently: all web and API requests are served by containers running in Kubernetes clusters deployed on our metal cloud. Moving a critical application to Kubernetes was a fun challenge, and we're excited to share some of what we've learned with you today.

This is a big deal. GitHub using Kubernetes in production. I remember when their team was just kicking the tires. twitter.com/AaronBBrown777…
6:47 PM - Jul 11, 2017
15  1.059 498
CNCF: 12 Amazing Cloud Native Projects!

- **kubernetes**: Orchestration
- **Prometheus**: Monitoring
- **OPEN TRACING**: Distributed Tracing API
- **fluentd**: Logging
- **linkerd**: Service Mesh
- **gRPC**: Remote Procedure Call
- **CoreDNS**: Service Discovery
- **containerd**: Container Runtime
- **rkt**: Container Runtime
- **CNI**: Networking API
- **envoy**: Service Mesh
- **JAEGER**: Distributed Tracing
Riyaz Faizullahbhoi
Security Engineer, Docker
@riyazdf
New Projects: TUF & Notary

https://github.com/theupdateframework

https://github.com/docker/notary
The Update Framework (TUF)
TUF Features

- Authenticity
- Integrity
- Freshness
- Multi-signature Thresholding
- Survivable Key Compromise
TUF Adopters
Notary is a Docker project that allows anyone to have trust over arbitrary collections of data [https://docker.com](https://docker.com)

- **2,678 commits**
- **15 branches**
- **35 releases**
- **54 contributors**
- **Apache-2.0 license**

<table>
<thead>
<tr>
<th>Branch</th>
<th>New pull request</th>
<th>Create new file</th>
<th>Upload files</th>
<th>Find file</th>
<th>Clone or download</th>
</tr>
</thead>
</table>

**endophage** Merge pull request #1219 from cpuguy83/fixup_docstrings

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>buildscrips</td>
<td>Enable SSH on the test server for our CI</td>
<td>5 months ago</td>
</tr>
<tr>
<td>client</td>
<td>Merge pull request #1219 from cpuguy83/fixup_docstrings</td>
<td>17 days ago</td>
</tr>
<tr>
<td>cmd</td>
<td>Remove <code>Notary</code> from Repository constructor functions</td>
<td>a month ago</td>
</tr>
<tr>
<td>cryptoservice</td>
<td>Update vendoring and import for sirupsen/logrus</td>
<td>a month ago</td>
</tr>
<tr>
<td>docs</td>
<td>Fix broken image because center tags</td>
<td>5 months ago</td>
</tr>
<tr>
<td>fixtures</td>
<td>Add PKCS#8 support</td>
<td>3 months ago</td>
</tr>
</tbody>
</table>
Notary: Image Provenance
Notary: Cryptographic Chain

CI

Security Scanning

Staging

Production

Image passes CI test

Signature

Scan image

Successful deployment to staging

Signature

Verify all three signatures before deploying to production

Signature
Notary Adopters
Join us: TUF & Notary

- TUF Augmentation Proposals (TAPs)
- Notary: approaching 1.0

https://github.com/theupdateframework  
https://github.com/docker/notary
This landscape is intended as a map through the previously uncharted terrain of cloud native technologies. There are many routes to deploying a cloud native application, with CNCF Projects representing a particularly well-traveled path.
Thank You and See You in Austin!

- **See you in Austin and Copenhagen!**
- **KubeCon + CloudNativeCon North America 2017**
  - Austin, Texas (December 6 - 8, 2017)
  - Registration & Sponsorships now open: [kubecon.io](http://kubecon.io)
- **KubeCon + CloudNativeCon Europe 2018**
  - Copenhagen, Denmark (May 2 - 4, 2018)
  - [http://events.linuxfoundation.org/events/kubecon-and-cloudnativecon-europe](http://events.linuxfoundation.org/events/kubecon-and-cloudnativecon-europe)