



# Lessons learned from 5+ years into Cloud Native

Januar 2020, CNCF Meetup Bern  
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## Container growth



**40'000+**

Containers in production





Chanwit Kaewkasi  
@chanwit

When DevOps people trying to upgrade their  
[#Kubernetes](#) to a new major version.



# Cloud Native Journey @Swisscom

Sommer 2014	January 2015	October 2015	February 2016	Q4 2018
Building PaaS with open source version of Cloud Foundry	Birth of Cloud Foundry Foundation, Swisscom gold member ever since	Launch of Application Cloud (PaaS) offering ( <a href="http://developer.swisscom.com">developer.swisscom.com</a> )	Adaption of k8s for marketplace services	Launch of managed k8s service based on PKS or Red Hat OpenShift

## Highlights



### Board member

Shaping CF foundation, input as service provider, various beta programs



### Contribution to multiple OSS projects

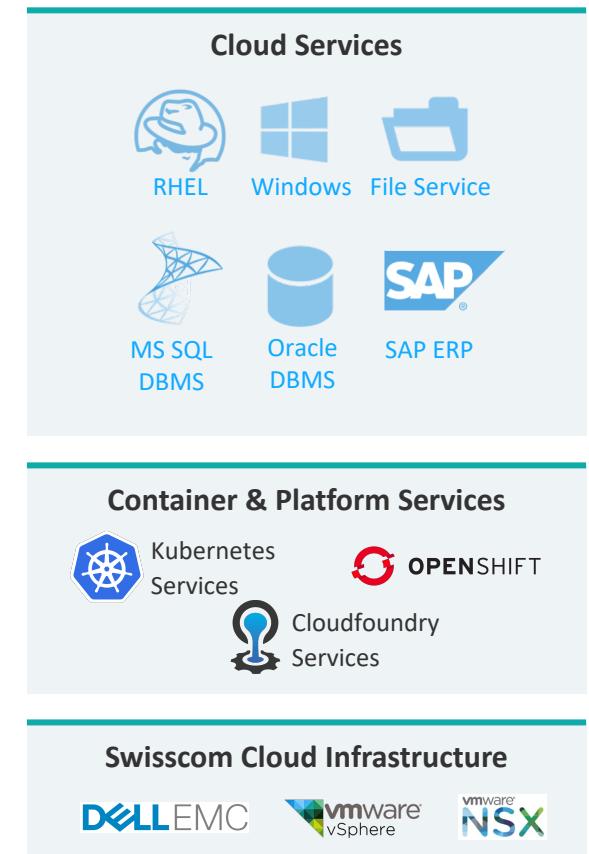
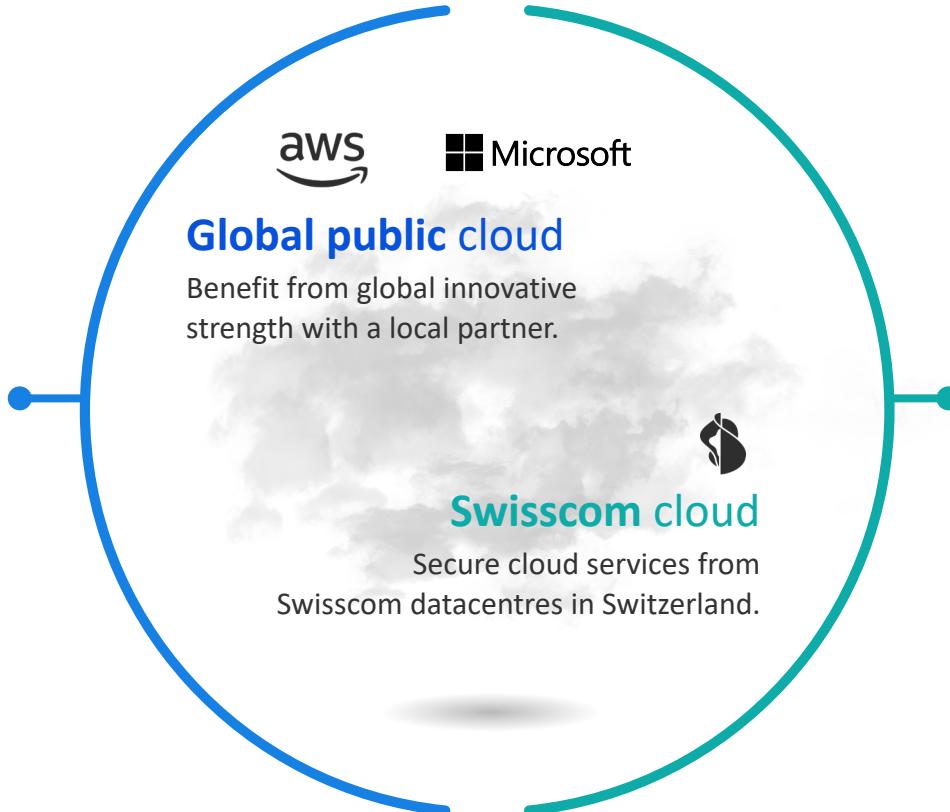
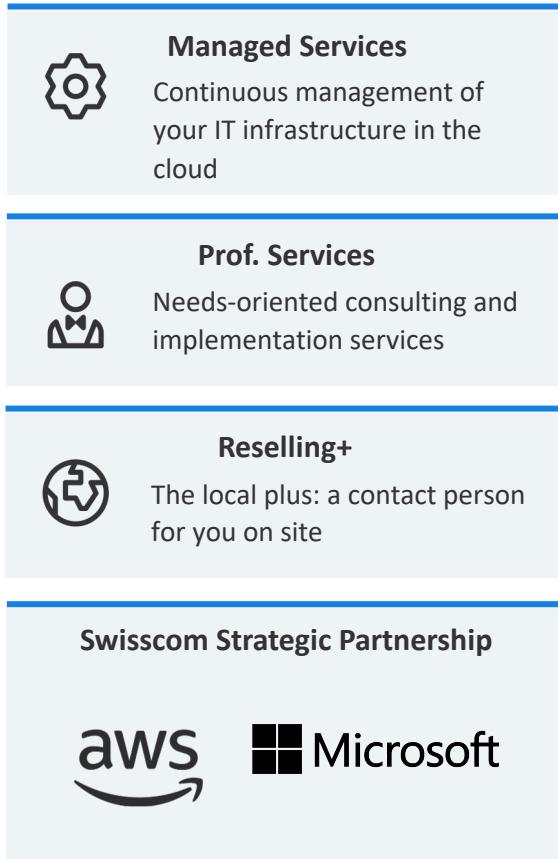
CFF, OSBAPI, CNI, certification programs etc.



### full time committer

one person dedicated full time to OSS contribution

# Swisscom Cloud Portfolio



A silhouette of a person standing on a grassy mountain ridge, facing away from the viewer towards a range of mountains under a warm, orange and yellow sunset sky.

**Journey is not over yet**

**...but we have already learned  
a lot!**

# Lessons Learned (excerpt)



## Stay flexible

...offer different migration scenarios



## Focus portfolio

...provide just what matters for the customer and do that well



## Operating open source

...is not only sunshine!



## Avoid unneeded complexity

...and choose the right abstraction layer



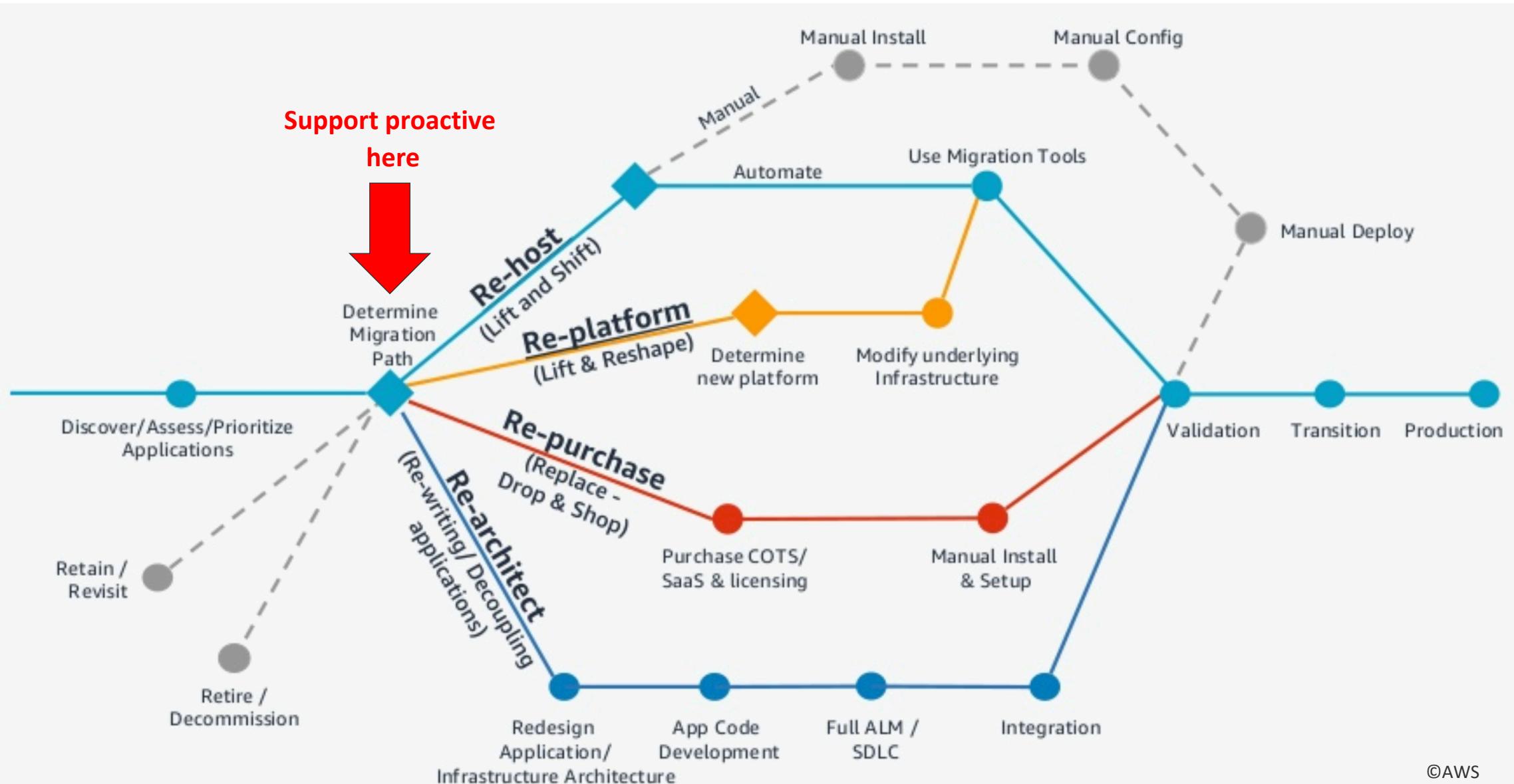
## Don't build it yourself

...take what is there and adapt it if needed!





# Stay flexible and allow different migration paths





# Operating open source is not always sunshine!



Possible license changes...



...on your own to deal with issues



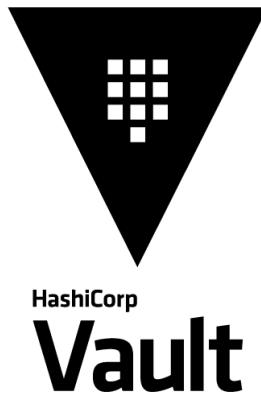
not enough contributors / users...



...Deprecation possible



Managed services portfolio can grow too fast...



..Day2 at scale can be very hard!!



# Extend your platform with extensions customers really need

## = Cloud Foundry + Plus Enterprise Extras!



self-service onboarding & open service marketplace



connectivity approval process



self-service ssl certificates

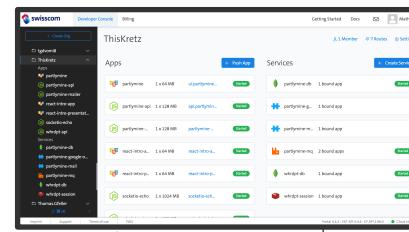


self-service technical users



AD federation service

developer console



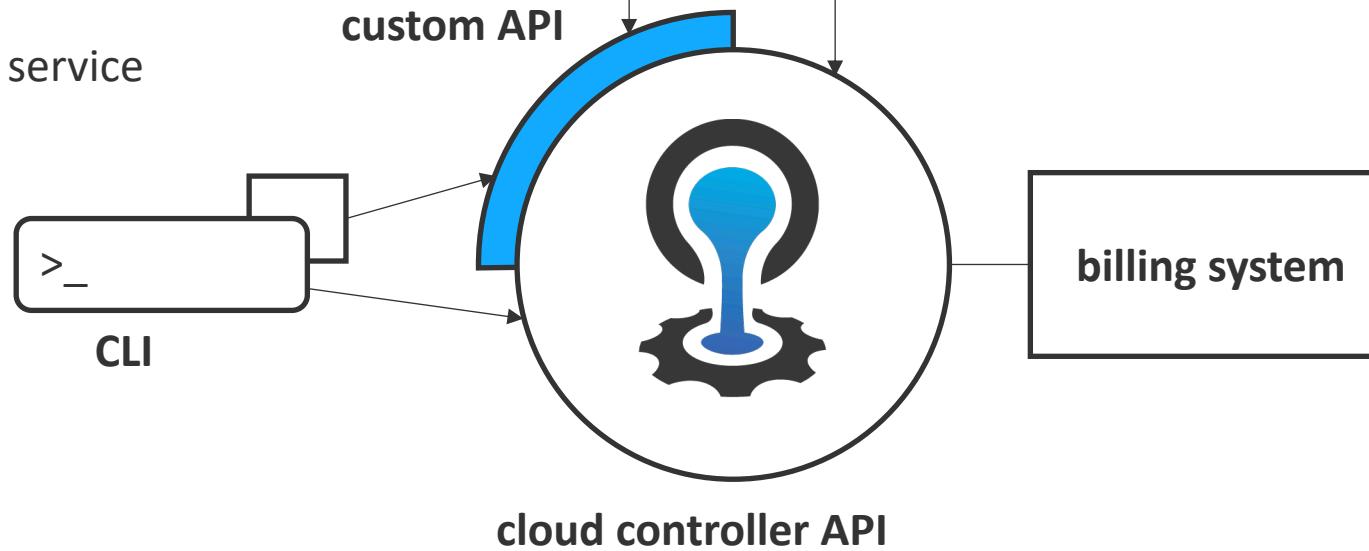
account / cost center management



fine-grained billing

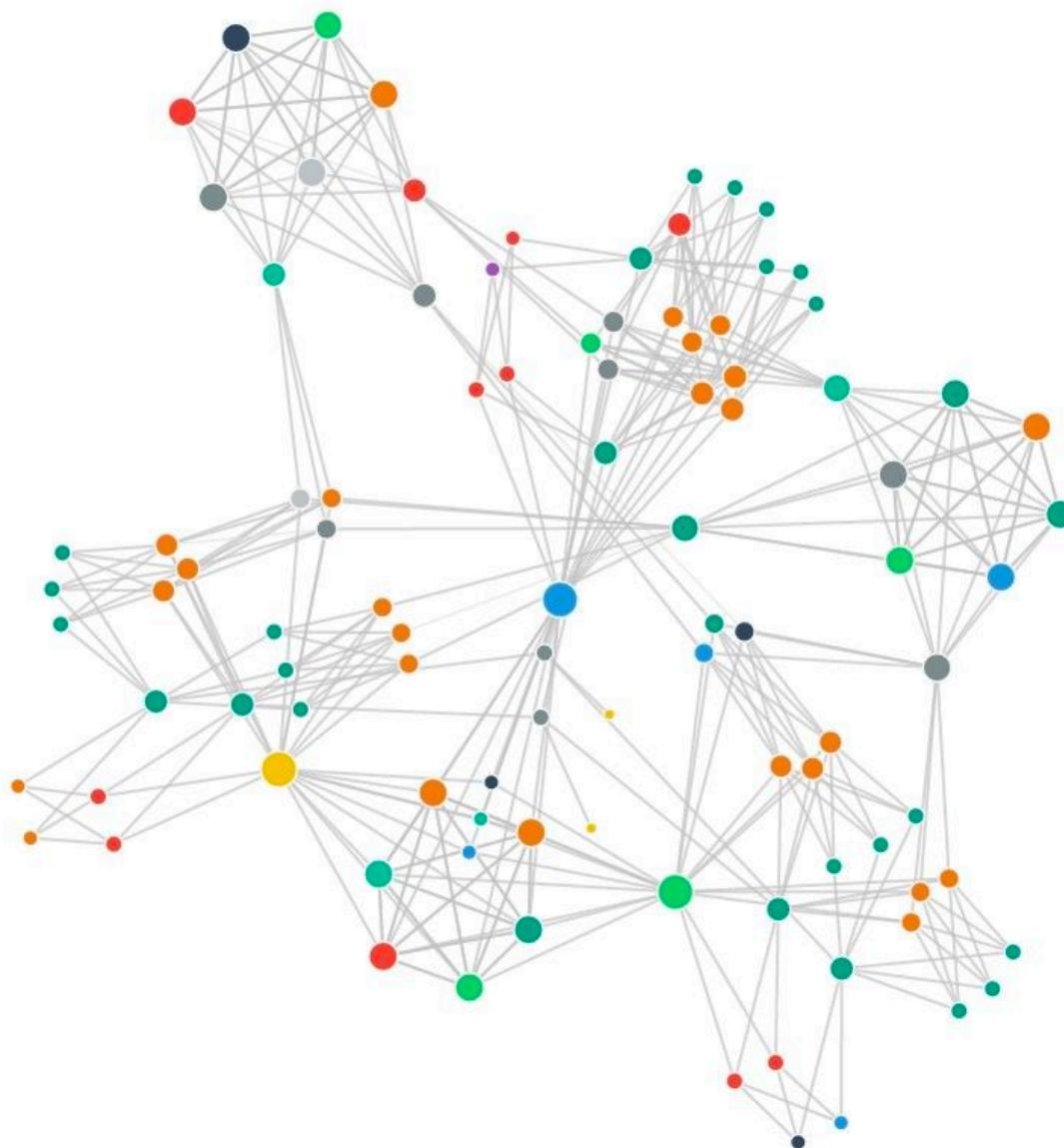


detailed consumption reporting



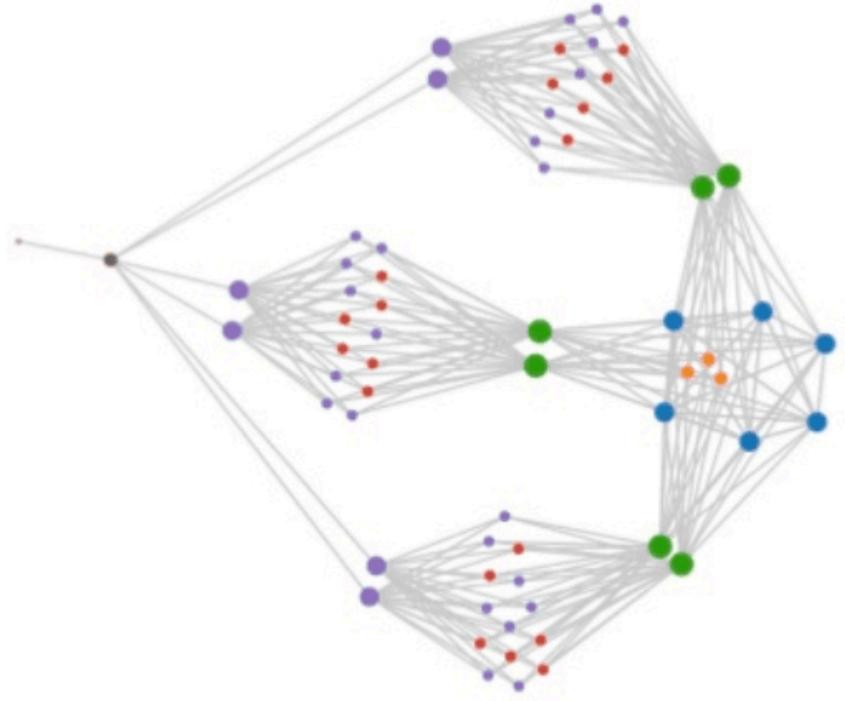


# Microservices (and more) open a lot of possibilities

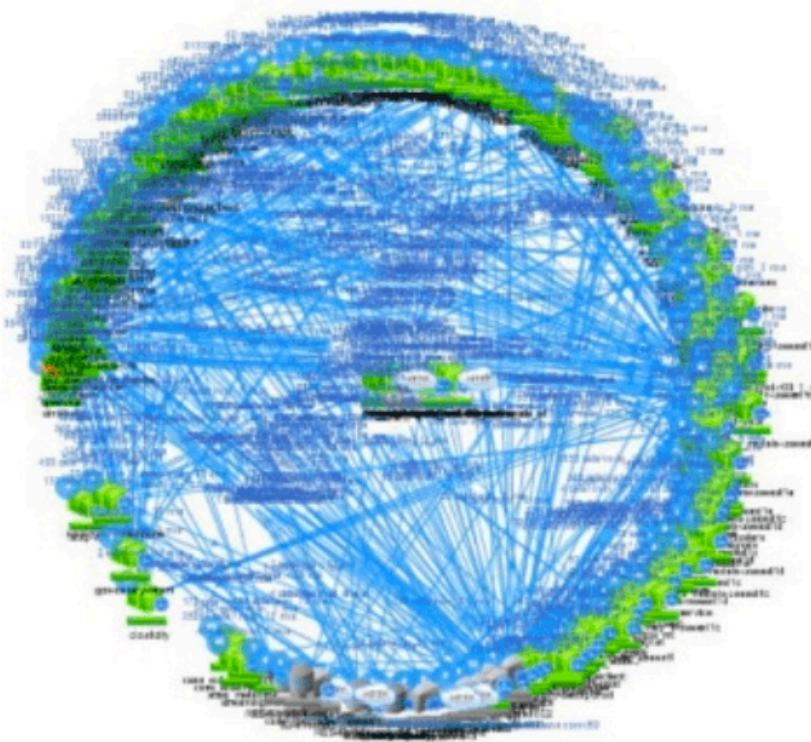




# Microservices (and more) open a lot of possibilities



Simplified Architecture



Actual Architecture





Find your place

Dating

Community

Nomad Insurance NEW

Advertise NEW

Forum

Hire Remotely

Log In

Sign Up

# Explore the world

Join a global community of international travelers working remotely around the world



Email address

Go nomad

Add Filters

Nomad Score

Sheet

Chart

Map

3D

1 18 Mbps  
**Buenos Aires**  
Argentina  
FEELS 29° AQI 59  
28° 59°  
\$992 / mo

2 18 Mbps  
**Canggu, Bali**  
Indonesia  
FEELS 46° AQI 55  
32° 55°  
\$1,376 / mo

3 13 Mbps  
**Medellín**  
Colombia  
FEELS 35° AQI 64  
30° 64°  
\$1,055 / mo

4 17 Mbps  
**Mexico City**  
Mexico  
FEELS 25° AQI 100  
23° 100°  
\$1,495 / mo

Promotion  
  
The world's first insurance made for nomads, by nomads. Get global travel medical for \$37 per month  
[Get Insured](#)

5 22 Mbps

6 23 Mbps

7 34 Mbps

8 40 Mbps



USD — \$ °C





First you need users and then you can start scaling!



@levelsio ✅



@nomadlist @remote\_ok and my other sites now do:

- 108 million requests per month
- 3.5 million requests per day
- 147,000 requests per hour
- 40 requests per second

On a single \$240/mo @linode VPS 😍

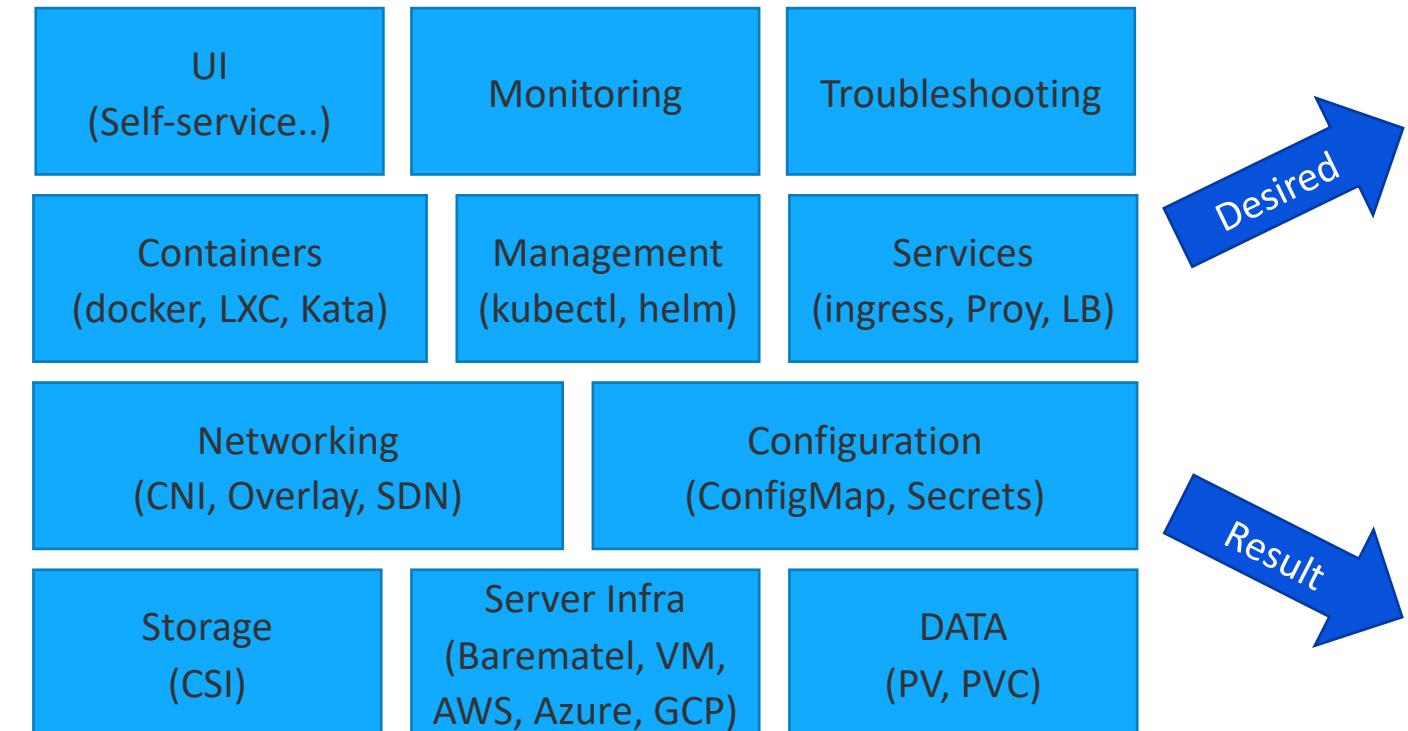


Live stats ➡️ [nomadlist.com/status](https://nomadlist.com/status)





## Take away: DIY can be hard





**Thank you!**  
**[developer.swisscom.com](https://developer.swisscom.com)**

