
HA.NU : Power of Sharing

**Project Leader, 5GX Cloud Labs, T3K, SK Telecom
& Long Time Open Source Software 참여자**



HA.NU (HAm Gye NUrim; 함께 누림) 프로젝트

<https://github.com/openinfradev>

HANU 프로젝트는 오픈 인프라스럭처와 관련된 오픈소스 소프트웨어 기술들을 모아서 제공하고, 이를 기반으로 커뮤니티를 구성하고 확산시키기 위한 공간입니다.

OSC오픈소스컨설팅과 공동으로 두 개의 프로젝트와 하나의 SIG로 런칭 준비

- **Project: TACOPLAY → TACOCTL**
- **Project: DECAPOD (DECLarative APplication Orchestration & Delivery)**
- **SIG: ARM SIG**

또한, 엑세스랩, 에스엠솔루션즈등이 초기 참여 멤버로 협력해갈 예정입니다.

01

SKT의 클라우드 오픈소스 기술이 걸어온 길

02

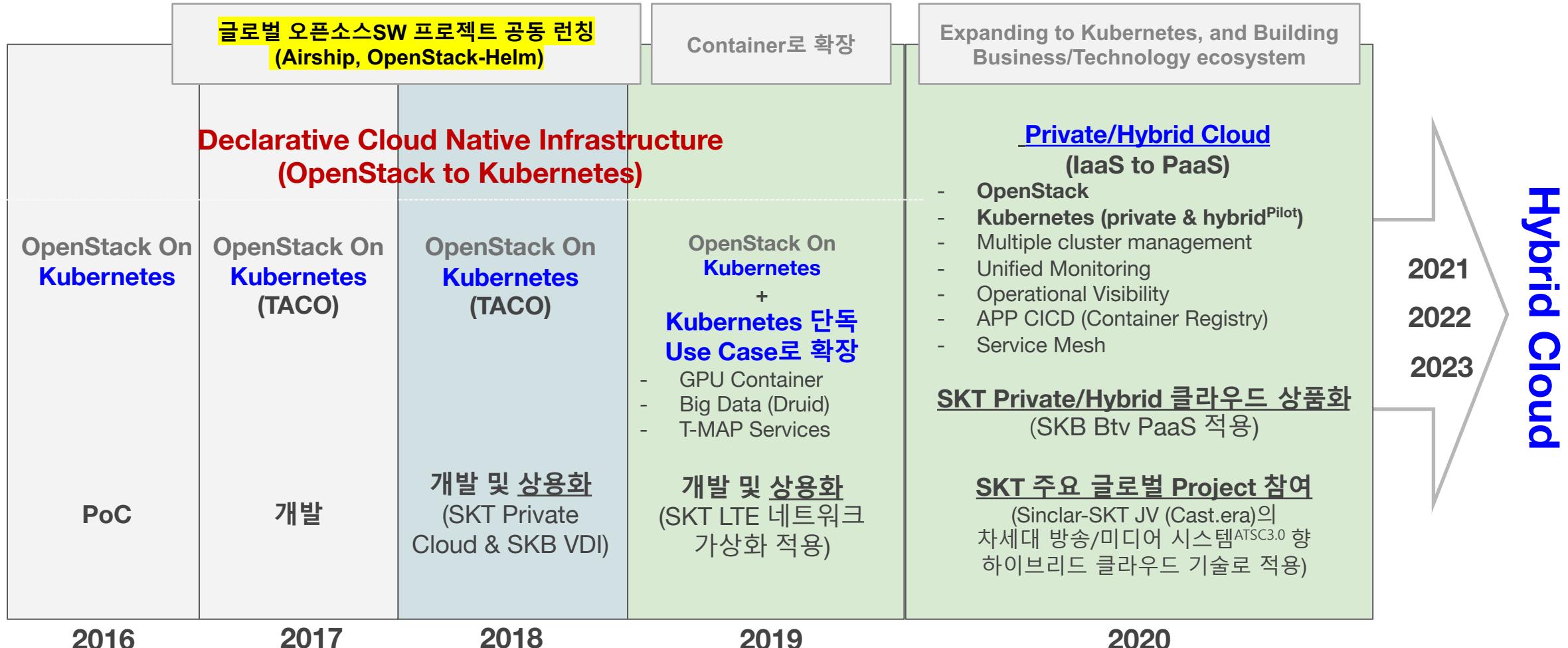
Open Community로의 도전 (HA.NU)

01

SKT의 클라우드 오픈소스 기술이 걸어온 길

TACO Project History

글로벌 선행기술 개발 → 글로벌 오픈소스SW 프로젝트 공동 런칭 → SKT 내부 상용화
→ 국내 및 글로벌 B2B 상품화까지 지속적으로 발전 및 확장





Superuser Award Nominees



leboncoin



trendyol
tech



中国移动
China Mobile

LINE

StackHPC

workday®

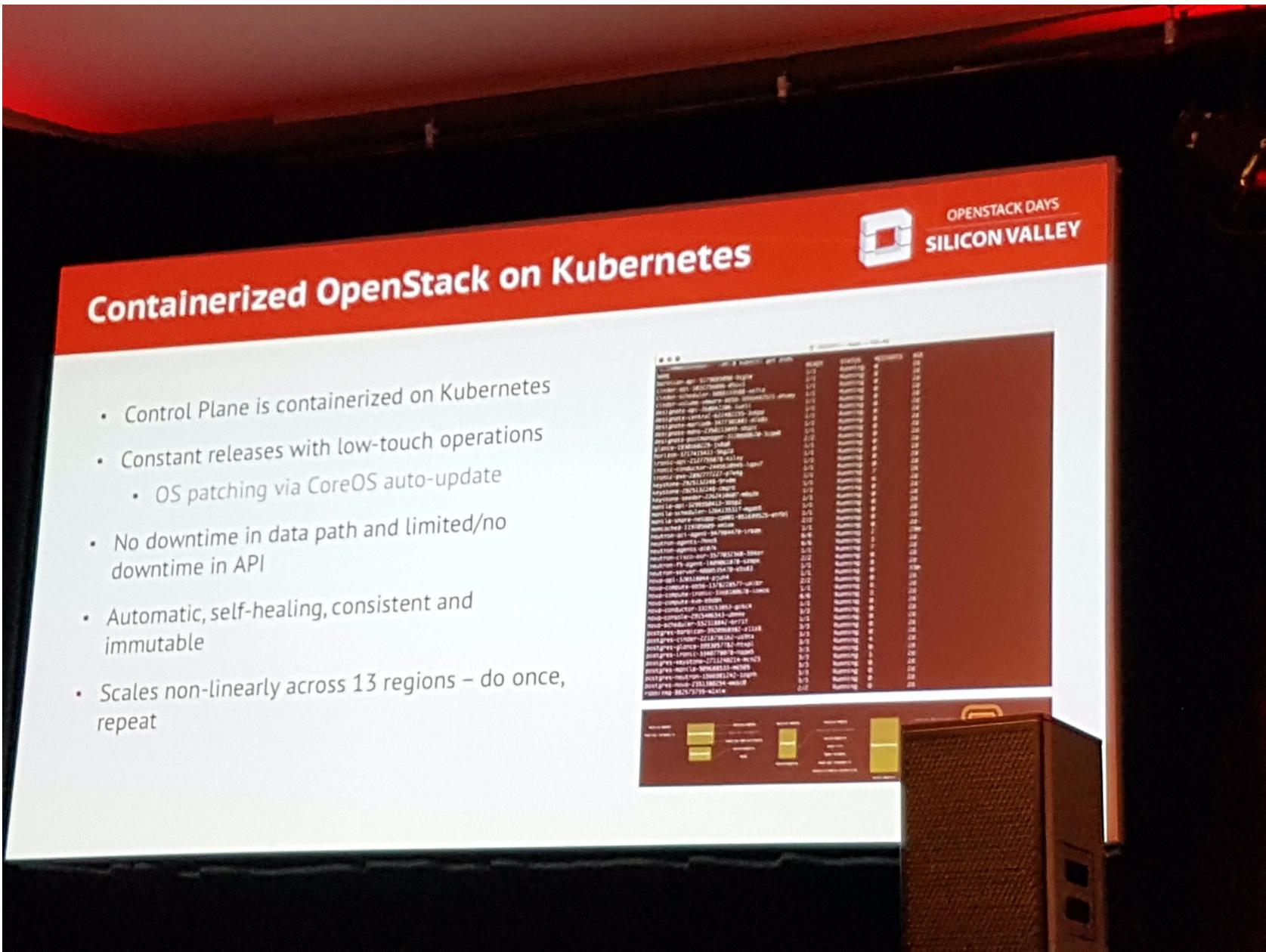


**Superuser
Award
Winner**



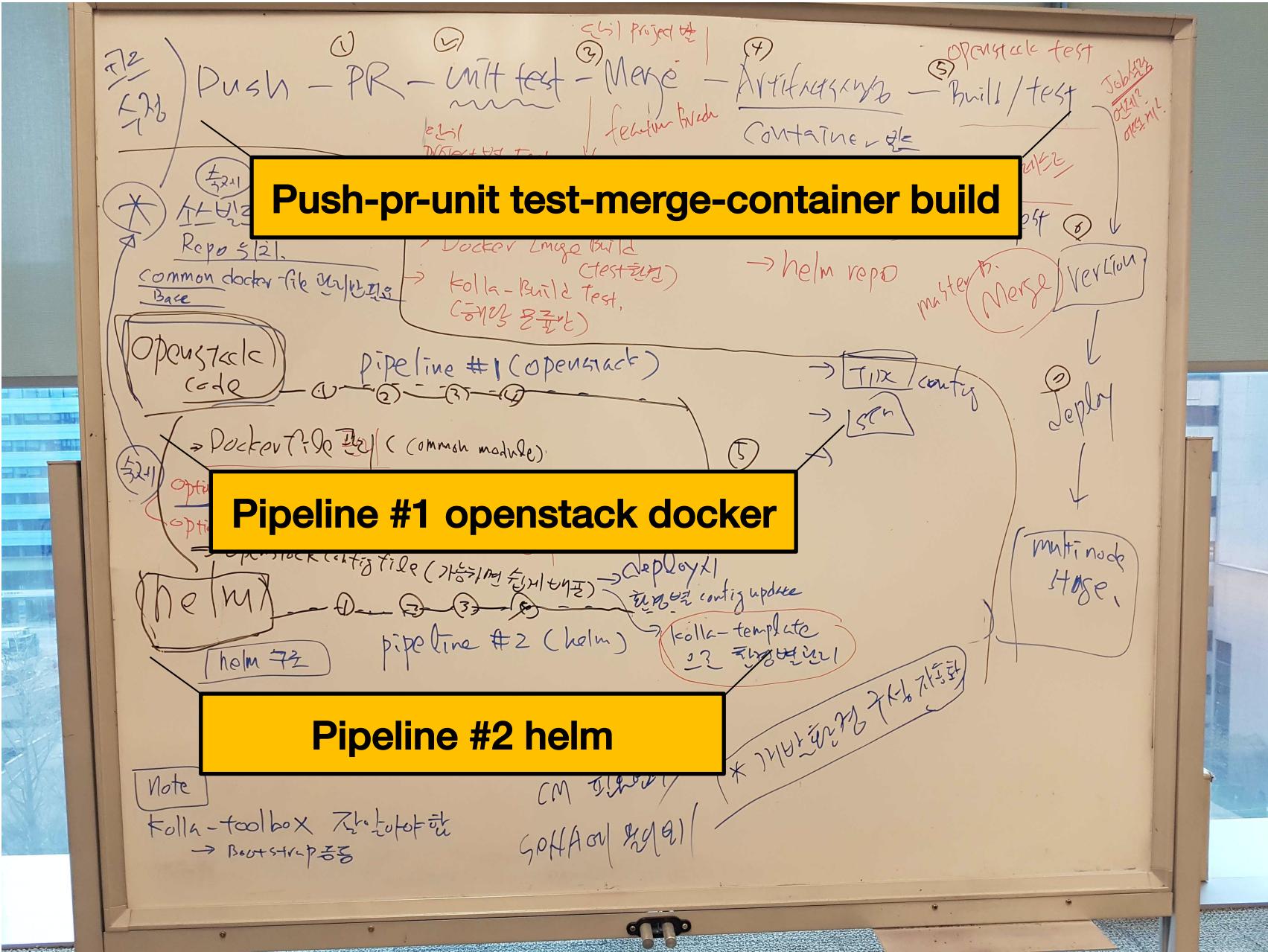
How it began, How we found each other, ...

2016년



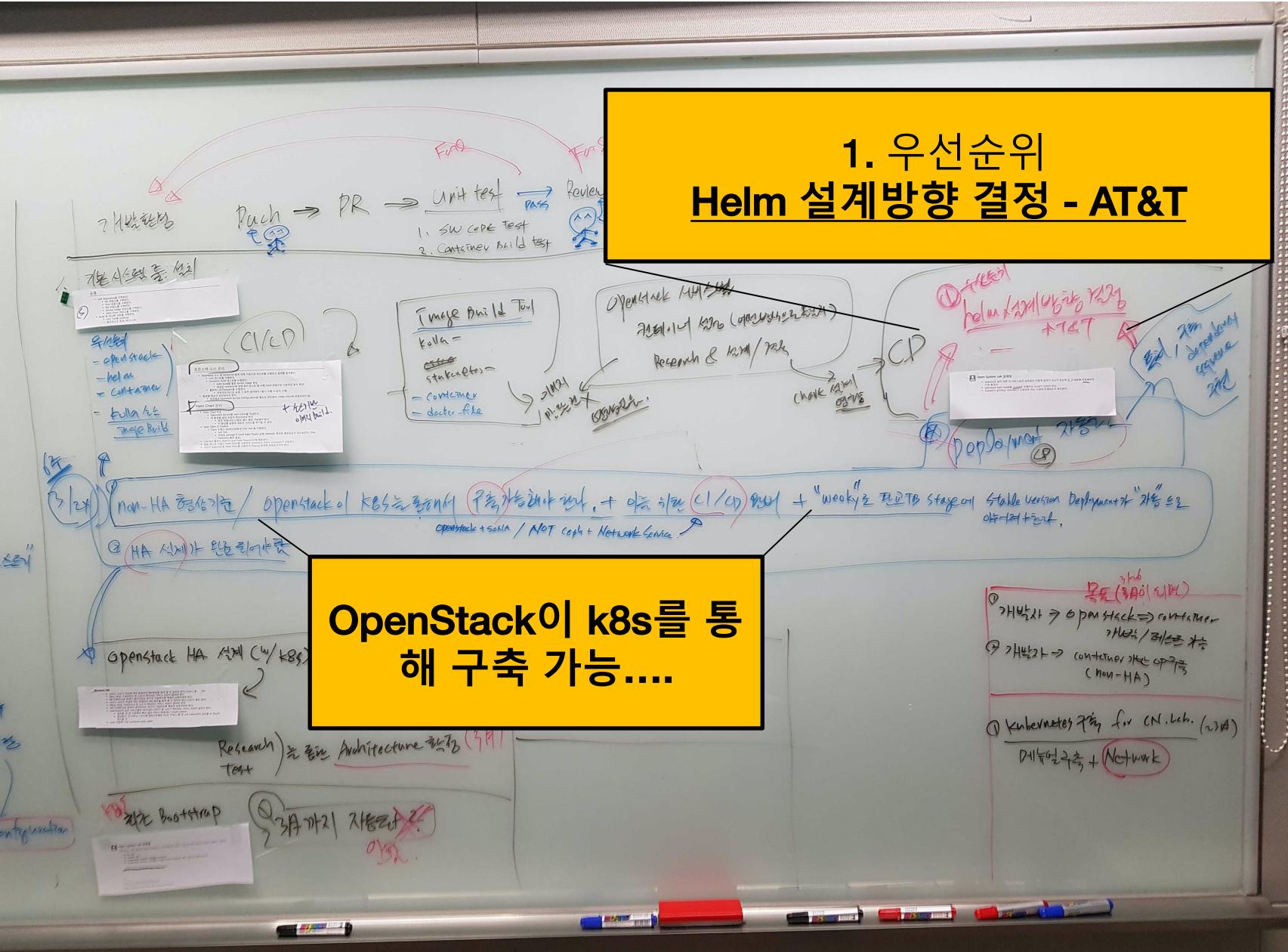
How it began, How we found each other, ...

2017년



How it began, How we found each other, ...

2017년



How it began, How we found each other, ...

2017년

VAN WYK, RYAN L <rv6848@att.com>
to ALAN, 안재석, CECILIA, KANDAN, me, 안승규, 이강원, MATT ▾
Thu, Apr 27, 2017, 10:13 AM ⭐ ↶ :

Thanks, you very much for meeting with us tonight. It is very exciting that we are trying to solve similar problems, and there is some good alignment on how we can get there.

I look forward to working together, and meeting face to face into our meetings with RedHat, Intel, and Canonical.

Thanks,

Ryan van Wyk
Assistant Vice President (AVP) – Cloud Platform Development

Contact: C: 312-860-0966 | rv6848@att.com

Assistant: Sherry Minnella | 314.450.9661 | sherry.minnella@att.com

...

..exciting that we are trying to solve similar problem..

SUPERUSER

NEWS

SK Telecom 5GX Cloud Labs wins the 2020 Superuser Awards

SK Telecom 5GX Labs wins the Superuser Awards for their Airship use case.



Ashlee Ferguson

October 20, 2020

SK Telecom 5GX Cloud Labs was among eight nominees for the Award this year and is the first to receive the Award for an Airship use case.

open infrastructure. SK Telecom 5GX Cloud Labs was among eight nominees for the Award this year and is the first to receive the Award for an Airship use case.

In addition to contributing upstream to OpenStack and [Airship](#), an open source project supported by the [Open Infrastructure Foundation](#), SK Telecom developed a containerized OpenStack on Kubernetes solution called SKT All Container Orchestrator (TACO), based on OpenStack-helm and Airship. TACO is a containerized, declarative, cloud infrastructure lifecycle manager that enables them to provide operators the capability to remotely deploy and manage the entire lifecycle of cloud infrastructure and add-on tools and services by treating all infrastructure like cloud native apps. They

SU SUPERUSER

NOMINEE

SK Telecom



SEPTEMBER 22, 2020

2020 Superuser Awards Nominee: SK Telecom 5GX Cloud Labs

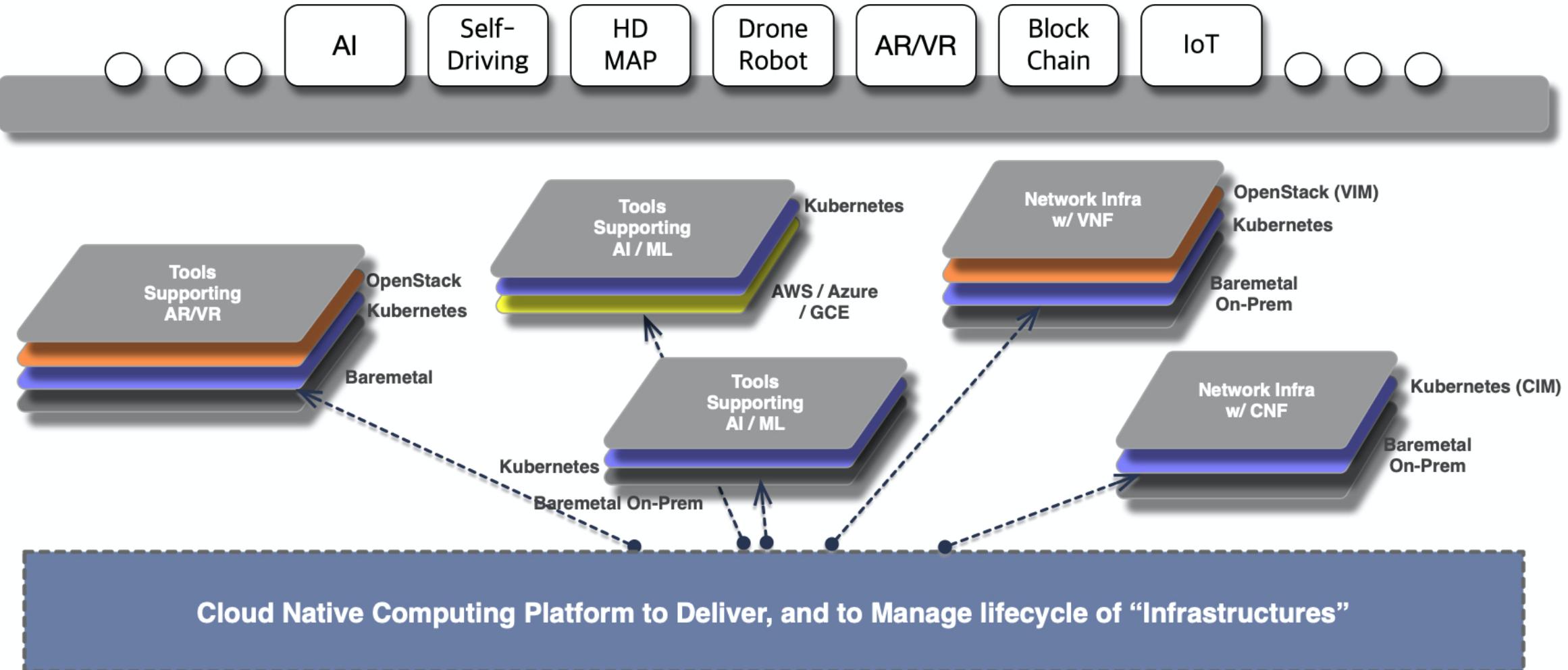
Declarative, Cloud Native, Containerized, Kubernetes...

우리의 관심 대상은 남들과 좀 달랐습니다.

= “APP”이 아닌 “Infrastructure”

Treat your infrastructure like Cloud Native Apps

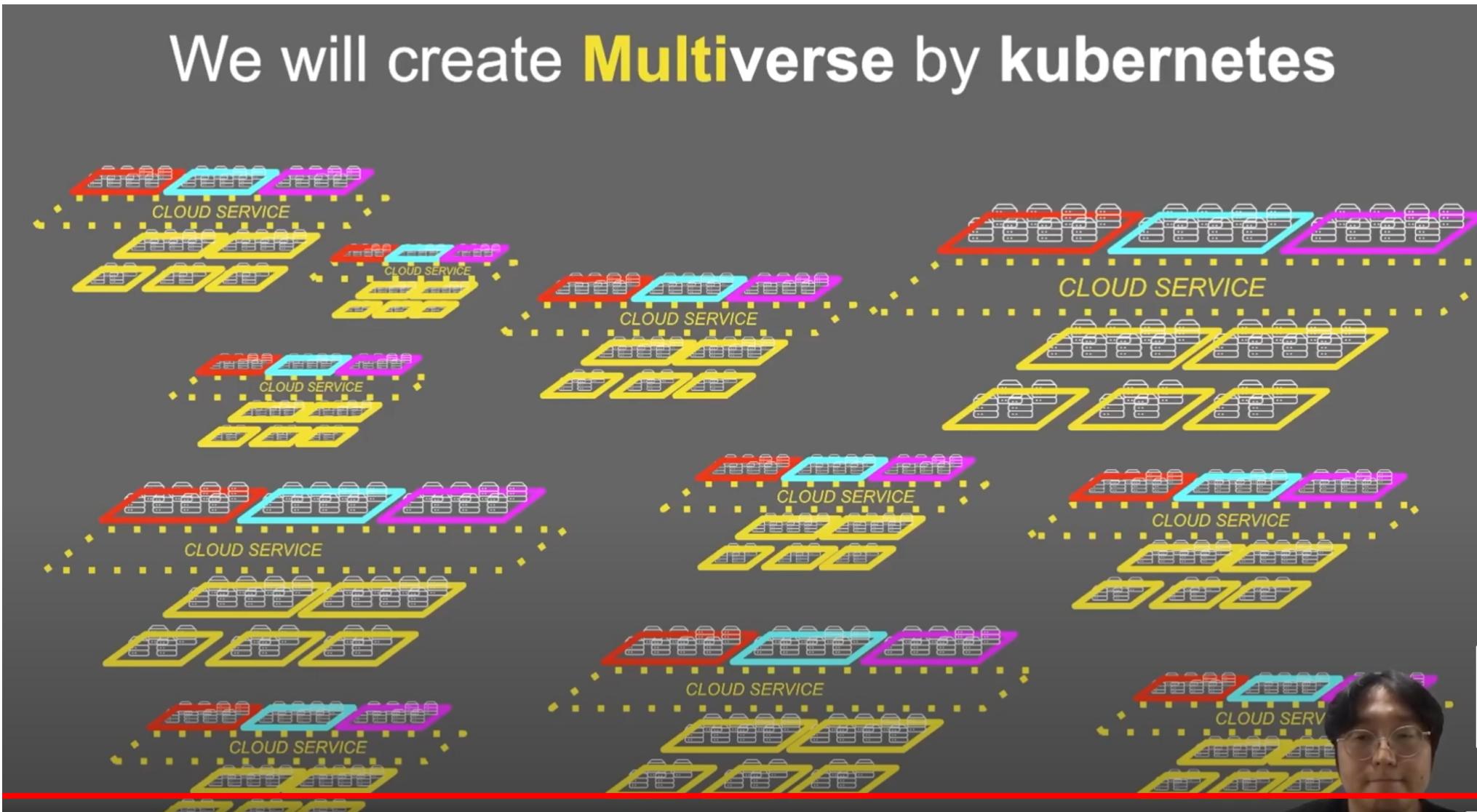
Vision in 2018



Kubernetes Cluster API 0.0.0-alpha1 (2018.6.8)

It is coming! Others are actually doing it!

We will create **Multiverse** by kubernetes



Toward Kubernetes-native data center (데이터센터의 모든 자원을 쿠버네티스로 관리하기 위하여)
Presented by Kakao Enterprise 이어형
at Cloud Native Community Groups Seoul 2020

Year 2020 – Realizing Vision

Kubernetes Cluster-API

Operator Pattern

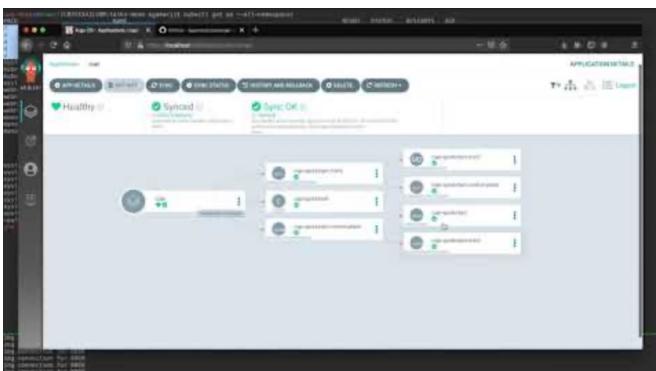


ClusterOps Gitops

Airship

Toward Kubernetes-native data center
(데이터센터의 모든 자원을 쿠버네티스로 관리하기 위하여)

Presented by Kakao Enterprise 이어형
at Cloud Native Community Groups Seoul 2020



ClusterOps - ClusterAPI and ArgoCD

Presented by Katie Gamanji

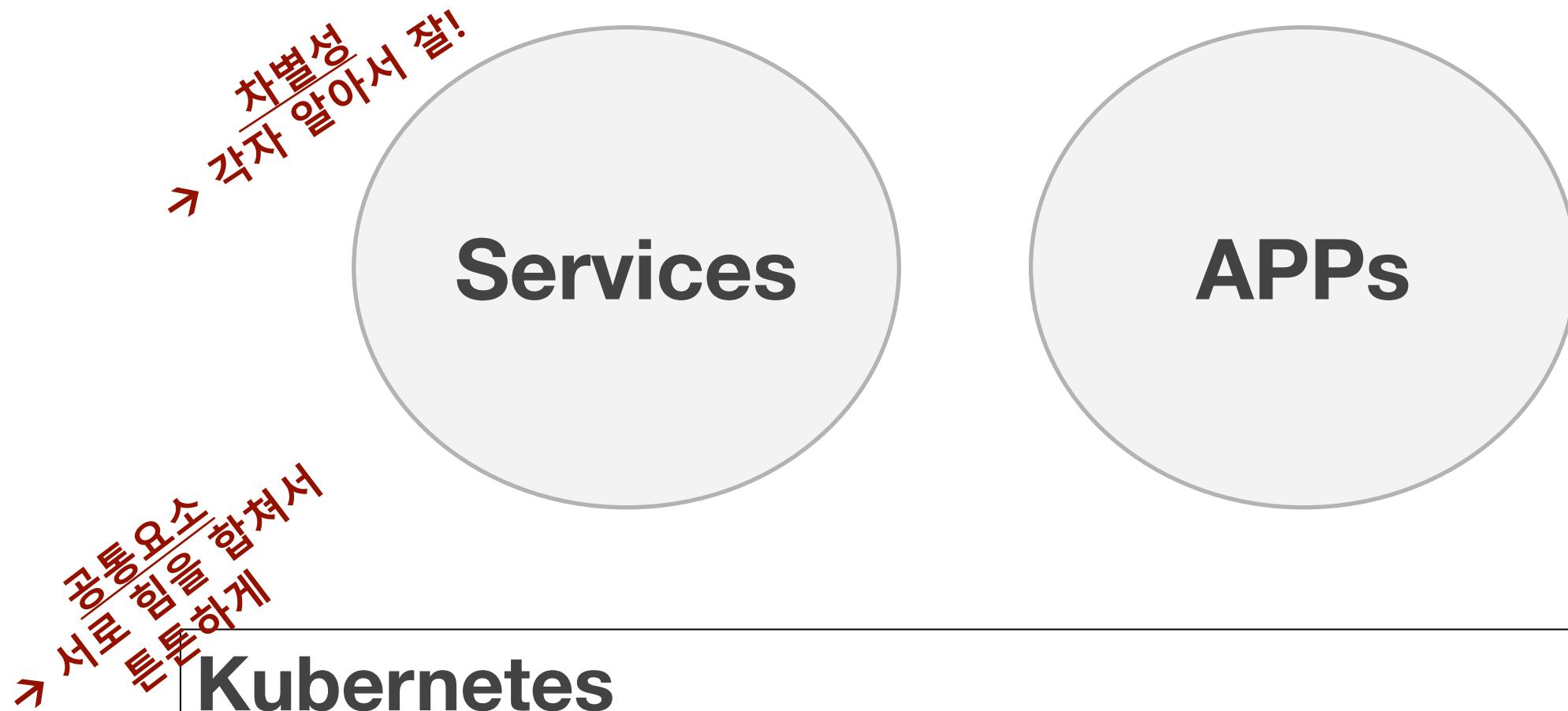
02

Open Community로의 도전 (HA.NU)

Kubernetes != Container Orchestration

**Kubernetes = orchestrator of everything
= life-cycle manager of everything
= Kernel**

공통 요소에 대한 협업



Kubernetes
= orchestrator of every cloud infrastructure
& datacenter resources

Working with Upstream Project

시간대와 언어의 차이의 장벽 - Engagement의 어려움

- 새로운 Use Case, Feature 제안의 어려움
- 변경사항 (나에게 깨치는 영향)에 대한 적시 소통의 어려움
- ... etc

Ecosystem들의 혼재, 빠른 확장과 변화 – Insight 확보의 어려움

Working with Upstream Project

만약 나와 비슷한 시간대에 같은 언어를 사용하면서,

나와 비슷한 문제를 가지고 있고,

나와 유사한 기술셋으로 해결하고자 하는 사람들이 많았으면

그래서, Upstream과 대화하는데 있어 서로 협력할 수 있다면

협업의 힘

원장님, 우리가 개발하는 걸 저분들이 다 같이 해주신데요!

2018년 OpenStack Summit
Airship Workshop



HA.NU (HAm Gye NUrim; 함께 누림) 프로젝트

HANU Project Workspace
A space for open, collaborative cloud native infrastructure software.
Republic of Korea <https://github.com/openinfradev/op...>

Repositories 40 Packages People 29 Teams 4 Projects 1 Settings

Pinned repositories

- tacoplay: taco deployment automation leveraging ironic, kubespray, ceph-ansible, armada, helm.
HTML 24 21
- taco-docs: taco documentation
6 6
- tacoctl: CLI tool for Kubernetes Cluster API based TACO
Go 2 1
- decapod-flow: Archives for Argo Workflow Templates
- decapod-yaml: Yaml for DECAPOD(Declarative Application Orchestration & Delivery)
Go 5
- kustomize-helm-transformer: Kustomize Plugin to transform values in HelmRelease CR
Go 5

Find a repository... Type: All Language: All New

tacoplay
taco deployment automation leveraging ironic, kubespray, ceph-ansible, armada, helm.
kubernetes helm openstack openstack-helm ironic airship
ceph-ansible
HTML Apache-2.0 21 24 0 1 Updated 2 days ago

Top languages: Go, Shell, Python, Smarty, HTML

Most used topics: helm, helm-operator, kubernetes, kustomize, openstack

<https://github.com/openinfradev>

현재 프로젝트화를 위한

- CI Pipeline 설계 및 구성, 설치
- Governance 체계 수립
- 개발참여 프로세스 정립
- 오픈소스 SW화를 위한 코드 공개
- SIG 등 생태계 구성 추진
- 교육프로그램 기획
- ..

HA.NU (HAm Gye NUrim; 함께 누림) 프로젝트

The screenshot shows the GitHub organization page for 'HANU Project Workspace'. The header includes the organization logo (TACO), name, description ('A space for open, collaborative cloud native infrastructure software.'), and links to the Republic of Korea and the GitHub repository.

The main navigation bar shows 40 repositories, 29 packages, 4 people, 4 teams, 1 project, and settings.

The 'Pinned repositories' section displays six pinned repositories:

- tacoplay**: taco deployment automation leveraging ironic, kubespray, ceph-ansible, armada, helm. (HTML, 24 stars, 21 forks)
- taco-docs**: taco documentation (6 stars, 6 forks)
- tacoctl**: CLI tool for Kubernetes Cluster API based TACO (Go, 2 stars, 1 fork)
- decapod-flow**: Archives for Argo Workflow Templates
- decapod-yaml**: Yaml for DECAPOD(Declarative Application Orchestration & Delivery)
- kustomize-helm-transformer**: Kustomize Plugin to transform values in HelmRelease CR (Go, 5 stars)

Below the pinned repositories is a search bar, type filter, language filter, and a 'New' button.

The 'tacoplay' repository card is expanded, showing its details:

- tacoplay**: taco deployment automation leveraging ironic, kubespray, ceph-ansible, armada, helm.
- Tags: kubernetes, helm, openstack, openstack-helm, ironic, airship, ceph-ansible
- Metrics: 1 HTML, Apache-2.0 license, 21 forks, 24 stars, 0 issues, 1 pull request, updated 2 days ago
- Top languages: Go, Shell, Python, Smarty, HTML
- Most used topics: helm, helm-operator, kubernetes, kustomize, openstack

<https://github.com/openinfradev>

앞으로...

- Open Infrastructure Foundation과 직접적인 협력관계 모색
- 다양한 형태의 모임 추진
- 국내 관련 커뮤니티들과의 긴밀한 협업

**SKT 클라우드 기술의 “오픈소스 프로젝트화”
(단순한 코드공개가 아닌 생태계를 만들 수 있는 커뮤니티화)**

**글로벌 주요 오픈소스SW프로젝트 공동 참여 및 협력
(국내 개발자/엔지니어들이 더 적극적인 참여가 가능토록 협업)**

**국내에서 개발되는 소프트웨어들의 Incubator 역할 →
글로벌 재단과의 협력관계 추진**

서로 대화 할 수 있는 Playground 마련

— END

감사합니다