HANU Open Infrastructure프로젝트 Treat Your Infrastructure Like Cloud Native Apps

안재석

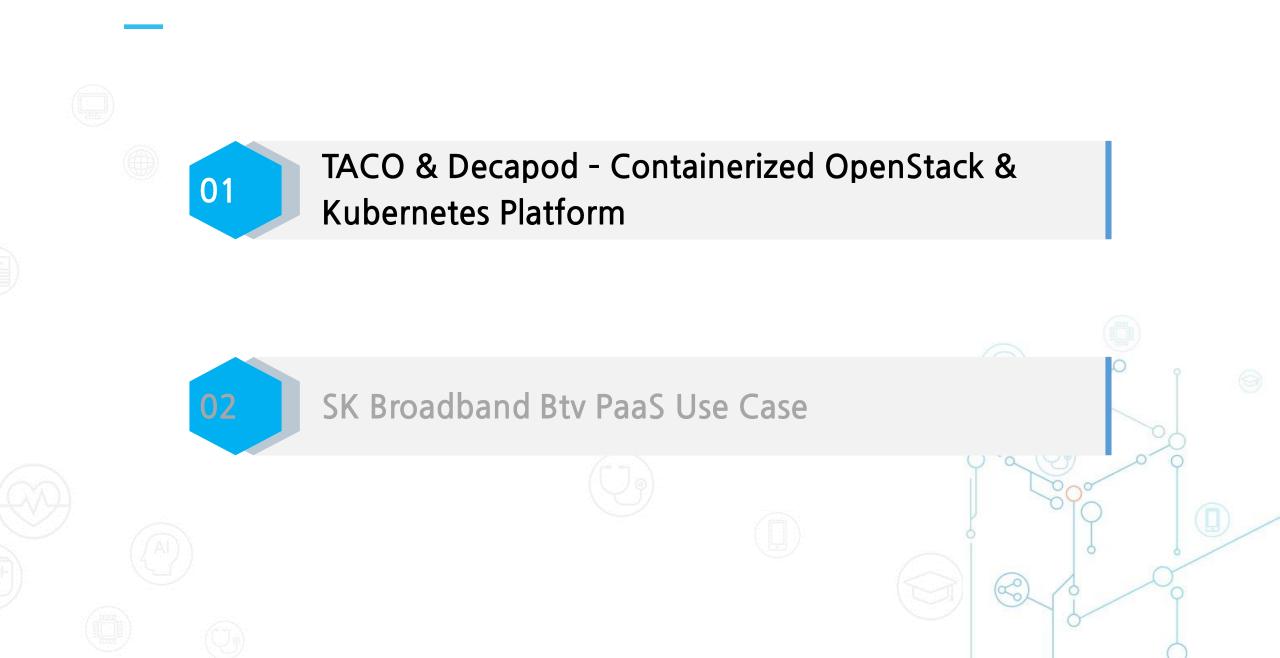
5GX Cloud Labs, SK Telecom

HANU (HAm Gye NUrim; 함께 누림) 프로젝트 https://github.com/openinfradev

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

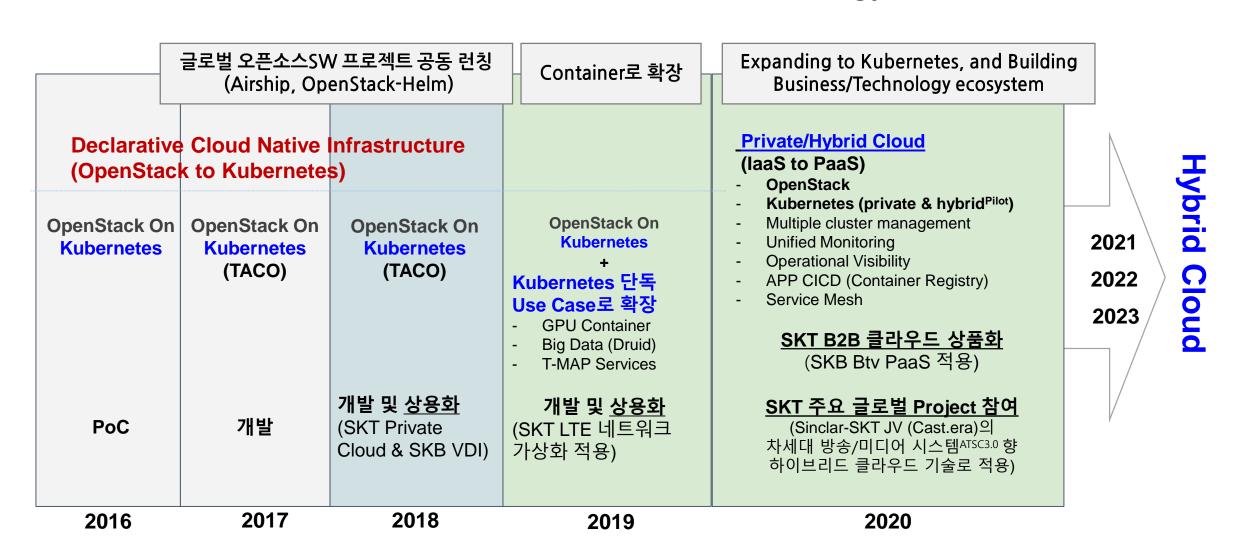
현재는 두 가지 프로젝트들을 호스팅 하여 런칭 준비를 하고 있습니다

- TACO (SKT All Container Orchestrator) 이름은 변경 예정
- DECAPOD (DEClarative APplication Orchestration & Delivery)



TACO Project History

(Kubernetes-based Cloud Native Infrastructure Technology)



오픈소스 소프트웨어 in TACO

Open Infrastructure Foundation



Making lifecycle manage ment for open infrastruct ure simple, repeatable & resilient

SKT Co-Founded (TACO Development)



Secure, lightweight CRI compatible virtualized containers



Programmable infrastruct ure for VMs, containers and bare metal

STARLINGX

Edge cloud computing Infrastructure for high performance, ultra-low latency applications



CI/CD platform for gating changes across multiple systems/repos

SKT Participated (TACO Development)

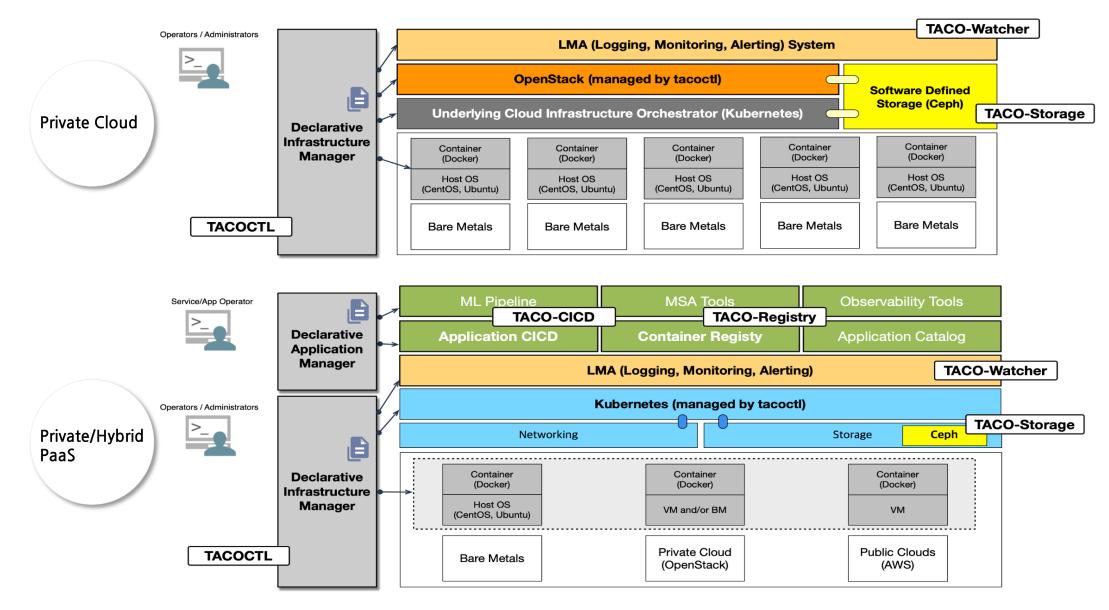
Cloud Native Computing Foundation & Linux Foundation + More



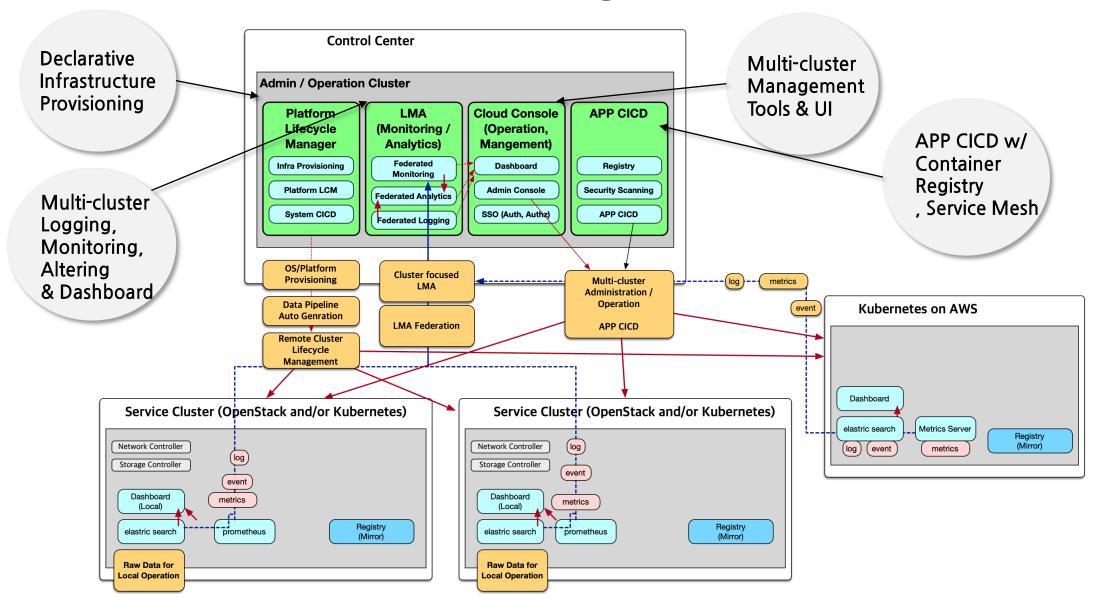


Prometheus, Grafana, Elastic Search, Kibana, Fluentbit, etc Istio, Argo, Helm, Helm Operator, Kustomize, etc Terraform, Kubernetes Cluster-API, Ansible, Kubespray, etc

TACO 아키텍처 (from Private to Hybrid)

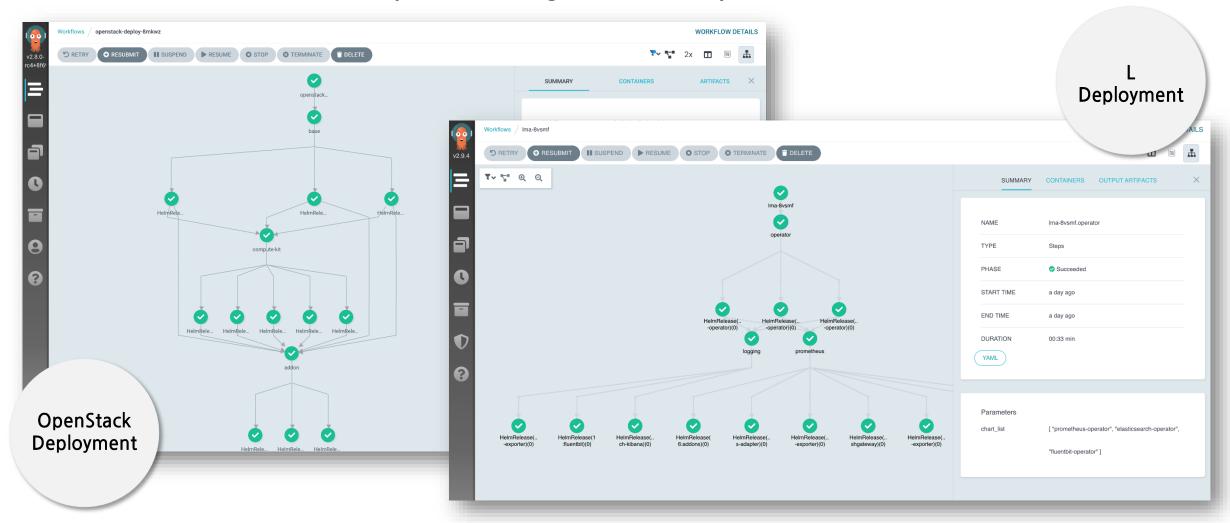


TACO: Multi-cluster Management Architecture



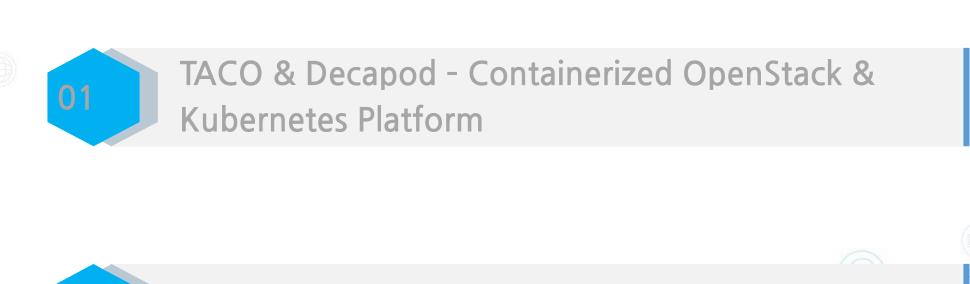
DECAPOD: Declarative App/System Deployment

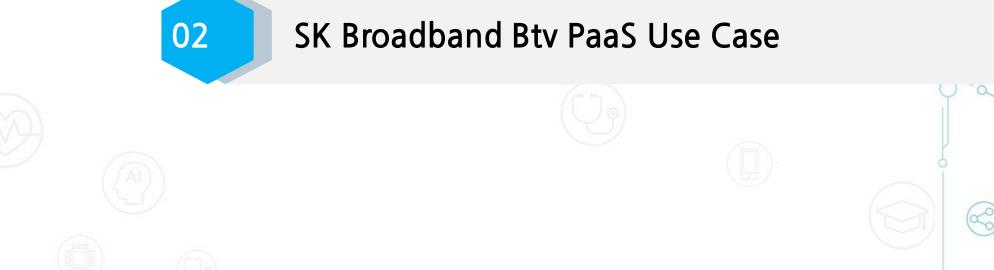
Kustomize + Helm Operator + Argo based Gitops-based Declarative APP CD



DECAPOD in Action (Online Demo)

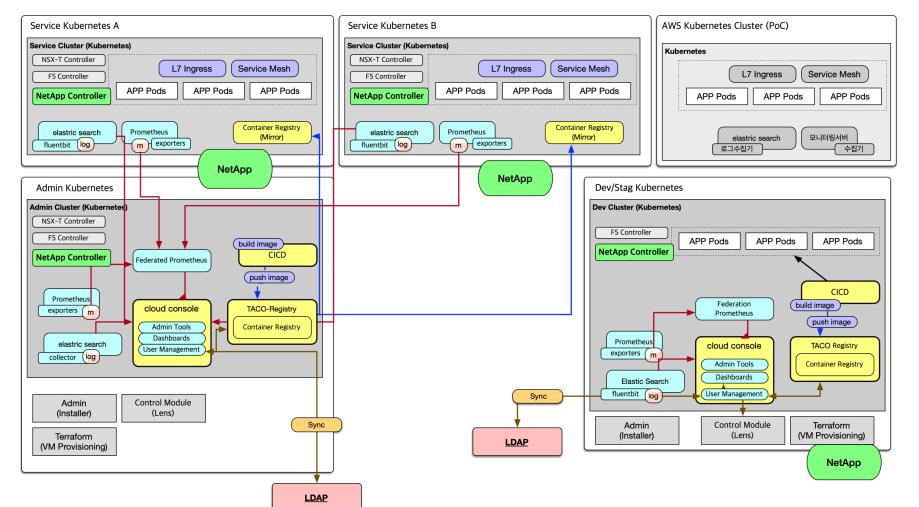
https://www.youtube.com/watch?v=VMhrrL-Mgzl





SKT Btv Next PaaS: Multi, Hybrid Kubernetes

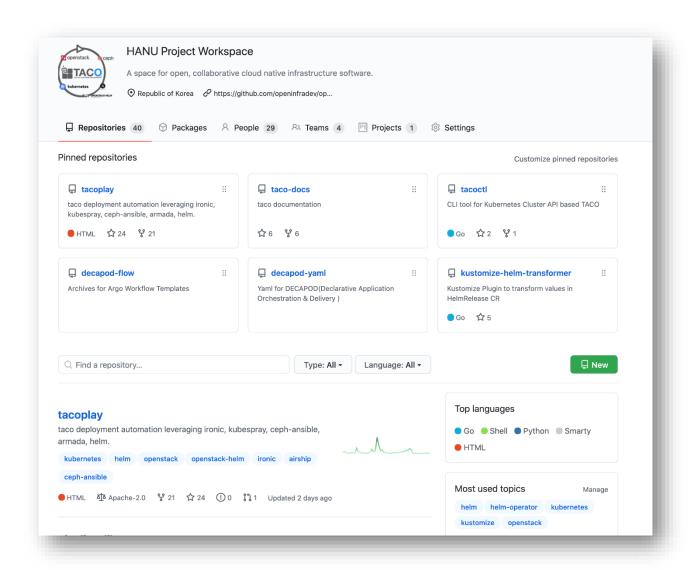
6 Kubernetes Clusters (3x 상용, 2x Dev/Stag, 1x Pilot on AWS) to run Key Services (WebUI, Metv, Scs) of SK Broadband Btv (IPTV offering)



Cluster Structure

- Admin Cluster:
 Multi Cluster
 Management
- Service Cluster:
 Application

Open Sourcing TACO, Decapod, etc under HANU Project



https://github.com/openinfradev

- Planning to launch on Nov. 2020
- Forming initial ecosystem inside Korea

감사합니다

SK텔레콤 5GX Cloud Labs



