



TKS Cloud Service

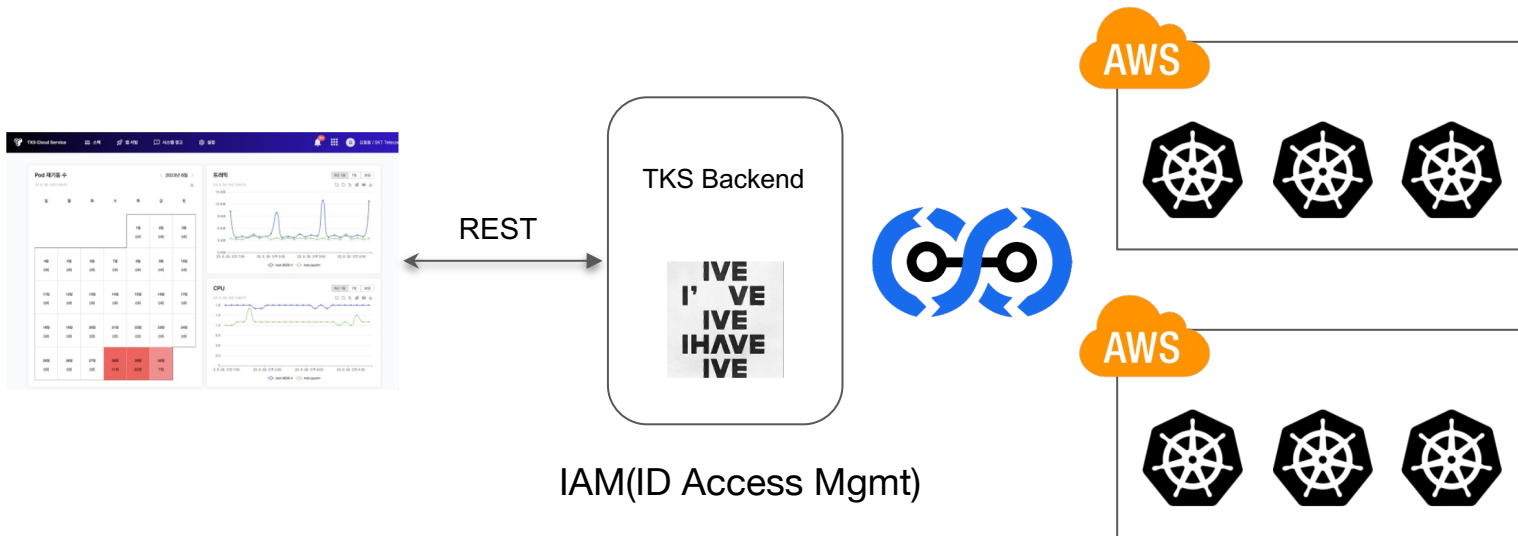
Keycloak 기반 관리형 쿠버네티스 서비스 SSO 구성



Container Solution 개발팀 한규호, 조동규

TKS Cloud Service

TKS Cloud Service: SKT가 제안하는 Kubernetes 기반 관리형 MSA Platform

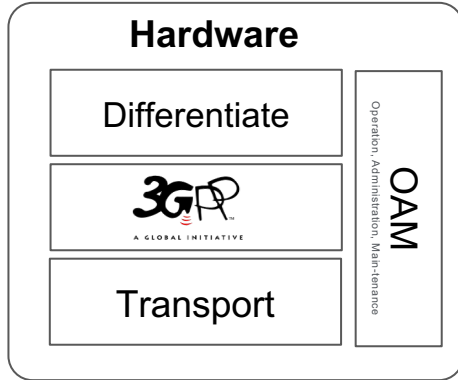


- Multi-tenant
- Access Token
- SSO

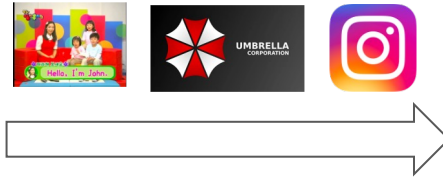
MSA Case study

약은 약사에게~~~

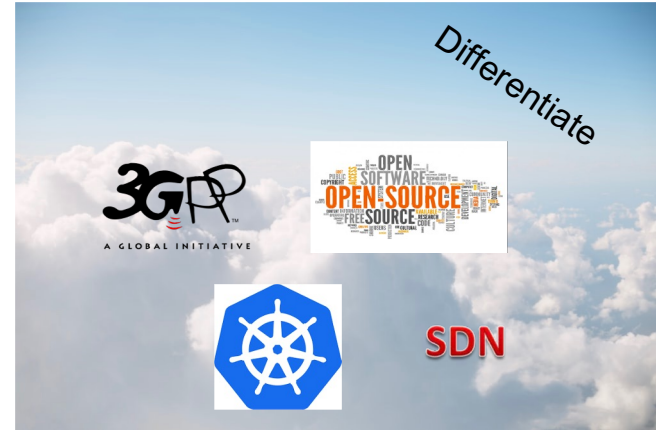
2G/3G



Purpose built HW

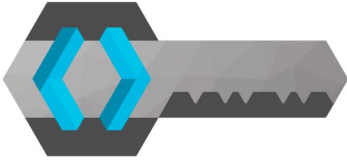


4G / 5G



Cloud native function

Keycloak



KEYCLOAK

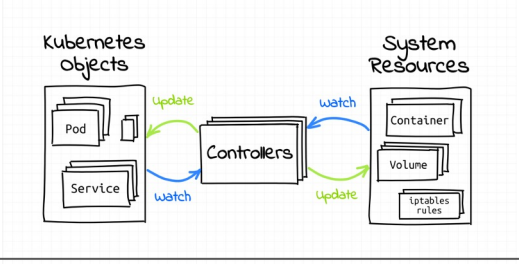
Latest release 21.1.2



OLD



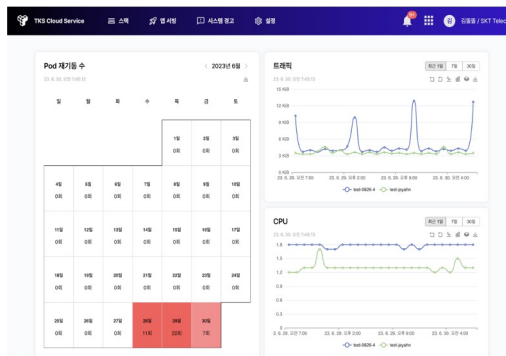
STANDARD



#K8SFRIEND

HA

HA = Network + Redundant + Consistency



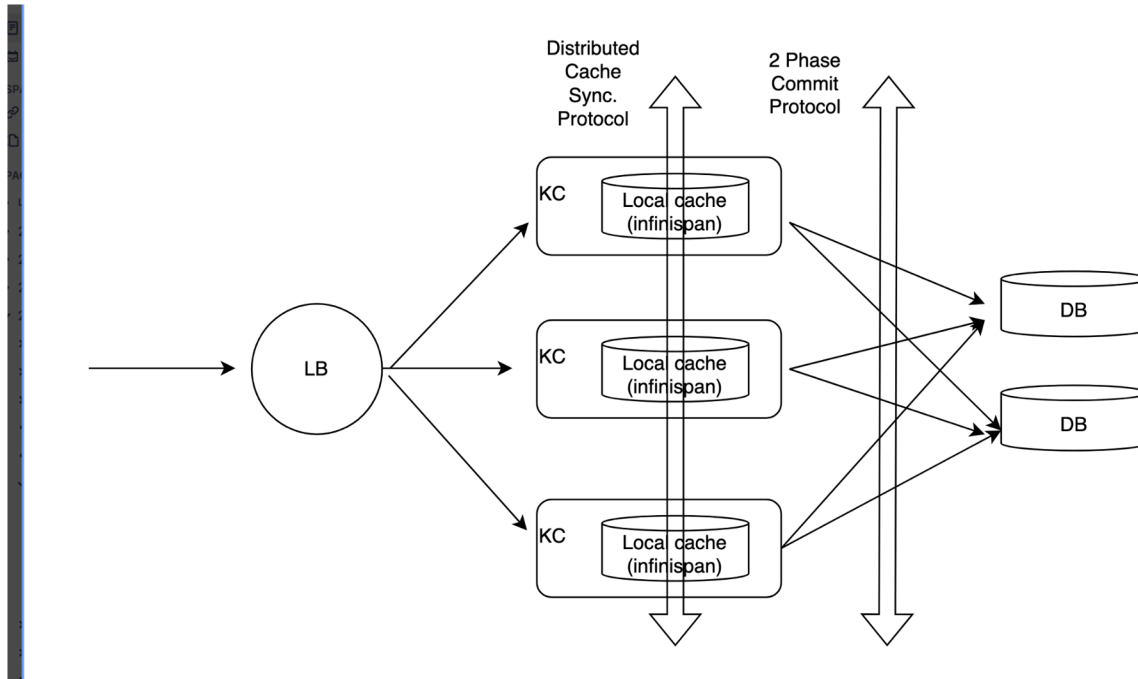
NW



Logical

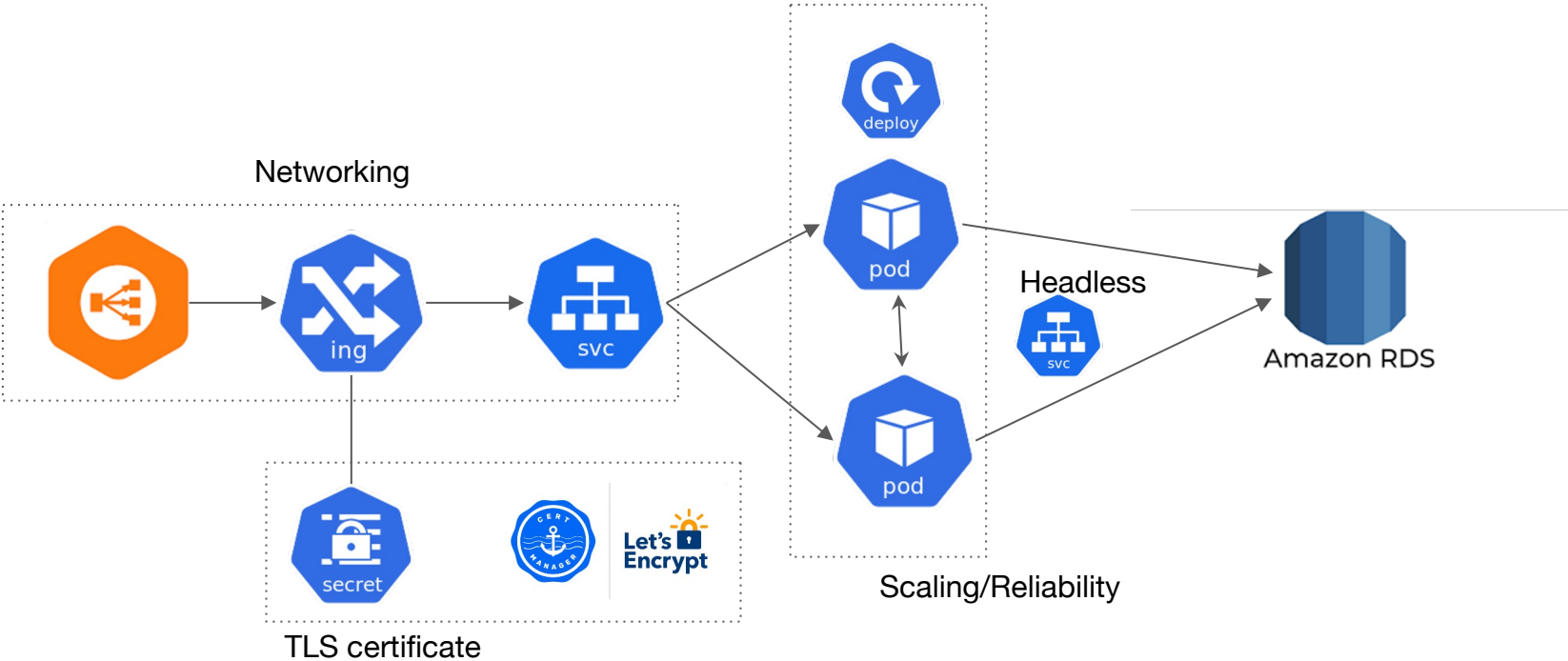
Keycloak HA

External Load balancer + Local Cache Cluster + DB consistency



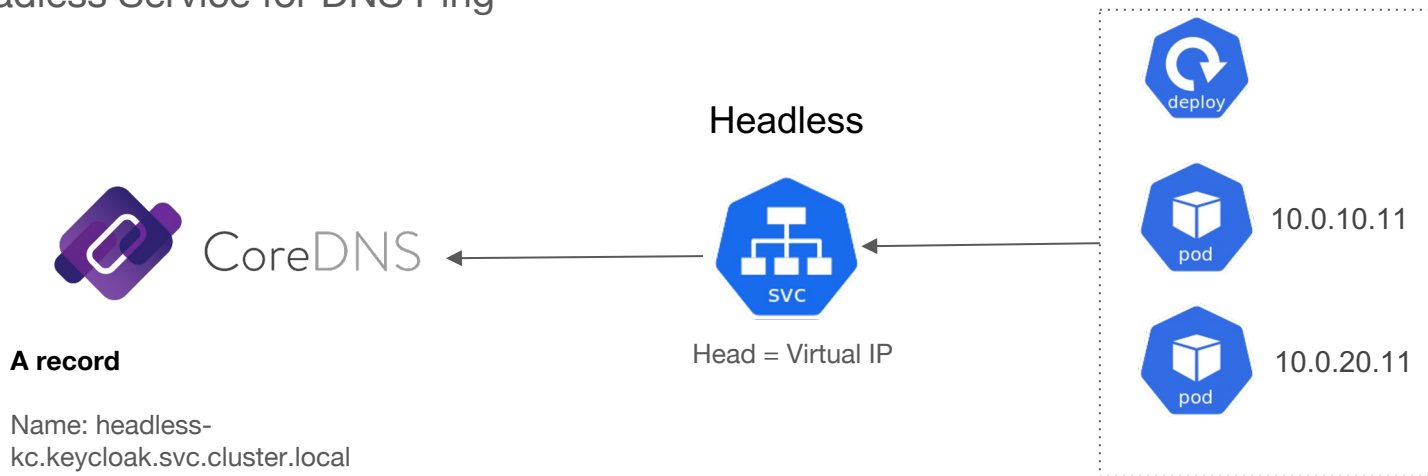
Keycloak HA @ Kubernetes over AWS

Scalability , Reliability , Networking by K8S, External LB + Managed DB by AWS



Infinispan cluster : Neighbor discovery

Headless Service for DNS Ping



A record

Name: headless-
kc.keycloak.svc.cluster.local
Address: 10.0.10.11, 10.0.20.11

Pod configuration

```
KC_CACHE_STACK: kuberentes  
JAVA_OPTS: -Djgroups.dns.query=headless-  
kc.keycloak.svc.cluster.local
```

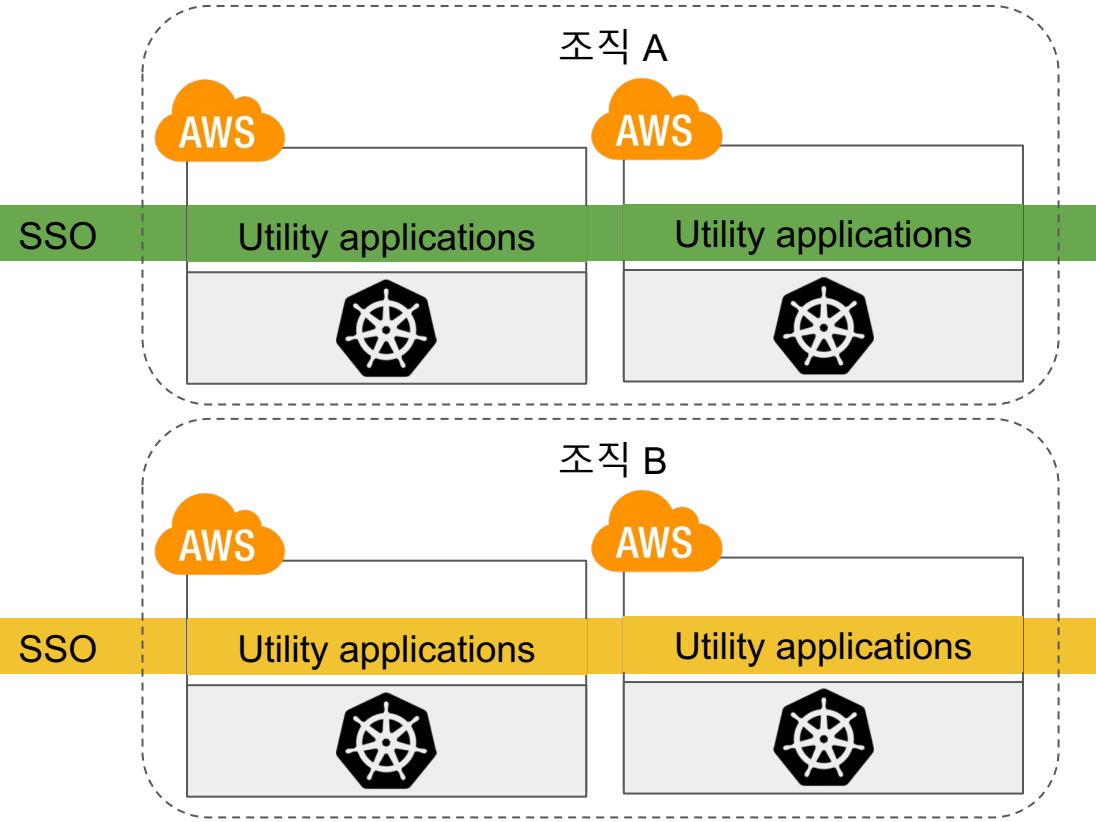

TKS Cloud Service Multi-tenancy

TKS Cloud Service

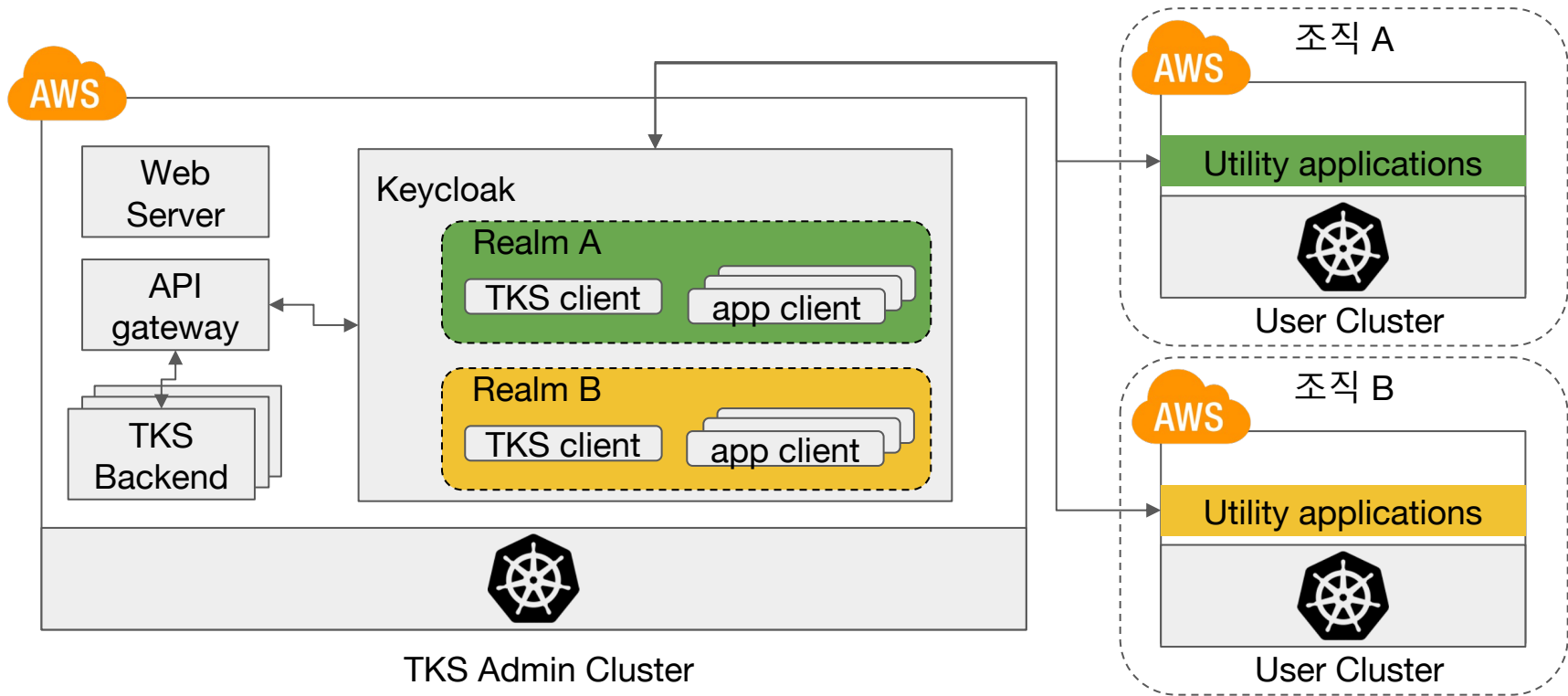
조직코드, 아이디 기억하기

[아이디 찾기](#) / [비밀번호 찾기](#)

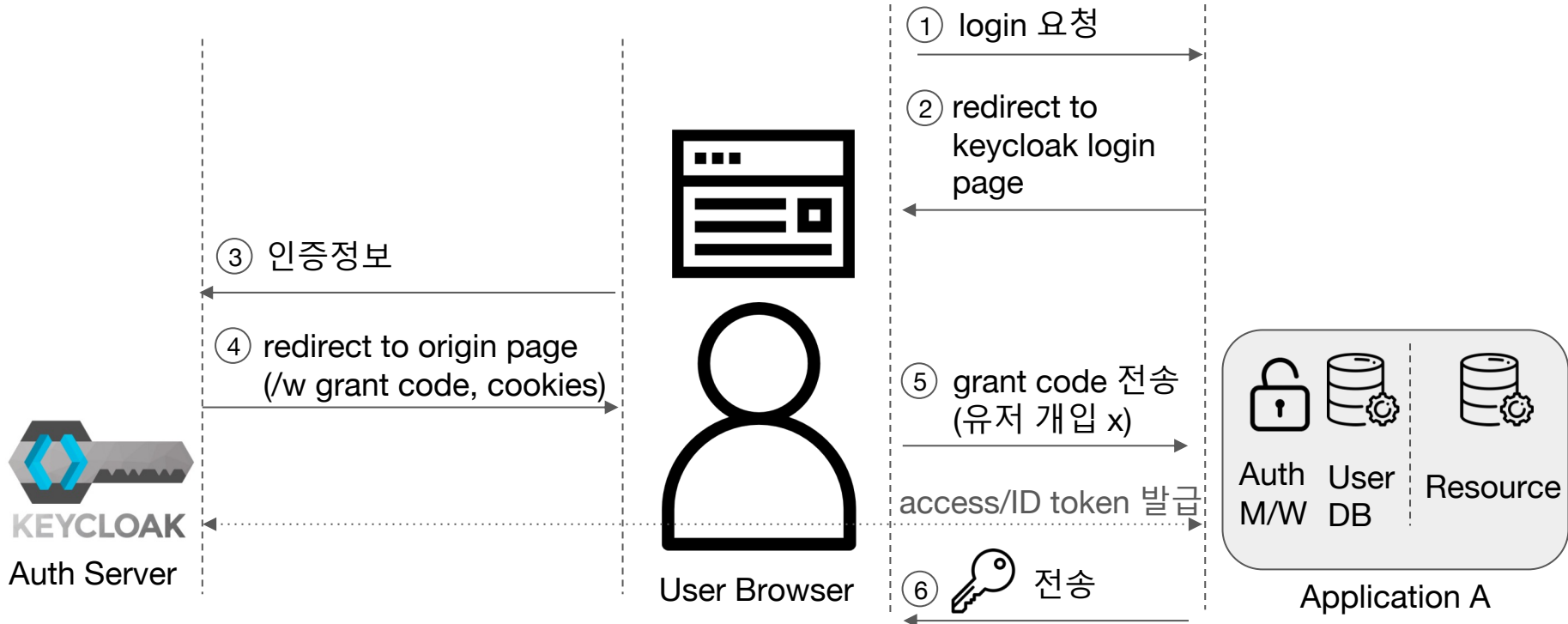
TKS Console



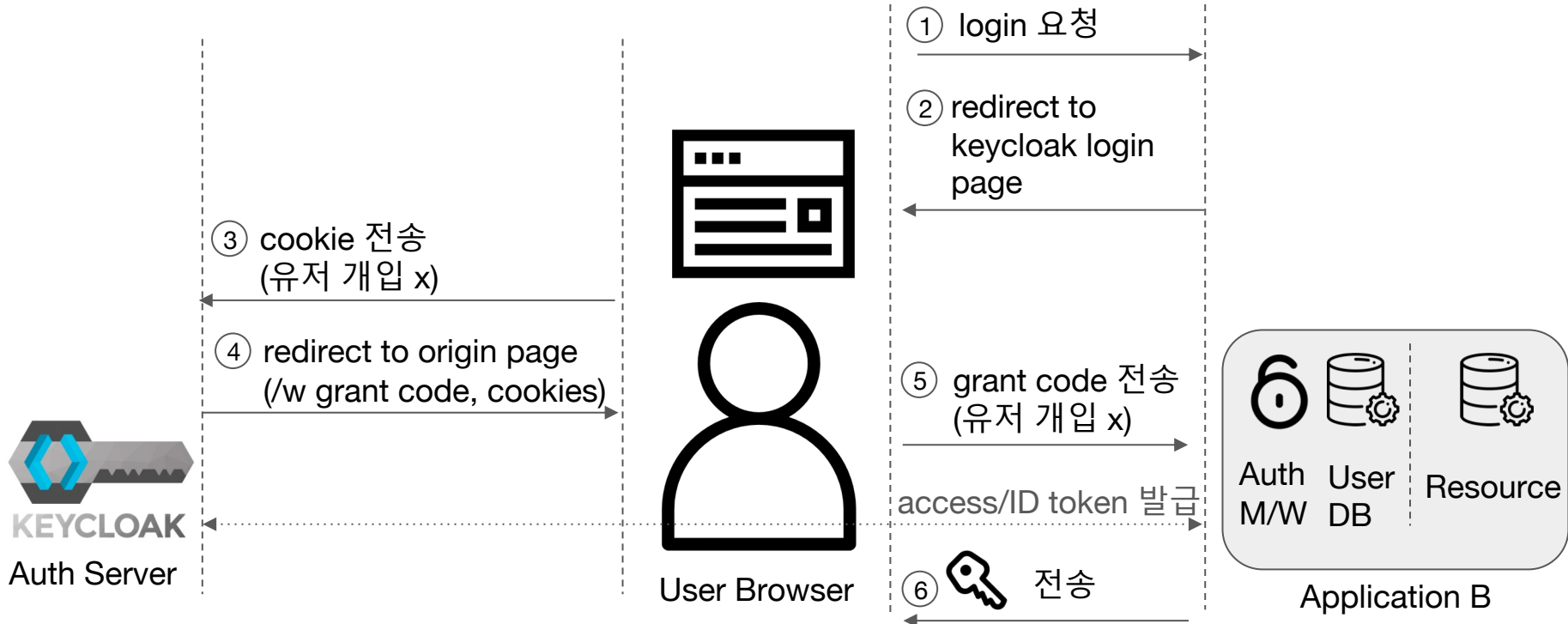
TKS Cloud Service Multi-tenancy



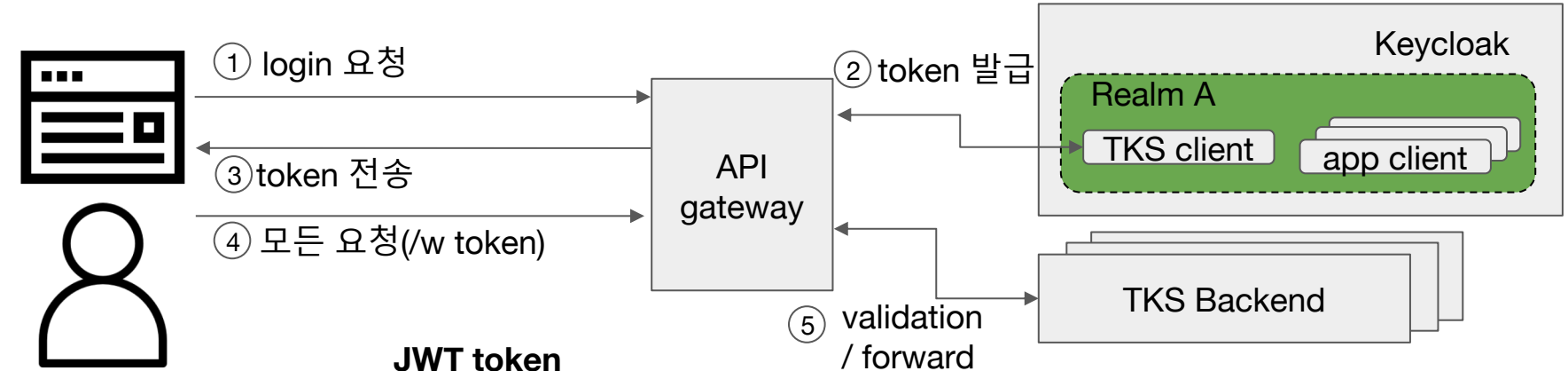
How Single Sign-On works in Keycloak



How Single Sign-On works in Keycloak



TKS Cloud Service Login process



User Browser

JWT token

payload: {

...

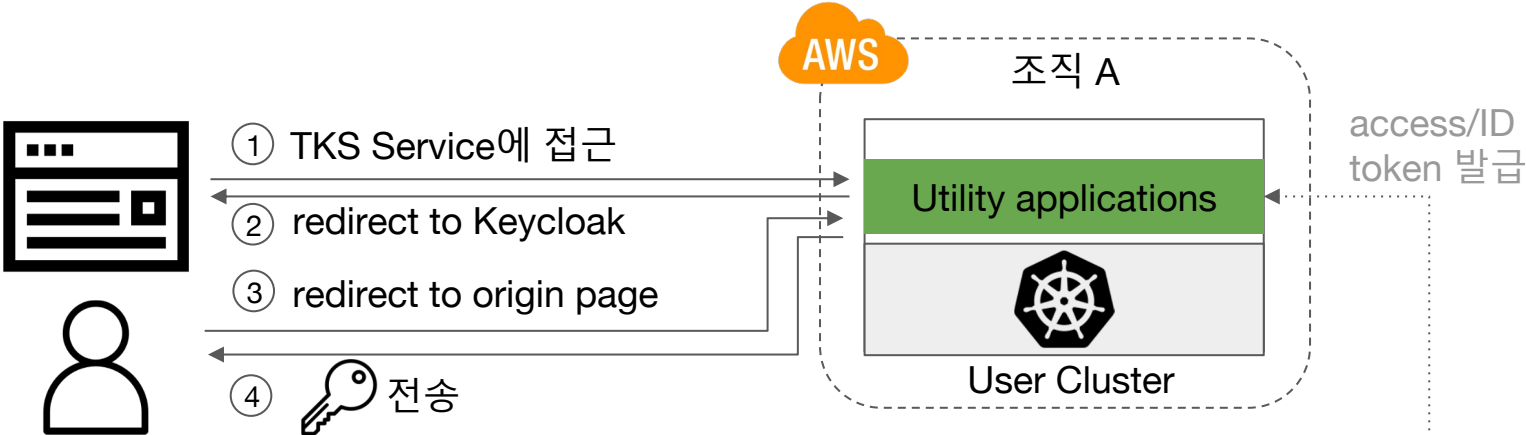
“aud”:

“organization” :

“tko-role”:

}

SSO in TKS Cloud Service



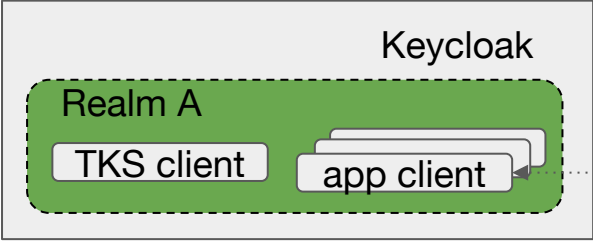
User Browser

cookie

Domain: keycloakURL

value :

- KEYCLOAK_IDENTITY
- AUTH_SESSION_ID
- KEYCLOAK_SESSION



Questions?



Thank you!

