
A Microservice Approach to Identity Management

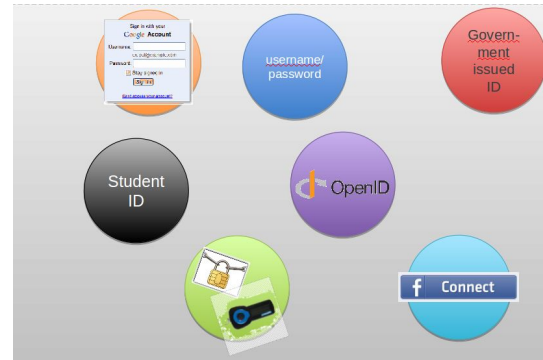
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Outline

- Introduction
- Identity Management
- Microservices
- Kubernetes
- OpenLDAP
- Solution

Introduction

- R&E institutions in many African countries are faced with application management challenges
 - Power outages
 - Infrastructure management
 - Expertise
 - Costs - purchase & maintenance
 - Security
- Identity management no exception
- Silos of identities created for resource access
 - Identity crisis



Identity Management

- A security discipline for IAA to system/network resources
- Provides confidence of resource access on supplied identity information
- Digital ecosystem space dynamically changing -
access management still challenging
- Effective centralized identity management system -
 - *Improved data security*
 - *Reduced resource access costs*
 - *Easy policy implementation*



Microservices

- Applications are structured as loosely coupled services
- Continuous delivery and deployment of applications
- Each microservice responsible for a specific issue
 - *Decentralized*
 - *Independent*
 - *Scalable*
 - *Blackbox - use APIs*
 - *DevOps - build, operate and maintain*



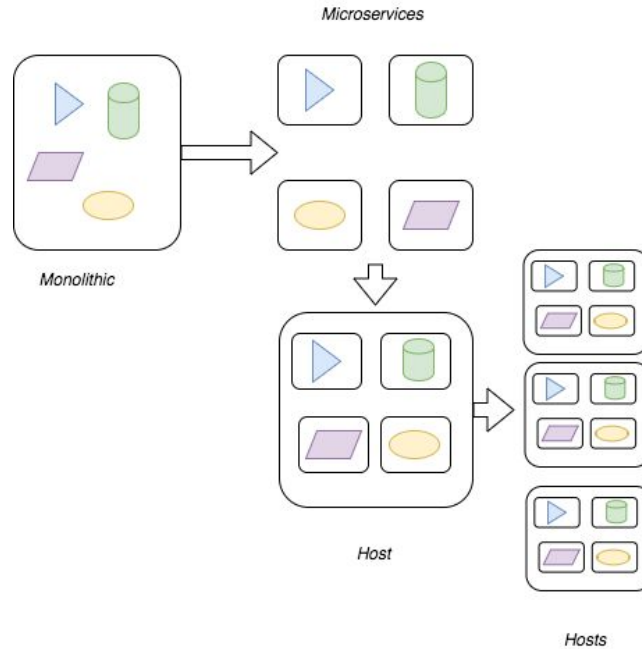
Enters..... Kubernetes (K8s)

- K8s automates application
 - *Deployment*
 - *Operation*
 - *Scaling*
- Distributed applications over a hosts clusters
- Self healing of applications
- Infrastructure abstraction - no side effects



Kubernetes

- *Monolithic applications?*
- *Microservices*
- *Deployment*
- *Scaling*
- *Failures?*

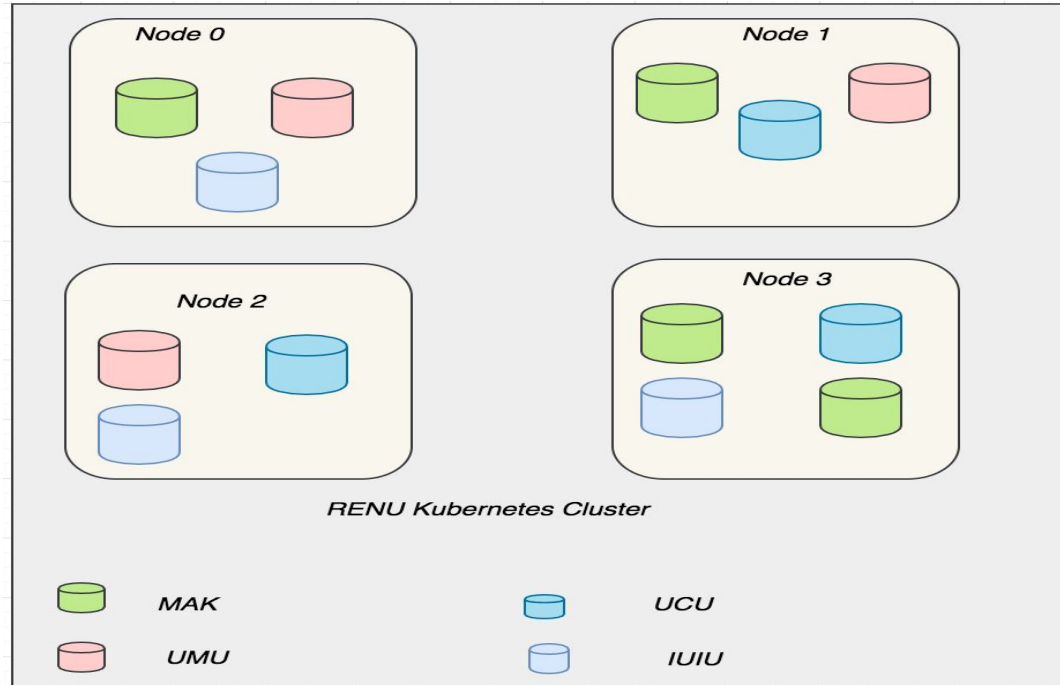


OpenLDAP

- Open source implementation of the popular Lightweight Directory Access Protocol (LDAP)
- Centralized user management
- Hierarchical directory service



Solution



Questions

