NFV Orchestrator Practices In CMCC

LFN DDF 2019.06
- Introduction of Customized NFV Orchestrator

- Experiences Sharing

- Demo
CMRI released NFV Orchestrator alpha based on ONAP in October 2018. Micro services, container based Deployment Customized the interfaces with VNFM/OMC/VIM/OSS, to align with CMCC enterprise standard. Extended O&M features for NFV domain resources.

### Functional Architecture

**Resource Management**
- VNF Catalog Mgmt
- Image Mgmt
- Policy Templates Mgmt
- Ext-system Mgmt

**LCM**
- VNF Lifecycle Mgmt
- Inventory Mgmt

**O&M**
- Performance
- Alarm
- Resources
- User & Log & Authority

**Micro Services Bus**
NFV Orchestrator Components

- Inherited from ONAP: VFC, MSB, Multi-Cloud, LOG,
- Extensions: Policy Template Management, System Management, External System Management, FCAPS Management

Micro Services Architecture, Restful API, Each component can be deployed, scale in/out independently according to workload.
Main Features

- Current Progress: Self-developed NFVO+

-已经开始试验网测试

- VNF Lifecycle Management

- Network Resources Topology

- Overview of Resources

- Alarm Monitoring
- Customized NFV Orchestrator Introduction
- Experiences Sharing
- Demo
Experiences Sharing

- Database connection pool for Django
- Reliability for the packages/images Storage
- No reservation for the resources during the process of LCM, Can NOT accurately control resource allocation
- Make the best of MSB, such as monitoring the micro services with heartbeat, load balance between backend services. metrics for the message. MSB could be easily used for Fault Delimitation.
Plan to do

- Involve SDC as design studio
- Involve AAI as Inventory, replace SQL DB
- Try SDN network orchestrations cases via SDN-C & SO

Welcome Your Expert Advice and Guidance from ONAP Community
- Customized NFV Orchestrator Introduction
- Experiences Sharing
- Demo
The End