ONAP Real-World Trial —— NFVO Orchestrator

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2019.1.9
NFVO develops UI and various functions of FCAPS in combination with the features of NFV network management, and has the Devops characteristics of open and flexible architecture, fast deployment and upgrade.

CMCC NFVO Functional Framework

Micro-service and Container Based Architecture

- **Customized ONAP development**
- **Brand new**
CMCC NFVO Features

- Easy to finish VNF deployment, scaling, termination, etc.
- Ability to monitor resource changes, performance and failure status at all NFV network levels.
Technical Architecture

- Align with ONAP R2 achievement, combine community module with self-developed module.
- Introduce the functions of backup and load balance, database cluster and virtual IP to increase reliability.

- Provide Restful APIs in Web Service mode (except TOSCA Parser components);
- Component independence
- Micro-service bus function
- Ability to integration with other micro-service management and control platform
- Decomposable and integral micro-service integration
Deployment Testing

- Network Element Layer, Cloud OS Layer, Infrastructure Layer are decoupled from each other;
- Has passed tests of network element lifecycle management;
- Verification of other performances is in progress.

Testing System

Testing Network
Future Plan: Towards 5G Function

UI

Network Design
- VNF Package Management
- Image Management
- Visual Orchestration
- Network Service Model Management
- Slice Management
- Policy Management
- External System Management

Network Deployment
- VNF Lifecycle Management
- VNF Instance Information Management
- Network Service Lifecycle Management
- Slice Lifecycle Management

Network Operation & Maintenance
- Performance Management
- Alarm Management
- Resource Management
- Log & Administration Management

Micro-service and Container Based Architecture

- V 1.0 Already have
- Brand new towards 5G
- Enhancement towards 5G

Future Plan for NFVO+ Orchestrator Architecture
Thank you!