



中国移动
China Mobile

NFV Orchestrator Practices In CMCC

LFN DDF 2019.06

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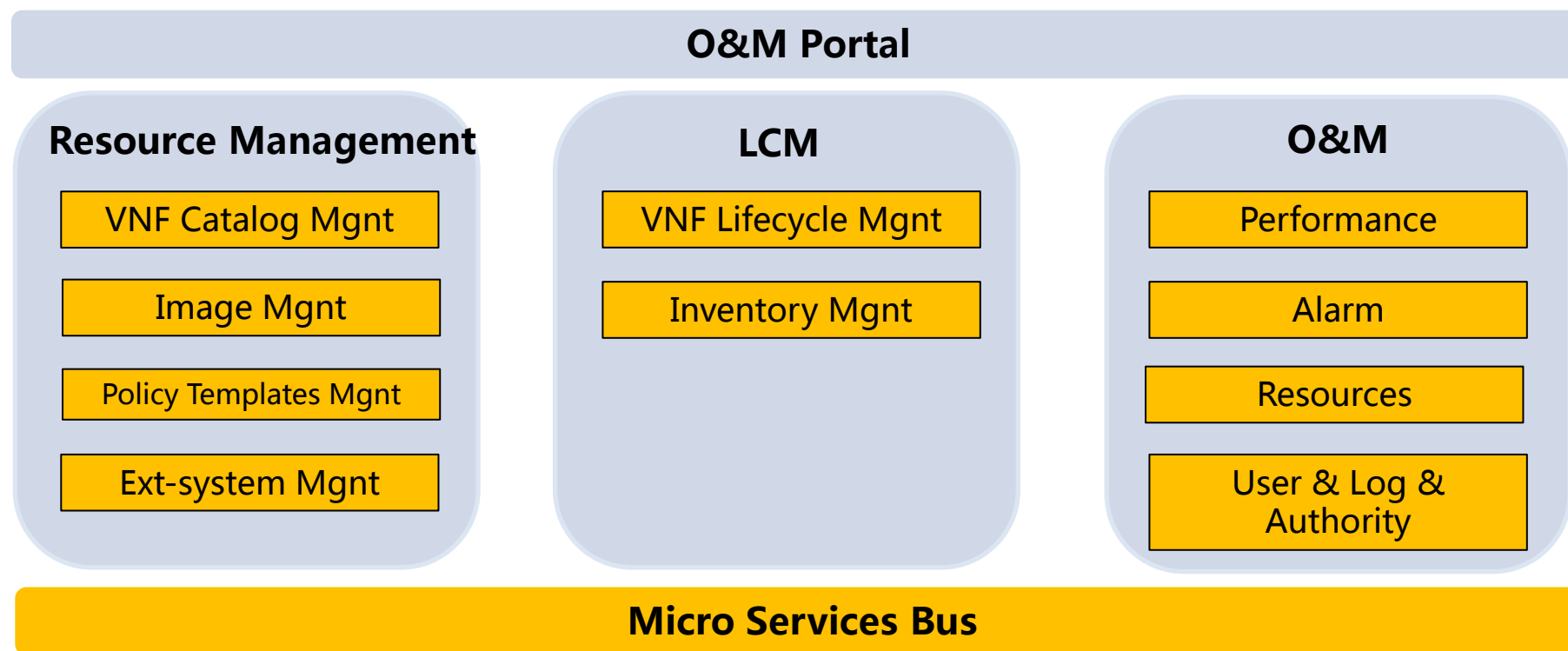
- Introduction of Customized NFV Orchestrator
- Experiences Sharing
- Demo

CMRI released NFV Orchestrator alpha based on ONAP in October 2018.

Micro services, container based Deployment

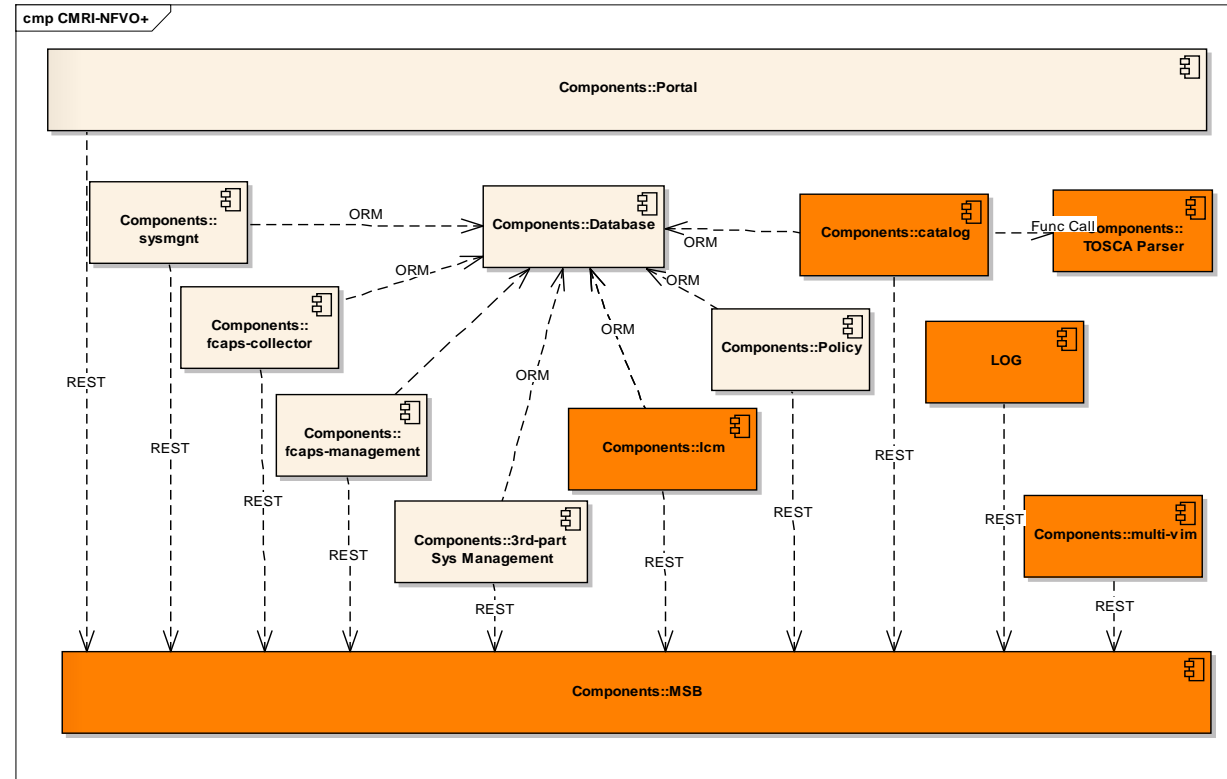
Customized the interfaces with VNFM/OMC/VIM/OSS, to align with CMCC enterprise standard.

Extended O&M features for NFV domain resources.

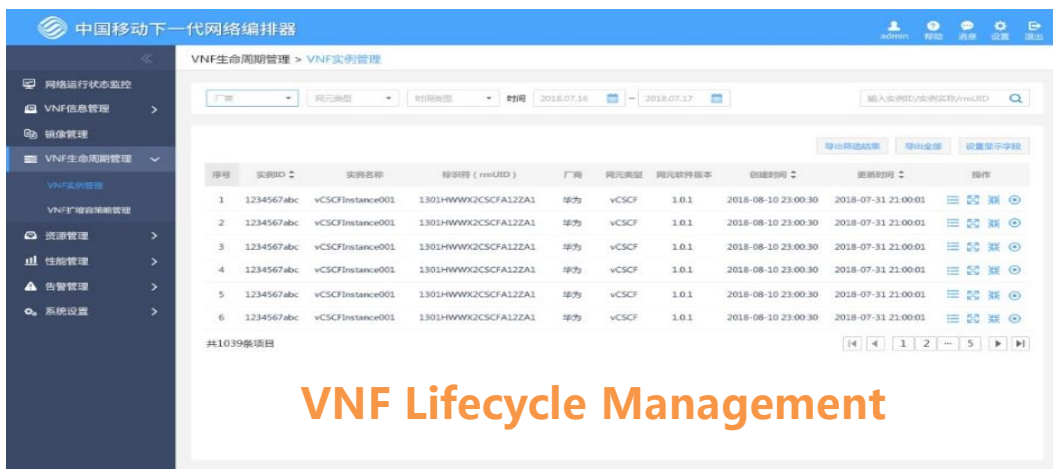
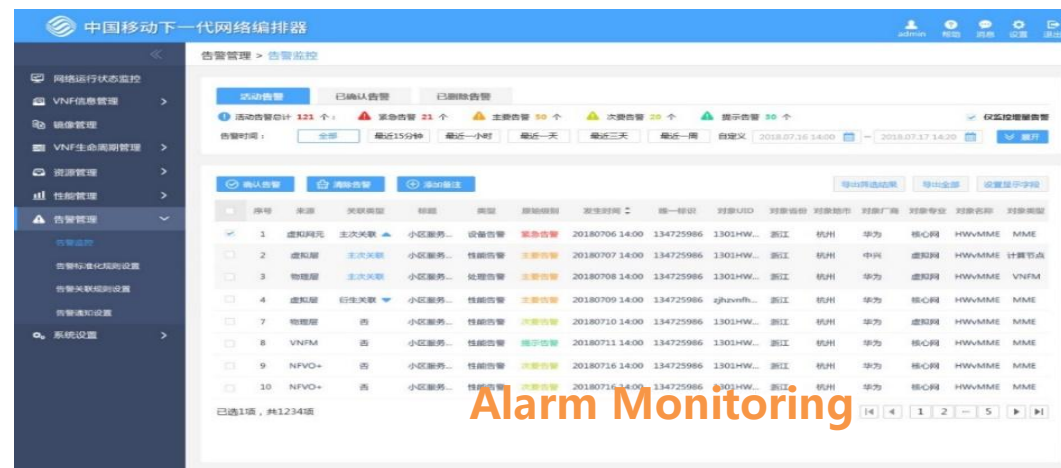


Functional Architecture

- 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.

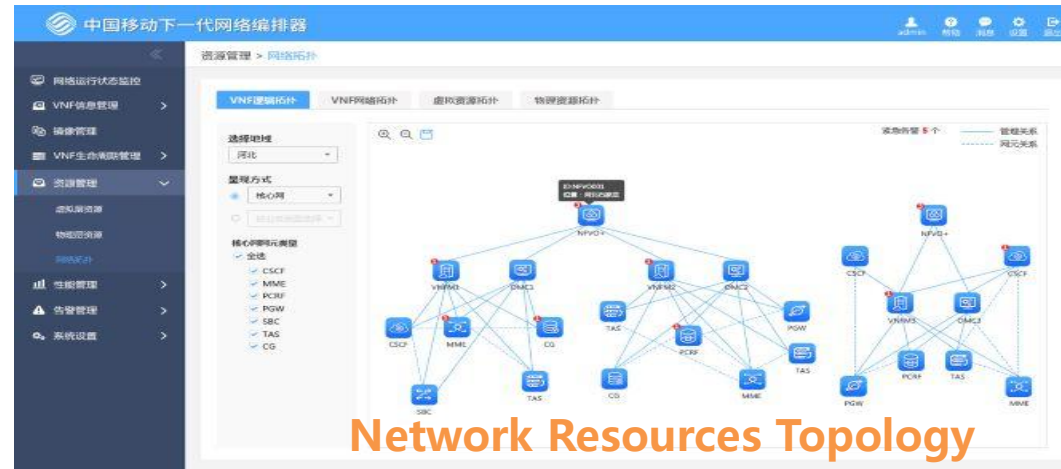


中国移动下一代网络编排器

VNF生命周期管理 > VNF实例管理

序号	实例ID	实例名称	标识符 (vnfID)	厂商	网元类型	网元软件版本	创建时间	更新时间	操作
1	1234567abc	vSCSFInstance001	1301HWWK2CSCFA122A1	华为	vSCSF	1.0.1	2018-08-10 23:00:30	2018-07-31 21:00:01	
2	1234567abc	vSCSFInstance001	1301HWWK2CSCFA122A1	华为	vSCSF	1.0.1	2018-08-10 23:00:30	2018-07-31 21:00:01	
3	1234567abc	vSCSFInstance001	1301HWWK2CSCFA122A1	华为	vSCSF	1.0.1	2018-08-10 23:00:30	2018-07-31 21:00:01	
4	1234567abc	vSCSFInstance001	1301HWWK2CSCFA122A1	华为	vSCSF	1.0.1	2018-08-10 23:00:30	2018-07-31 21:00:01	
5	1234567abc	vSCSFInstance001	1301HWWK2CSCFA122A1	华为	vSCSF	1.0.1	2018-08-10 23:00:30	2018-07-31 21:00:01	
6	1234567abc	vSCSFInstance001	1301HWWK2CSCFA122A1	华为	vSCSF	1.0.1	2018-08-10 23:00:30	2018-07-31 21:00:01	

VNF Lifecycle Management



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- 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.



- 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**

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