



ONAP

OPEN NETWORK AUTOMATION PLATFORM

VNF Life Cycle Management using Macro flow

Use cases

- Add VNF to an existing Service Instance (different cloud-region)
- Delete a VNF from an existing Service Instance
- Upgrade an existing Service Instance to newer model

Add & Delete VNF

- Endpoints already exist:

POST

/onap/so/infra/serviceInstantiation/v7/serviceInstances/\$SERVICE_INSTANCE_ID/vnfs

DELETE

/onap/so/infra/serviceInstantiation/v7/serviceInstances/\$SERVICE_INSTANCE_ID/vnfs/\$VNF_ID

- Today these endpoints will force alaCarte=true

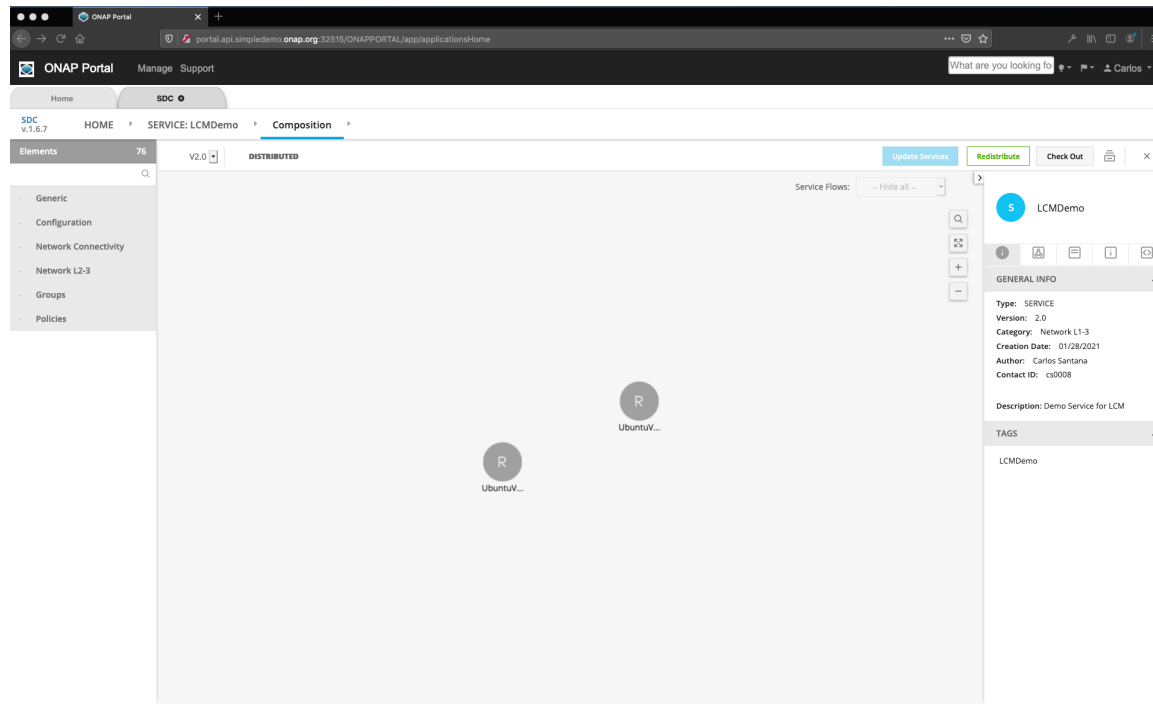
Add & Delete VNF - New Macros

- New macros including all BB's from VNF level to VF-MODULE level

VNF-Macro-Create	VNF-Macro-Delete
CreateNetworkCollectionBB	DeactivateVfModuleBB
AssignNetworkBB	ConfigDeployVnfBB
AssignVnfBB	DeleteVfModuleBB
AssignVolumeGroupBB	DeactivateVolumeGroupBB
AssignVfModuleBB	DeleteVolumeGroupBB
ConfigAssignVnfBB	DeactivateVnfBB
AssignPnfBB	DeactivateNetworkBB
WaitForPnfReadyBB	DeleteNetworkBB
ActivatePnfBB	DeactivateNetworkCollectionBB
CreateNetworkBB	DeleteNetworkCollectionBB
ActivateNetworkBB	UnassignVfModuleBB
CreateVolumeGroupBB	UnassignVolumeGroupBB
ActivateVolumeGroupBB	UnassignVnfBB
CreateVfModuleBB	UnassignNetworkBB
ActivateVfModuleBB	
ConfigDeployVnfBB	
ActivateVnfBB	
ActivateNetworkCollectionBB	

Upgrade Service Instance

- Example: heat template requires change - new VNF version
- Existing VNF can not be deleted until new VNF is running (rolling-upgrade, migration)
- Model needs to support both old VNF and new VNF versions at the same time



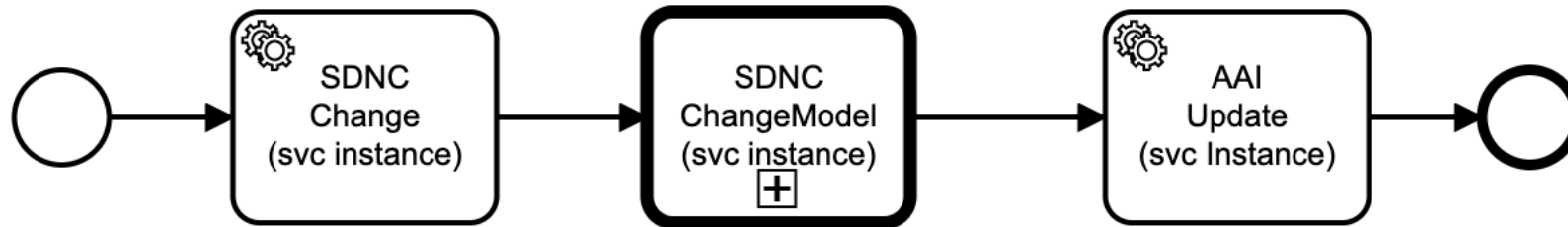
Upgrade Service Instance - new endpoint

- /onap/so/infra/serviceInstantiation/v7/serviceInstances/\$SERVICE_INSTANCE_ID/upgrade

```
{
  "requestDetails": {
    "subscriberInfo": ...,
    "requestInfo": ...,
    "cloudConfiguration": ...,
    "requestParameters": ...,
    "project": ...,
    "owningEntity": ...,
    "modelInfo": {
      "modelVersion": "{{new_modelVersion}}",
      "modelVersionId": "{{new_modelVersionId}}",
      "modelInvariantId": "{{modelInvariantId}}",
      "modelName": "{{modelName}}",
      "modelType": "service"
    }
  }
}
```

Upgrade Service Instance - new macro

- Service-Macro-Upgrade, action = upgradeInstance
- Reuse existing building block: ChangeModelServiceInstanceBB



Upgrade Service Instance - Validation

- Only allow version change within the same model (invariant id)
- Existing VNF instances must be supported by new model



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