

VF-C Dublin Highlights and E/F Planning

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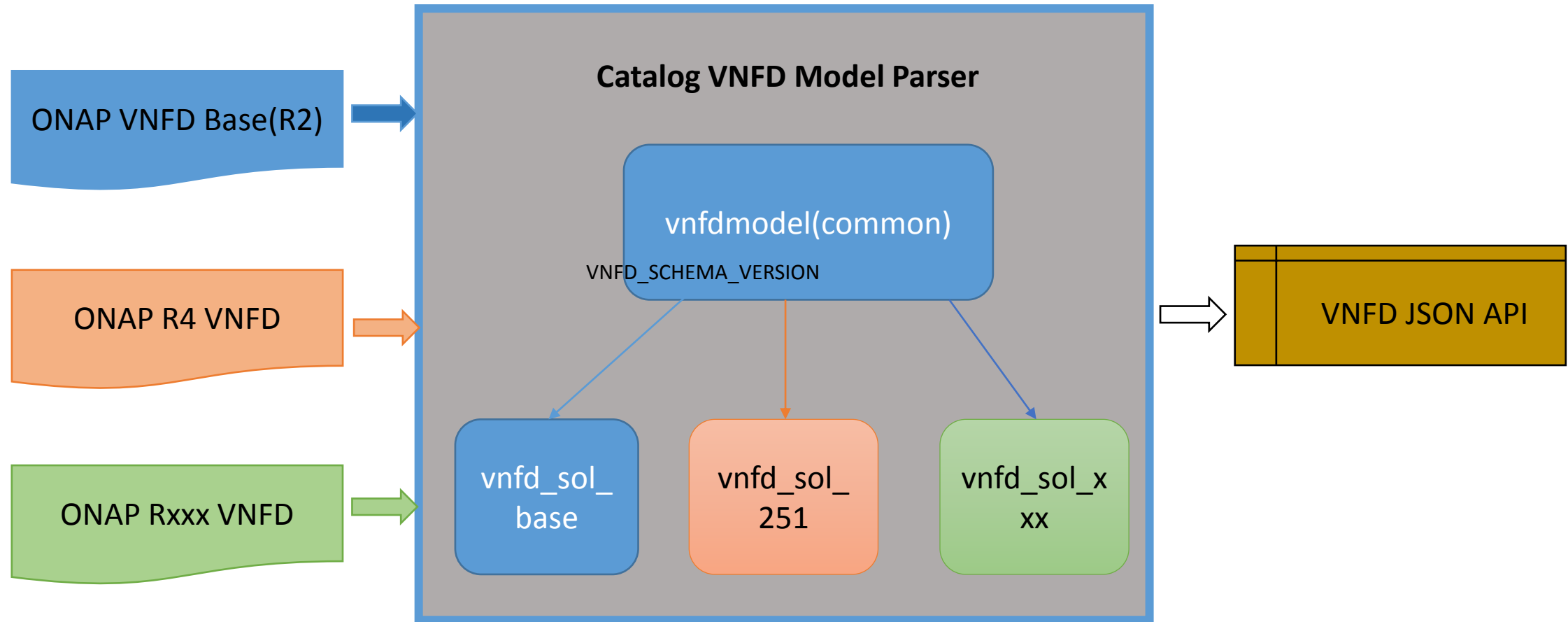
Intel: Haibin Huang

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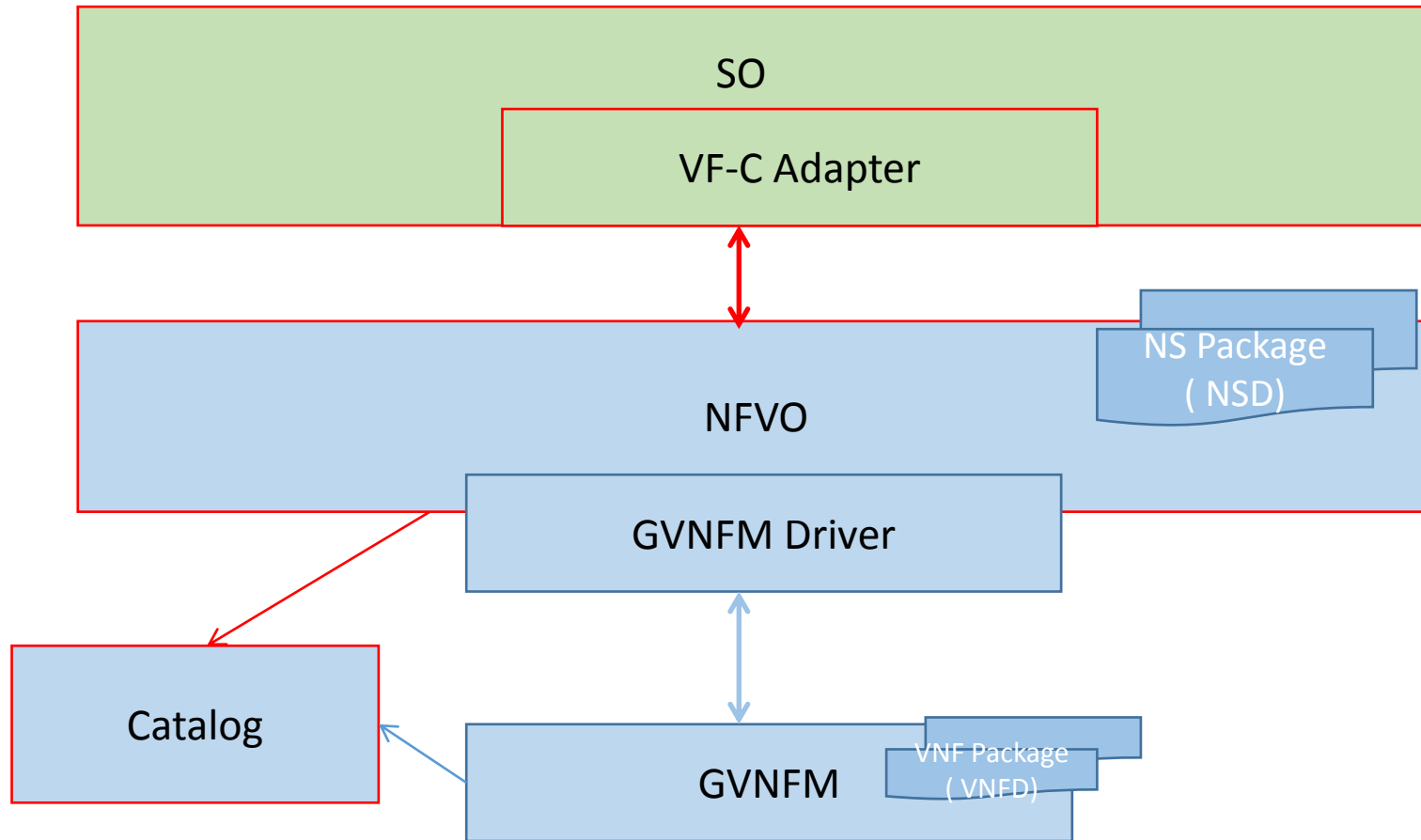
Part1 VF-C Dublin Highlights

Catalog Enhancement—Flexible Mechanism to Support Multi-version VNFD

Catalog provides a flexible mechanism that is compatible with different versions of VNFD



SOL005 Alignment— Reference Implementation of ETSI NFVO



The Interface alignment include :

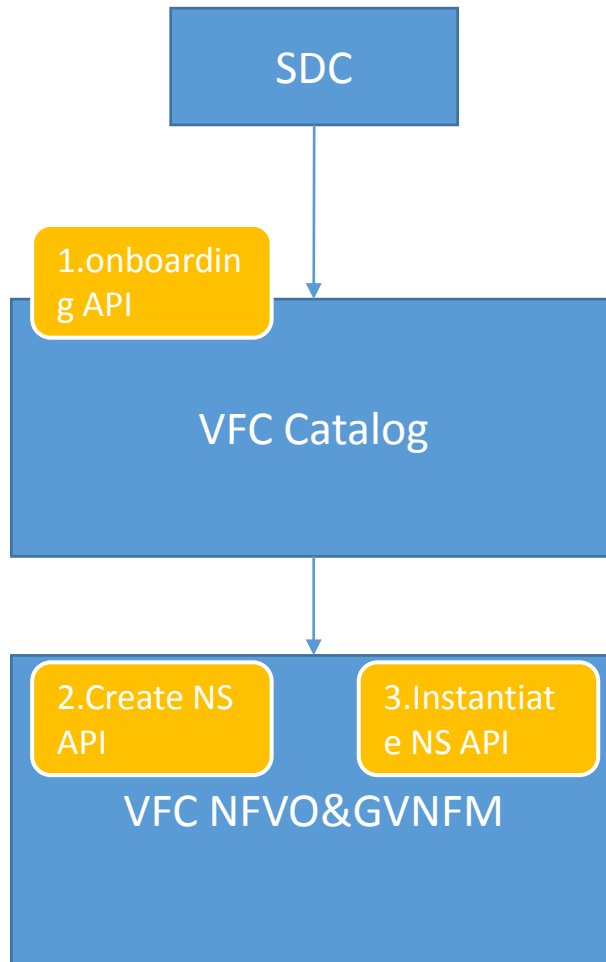
- NFVO support SOL005 API, including Create/Instantiate/Operate/Terminate/Delete/Query NS Instance

NS LCM Operation subscriptions and notification.

- Catalog support SOL005 related API, including package subscription and notification

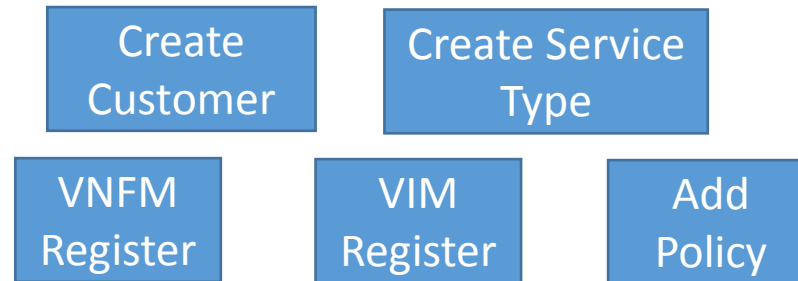
CLI Integration — Provides Automated Testing Capabilities

With SDC

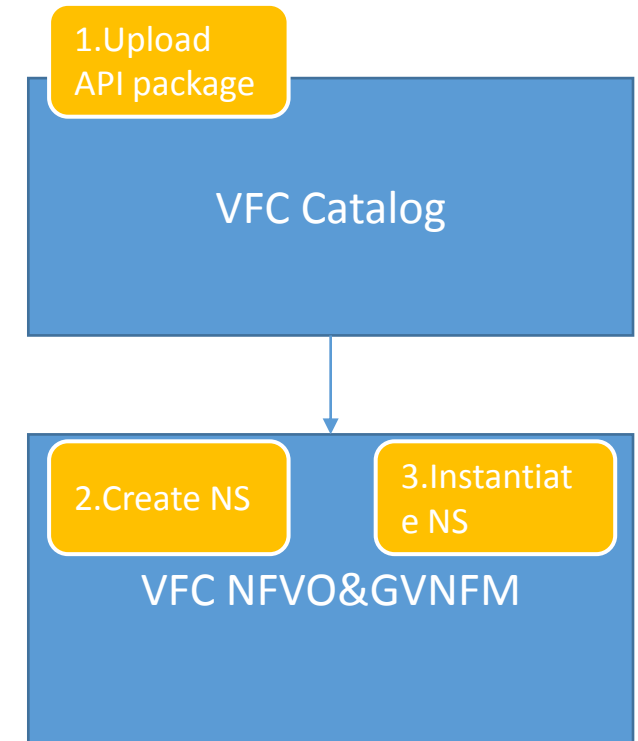


SDC output data model is AID
VFC input data model is SOL001

Artifacts/Deployment/OTHER/
Definitions
TOSCA-Metadata
MainServiceTemplate.mf
MainServiceTemplate.yaml

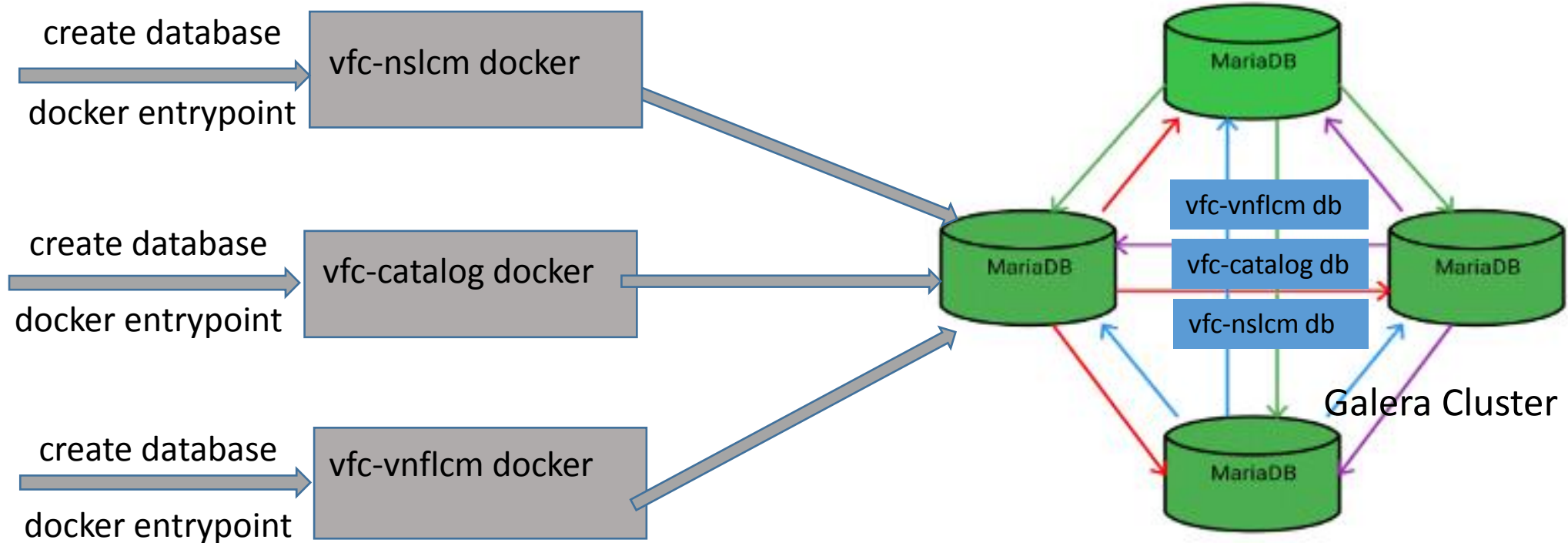


Without SDC



DB Migration — Support HA and Horizontal Scalability

Mysql migrate to the mariadb Galera Cluster
Leverage OOM shared MariaDB Galera Cluster Charts



VF-C Other Work in Dublin

➤ Functional Enhancement

| Function | Description |
|------------------------------|---|
| Upgrade Multicloud API | Upgrade Multicloud API to support consistent identification of cloud region functional requirement |
| OOF Integration Optimization | Optimize the methodology for VNF(vdu) placement, add the process for placement with selected candidates(VIM) |

➤ Maturity Enhancement

| Function | Description |
|------------------------------------|---|
| Configuration inject automatically | All the configuration will inject automatically through OOM env |
| Data Persistent | Add data persistent storage to avoid data loss due to pod restart |
| Image Optimization | All docker images of python components have optimized |

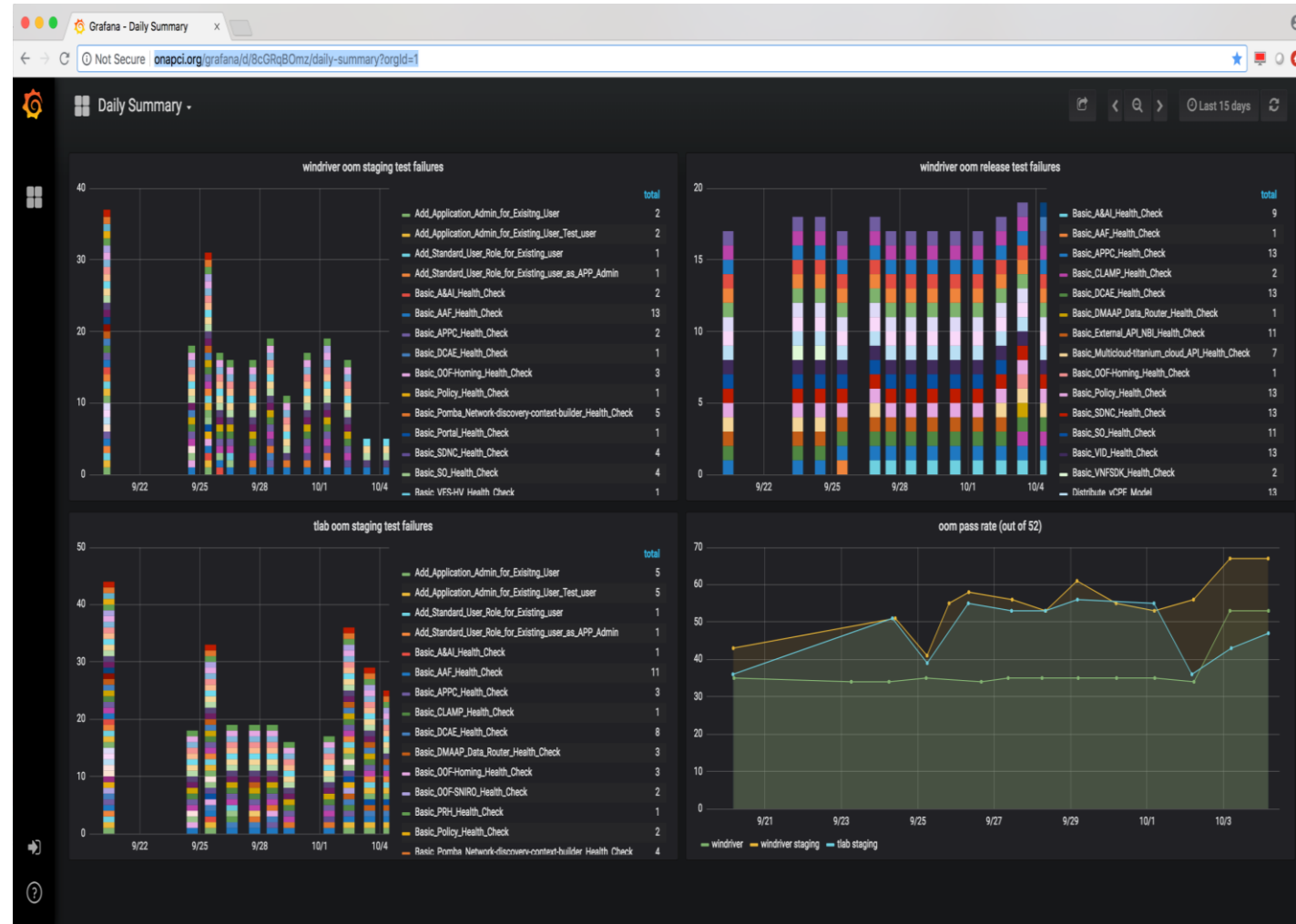
Part2 VF-C E Planning

Tosca-based VNF Deployment Automation

Current CI/CD with Daily Summary include functional tests + health checks, the functional tests such as:

- ONAP CI.Vnf-Orchestration.Instantiate Virtual DNS
- ONAP CI.Vnf-Orchestration.Instantiate Virtual FirewallCL

All current functional tests only cover heat-based VNF deployment, will plan to add toasca-based VNF deployment functional tests. And want to leverage the CLI existing capabilities.



Tosca-based VNF Deployment Automation

Plan1: Add destroy operation which can automatically delete VNF and NS automation

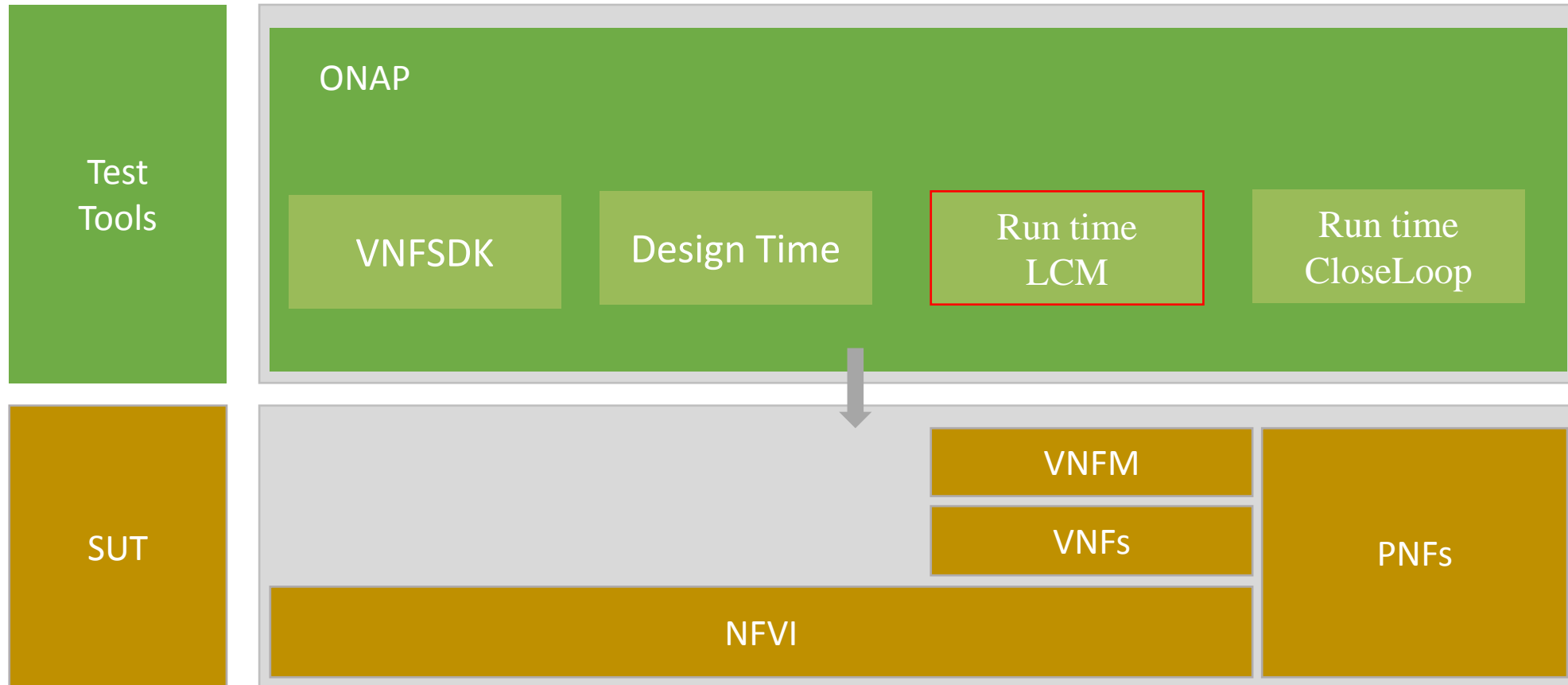
Plan2: Integrate python script to robot. Robot can call it and automatically test vCPE with TOSCA.

Plan3: Integrate python script to Jenkins. We can automatically test it when someone submit a patch.

Plan4: SDC provide external API for design VNF and NS.

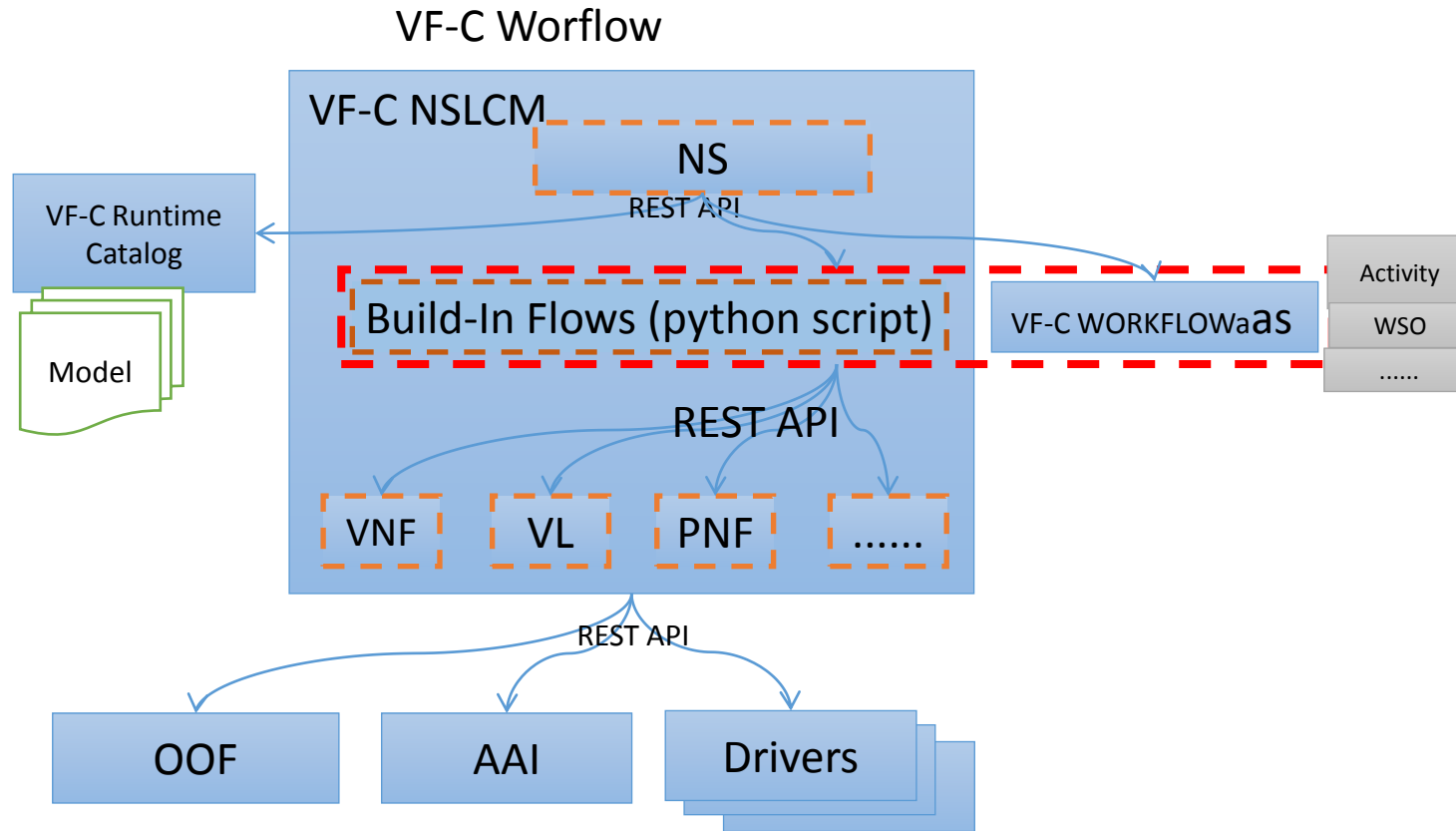
OVP Tosca VNF Validation Support

VF-C will participate in OVP tosca based VNF Validation testing using the existing Interfaces and capabilities



Part3 VF-C F Planning

WorkFlow Optimization



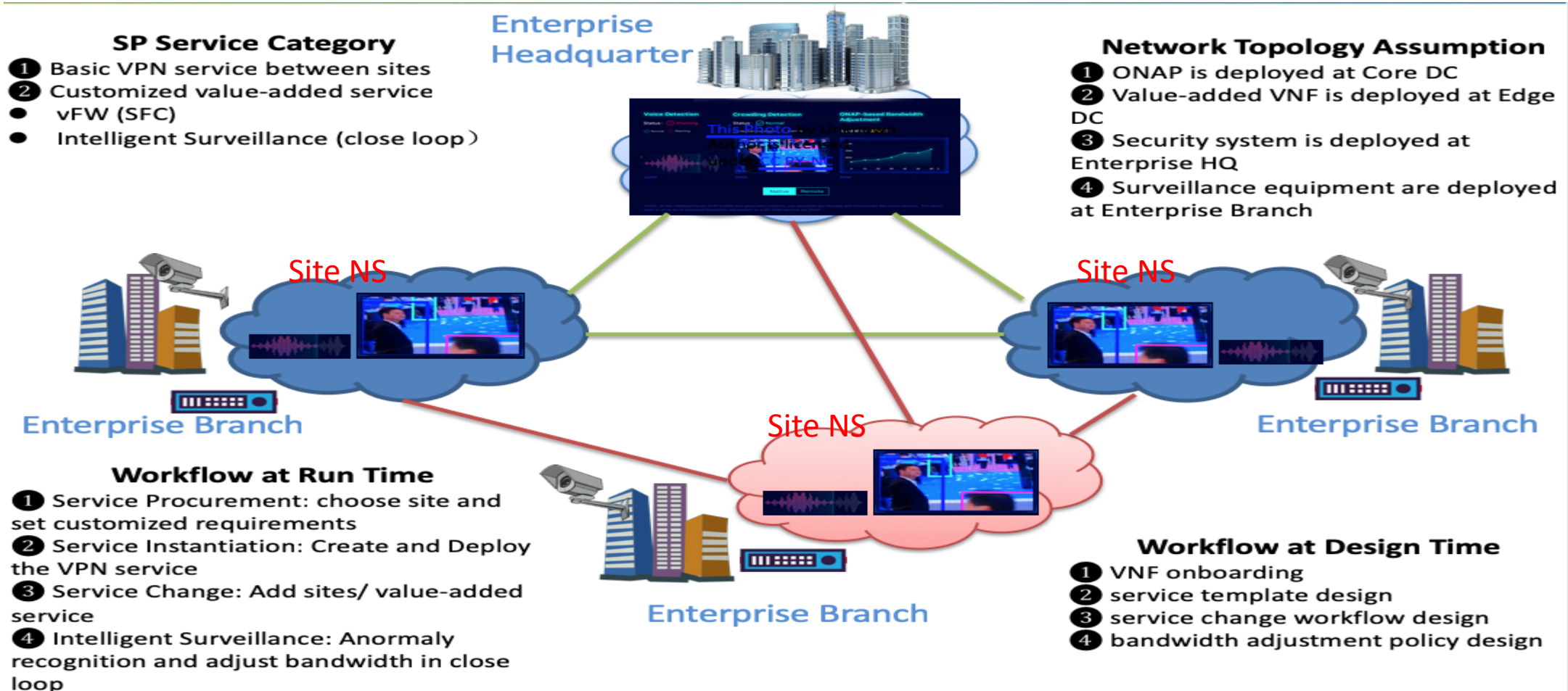
VF-C workflow has different options, the build-in workflow has higher execution efficiency and VF-C also provides workflow microservice that can integrate with different workflow engines. This design allows VF-C to be decoupled from specific workflow engines and more flexible.

The built-in workflow is executed by default in current VF-C code.

In F release, we would like to perform different workflow branches through flexible configuration. And increase the capabilities that workflow microservices can provide, such as monitoring ...

CCVPN Edge NS Deployment

In CCVPN use case, assumes the SP provides two types of service: Basic VPN service and Value-Added services. The AI applications for collecting both the voice/video monitoring and anomaly recognition, are deployed in a distributed fashion to the edge DCs that are near the specific site(s) under surveillance.



Requirements Collection

| Collected Requirements | |
|--------------------------------|---|
| Open Catalog as common service | Open Catalog capabilities , ONAP projects can leverage its capabilities to manage csar package |
| Dmaap python library | There is no python library for dmaap, if can provide a python library , the csar package can distribute to VF-C from SDC directly not need to through UUI |
| LCM rollback | Once NS/VNF LCM is abnormal, should Support NS and VNF rollback |
| K8S Integration | Plan to support VNF as containers according to integrate with K8S |
| VNFFG/NFP | SFC supporting |



Thanks