ONAP for the newbies

- First feedbacks from
  - Orange internal
  - Eco-system local actors
  - Hackathon organization discussion

- Various newbies
  - Developers who develop/improve components
  - VNF Vendor who need to on-board VNF
  - Service designers who need to compose complex Services from Resources
  - Testers/Approvers who need to test and certify Resources and Services
  - Administrators who create user accounts, assign roles, and install applications within ONAP
  - System and network administrators who need to instantiate, manage, and monitor Resources, Services, and Products on an existing ONAP system
  - Research teams

How they start ?

- Test: where to find the documentation
  - First reflex: use search engine

- Get the installation guide:
  - **ONAP Installation in Vanilla OpenStack - Developer Wiki - Confluence**
  - **Setting Up ONAP - Developer Wiki – Confluence**
  - **Setting Up Full ONAP — master branch …**

Documentation for users

- **Videos**
  - [Youtube](#)

- **White papers**
  - [Architecture Overview](#)
  - [vCPE Use Case Whitepaper](#)
  - [VoLTE Use Case Whitepaper](#)

- **Readthedoc** **http://onap.readthedocs.io/en/latest/guides/onap-user/index.html**
  - [VNF Provider Guidelines and Requirements](#)
  - [Service Designer](#)
  - [Service Administrator](#)
  - [User Portal](#)
  - **Mainly written in silo mode,**

- **Wiki very rich, but not cleaned**
  - **[Using ONAP](#)**
    - [ONAP Portal](#)
    - [Design](#)
    - [Deploy](#)
    - [Operate](#)
    - [Application overviews](#)

  - **[Running the ONAP Demos](#)**

1. ONAP Architecture Overview (Amsterdam release) — ONAP Project — 4:18
2. ONAP - Portal intro — ONAP Project — 3:27
3. ONAP Service Design intro — ONAP Project — 3:33
4. Service Orchestrator intro — ONAP Project — 6:15
5. ONAP A&AI overview — ONAP Project — 5:41
6. Virtual Infrastructure Deployment in ONAP — ONAP Project — 2:35
7. ONAP External System Registry intro — ONAP Project — 3:20

How to play with ONAP ?

- Full official installation requires huge footprint
  - VM based installation using Heat template
  -

- Optimized installation using ONAP Operations Manager
  - Docker based installation using Kubernetes

- Possible to set up some components

- Not (yet) available ONAP as a Service solution

Use-case tutorial

- Step-by-step with no detailed explanation

- Confusion on the various roles for design phase

- Robot usage to perform some tasks
  - Requires to connect to the VM

- VIM configuration
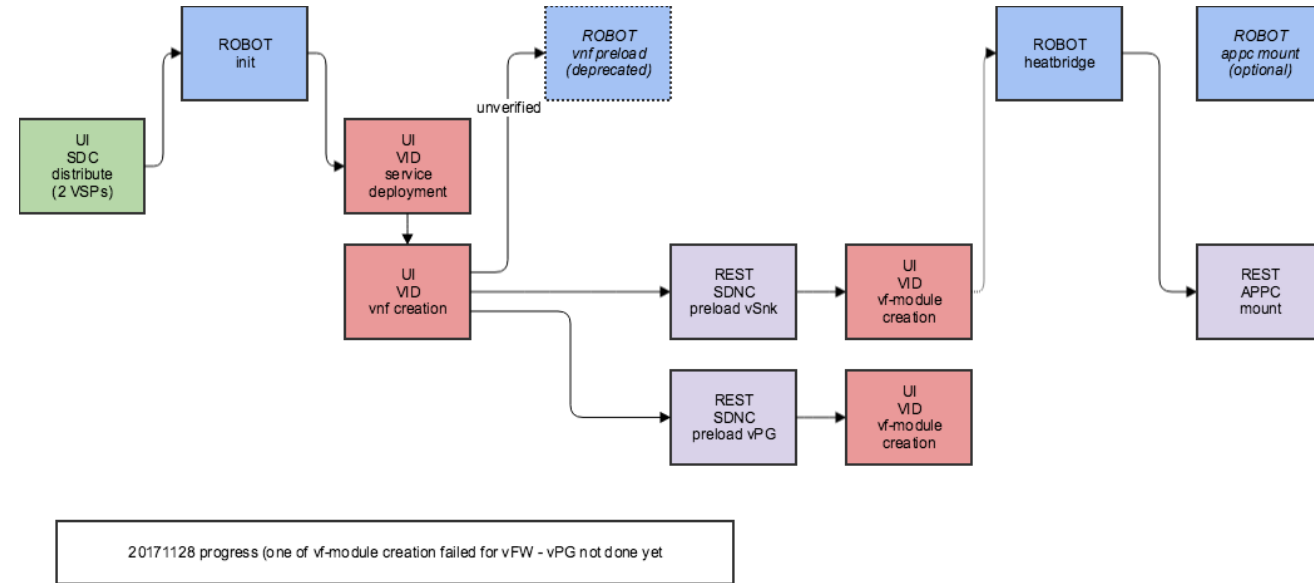
Design phase

- Globally UI quite intuitive

- A lot of pre-defined objects with no documentation

- No way to clean the "tested" models

- No "high-level" description for
    - Directed Graphs in SDNC, APPC
    - BPMN workflow

General comments on Amsterdam

- Various use cases to illustrate ONAP capabilities

- Many code / rule for the use-case implementation
  - Not always documented
  - May require some reverse-engineering

- Default configuration
  - Not always documented

- Modeling concepts to be aligned
  - Naming may vary (eg Virtual Functions)

The guidelines for modeling/workflows

- ## Directed Graph
  - Tutorial ok

- ## SO workflow:
  - Camunda Modeler

- ## Policy rules
  - Ok for standalone

- ## Closed loop
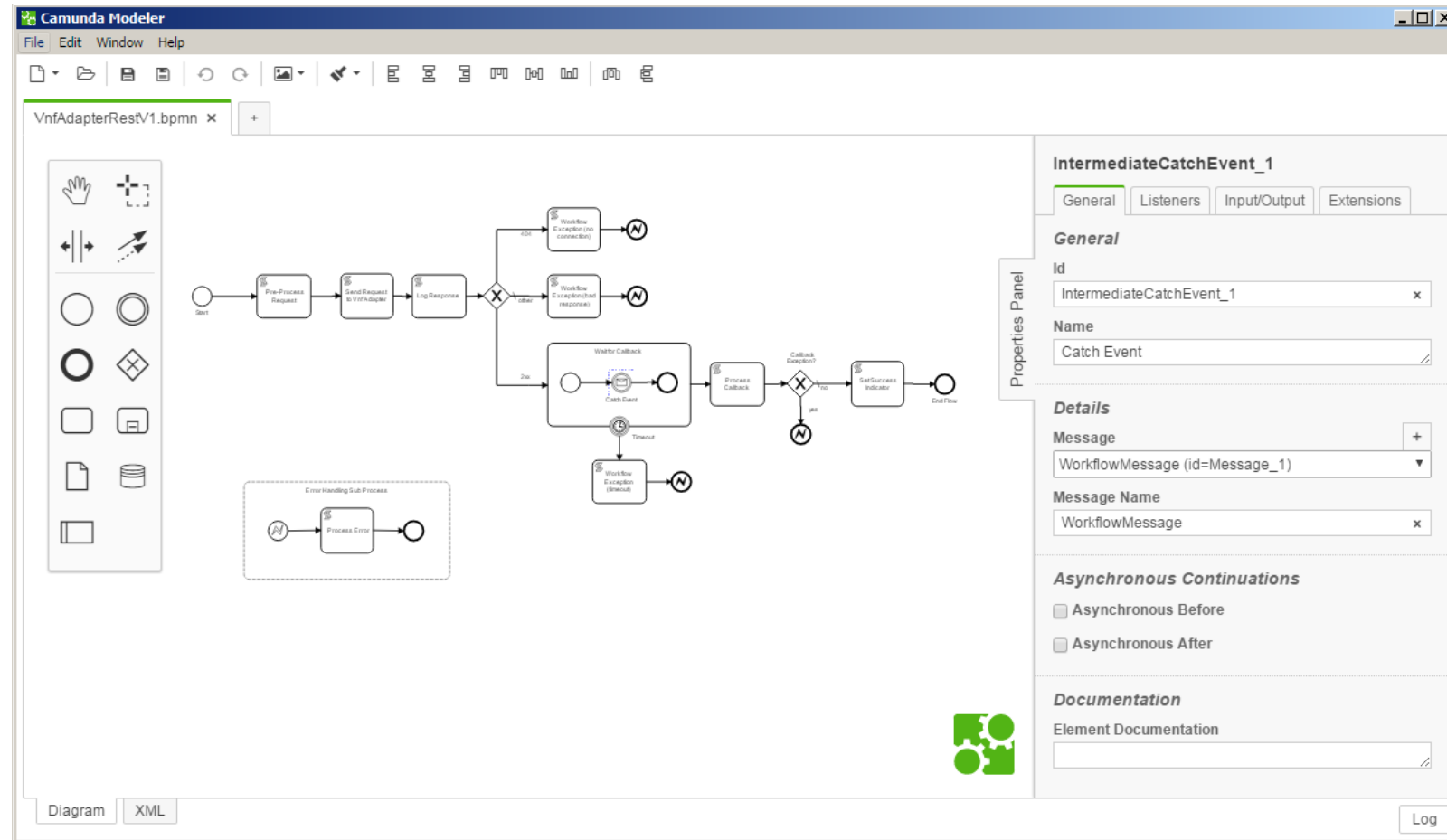
Documentation project working: **ONAP for Newcomers**

- **"Welcome to ONAP" Flows and Text**
  - Convert existing component level diagrams to high level flows and text. Include high level Architecture, as well as as typical use cases such as: VNF Onboarding, Fault management, and Capacity management.

- **ONAP "Light" for SEs, Architects**
  - ONAP "Light" version (non-coding) targeted for SEs, architects on how to use the platform. Install ONAP on their local cloud environmentμ
  - Run Health Check. Run three Use cases: vFW, vDNS, vCPE
  - Documentation - Put each step into context, both what and why

- **"Sandbox"**
  - "Sandbox" for developers to actually interact with the code. Install on laptops, pre-configured environment
  - Allow for coding, build and compile
  - Default IDEs
  - Does not impact live Master Branch
  - Available for hackathon
  - Documentation; Need tutorial materials (videos, text, flows?)

https://wiki.onap.org/display/DW/Beijing+%28Release+2%29+Doc+Work+Plan

Proposals

- Use-case documentation
  - High-Level call flows
  - Detailed call flows
  - Harmonized documentation for use-cases

- Use-case tutorial
  - Do not mix UI & scripts => develop some UI for the test
  - Simplify with predefined License Model
  - Create specific user to enable all roles

Call flow using plantUML
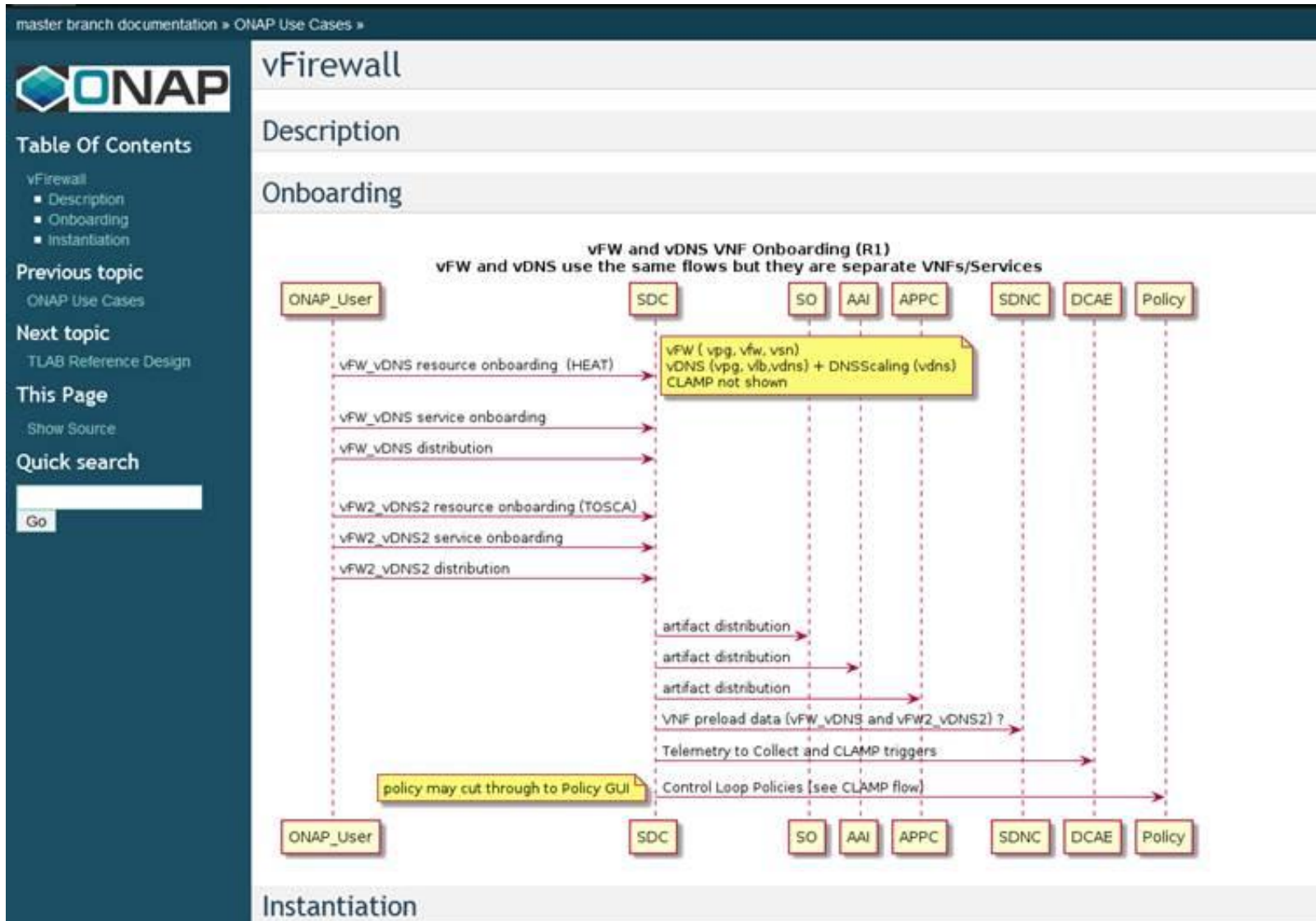
High-level animated call flow ?

Portal, Use Case-UI   **Command Line Interface**

DESIGN-TIME

VNF SDK & Requirements

Resource Onboarding

Service & Product Design

Policy Creation & Validation

Closed Loop Design

VNF — Storage
VNF — Network — Service
VNF

RUN-TIME

Dashboard

Rule
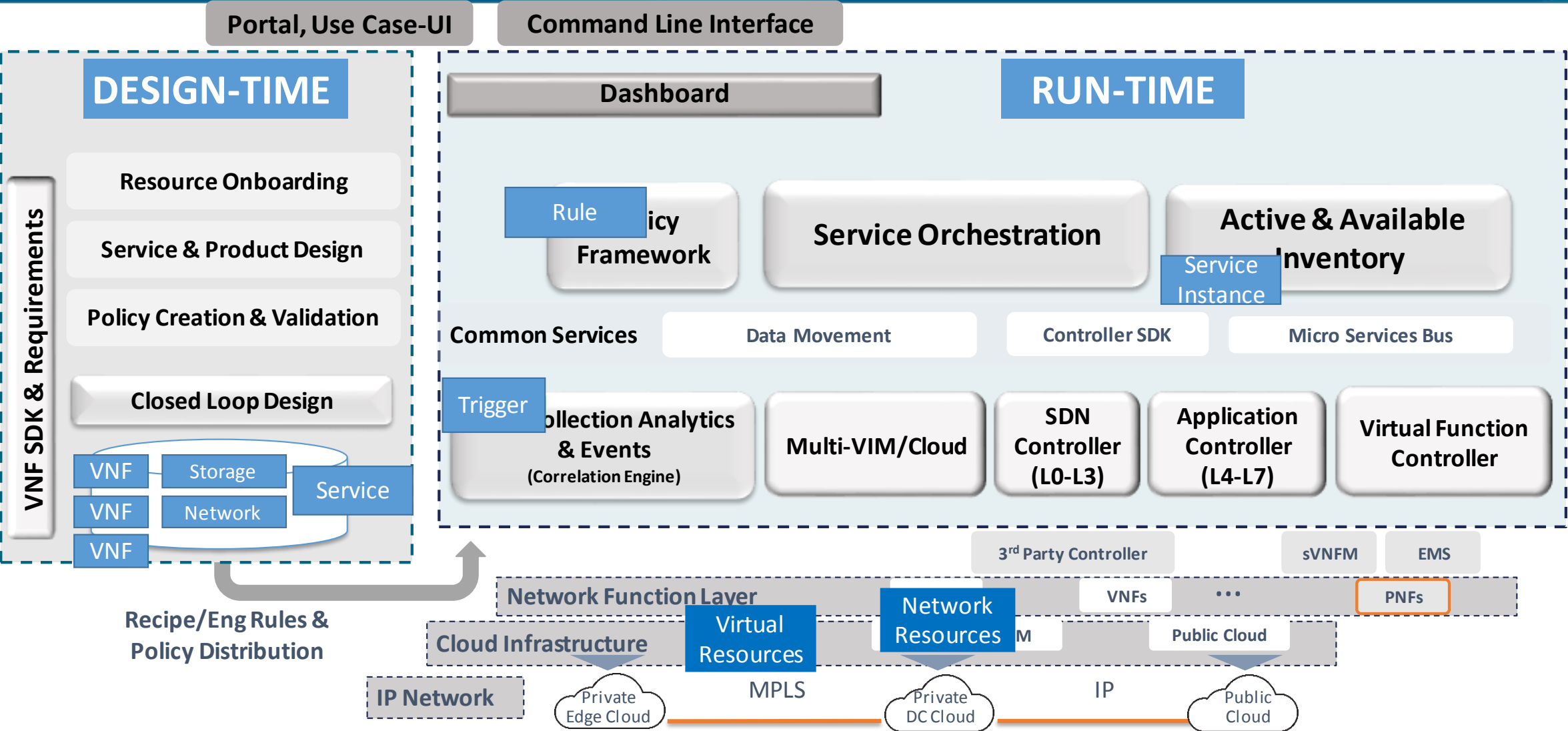Policy Framework

Service Orchestration

Active & Available Inventory
Service Instance

Common Services — Data Movement — Controller SDK — Micro Services Bus

Trigger
Collection Analytics & Events (Correlation Engine)

Multi-VIM/Cloud

SDN Controller (L0-L3)

Application Controller (L4-L7)

Virtual Function Controller

3rd Party Controller   sVNFM   EMS

Network Function Layer   VNFs   ...   PNFs

Recipe/Eng Rules & Policy Distribution

Cloud Infrastructure   Virtual Resources   Network Resources   M   Public Cloud

IP Network   Private Edge Cloud   MPLS   Private DC Cloud   IP   Public Cloud

A proposed learning curve for connectivy services

SDNC

*NetConf/Yang
Directed Graph*

*Require some
physical or
virtual network
functions
offering
NetConf/Yang
interface*

Connectivity

SDNC

AAI

*REST API
ONAP Modeling*

Inventory upgrade

SDNC

AAI

SO

BPMN

SDC

Modeling

SDNC

AAI

SO

SDC

DCAE   **Policy**

CLAMP

Closed-loop
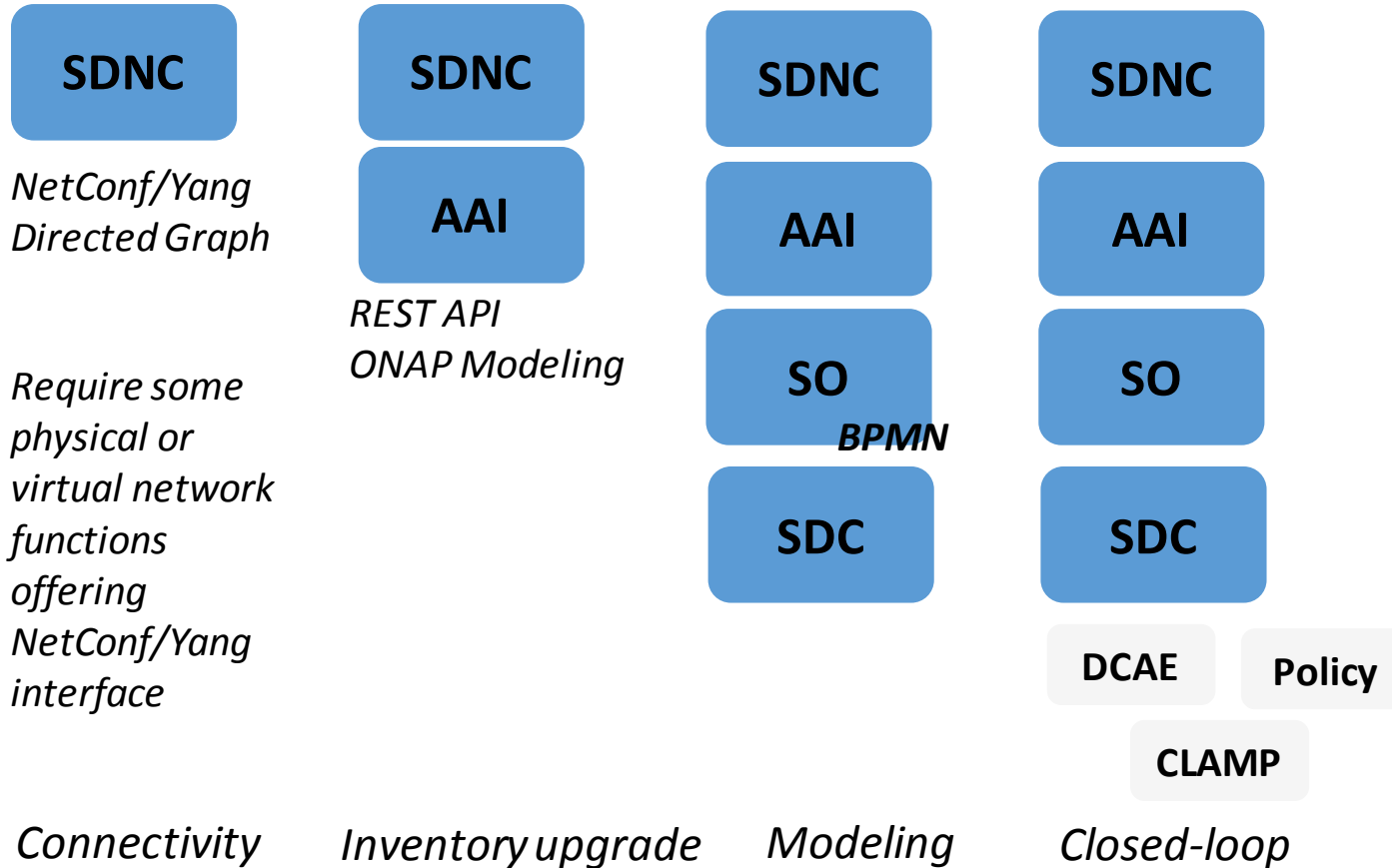
Need community help to reach S3P

- S3P: Scale, Stability, Security and Performance

- Documentation is key to reach ONAP usability

- More documentation required for every component
  - Default configuration
  - More example

- More focus on end to end documentation
  - Call flows
  - Explanation

- Training/University efforts should be prioritized

MERCI ;-)