Anuket – Telecom Reference Infrastructure for SDN Functions

Project Update

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THE LINUX FOUNDATION

GSMA
"Empower the global communications community by creating and developing reference cloud infrastructure models, architectures, conformance programs and tools to deliver network services faster, more reliably, and securely."
Anuket | Problem Statement

Many combinations = silo deployments

Cloud stack A
Cloud stack B
Cloud stack C

NF Vendor A
NF Vendor B
NF Vendor C

Cloud native VNFs
Infrastructure Abstraction
(Common Shared Infrastructure)

✓ Reduced TCO
✓ Consistent Operating Model
✓ Better Utilized Infrastructure
✓ Scalable
✓ Easy to automate
✓ Unified Verification and Testing
Anuket | Organization Proposal

LFN Governance
- GB
- (MAC) SPC TAC

LFN Operations
- Staff Support
- IT Infrastructure
- Tooling

LFN Industry Programs
- CVC

Supplier Members
Operator Members

Work Intake
- Requirements Funnel
- Resource prioritization
- Backlog management

Anuket TSC
Technology Oversight
Business Coordination (committee...)

Work Output
- Release management
- Schedules
- Process

Anuket Projects and Workstreams

Specification Projects
1. Ref. Model
2. Ref. Arch. O
3. Ref Arch. K
4. Another ref. architecture

Implementation Projects
1. Ref. Implementation O-1
2. Ref. Implementation O-n
3. Ref Implementation K-1
4. Ref Implementation K-n

Conformance Projects
1. Ref. Conformance O
2. Ref Conformance K

Requirements Traceability

Releases
1. Docs
   - IM spec
   - RA specs
   - RI config spec
   - RI cookbooks
   - RC test spec
   - RC cookbooks
   - Proj user guides
   - ...
2. Code
   - Install scripts
   - Test code
   - Project code
   - Tooling code
   - ...
3. ...

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Anuket | Project Scope

- **Reference Model (RM)**
- **Reference Architecture(s) (RA)**
- **Reference Implementation (RI)**
- **VNF Conformance**
- **NFVI Conformance**

Instances Catalogue:
- Instance Type
- Compute flavour

Vendor Implementation:
- Vendor A
- Vendor B

Reference Conformance (RC):
- OPNFV Implementation

NFVI Vendor:
- Vendor Implementation

VNF Vendor:
- Vendor Implementation
Anuket | Workstreams (WS)

Reference Model (RM)
- Requirements
- Guidelines

Reference Architecture (RA)
- RA 1
  - OpenStack Based
  - Specification
  - Guidelines
  - Gap analysis
  - Innovation

Reference Implementation (RI)
- RI 1
  - Install & Lab Requirements
  - Playbook (Cookbook)
  - Gap analysis
  - Development Planning

Reference Certification (RC)
- RC 1
  - Framework & Testcases
  - Requirements
  - Playbook (Cookbook)
  - Gap analysis
  - Development Planning

- RI 2
  - Install & Lab Requirements
  - Playbook (Cookbook)
  - Gap analysis
  - Development Planning

- RC 2
  - Framework & Testcases
  - Requirements
  - Playbook (Cookbook)
  - Gap analysis
  - Development Planning

Under Planning...

Other Conformance Programs
Non-Juniper
Anuket | Release Cadence

› Baraque was released June 2020

› Reference Model Baraque moved to GSMA October 2020

› Last CNTT release, Elbrus, scheduled for January 2021

› Future releases will be under Anuket
How to Contribute

GitHub

Reference Model (RM)
https://github.com/cntt-n/CNTT/tree/master/doc/ref_model

Reference Architecture (RA)
https://github.com/cntt-n/CNTT/tree/master/doc/ref_arch

Reference Implementation (RI)
https://github.com/cntt-n/CNTT/tree/master/doc/ref_impl

Reference Certification (RC)
https://github.com/cntt-n/CNTT/tree/master/doc/ref_cert
Thank you 😊