

# VNF SDK Beijing Release Planning (M1)

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## Overview

Project Name	VNFSDK
Target Release Name	Beijing
Project Lifecycle State	Incubation
Participating Company	Huawei, Intel, AT&T, Gigaspaces, China Mobile, Wind River, Orange, Amdocs, Nokia, ZTE, IBM, VMWare, Cisco, ARM

## Scope

### What is this release trying to address?

VNF SDK's mission is to simplify the process of developing and onboarding VNFs and expanding ONAP's VNF ecosystem. **For Service Providers, VNFSDK will reduce the time and level of testing required to identify, select, and onboard a VNF. For vendors, VNFSDK will reduce integration efforts by defining a standard for VNF packaging with widespread operator acceptance. VNFSDK can be used in a validation/conformance testing program in the future.**

The Beijing release will enhance existing functionality, introduce security, integrate with ONAP use-case flow and progress towards being carrier grade with high quality.

1. Better integration with SDC for automatic onboarding
2. Update pkgtools/marketplace to support VNF packaging model. Update VNF template to align with VNFD information model.
  - a. add pkgtools to pypi
3. Integrate VVP (ICE) tools to allow us to validate VNF packaging (not acceptance testing)
4. Improve code quality & code coverage
5. Improve security (S3P) ([https, SOL004](https://sol004.com), possibly certificate validation)
6. **Align with VNF Requirements**
7. **Experimental integration with OPNFV Dovetail test framework**
8. **Begin work on functional testing (ONAP-lite test platform, test framework, specific tests)**

## Use Cases

- 1. Integrate VVP (ICE) tools
- 2. Standalone validation tool
- 3. **HPA**

## Minimum Viable Product

Describe the MVP for this release.

- 1. **Support the VNF packaging model & VNF Requirements defined in Amsterdam**
- 2. **Enhance integration with SDC**
- 3. **Integrate ICE tools**
- 4. **50% code coverage**
- 5. **HPA**

## Functionalities

List the functionalities that this release is committing to deliver by providing a link to JIRA Epics and Stories. In the JIRA Priority field, specify the priority (either High, Medium, Low). The priority will be used in case de-scoping is required. Don't assign High priority to all functionalities.
































## Epics

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
VNFSD K-154	Update VES agent		Jan 15, 2018	Aug 08, 2018		Unassigned	None	=	CLOSED	Done
VNFSD K-151	Integrate VNFSDK with OPNFV Dovetail		Jan 15, 2018	Aug 08, 2018		Unassigned	None	=	CLOSED	Done
VNFSD K-150	Update functional tests for ONAP		Jan 15, 2018	Aug 08, 2018		Unassigned	None	=	CLOSED	Done
VNFSD K-137	Improve security (https, SOL004, certificate validation)		Dec 17, 2017	Aug 08, 2018		Unassigned	None	=	CLOSED	Done
VNFSD K-136	Improve code quality & code coverage		Dec 17, 2017	Aug 08, 2018		Unassigned	None	=	CLOSED	Done
VNFSD K-134	improve alignment with SDC		Dec 17, 2017	Aug 08, 2018		Unassigned	None	=	CLOSED	Done
VNFSD K-26	Align VNF SDK tools (from OPEN-O) with ICE tools (from ECOMP)		Jun 26, 2017	Aug 08, 2018		Unassigned	None	=	CLOSED	Done

7 issues

## Stories

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
VNFSD K-831	Update VNFSDK Istanbul Maintenance Release notes with info on transitive dependency for log4j vulnerabilities		Mar 09, 2022	Mar 10, 2022		Unassigned	None	^	CLOSED	Duplicate
VNFSD K-830	Update VNFSDK Istanbul Maintenance Release notes with info on transitive dependency for log4j vulnerabilities		Mar 09, 2022	Mar 21, 2022		Unassigned	None	^	CLOSED	Done

VNFSD K-829	Update VNFSDK Istanbul Maintenance Release notes with info on transitive dependency for log4j vulnerabilities		Mar 09, 2022	Mar 09, 2022	Unassigned	None		CLOSED	Done
VNFSD K-792	add dist mode		Jul 21, 2021	Aug 02, 2021	Unassigned	None		CLOSED	Done
VNFSD K-731	Adapt VNFSDK "product-name" behavior		Dec 31, 2020	Jan 28, 2021	Unassigned	None		CLOSED	Done
VNFSD K-721	Add oclip command to trigger pm_dictionary validation		Dec 21, 2020	Apr 15, 2021	Unassigned	None		CLOSED	Done
VNFSD K-715	Update PM_Dictionary validator to support CLI operation		Dec 11, 2020	Dec 31, 2020	Unassigned	None		CLOSED	Done
VNFSD K-696	[Validation] Generate rst table with supported rules		Oct 02, 2020	Jan 07, 2021	Unassigned	None		CLOSED	Done
VNFSD K-619	REQ-349: Each ONAP project shall define code coverage improvements and achieve at least 55% code coverage		Jul 16, 2020	Sep 28, 2020	Unassigned	None		CLOSED	Done
VNFSD K-618	REQ-351: ONAP must complete update of the java language (from v8 -> v11)		Jul 16, 2020	Sep 28, 2020	Unassigned	None		CLOSED	Done
VNFSD K-617	REQ-361: Continue hardcoded passwords removal		Jul 16, 2020	Oct 29, 2020	Unassigned	None		CLOSED	Done
VNFSD K-616	REQ-380: ONAP container repository (nexus) must not contain upstream docker images		Jul 16, 2020	Nov 04, 2020	Unassigned	None		CLOSED	Done
VNFSD K-615	Discover test cases and auto register for ETSI plugtest		Jul 06, 2020	Nov 04, 2020	Unassigned	None		CLOSED	Done
VNFSD K-614	ETSI Plugtest integration for NFV testing		Jul 06, 2020	Dec 28, 2020	Unassigned	None		CLOSED	Done
VNFSD K-613	Scenario active management		Jul 06, 2020	Jan 22, 2021	Unassigned	None		CLOSED	Done
VNFSD K-611	CNTP: Integrate VTP in SO for Network service testing		Jul 06, 2020	Sep 19, 2022	Unassigned	None		OPEN	Unresolved
VNFSD K-597	PNF PreOnboarding in R7 - VNFSDK Enhancements		Jun 11, 2020	Oct 30, 2020	Unassigned	None		CLOSED	Done
VNFSD K-596	Package security SOL004 Option 1 - Package security SOL004 Option 1 - add warnings to OCLIP json response		Jun 03, 2020	Oct 06, 2020	Unassigned	None		CLOSED	Done
VNFSD K-595	Rule R130206 should looks for ETSI-Entry-Certificate definition in Tosca.meta file depend on CMS signature (with or without cert) and Tosca.meta file existence in csar		Jun 03, 2020	Oct 06, 2020	Unassigned	None		CLOSED	Done
VNFSD K-594	PM_Dictionary content validation		Jun 02, 2020	Sep 24, 2020	Unassigned	None		CLOSED	Done

Showing 20 out of 141 issues

Longer term roadmap

Indicate at a high level the longer term roadmap. This is to put things into the big perspective.

- Support functional testing (requires ONAP-lite test framework)
- Support VNF conformance/validation testing
- Integrate with Dovetail test framework
- Support VNF lifecycle tests

## Release Deliverables

Indicate the outcome (Executable, Source Code, Library, API description, Tool, Documentation, Release Note...) of this release.

Deliverable Name	Deliverable Description
Compliance Tool	Executable
Model	UML info model and TOSCA model
Packaging tool	Executable
Reference Repo/Marketplace	Executable
	API : Deliver API for external Project. The API will deliver such as uploading/downloading/Updating/etc functionality
Validation Tools	Executable
Lifecycle Test Framework (future)	Executable/Library
Function Test Framework (future)	Executable/Library
VES Agent	code/libraries that can be included in VNFs

## Sub-Components

List all sub-components part of this release.

Activities related to sub-components must be in sync with the overall release.

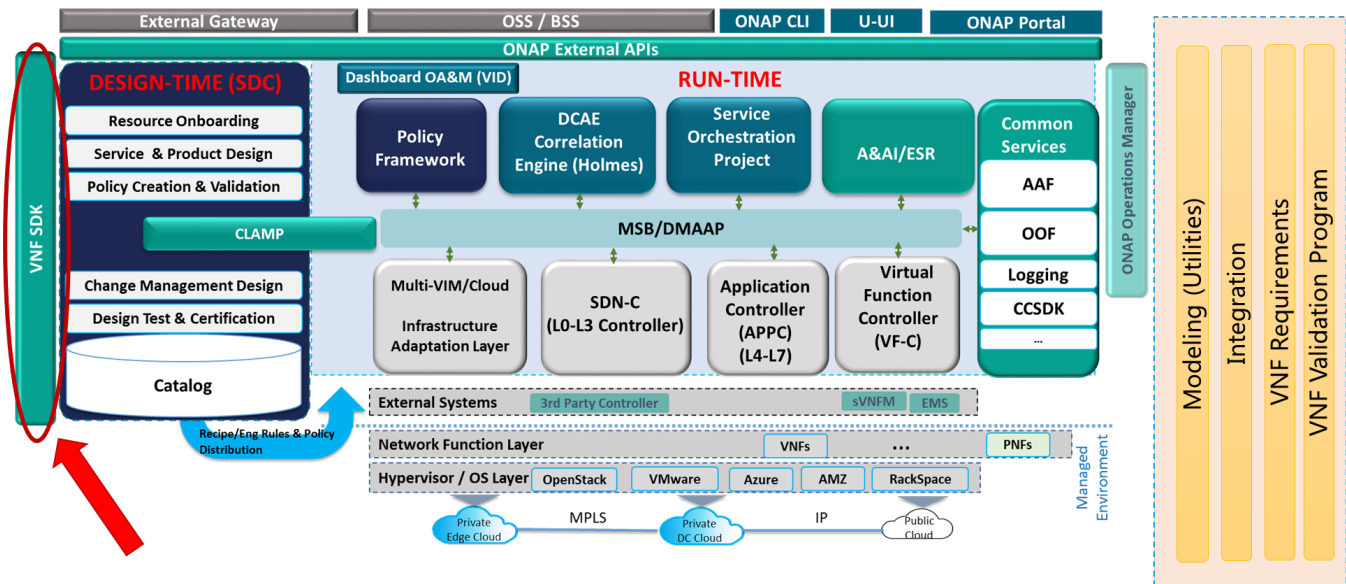
Sub-components are repositories and are consolidated in a single centralized place. Edit the [Release Components name for your project](#) in the centralized page.

## Architecture

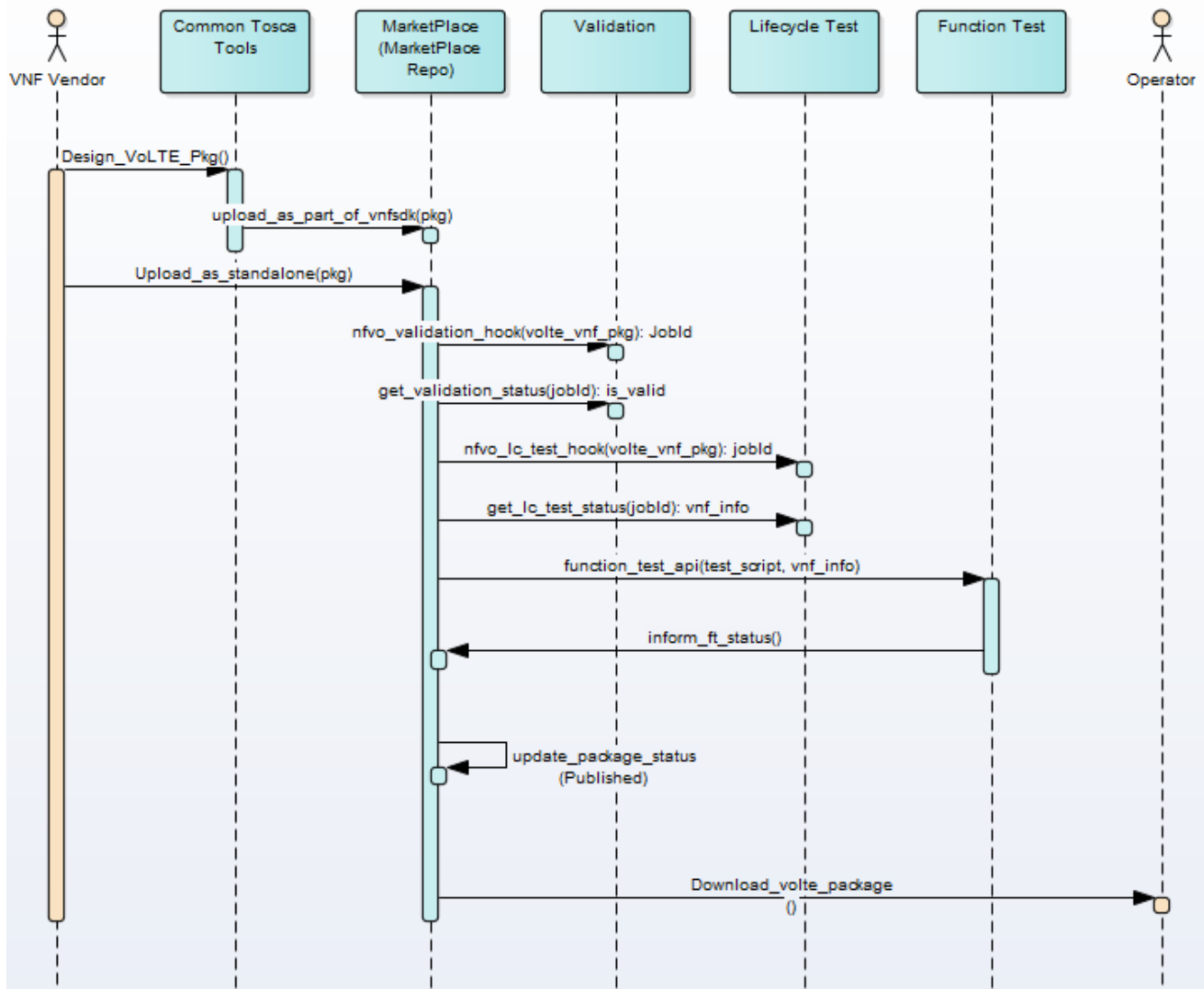
### High level architecture diagram

At that stage within the Release, the team is expected to provide more Architecture details describing how the functional modules are interacting.

Indicate where your project fit within the [ONAP Architecture diagram](#).

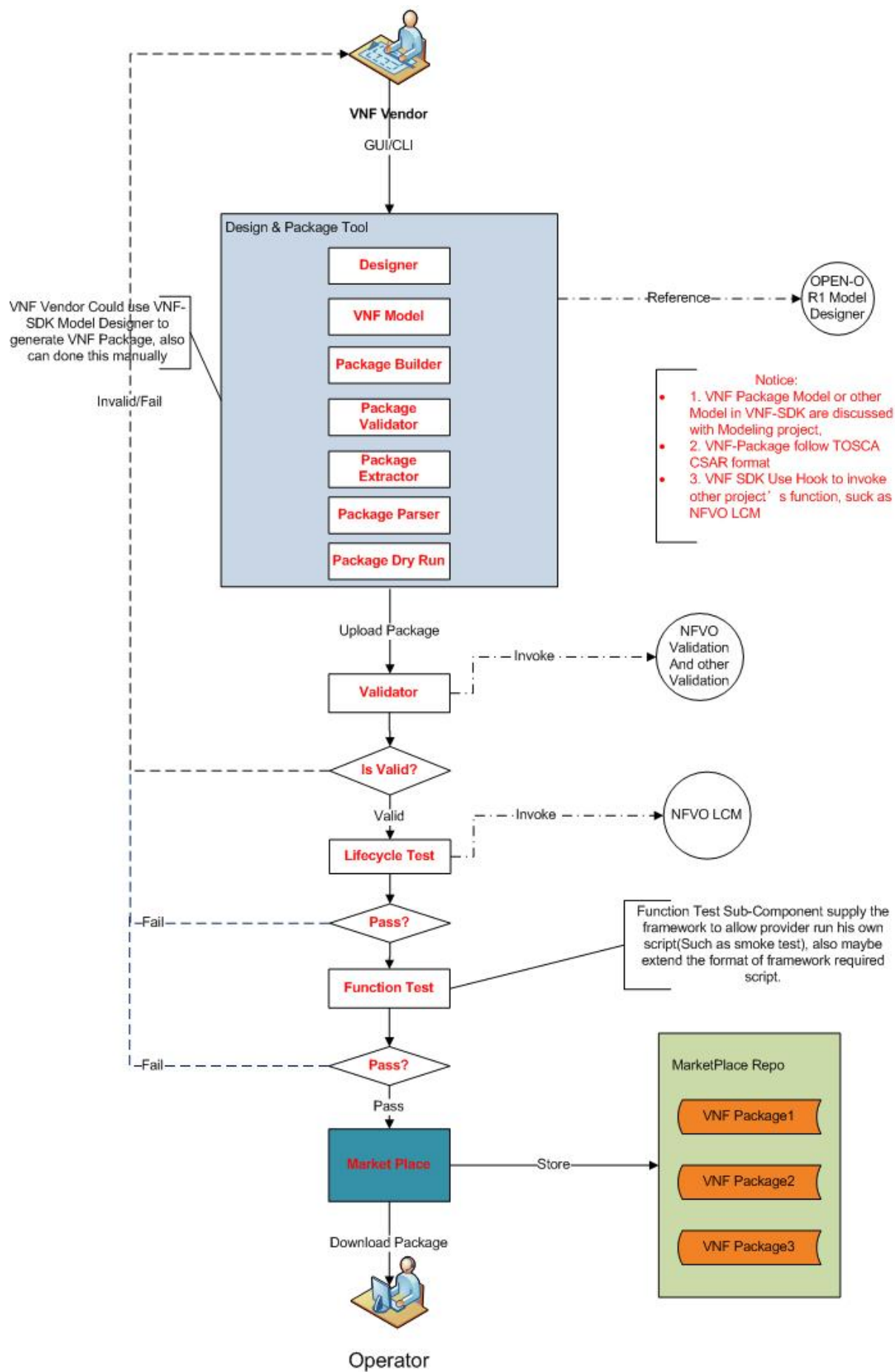


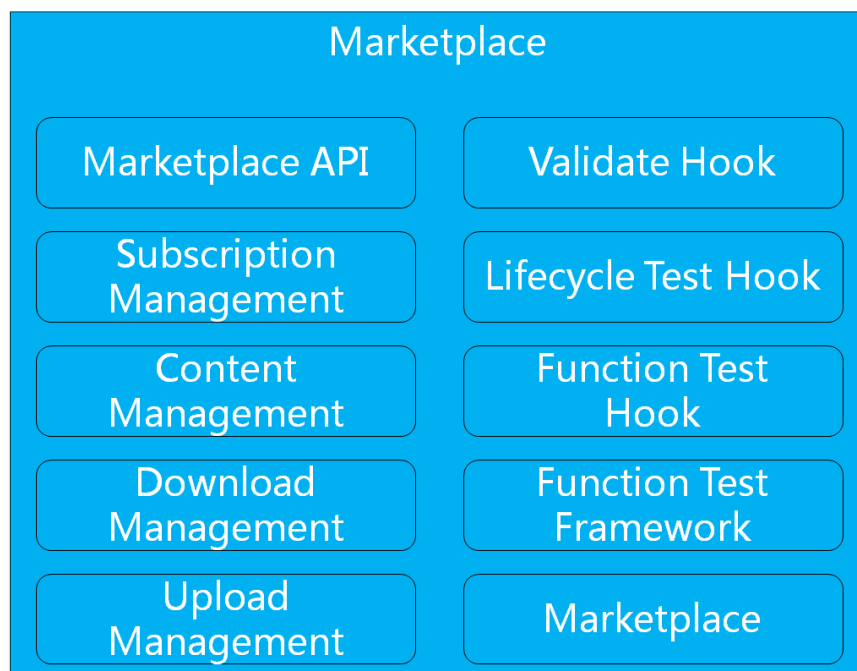
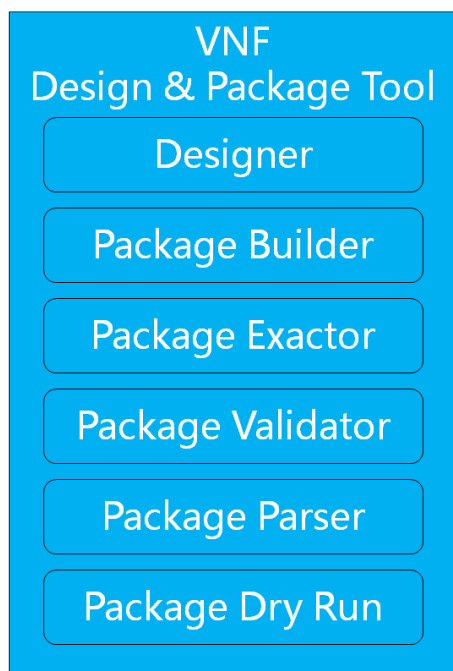
Block and sequence diagrams showing relation within the project as well as relation with external components are expected.



**Notes:**

VNF-SDK Related tools can be delivered in two ways: Standalone, part of OPEN-O





Anyone reading this section should have a good understanding of all the interacting modules.

## • Platform Maturity

Referring to [CII Badging Security Program](#) and [Platform Maturity Requirements](#), fill out the table below by indicating the actual level , the targeted level for the current release and the evidences on how you plan to achieve the targeted level.

Area	Actual Level	Targeted Level for current Release	How, Evidences	Comments
Performance	0	0	design-time component	<ul style="list-style-type: none"> <li>0 -- none</li> <li>1 – baseline performance criteria identified and measured</li> <li>2 &amp; 3 – performance improvement plans created &amp; implemented</li> </ul>
Stability	1	1	design-time component	<ul style="list-style-type: none"> <li>0 – none</li> <li>1 – 72 hours component level soak w/random transactions</li> <li>2 – 72 hours platform level soak w/random transactions</li> <li>3 – 6 months track record of reduced defect rate</li> </ul>
Resiliency	1	1	system run as-needed	<ul style="list-style-type: none"> <li>0 – none</li> <li>1 – manual failure and recovery (&lt; 30 minutes)</li> <li>2 – automated detection and recovery (single site)</li> <li>3 – automated detection and recovery (geo redundancy)</li> </ul>
Security	0	1	increase test coverage to 50%.  Implement https and aspects of SOL-004	<ul style="list-style-type: none"> <li>0 – none</li> <li>1 – CII Passing badge + 50% Test Coverage</li> <li>2 – CII Silver badge; internal communication encrypted; role-based access control and authorization for all calls</li> <li>3 – CII Gold</li> </ul>
Scalability	0	0	not a runtime component. VNF SDK will be run as-needed in constrained environment.	<ul style="list-style-type: none"> <li>0 – no ability to scale</li> <li>1 – single site horizontal scaling</li> <li>2 – geographic scaling</li> <li>3 – scaling across multiple ONAP instances</li> </ul>



Manag eability	1	1		<ul style="list-style-type: none"> <li>1 – single logging system across components; instantiation in &lt; 1 hour</li> <li>2 – ability to upgrade a single component; tracing across components; externalized configuration management</li> </ul>
Usability	1	1	onap.readthedocs.io	<ul style="list-style-type: none"> <li>1 – user guide; deployment documentation; API documentation</li> <li>2 – UI consistency; usability testing; tutorial documentation</li> </ul>

## • API Incoming Dependencies

List the API this project is expecting from other projects.

Prior to Release Planning review, Team Leads must agreed on the date by which the API will be fully defined. The API Delivery date must not be later than the [release API Freeze date](#).

Prior to the delivery date, it is a good practice to organize an API review with the API consumers.

API Name	API Description	API Definition Date	API Delivery date	API Definition link (i.e.swagger)
none				

## • API Outgoing Dependencies

API this project is delivering to other projects.

API Name	API Description	API Definition Date	API Delivery date	API Definition link (i.e. swagger)
Upload API	API for vendors to upload VNF packages to marketplace	M1	M3	<a href="#">API Documentation</a>
Download API	API for downloading VNF Package from marketplace	M1	M3	<a href="#">API Documentation</a>
Query VNF information	API to query information on VNFs uploaded to the marketplace	M1	M3	<a href="#">API Documentation</a>

## • Third Party Products Dependencies

Third Party Products mean products that are mandatory to provide services for your components. Development of new functionality in third party product may or not be expected.

List the Third Party Products (OpenStack, ODL, RabbitMQ, Elasticsearch, Crystal Reports, ...).

Name	Description	Version
To fill out	To fill out	To fill out

In case there are specific dependencies (Centos 7 vs Ubuntu 16. Etc.) list them as well.

## • Testing and Integration Plans

Provide a description of the testing activities (unit test, functional test, automation,...) that will be performed by the team within the scope of this release.

Describe the plan to integrate and test the release deliverables within the overall ONAP system.

Confirm that resources have been allocated to perform such activities.

We will enhance unit tests and CSIT tests for validation tools, packaging tools, and certification tools.

## • Gaps

This section is used to document a limitation on a functionality or platform support. We are currently aware of this limitation and it will be delivered in a future Release.

List identified release gaps (if any), and its impact.

Gaps identified	Impact
To fill out	To fill out

## • Known Defects and Issues

Provide a link toward the list of all known project bugs.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
VNFSD K-874	Python Code Updates: Vnfsdk(VNFSDK)		May 15, 2023	May 15, 2023		Unassigned	Matthew Watkins		OPEN	Unresolved
VNFSD K-862	Kohn Release Note not updated		Nov 30, 2022	Dec 05, 2022		Unassigned	Thomas Kulik		OPEN	Unresolved
VNFSD K-832	Sonar issues present in ONAP vnfsdk validation		Mar 20, 2022	Mar 20, 2022		Unassigned	None		OPEN	Unresolved
VNFSD K-785	Issue in VTP profile GET operations		May 28, 2021	May 31, 2021		Unassigned	None		IN PROGRESS	Unresolved
VNFSD K-769	Remove PM references from PM_Dictionary_validator		May 06, 2021	May 06, 2021		Unassigned	None		SUBMITTED	Unresolved
VNFSD K-768	VNFSDK marketplace CSIT is testing old postgres image		May 05, 2021	Sep 19, 2022		Unassigned	None		OPEN	Unresolved
VNFSD K-405	Make validation of CSAR case insensitive		May 08, 2019	Sep 19, 2022		Unassigned	None		OPEN	Unresolved
VNFSD K-344	Support HEAT based VNFpackage uploads in Market place		Dec 11, 2018	Sep 19, 2022		Unassigned	None		OPEN	Unresolved

8 issues

• Risks

List the risks identified for this release along with the plan to prevent the risk to occur (mitigation) and the plan of action in the case the risk would materialized (contingency).

Risk identified	Mitigation Plan	Contingency Plan
To fill out	To fill out	To fill out

• Resources

Fill out [the Resources Committed to the Release](#) centralized page.

• Release Milestone

The milestones are defined at the [Release Level](#) and all the supporting project agreed to comply with these dates.

• Team Internal Milestone

This section is optional and may be used to document internal milestones within a project team or multiple project teams. For instance, in the case the team has made agreement with other team to deliver some artifacts on a certain date that are not in the release milestone, it is erecommended to provide these agreements and dates in this section.

It is not expected to have a detailed project plan.

Date	Project	Deliverable
To fill out	To fill out	To fill out

• Documentation, Training

- Highlight the team contributions to the specific document related to he project (Config guide, installation guide...).
- Highlight the team contributions to the overall Release Documentation and training asset
- High level list of documentation, training and tutorials necessary to understand the release capabilities, configuration and operation.
- Documentation includes items such as:
  - Installation instructions

- Configuration instructions
- Developer guide
- End User guide
- Admin guide
- ...



#### Note

The Documentation project will provide the Documentation Tool Chain to edit, configure, store and publish all Documentation asset.

## Other Information

- Vendor Neutral

If this project is coming from an existing proprietary codebase, ensure that all proprietary trademarks, logos, product names, etc. have been removed. All ONAP deliverables must comply with this rule and be agnostic of any proprietary symbols.

- Free and Open Source Software

FOSS activities are critical to the delivery of the whole ONAP initiative. The information may not be fully available at Release Planning, however to avoid late refactoring, it is critical to accomplish this task as early as possible.

List all third party Free and Open Source Software used within the release and provide License type (BSD, MIT, Apache, GNU GPL,... ).

In the case non Apache License are found inform immediately the TSC and the Release Manager and document your reasoning on why you believe we can use a non Apache version 2 license.

Each project must edit its project table available at [Project FOSS](#).

## Charter Compliance

The project team comply with the [ONAP Charter](#).