# Beijing-M1-CLI Release planning

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#### Overview

| Project Name            | Enter the name of the project |
|-------------------------|-------------------------------|
| Target Release Name     | Beijing                       |
| Project Lifecycle State | incubation                    |
| Participating Company   | Huawei, AT&T                  |

# Scope

- Stabilise ONAP commands and CLI platform to meet S3P
- Provides Commands for VNF (netconf) & VNF-SDK
  - Standardise CLI for VNF (Stretch goal)
- Closed-loop supporting commands (Stretch goal)
- ONAP command console (OCC)
- Standardise Open Command Specification (OCS).

#### **Use Cases**

As a user/operator, i should be able to perform the ONAP operations from OCC/Linux console, required for Beijing release.

### Minimum Viable Product

Provide OCC to to operate ONAP environment from Portal & OOM.

Provides required commands for SO, SDC, MSB and AAI for performing Beijing use case (change mgmt, scaling) from command line.

### **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                            | Т | Created         | Updated         | Due | Assignee   | Reporter | Р | Status | Resolution |
|--------|------------------------------------|---|-----------------|-----------------|-----|------------|----------|---|--------|------------|
| CLI-91 | Closed-loop support                | 4 | Jan 08,<br>2018 | Aug 08,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |
| CLI-90 | PNF/VNF support                    | 4 | Jan 08,<br>2018 | Aug 08,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |
| CLI-89 | Command and Platform stabilisation | 4 | Jan 08,<br>2018 | Aug 08,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |

3 issues

#### **Stories**

| Key    | Summary  | Т | Created         | Updated         | Due | Assignee   | Reporter | Р | Status | Resolution |
|--------|--|---|-----------------|-----------------|-----|------------|----------|---|--------|------------|
| CLI-88 | Migrate SDC commands to use published REST API     |   | Jan 08,<br>2018 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |
| CLI-74 | Setup Mock environment for a command               | A | Nov 16,<br>2017 | Aug 08,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |
| CLI-73 | Make output format as plugable component           |   | Nov 09,<br>2017 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |
| CLI-72 | Add support for expression language in YAML schema |   | Nov 09,<br>2017 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |
| CLI-68 | Add CLI support for VNF-<br>SDK                    |   | Nov 07,<br>2017 | Sep 20,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |
| CLI-67 | Add support for VNF configuration                  | A | Nov 07,<br>2017 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |
| CLI-66 | Separate OCLIP and plugins into different git repo |   | Nov 07,<br>2017 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |
| CLI-65 | Add support for AAF                                |   | Nov 07,<br>2017 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |
| CLI-57 | Fix onap commands issues                           |   | Oct 24,<br>2017 | Aug 08,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |
| CLI-55 | Implement autogeneation of moco json               |   | Oct 16,<br>2017 | Aug 08,<br>2018 |     | Unassigned | None     | = | CLOSED | Done       |
| CLI-52 | Add validation support for parameters in yaml      |   | Oct 13,<br>2017 | May 15,<br>2020 |     | Unassigned | None     | = | CLOSED | Not Done   |

11 issues

### Longer term road map

As CLI is critical in devops environment, in future, CLI will be extended to use in VNF boot scripts and Integration projects to make the ONAP integration point smoother and easier.

### Release Deliverable

| Deliverable Name      | Deliverable Description   |
|-----------------------|---|
| CLI Nexus zip archive | ZIP archive used to install the CLI manually                                      |
| CLI docker container  | Docker container to run the ONAP command and will integrate into demo environment |
| Documentation         | Developer guide   |
|                       | User guide  |
|                       | Release notes   |
|                       | Architecture  |
|                       | open-cli-schema-1.0 specification   |

# **Sub-Components**

NIL

# **ONAP Dependencies**

- AAF project
   a. for Authentication and authorization
- 2. MSB project
- a. for service discovery
- 3. AAI
- a. for customer, subscription, cloud managment
- b. external system managment
- 4. SO
- a. Service life cycle management
- 5. SDC
  - a. Service and resource model management

### Platform Maturity

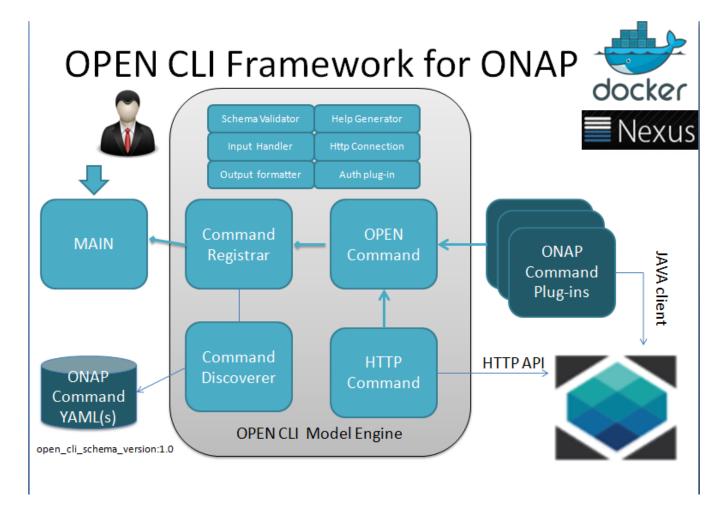
Refering to CII Badging Security Program and Platform Maturity Requirements, fill out the table below by indicating the actual level , the targeted level for the current release and the evidences on how you plan to achieve the targeted level.

| Area            | Actual<br>Level | Targeted Level for current Release | How,<br>Evidences | Comments   |
|-----------------|-----------------|------------------------------------|-------------------|--|
| Performa<br>nce | 0               | 1                                  |                   | 0 none     1 - baseline performance criteria identified and measured     2 & 3 - performance improvement plans created & implemented  NOTE:  Performance test is not performed in amsterdam though it performent, which is best observed during the usage.  so current level is marked 0. In this release, we will add bennchmarking test cases to show the level 1                    |
| Stability       | 0               | 1                                  |                   | 0 – none     1 – 72 hours component level soak w/random transactions     2 – 72 hours platform level soak w/random transactions     3 – 6 months track record of reduced defect rate  NOTE:  Test cases are not added to test the sability and bechmark it. so current level is marked 0. Otherwise, its very stable at level 1 or more.  will address the test cases in this release. |

| Resiliency        | 1 | 2 | <ul> <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 | 0 – none     1 – CII Passing badge + 50% Test Coverage     2 – CII Silver badge; internal communication encrypted; role-based access control and authorization for all calls     3 – CII Gold                      |
| Scalability       | 1 | 1 | 0 – no ability to scale     1 – single site horizontal scaling     2 – geographic scaling     3 – scaling across multiple ONAP instances   |
| Managea<br>bility | 1 | 1 | 1 – single logging system across components; instantiation in < 1 hour     2 – ability to upgrade a single component; tracing across components; externalized configuration management                             |
| Usability         | 1 | 2 | 1 – user guide; deployment documentation; API documentation     2 – UI consistency; usability testing; tutorial documentation  |

# Architecture

High level architecture diagram



#### **CLI Components**

- •Open Command Models the most of the requirements of CLI and it's the CLI schema engine, understands the OPEN-CLI 1.0 schema and make it as Command
- -Command Plug-in: Provides extensibility support to implement any commands which are depends on java api
- -HTTP Command : An special command plug-in provided by framework to implement the Command on top of REST API without writing any java code. (only YAML template is sufficient)
- •Command Discoverer Discovers the available CLI templates (YAML file created by using OPEN-CLI 1.0 schema) placed under OPEN\_CLI\_HOME directory or its sub-directories and register them into Command Registrar.
- •Command Registrar Maintains the map of command name vs actual command executable
- •Main Provides the interactive/direct command mode to run the commands from Linux OS console

#### Sample YAML CLI template

Following sample YAML shows the YAML file used to create the microservice in Open-O using CLI

```
openo microservice-create

open_cli_schema_version: 1.0
name: microservice-create
description: Register microservice into Open-O
service:
   name: msb
   version: v1

parameters:
   - name: service-name
   description: Open-O service name
   type: string
   short_option: x
   long_option: service-name
   is_optional: false
```

```
- name: service-version
   description: Open-O service version
   type: string
   short_option: y
   long_option: service-version
   is_optional: false
  - name: service-url
   description: Open-O service base url
   type: url
   short option: r
   long_option: service-url
   is_optional: false
  - name: node-ip
   description: Open-O service running node IP
   type: string
  - name: node-port
   description: Open-O service running node port
   type: string
  - name: create-or-update
   description: Open-O service create or update
   type: bool
   default_value: true
results:
 direction: portrait
 attributes:
   - name: name
     description: Open-O service name
     scope: short
     type: string
   - name: version
     description: Open-O service version
     scope: short
     type: string
    - name: url
     description: Open-O service base url
     scope: short
     type: url
   - name: status
     description: Open-O service status
     scope: short
     type: long
   - name: nodes
     description: Open-O service running nodes
     scope: long
     type: string
   - name: location
     description: Open-O service location
     scope: long
     type: url
http:
 request:
   uri: /services
   method: POST
    \texttt{REST","visualRange":"1","lb\_policy":"hash","nodes":[{"ip":"${node-ip}","port":"${node-port}","ttl":0}]}' \\
   headers:
   queries:
     createOrUpdate: ${create-or-update}
 success codes:
   - 201
   - 200
 result map:
   name: $b{$.serviceName}
   version: $b{$.version}
   url: $b{$.url}
   status: $b{$.status}
   nodes: $b{$.nodes[*].ip}:$b{$.nodes[*].port}
   location: $h{Location}
```

## **API Incoming Dependencies**

To provide the required commands for each of the ONAP services, this project will depends on the REST API provided by every other services such as SO, AAI, etc

#### **CLI Outgoing Dependencies**

NOTE: This project delivers CLI and not API

#### Third Party Products Dependencies

| Name     | Description              | Version                                      |
|----------|--------------------------|--|
| Docker   | Docker container for CLI | Aligned with existing Docker version of ONAP |
| Ubuntu   | For running CLI manually | 14.04 / 16.04 32-bit/64-bit                  |
| Open JDK | For Java RTE             | 1.8  |

# 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.

## 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 |
|-----------------|--------|
| NIL             | NIL    |

#### Known Defects and Issues

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

| Key         | Summary  | Т | Created         | Updated         | Due | Assignee   | Reporter        | Р | Status    | Resolution |
|-------------|--|---|-----------------|-----------------|-----|------------|-----------------|---|-----------|------------|
| CLI-<br>475 | Kohn Release Note not updated                  |   | Nov 30,<br>2022 | Dec 05,<br>2022 |     | Unassigned | Thomas<br>Kulik | = | OPEN      | Unresolved |
| CLI-<br>466 | Node port issue                                |   | Jun 28,<br>2022 | Sep 19,<br>2022 |     | Unassigned | None            | ^ | OPEN      | Unresolved |
| CLI-<br>440 | Sonar issues present in ONAP vnfsdk validation |   | Mar 20,<br>2022 | Mar 20,<br>2022 |     | Unassigned | None            | ^ | OPEN      | Not a Bug  |
| CLI-<br>438 | issue in CLI docker image build                |   | Mar 08,<br>2022 | Mar 08,<br>2022 |     | Unassigned | None            | ^ | DELIVERED | Done       |
| CLI-<br>422 | fix documentation                              |   | Oct 28,<br>2021 | Nov 29,<br>2022 |     | Unassigned | Thomas<br>Kulik | * | CLOSED    | Done       |

| CLI-<br>376 | update discovery,run robot scripts  |   | Mar 29,<br>2021 | Sep 19,<br>2022 | Unassigned | None | = | OPEN   | Unresolved |
|-------------|---|---|-----------------|-----------------|------------|------|---|--------|------------|
| CLI-<br>349 | No Metadata in<br>OnapCommand Info<br>section   |   | Jan 12,<br>2021 | Jan 28,<br>2021 | Unassigned | None | = | CLOSED | Done       |
| CLI-<br>348 | Optional parameters with<br>default values are lost<br>after overriding selected<br>parameter |   | Jan 12,<br>2021 | Jan 28,<br>2021 | Unassigned | None | = | CLOSED | Done       |
| CLI-<br>325 | Using version 6.0.0 of CLI<br>cause error in VNFSDK<br>Marketplace                            |   | Oct 13,<br>2020 | Nov 05,<br>2020 | Unassigned | None | * | CLOSED | Done       |
| CLI-<br>316 | CLI certificates have bad owner   |   | Sep 14,<br>2020 | Sep 19,<br>2022 | Unassigned | None | = | OPEN   | Unresolved |
| CLI-<br>315 | use java 11 min recommended version   |   | Sep 10,<br>2020 | Oct 26,<br>2020 | Unassigned | None | ~ | CLOSED | Done       |
| CLI-<br>267 | Migrate Port 9090 -> 9443   | • | Apr 20,<br>2020 | Aug 05,<br>2020 | Unassigned | None | = | CLOSED | Done       |
| CLI-<br>265 | Add HTTPS certificate in OOM CLI charts   |   | Apr 16,<br>2020 | Apr 30,<br>2020 | Unassigned | None | = | CLOSED | Done       |
| CLI-<br>264 | Update SDC vf-model-add-<br>artifact cli, add parameter<br>artifactLabel                      |   | Apr 15,<br>2020 | Apr 23,<br>2020 | Unassigned | None | = | CLOSED | Done       |
| CLI-<br>263 | There are some bugs on vnf-tosca-lcm.py script  | • | Apr 15,<br>2020 | Apr 23,<br>2020 | Unassigned | None | = | CLOSED | Done       |
| CLI-<br>257 | franfurt release  | • | Mar 09,<br>2020 | Feb 23,<br>2022 | Unassigned | None | = | CLOSED | Won't Do   |
| CLI-<br>255 | Pods still run as root  |   | Mar 02,<br>2020 | Apr 21,<br>2020 | Unassigned | None | ^ | CLOSED | Done       |
| CLI-<br>254 | HTTP port open  |   | Mar 02,<br>2020 | Apr 21,<br>2020 | Unassigned | None | ^ | CLOSED | Done       |
| CLI-<br>250 | Sonar cloud migration   |   | Feb 21,<br>2020 | Mar 04,<br>2020 | Unassigned | None | ^ | CLOSED | Done       |
| CLI-<br>229 | Minor CLI bug fixes   |   | Sep 30,<br>2019 | Oct 14,<br>2019 | Unassigned | None | = | CLOSED | Not a Bug  |

Showing 20 out of 88 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 |
|-----------------|-----------------|------------------|
| NONE            |                 | -                |

### 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 |  |  |  |  |
|------|---------|-------------|--|--|--|--|
| NIL  | NIL     | NIL         |  |  |  |  |

## 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:
  - o Installation instructions
  - o Configuration instructions
  - o 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.