



# ONAP - Usability

## Current status and Frankfurt objectives

LFN Developer & Testing Forum – Prague January 13<sup>th</sup>-16<sup>th</sup>, 2019

Eric Debeau (Orange)  
Andreas Geissler (Deutsche Telekom)  
Ken Kanishima (NTT)  
Naoki Tateishi (NTT)

# Agenda

- Challenges for ONAP Users
- El Alto achievements
  - Documentation, API Postman collection,...
- Frankfurt plans and activities
  - Documentation, SDC, CDS UI, Policy...
- ONAP Modularity (Naoki, Ken)

# Challenges for ONAP Users

- Where do I find information about ONAP (Wiki, ReadTheDocs,...) ?
- What information belongs to what release ?
- How can I ...
  - ... start using ONAP ?
  - ... setup and operate ONAP ?
  - ... choose the right ONAP components for my use case ?
  - ... design, onboard and manage a service with ONAP ?
  - ... contribute to ONAP ?
- See also: <https://wiki.onap.org/display/DW/ONAP+Documentation+Challenges+and+Proposals>

# El Alto achievements: Documentation

- Start of migration of existing Wiki content to RTD (and update)
- Restructuring of RTD to an End-User focus (E2E):
  - Operations and Administration Guides (in Frankfurt)
    - ONAP Setup
    - ONAP Operation
    - Integration
  - Users Guides
    - Service Design
    - Service Instantiation
    - Service Operation
  - Developer Guides
  - ...

The screenshot shows the ONAP documentation homepage. The left sidebar has a dark theme with white text, listing navigation links: Home, El Alto Release Notes, ONAP Overview, ONAP Architecture, ONAP components and functionalities, Operations and Administration Guides, User Guides, Developer Guides, VNF/PNF Requirements and Guidelines, and a "Hiring Python dev! Read the Docs can help!" section. The main content area has a light background and displays the "Open Network Automation Platform" page. It includes a header with the ONAP logo and navigation links for "Docs" and "View page source". Below the header is a section titled "Open Network Automation Platform" with a brief description of the project. A table titled "Main documentation areas" lists various guides with their descriptions:

Main documentation areas	Description
Release Notes	The Release Notes besides providing the basic information on the main release, also presents link to the release information of each, specific ONAP component.
ONAP Overview	ONAP Overview provides generic and high-level guidance on the mission and main functionalities of ONAP. Basic guidelines on license details, limitations and security references support understanding the solution.
ONAP Architecture	The ONAP architecture and its functional elements are described in details here. We can learn how the two main frameworks, namely the Design-time framework and the Runtime framework cooperate and how the Microservices, Common services and the ONAP Portal support the certain functions.
ONAP components and functionalities	The ONAP components and functionalities are described in details here. We can learn what functionalities ONAP provides and how the certain components in ONAP operate together.
Operations and Administration Guides	ONAP Platform operation and administration cover the configuration and installation of ONAP; its management, monitoring and other operational tasks (integration, user management,...).
User Guides	The User Guides focus on tasks to administer Services using ONAP covering Service Design, Instantiation and their management using control loops.
Developer Guides	Developers contributing to the ONAP development can find crucial information in the Developer Guides. The reader can search among the developers' topics in alphabetical order.
VNF/PNF Requirements and Guidelines	Harmonized VNF and PNF requirements and reduced customization of onboarding VNFs and PNFs can accelerate the optimal usage of this ONAP environment. The guidelines on VNF/PNF requirements facilitates synchronized and aligned activities for all participants.

At the bottom of the page, there is a copyright notice: "© Copyright 2019 ONAP. Licensed under Creative Commons Attribution 4.0 International License Revision 4676612B." and a "Next" button.

# User Guide example

## ONAP Postman collections

ONAP Integration project provides several Postman collections with two environment files.

Those Postman Collections will allow a Developer to experiment various ONAP API on various ONAP components (SDC, NBI, SO, AAI, SDNC)

- declare a vendor
- declare a VSP
- upload a package
- declare a VF based on the VSP
- declare a Service composed of the VF and a Virtual Link
- distribute all those informations
- declare a customer, a service subscription
- declare OwningEntity, Platform...
- declare a Complex, Cloud Region, Tenant
- associate customer/service/tenant
- declare a service instance via a serviceOrder
- declare a vnf
- declare a vf-module
- declare a network

A collection is also provided to delete objects (reminder: it is not possible to delete object in SDC)

They have been tested with Onap ElAlto (they are not all compatible with Dublin, and there is not guaranty about ONAP "master" as API definition can change)

[https://docs.onap.org/en/elalto/submodules/integration.git/docs/docs\\_postman.htm](https://docs.onap.org/en/elalto/submodules/integration.git/docs/docs_postman.htm)

# User Guide example using Postman collection

The screenshot shows the Postman application interface. The top navigation bar includes 'NEW', 'Runner', 'Import', 'Builder' (which is selected), 'Team Library', 'Sign In', and various status icons. A message at the top states: 'Chrome apps are being deprecated. Download our free native apps for continued support and better performance. [Learn more](#)'.

The left sidebar displays 'History' and 'Collections'. Under 'Collections', there are several items:

- 01\_Onboard\_Vendor (7 requests):
  - GET Get Vendor before create (selected)
  - POST Create Vendor
  - GET Get Vendor after create
  - GET Get Vendor additional info after create
  - PUT Submit Vendor
  - GET Get Vendor after submit
  - GET Get Vendor additional info after Submit
- 02\_Onboard\_VSP\_part1 (5 requests)
- 03\_Onboard\_VSP\_part2 (1 request)
- POST Upload zip file containing Heat files
- 04\_Onboard\_VSP\_part3 (4 requests)
- 05\_Onboard\_VF

The main workspace shows a collection named 'Get Vendor before create'. The request details are as follows:

- Method: GET
- URL: `{{url-sdc2}}/sdc1/feProxy/onboarding-api/v1.0/vendor-license-models`
- Params
- Send
- Save

The 'Tests' tab is selected, displaying the following JavaScript code:

```
1 tests["Status code is 200"] = responseCode.code === 200;
2
3 var jsonData = JSON.parse(responseBody);
4 var vendor_found = false;
5 for (var i = 0; i < jsonData.results.length; i++) {
6   if (jsonData.results[i]["name"] === postman.getGlobalVariable("vendor_name")) {
7     vendor_found = true;
8     postman.setGlobalVariable("auto_vendor_id", ""+jsonData.results[i]["id"]);
9   }
10 }
11 if (vendor_found === false) {
12   tests[postman.getGlobalVariable("vendor_name")+" does not exists"] = true;
13 }
14 else {
15   tests[postman.getGlobalVariable("vendor_name")+" already exists, we stop the run"] = true;
16   postman.setNextRequest(null);
17 }
18
19
```

The right side of the interface contains a sidebar with various test script snippets and documentation links.

[https://docs.onap.org/en/elalto/submodules/integration.git/docs/docs\\_postman.htm](https://docs.onap.org/en/elalto/submodules/integration.git/docs/docs_postman.htm)

# Frankfurt plans and activities: Documentation Content

- Continuation of Wiki migration and removal/marking of deprecated content
- Continuation of E2E documentation in RTD, e.g.
  - Service Design
  - CDS Design
  - Control Loop Creation
- ONAP Operation Guide extension
  - ONAP Backup/Restore
  - Multi-site ONAP
  - ONAP Networking
  - ONAP Monitoring and Testing
- ONAP Tutorials
  - UseCase specific
  - Should be added to RTD
- Documentation GIT structure update
  - removal of subcomponent structure

# Frankfurt plans and activities: Documentation Process

- Define a guideline for the usage of Wiki and RTD
  - What content should go where ?
  - User/Admin Documentation only in RTD
  - Plan to migrate Wiki content to RTD
- Improvement of the development process to document as you code
  - -> How to keep documentation aligned with the code
  - Directly document in RTD instead of Wiki
    - -> Maybe RDT templates could be provided
    - Tutorials or HandsOn session for RDT creation provided for developers
- Milestone criteria for documentation quality and completeness
  - might be added -> Guilin
- Documentation development
  - Better code checks to ensure better build results (currently 1500 warnings)
  - Tutorials and hands-on for RDT creation

# Frankfurt plans and activities: Tool Usability

- UI harmonization and integration, e.g.
  - Portal usage and integration improvements
  - SDC
    - Better general usage guide
    - Integrate other artifact design tools (e.g. CDS-UI, Extension of DCAE-DS)
  - Control Loop Design and Execution
    - DCAE-DS integration to SDC
    - CLAMP as Control Loop Management
  - Policy UI
  - DCAE Monitor

# Frankfurt plans and activities: Platform

- Reduce Footprint
  - Database consolidation
- Use-case optimized platform
  - Deploy necessary components for a use-case (Modularity)
  - Analysis of Component dependencies and interfaces
  - Definition of “Core ONAP”, Add-ons

**We need help and support from the Projects and from End-Users to improve the usability**

# Challenges

- Keep Documentation aligned with code
- Provide accurate tutorials
- Move specific artifacts related to a use-case in a separate repo
  - Use only such artifacts if required