

Cherry



The OAM project focus on the following topics:

Provide complete implementation for OAM functions (FCAPS).

- Specifications
- VES JSON-Schemas
- Yang Modules
- Non-functional

Specifications

The following Specifications needs to be considered for software updates:

O-RAN Operations and Maintenance Architecture Version 3.0 - April 2020
O-RAN.WG1.OAM-Architecture-v03.00

O-RAN Operations and Maintenance Interface Version 3.0 - April 2020
O-RAN.WG1.O1-Interface.0-v03.00

O-RAN Use Cases Detailed Specification 2.0 - April 2020
O-RAN.WG1.Use-Cases-Detailed-Specification-v02.00

O-RAN Management Plane Specification Version 3.0 and YANG Models Version 3.0 - April 2020
O-RAN.WG4.MP.0-v03.00
O-RAN.WG4.MP-YANGs-v03.00

VES JSON-Schemas

- [ONAP VES 7.2](#)
- [3GPP TS 28.532 V16.4.0](#)
 - - A.1.2 JSON schema of 'prov3gppFields' for integration with ONAP VES
 - - A.2.2 JSON schema of 'fault3gppFields' for integration with ONAP VES
 - - A.5.2 Heartbeat for integration with ONAP VES

Yang Modules

New OAM related yang modules are avaialble by [3GPP](#) and O-RAN WG4 OpenFronthaul v3.0

- [3GPP TS 28.541 v16.5.0-](#) E.5 Modules
- [3GPP TS 28.623 V16.4.0-](#) D.2 Modules



For O-RAN Members only : - please follow the DM discussions:

- [O-RAN WG1 DM Meetings](#)
- [Current data modeling issues](#)
- [Proposal for 2020 November Train](#)

Function	Source of Data model O-RAN-SC
	Status: 2020-07-28
Fault	3GPP: _3gpp-common-fm (Fallback from Bronze RFC8632: ietf-alarms)
Configuration	(see next lines)

<ul style="list-style-type: none"> interfaces and /or termination points 	O-RAN-FH: RFC8343: ietf-interfaces 3GPP:
<ul style="list-style-type: none"> synchronization 	(see next lines)
-- Network Time Protocol	RFC7317: ietf-system.yang
-- Precision Time Protocol	RFC8575: ietf-ptp.yang (check if new IEEE standard was adopted)
<ul style="list-style-type: none"> DCN <ul style="list-style-type: none"> OAM IF 	
<ul style="list-style-type: none"> Ehternet OAM 	<ul style="list-style-type: none"> Loopback config Link supervision
<ul style="list-style-type: none"> others 	to be updated based on SDO progress
Accounting	not scope of O-RAN and O-RAN-SC - listed just for completeness of FCAPS
Performance	3GPP-xml, file, VES
Security	(see next lines)
<ul style="list-style-type: none"> Protocol TLS (for Rest, RestConf and NetConf) 	RFC8446: Transport Layer Security
<ul style="list-style-type: none"> User Management 	RFC7317: ietf-system.yang Open: o-ran-user-management
Inventory (hardware)	RFC8348: ietf-hardware.yang and iana-hardware.yang and of cause o-ran-hardware@2019-07-03.yang for the O-RAN identities. Open: only for O-RU and O-DU; O-DU anyhow optional
Software Management	Management interfaces: <ul style="list-style-type: none"> xran-software-management.yang o-ran-software-management.yang 3GPP and/or o-ran-o1 software-management (once exists) OpenROADM manifest file Use case: Start with and xRan-fronthaul radio unit and perform and upgrade to an o-ru with the OpenFronthaul M-plane and upgrade further to an O-RU with an O-RAN /3GPP common O1 management interface.
Backup and restore	OpenROADM manifest file
xApp onboarding (from O1 point of view)	under development by WG2 and Near-RT-RIC project
Subscription for VES	_3gpp-common-subscription-control Open: RFC8639: ietf-subscribed-notifications augmented by opnfv-ves-push.yang

Non-functional

All this updates happens in ONAP CCSDK/SDNC and ONAP OOM project.

- Switch to OpenDay version Sodium
- Switch to Java11
- https only support on all REST/RESTCONF interfaces
 - O1-controller northbound
 - DMaaP
 - VES-Collector
- full IPv6 support and integration tests on all SMO interfaces.