

D-Release

FA7B62

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The OAM project focus on the following topics:

Provide complete implementation for OAM functions (FCAPS).

Specifications

The following Specifications needs to be considered for software updates:
<https://www.o-ran.org/specification-access>

- **O-RAN Architecture Description 3.0 - November 2020**
O-RAN.WG1.O-RAN-Architecture-Description-v03.00
- **O-RAN Operations and Maintenance Architecture 4.0 - November 2020**
O-RAN.WG1.OAM-Architecture-v04.00
- **O-RAN Operations and Maintenance Interface 4.0 - November 2020**
O-RAN.WG1.O1-Interface.0-v04.00
- **O-RAN Use Cases Detailed Specification 4.0 - November 2020**
O-RAN.WG1.Use-Cases-Detailed-Specification-v04.00
- **O-RAN Management Plane Specification - YANG Models 5.0 - November 2020**
O-RAN.WG4.MP-YANGs-v05.00
- **O-RAN O1 Interface for O-DU 1.0 - YANG Models - November 2020**
O-RAN.WG5.MP.1-v01.00

VES JSON-Schemas

- **ONAP VES 7.2.1**
- **3GPP TS 28.532 V16.6.0**
 - Annex B (Informative):
Guidelines for the integration of 3GPP MnS notifications with ONAP VES
 - A.1.1 OpenAPI document "provMnS.yaml" (CM-Notify) - (fallback polling)
 - A.2.1 OpenAPI document "faultMnS.yaml" (FM) - fallback: domain fault
 - A.4.2 OpenAPI document "perfMnS.yaml" (PM) - fallback domain perf3gpp
 - A.5.1 OpenAPI document "heartbeatNtf.yaml" - fallback domain heartbeat

Yang Modules

New OAM related yang modules are available [gerrit scp/oam/modeling/data-model/yang/published/o-ran](https://gerrit.scp.oam/modeling/data-model/yang/published/o-ran) and by [3GPP](#).



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: 2020-10-07
Fault	3GPP: _3gpp-common-fm (Fallback from Bronze RFC8632: ietf-alarms)
Configuration	(see next lines)
• interfaces and /or termination points	O-RAN-FH: RFC8343: ietf-interfaces 3GPP:
• 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)
• DCN ◦ OAM IF	
• Ethernet OAM	• Loopback config • Link supervision
• 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)
• Protocol TLS (for Rest, RestConf and NetConf)	RFC8446: Transport Layer Security
• 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 Aluminium SR1
- Update of JAVA artifacts addressing security issues
- Logging of NetConf Call Home (WG4 OpenFronthaul, WG9 Transport)
- https only support on all REST/RESTCONF interfaces
 - O1-controller northbound

- DMaaP
- VES-Collector
- full IPv6 support and integration tests on all SMO interfaces.