

2021-08-11 Meeting notes (ONAP/O-RAN-SC/SMO - Meeting) - Agenda

11 Aug 2021 | 9am PDT | noon EDT | 16:00 UTC | 18:00 CEST | 21:30 IST

ZOOM: <https://us02web.zoom.us/j/89069708424?pwd=aGJOZm54eTUxd0FXR0VCU1N0ejBrUT09>
Meeting ID: 890 6970 8424

Attendees

- Alex Stancu ★
- Abhinav Singh
- Alessandro Gerardo D'Alessandro
- Amar Kapadia
- Amy Zwarico
- Andrea Buldorini
- Andy Mayer
- @Anh Le
- bhanu chandra
- Byung-Woo Jun
- Claudio David Gasparini ★
- Christophe Closset ★
- Damian Nowak
- bhanu chandra ★
- Dibas Das
- @Dmytro Gassanov
- emmanuel sarris
- Fernando Oliveira ★
- Gervais-Martial Ngueko ★
- Grzegorz Wielgosinski
- HariomGupta(HCL)★
- Joachim Blixt
- John Keeney ★
- Kamel Idir ★
- user-7f92d
- Konrad Baka
- Kuldeep Negi
- Lasse Kaihlavirta
- Lathishbabu Ganesan
- Manoj Nair
- Martin Skorupski ★
- marcin krasowski ★
- Marcin Wilk ★
- NICHOLAS KARIMI MUIGAI ★
- Michela Bevilacqua
- N.K. Shankaranarayanan ★
- Paulo Costa
- Pawel Slowikowski
- Ruslan Kashapov
- Sonia Sangari ★
- Scott Blandford ★
- subhash kumar singh
- Swaminathan Seetharaman
- Timo Perala ★
- @Vidhu Pandey ★
- William Diego Maza ★
- Zu Qiang (Ericsson) ★
- Sven van der Meer

Please add/remove yourself. Thanks!

Discussion items

Time	Item	Who	Notes
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Informed

- Andrea Buldorini
- Alexander Dehn
- George Clapp
- Herbert Eisele
- KAPIL SINGAL
- Tracy Van Brakle

See also

- 2021-08-11 Meeting notes - Joint OAM / NONRTRIC / SIM SCRUM meeting

Goals

- share information between
 - O-RAN-SC Non-RT-RIC
 - O-RAN-SC OAM
 - O-RAN-SC O-DU
 - ONAP CCSDK/SDNC/SDN-R
 - LFN 😊

Recording

- Recording (MP4 Hi-res-Cloud)
- Recording (MP4 low-res)

00:00	Admin	John Keeney Martin Skorupski	<p>Next meetings:</p> <p>2021-08-18: Martin Skorupski</p> <p>2021-08-25: John Keeney</p> <p>2021-09-01: Martin Skorupski</p> <p>2021-09-08: Martin Skorupski</p>
00:01	O-RAN-SC	O-RAN-SC PTLs	<p>O-RAN-SC ToC</p> <ul style="list-style-type: none"> ▪ https://wiki.o-ran-sc.org/display/TOC <p>Projects:</p> <ul style="list-style-type: none"> ▪ Non-RT-RIC: John Keeney (happy holidays 😊) <ul style="list-style-type: none"> ▪ release note updates ▪ e-release ideas presented in 2 weeks ▪ SIM: Alex Stancu <ul style="list-style-type: none"> ▪ Preparation of SIM deployment with helm ▪ OAM: Martin Skorupski <ul style="list-style-type: none"> ▪ architecting RAN slicing use case - and looking for overlaps with OOF SON ▪ TMForum interfacing between CSMF and NSMF (Option #2) <ul style="list-style-type: none"> ▪ https://wiki.onap.org/download/attachments/107251757/E2E%20Network%20Slicing%20Demoshow%20based%20on%20Guilin%20Deliverables.pdf?api=v2 ▪ R9 E2E Network Slicing use case (and subpages) ▪ Service Resolver ▪ 3gpp yang v17-draft ▪ O-DU: HarionGupta(HCL)
00:10		John Keeney Martin Skorupski	<p>O-RAN SC: Copying/Releasing helm charts in O-RAN-SC nexus repo</p> <p>https://jira.linuxfoundation.org/plugins/servlet/theme/portal/2/IT-22586 (maybe restricted access?!?)</p> <p>Status: canceled (Nexus does not support Helm chart distribution)</p> <p>Question from O-RAN-SC to ONAP: What is possible in ONAP nexus?</p> <p>Sébastien Determe: adds some info</p>

00:20	O1-VES	Stanislav Marszalek user-7f92d	<ul style="list-style-type: none"> • O1-VES collection (@33:30 in recording) <ul style="list-style-type: none"> ◦ PM Mapper - for PM Bulk <ul style="list-style-type: none"> ▪ Stanislav Marszalek Stanislav Marszalek Slides: • O1 is just via ves:fileReady FTPes ▪ issues in PM-Mapper should be handle via Jira ans slack <ul style="list-style-type: none"> • https://lists.onap.org/g/onap-discuss/message/23433 • DCAEGEN2-2874 PM Mapper output - sMeasTypesList <ul style="list-style-type: none"> ▪ DCAEGEN2-2874 - VES 7.1 - enhancements CLOSED • DCAEGEN2-2873 PM Mapper output - granularityPeriod issue <ul style="list-style-type: none"> ▪ DCAEGEN2-2873 - PM Mapper output - granularityPeriod issue CLOSED ▪ issues in VES spec are more problematic, as O-RAN Alliance is using the domain "stdDefined" <p>INFO: PM Streaming: ASN.1 via WebSocket according to O-RAN Spec - O-RAN Operations and Maintenance Interface 4.0 - November 2020</p> <p>Topic was discussed in DCAE Meeting: 2021-08-04 DCAE Meeting Notes</p> <p>HV-VES vs "standard" VES collector</p> <p>info: HV-VES not used by OOF-SON use case (yet)</p> <p>info: no relation between HV-VES and PM-Mapper</p> <p>2021-08-11 user-7f92d</p> <p>I refactored current Jira's base on our discussion:</p> <ul style="list-style-type: none"> • https://jira.onap.org/browse/DCAEGEN2-2873 (bug) • https://jira.onap.org/browse/DCAEGEN2-2874 (VES 7.1 enhancements) <p>And also create a new one:</p> <ul style="list-style-type: none"> • https://jira.onap.org/browse/DCAEGEN2-2880 (support for VES 7.2)
00:40	SMO deployment options	Christophe Closets	<p>SMO deployment options</p> <ul style="list-style-type: none"> ▪ no tested helm for OAM in O-RAN-SC D-Release - idea update the one from C-release ▪ for Non-RT-RIC a new helm is available - still some updates to be done ▪ Please see presentation within REQ-887 - Deliver ORAN SMO override IN PROGRESS <p>Meeting? on Friday 6/25</p> <p>https://lists.onap.org/g/onap-meetings/viewevent?repeating=37969&eventid=1192141&calstart=2021-06-25</p> <ul style="list-style-type: none"> ◦ https://lists.onap.org/g/onap-meetings/viewevent?repeating=37969&eventid=1192141&calstart=2021-06-25 bhanu chandra ◦ https://wiki.onap.org/pages/viewpage.action?pageId=103422272 <ul style="list-style-type: none"> ▪ (Updated afterward: Minutes & Recording: https://wiki.onap.org/display/Meetings/2021-06-25+Meeting+notes) <ul style="list-style-type: none"> ▪ proposed by aarna ▪ see email - TODO add link to wiki ▪ proposal to use this time slot here <p>Activity</p> <ul style="list-style-type: none"> ▪ kubernetes updates ▪ issues with certs addressed ▪ reuse of O-RAN-SC helm ▪ Winriver lab

<Martin Skorupski needed to leave. John Keeney continues minutes. See also: [2021-06-23 Meeting notes - Joint OAM / NONRTRIC / SIM SCRUM meeting](#) >

- REF: 2 Weeks ago: Proposal for an ONAP deployment specific for an ORAN SMO
 - Ref: <https://jira.onap.org/browse/REQ-887>
- @Christophe : Meeting upcoming
 - Every Friday:
 - <https://lists.onap.org/g/onap-meetings/viewevent?repeateid=37969&eventid=1192141&calstart=2021-06-25> bha nu chandra
 - <https://wiki.onap.org/pages/viewpage.action?pageId=103422272>
 - (Updated afterward: Minutes & Recording: <https://wiki.onap.org/display/Meetings/2021-06-25+Meeting+notes>)
 - Attempting to replicate functionality in OSC OAM/NONRTRIC/SIM demo - based on OSC charts.
 - Mainly updating charts etc.
 - Certs need updating
 - Will be testing in ONAP WindRiver lab - setup etc. Might be a good place to collaborate.
- [John Keeney](#) Any update on how to reuse OSC & other external components?
 - @Christophe, will be challenging in OOM, & need to reuse structure & some charts from OOM
- [John Keeney](#) Any ideas where SMO would be different from "Full ONAP"
 - @Christophe: Plan to start with OSC charts/flavour ... then depends on UseCases ...
 - Hope to be able to make use of the override files to create different flavours .. aiming for something similar to OSC version
 - Ref [Closed loop use case & "D" Release - Closed Loop Use Case: Simulation of O-RU and O-DU & "D" - Closed Loop Use Case](#)
- [John Keeney](#) Probably need different versions for different usecases
 - @Christophe ... OOM have this same idea to have multiple flavours. Discussion gets broader when non-ONAP components are added.
- @NK Shankar ... Should also consider SON and Slicing usecases.
- [John Keeney](#) Recall that the OSC D release usecase is not real world ... and will mature in coming releases. Currently mostly treated as an integration requirements driver
 - Ref [Closed loop use case & "D" Release - Closed Loop Use Case: Simulation of O-RU and O-DU & "D" - Closed Loop Use Case](#)
- @Christophe @NK Shankar Need to consider diversity of DCAE components used. Also need to figure out how different simulators could co-exist.
- Lets continue discussions on Friday Call?

INFO from Christophe - 2021-06-30:

Just a few notes:

- We have agreed with ONAP and other members of O-RAN SC to keep an ad-hoc call on Friday to discuss technical details for now (will remove this meeting once all details are sorted out and use the joint meeting to report status)
- Main comment from John is that we cannot consider an SMO deployment without having a way to deploy Non-RT-RIC as well as ONAP components (hence a debate on how this should materialize : extend OOM?)
- We have progressed on the POC in the meanwhile, Sebastien had an idea and has pushed a small repository on github to show what we are doing for now to create a unique installation for O-RAN, trying to implement the following idea:
 - Started from IT/DEP repo, containing some Helm charts for O-RAN (including Non-RT-RIC)
 - Seems an embryo of using ONAP charts to deploy SMO components but sounded like a fork of ONAP charts
 - Instead of copy pasting OOM charts, he create a git submodule referring to oom ONAP charts repo (to keep ONAP untouched)
 - Rework the O-RAN charts to map them to the OOM structure (like OOM'ized O-RAN charts)
 - Try and build (created some makefiles, inspired from ONAP) then push them to a single chart repository
 - Merged ONAP override and O-RAN override to have a single file
 - Created an Install script to deploy the charts in a single Namespace
 - ... it worked more or less

We plan to show that maybe on Friday call (<https://wiki.onap.org/pages/viewpage.action?pageId=103422272>)

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Are the following pages related?

- CNF/VNF deployments
 - <https://wiki.onap.org/display/DW/Orchestration+Scenarios>
 - <https://wiki.onap.org/display/DW/O-RAN:+ASD+solution>

2021-07-07:

way forward

- release helm repo by OOM should be created
 - (Added later: [John Keeney](#) Also asked about getting a helm chart repo for OSC. <https://lists.o-ran-sc.org/g/discuss/message/331>)
- demo was shown last Friday how it could look like
- next step
 - sample overwrite files
- if access to the "demo git" is required, please reach out to [Christophe Closset Sébastien Determe Gervais-Martial Ngueko](#)

2021-07-14:

- <https://github.com/gmngueko/oran-deployment/pull/1>
- in non-overwrite helm only docker from "released" nexus should be included...

2021-07-21:

		<ul style="list-style-type: none"> ■ from John Keeney LFN ticket required to put helm into nexus ■ control about helm from different project <p>2021-07-28:</p> <ul style="list-style-type: none"> ■ not much additional features required for SMO deployment. ■ next step in the area of CNF deployment in combination with SMO <ul style="list-style-type: none"> ■ as demoed one year ago by Samsung (including closed loop and A1 Policies) ■ use case will be updated to Honolulu <p>2021-08-04:</p> <ul style="list-style-type: none"> ■ no updates on last weeks call ■ cnf deployment - reuse of existing use case implementation.
VES - CM-Notify	Pawel Slowikowski	<p><i>The following 3GPP CM notifications specified in 3GPP TS 28.532 [4] are supported in O-RAN:</i></p> <p><i>notifyMOIAttributeValueChanges</i></p> <p><i>notifyMOICreation</i></p> <p><i>notifyMOIDeletion</i></p> <p><i>notifyMOIChanges</i></p> <p>Its syntax is defined in</p> <pre>~/_3gpp/MnS ((SA88-Rel16)) \$ grep -anri notifyMOI* OpenAPI/provMnS.yaml:87: notifyMOICreation: OpenAPI/provMnS.yaml:95: \$ref: '#/components/schemas/notifyMOICreation-NotifType' OpenAPI/provMnS.yaml:108: notifyMOIDeletion: OpenAPI/provMnS.yaml:116: \$ref: '#/components/schemas/notifyMOIDeletion-NotifType' OpenAPI/provMnS.yaml:129: notifyMOIAttributeValueChange: OpenAPI/provMnS.yaml:137: \$ref: '#/components/schemas/notifyMOIAttributeValueChange-NotifType' OpenAPI/provMnS.yaml:150: notifyMOIChanges: OpenAPI/provMnS.yaml:158: \$ref: '#/components/schemas/notifyMOIChanges-NotifType' OpenAPI/provMnS.yaml:365: - notifyMOICreation OpenAPI/provMnS.yaml:366: - notifyMOIDeletion OpenAPI/provMnS.yaml:367: - notifyMOIAttributeValueChange OpenAPI/provMnS.yaml:513: notifyMOICreation-NotifType: OpenAPI/provMnS.yaml:530: notifyMOIDeletion-NotifType: OpenAPI/provMnS.yaml:546: notifyMOIAttributeValueChange-NotifType: OpenAPI/provMnS.yaml:569: notifyMOIChanges-NotifType: OpenAPI/genericNrm.yaml:297: - notifyMOICreation OpenAPI/genericNrm.yaml:298: - notifyMOIDeletion OpenAPI/genericNrm.yaml:299: - notifyMOIAttributeValueChanges</pre> <p>Please see further details:</p> <ul style="list-style-type: none"> • https://forge.3gpp.org/rep/sa5/MnS/blob/SA88-Rel16/OpenAPI/genericNrm.yaml • https://forge.3gpp.org/rep/sa5/MnS/blob/SA88-Rel16/OpenAPI/provMnS.yaml
	Q/A	

			<p>Info:</p> <div style="border: 1px solid #ccc; padding: 5px; display: inline-block;"> ● CCSDK-3422 - SDNC OAM is unable to build OPEN </div> <p>Please see comments:</p> <ul style="list-style-type: none"> • Caused by implementing CCSDK-3387 • Use fix, provided via https://jira.onap.org/browse/SDNC-1587 to do a local compile.
00:21	<End>		
END			
00:00	Use Case	@all	<p>OSC Proposed e2e integration use case: O-RU FH connection recovery</p> <ul style="list-style-type: none"> • REF/Background: <ul style="list-style-type: none"> ◦ (OAM) Closed loop use case ◦ (RSAC) Meeting 14 Jan: <ul style="list-style-type: none"> ▪ Slides: https://wiki.o-ran-sc.org/download/attachments/1179971/RU_failure_recovery_use_case.pptx?version=1&modificationDate=1610637325824&api=v2 ▪ Recording: https://zoom.us/rec/share/mKYOGKB3mgpvlo2Hx1eY5Oifyw9qV9NQd7NiEj-FxQKPOkUpWOc7yvMO_LLPhA_M.lmx2LCh7-QwDHAf • Martin Skorupski provided intro <ul style="list-style-type: none"> ◦ Alarm when fronthaul connection dies (O-DU - O-RU) (VES to SMO) • John Keeney If there is a failure both O-DU & O-RU will try reconnect anyway - without this loop? Martin Skorupski Yes. • @? How does SMO connect to O-RU? <ul style="list-style-type: none"> ◦ Martin Skorupski This is a mix of different deployment options (hierarchical vs hybrid, O1 vs M-Plane). Main issue is agreeing models & terminology. • John Keeney Seems this use case is not real-world useful, especially since recovery will happen automatically anyway, & mix of standards ... • Martin Skorupski John Keeney Using this use case as longer term motivator for SMO/NONRTRIC/rApp development - independent of usecase • Topology ??: <ul style="list-style-type: none"> ◦ May need a topology service for this use case - John Keeney Will use a simple file/hardcoded for initial versions of this use case. ◦ Pawe Pawlak Andy Mayer Topology in A&AI, CPS ? John Keeney No - not initially. Plan to keep it simple for this release. <p><bridge dropped recording stopped at this point. Most participants reconnected once bridge started again></p> <ul style="list-style-type: none"> • Topology ??: (contd) <ul style="list-style-type: none"> ◦ John Keeney Lots of options for how this should be done properly in ONAP. ◦ Swaminathan Seetharaman ONAP usecases already have some plans for this e.g. slicing, oof, etc ◦ Andy Mayer A model should be agreed in ONAP. Lots of previous discussions in ONAP - e.g. what goes in A&AI and CPS ... but that was a while ago. ◦ Martin Skorupski SDNR has some topology model too - not standards based. ◦ @Sven John Keeney Martin Skorupski Lots of issues with different topology models ... and most existing hierarchical models break down in a 5G/CloudRan environment ◦ Lots of work ... Andy Mayer Martin Skorupski Can create a JIRA in ONAP MODCOM ... ◦ ... but will keep it simple here for this use case. • @? Will other O1 usecases be effected? Martin Skorupski i No. O1 functions continue as before. • Martin Skorupski Please add feedback if any

Action items

