# 2023-11-21 Meeting notes - Joint OAM / NONRTRIC / SIM Community meeting

## Time & Location:

(i)

Meeting Detail: Times & Joining Info

Tuesdays at 15:00 UTC (14:00 UTC in Summer DST Northern Hemisphere)

https://us02web.zoom.us/j/89069708424?pwd=aGJOZm54eTUxd0FXR0VCU1N0ejBrUT09

- Ensure you are signed into your Zoom account to join.
- Meeting ID: 890 6970 8424. By Phone: Dial in (Local numbers): You will need a Participant ID so you will need to join the meeting from a Zoom client first to get this.
- · Calendar: https://lists.o-ran-sc.org/g/main/calendar
- NOTE: During the "Daylight Savings Time" changeover periods (US vs Europe vs Asia) the time of the meetings may fluctuate.
  - Winter (non-DST) time (Q4, Q1) eventually stabilizes to:
     7am PST | 10am EST | 15:00 UTC | 15:00 GMT | 16:00 CET | 17:00 EET | 20:30 IST | 23:00 CST (Thurs) | 00:00 JST (Thurs)
  - Summer Daylight Savings time (Q2, Q3) eventually stabilizes to:
     7am PDT | 10pm EDT | 14:00 UTC | 15:00 BST | 16:00 CEST | 17:00 EEST | 19:30 IST | 22:00 CST | 23:00 JST
  - (During WinterSummer DST changeover follow US time. SummerWinter DST changeover follow Europe time)
- Meeting ID: 890 6970 8424
- You will need a Participant ID so you will need to join the meeting from a Zoom client first to get this.
- Dial in: (Local numbers)
  - +1 646 558 8656 US (New York)
  - +49 30 5679 5800 Germany
  - o +49 69 3807 9883 Germany
  - o +353 1 240 8941 Ireland
  - o +46 8 4468 2488 Sweden
  - o +46 8 5016 3827 Sweden
  - o +358 3 4109 2129 Finland
  - o +358 9 7252 2471 Finland

#### Please checkout the calendars:

- https://lists.onap.org/g/onap-meetings/calendar
- https://lists.o-ran-sc.org/g/main/calendar

# **Anti-Trust Notice**

- Antitrust Policy Notice
- Antitrust Policy

# Date

21 Nov 2023

# Attendees

- John Keeney (Ericsson EST & OSC NONRTRIC)
- Martin Skorupski (Highstreet & OSC OAM)
- Alex Stancu (Highstreet & OSC SIM)
- James Li (CMTI & OSC INT)
- N.K. Shankaranarayanan (ONAP)
- Raviteja Karumuri (Éricsson EST)
- Denis G Noonan (Èricsson EST)
- Aravindhan Ayyanathan (Ericsson EST)
- Rohith Rajneesh (Ericsson EST)
- bimo fransiscus asisi (NTUST)
- May not have captured a full attendee list for this meeting ... please add/remove yourself :

# See also / co-located (ONAP/O-RAN-SC/SMO - Meeting)

• Co-located with ONAP 2023-11-21 Meeting notes (ONAP/O-RAN-SC/SMO - Meeting)

## Contents

- Time & Location:
- **Anti-Trust Notice**
- Date
- Attendees
- See also / co-located (ONAP/O-RAN-SC/SMO Meeting)
- Contents
- Recording
- Notes:

   Housekeeping:
  - OSC Project roundup:
    - News from OSC TOC call last week
    - NONRTRIC (John Keeney)
    - SIM (Alex Stancu)
    - OAM (Martin Skorupski)
    - OSC Integration / INT (James Li)
    - O-DU Vidhu Shekhar Pandey)
    - SMO (Seshu Kumar Mudiganti)

    - RSAC (David Kinsey Rittwik Jana)
       Al/ML platform project (Joseph Thaliath)
  - OSC/OAI/OSFG Workshop (James Li , John Keeney fransiscus bimo)
  - ONAP Update (N.K. Shankaranarayanan)
  - ONAP/OSC Usecases (N.K. Shankaranarayanan)
  - O Disaggregated SMO Flows (N.K. Shankaranarayanan)

  - NONRTRIC rApp Manager Demo & Discussion (Aravindhan Ayyanathan)
  - Questions / Comments / AOB:

# Recording

Recording (MP4 - lo res)

#### Notes:

## Housekeeping:

- Upcoming Meetings:
  - 0 2023-11-21
  - o 2023-11-28
  - ° 2023-12-05
  - o 2023-12-12 (Martin ooo)
  - o 2023-12-19 (Martin ooo) (John ooo ?) Consider cancelling?
  - o 2023-12-26 canceled
  - o 2024-01-02 canceled
  - o 2024-01-09 (Martin ooo) (John ooo ?) Consider cancelling?
  - o 2024-01-16
  - Calendar:
    - https://lists.o-ran-sc.org/g/main/calendar
    - https://lists.onap.org/g/onap-meetings/calendar
  - OSC SMO project calls now move to its own time slot alternate Thursdays TBC
    - o See OSC RSAC Calendar: https://wiki.o-ran-sc.org/display/RSAC/calendars
    - See also OSC Meetings calendar: https://lists.o-ran-sc.org/g/main/calendar
    - o (Note this meeting to open to anyone, including non-ORAN members)
    - We will maintain this slot for ONAP Alignment, and try flag issues/question to/from SMO meetings.
    - See OSC SMO Project meeting notes
  - See also OSC AIML Project meeting notes

# **OSC Project roundup:**

#### News from OSC TOC call last week

- https://wiki.o-ran-sc.org/display/TOC#ORANSCTechnicalOversightCommittee(TOC) 
   Last week's TOC (Thursday):
  - - Update about OAI/OSC/OSFG workshop
    - Update from Alex Stancu about Energy Savings use case (link)
    - No Update from Seshu Kumar Mudiganti on SMO & Orchestration Maybe next week ?
    - All PTLs should update wikis & start ORAN Spec compliance
  - This week's TOC (in 2 days):
    - Maybe not happening this week? Thanksgiving Day in US? No update in calendar yet (https://lists.o-ran-sc.org/g/main/calendar)
    - Update expected from Seshu Kumar Mudiganti & N.K. Shankaranarayanan on SMO-related activities

OSFG ... Time stabilizing to Monday 5AM PST - but watch O-RAN Alliance Calendar.

## **NONRTRIC (John Keeney)**

- Service Exposure Manager Started New function pulling together previous work. Unlikely to deliver in this release
   O-RAN Spec API compliance for R1-SME, R1-DME (TBC), R1-A1, A1
- - A1 & R1-A1 in good state right now.
    - Will continue to make small changes as needed.
    - Working on how to describe outgoing calls
  - R1-DME will likely need alot of work as R1-DME specs mature
  - R1-SME interface being defined as part of "Service Exposure Manager" (above).
- Making good progress on rApp manager.
  - Adding support for DME integration now.
  - O Hope to demo in 2 weeks
- OpenAPI-first in A1-PMS & ICS
  - A1-PMS changes in ONAP CCSDK/oran merged now
  - o ICS still to do.
- Pairwise test A1 Policy functions in near-RT-RIC & NONRTRIC
  - o Some changes in A1-Mediator in near-RT-RIC plt in H-Release.
    - Working fine in our function tests,
  - O Working on Pairwise test for Integration environment -
    - Will need help from James Li (email)
    - Add A1-PMS & maybe a A1 SIM to near-RT-RIC deployment ? add in some NONRTRIC A1 functions?
    - Current xApp deployed (KPIMon Go) does not use A1 Policies so we need an A1-enabled xApp to be added
      - James Li & Naman Gupta might be able to help. Hello-World xApp should be OK, or Traffic Steering?

#### SIM (Alex Stancu)

ONF have a deployed near-RT-RIC. Should consider this for pairwise testing too. (For traffic steering)

#### **OAM (Martin Skorupski)**

- O-RAN "planning" tool to visualise & deploy a RAN, and populate topology & inventory
  - o Ongoing
  - Now supports handover areas between cells.
  - o 1x 5G Core per SMO

#### OSC Integration / INT (James Li)

- · Alex Stancu Martin Skorupski Need to check what version of VES collector we us in IT/DEP & tests. May not be the latest (not sure if O1 PNFRegistration is supported)
- Will be working with Bimo about work in Taiwan Lab some testing also happening there.
  - o fransiscus bimo Working to generate dataset of Energy Saving use case
  - o fransiscus bimo making progress on the rApp but work to do about how to describe/package/manage the rApp
    - Will see NONRTRIC rApp Manager Demo below.
    - Working on some sample flows -Would be good to keep in touch with N.K. Shankaranarayanan who is assembling SMOrelated workflows.

#### O-DU Vidhu Shekhar Pandev)

· No update this week

#### SMO (Seshu Kumar Mudiganti)

- · No update this week.
- Meeting notes Meeting notes

#### **RSAC (David Kinsey Rittwik Jana)**

- No update this week
- Minutes: RSAC Meetings

#### AI/ML platform project (Joseph Thaliath)

- Minutes & Meeting: Meeting notes
- Calendar: https://lists.o-ran-sc.org/g/main/calendar
- No update this week

# OSC/OAI/OSFG Workshop (James Li, John Keeney fransiscus bimo)

- Workshop https://openairinterface.org/joint-osc-oai-workshop-end-to-end-open-source-reference-designs-for-o-ran/
  - Northeastern University, Burlington, Boston, USA
  - o 14-15 November 2023
  - O Slides/Recording should be available next week

- · Lots of good conversations about labs & interworking esp Taiwan lab & INT
- Lots of great examples of work already happening using both OAI and OSC many we hadn't seen before. 

  Very optimistic about OAI/OSC collaboration in future.

  - Lots of candidates emerging for OSFG Blueprint

# **ONAP Update (N.K. Shankaranarayanan)**

- No update this week
- · Will discuss next week

# ONAP/OSC Usecases (N.K. Shankaranarayanan)

- · No update this week.
- Will discuss next week

# Disaggregated SMO Flows (N.K. Shankaranarayanan)

- · Will discuss next week
  - o Extending slide set presented at O-RAN F2F.
    - (F2F version: OSC/WG1 session.
      - Slides: https://wiki.o-ran-sc.org/download/attachments/89784359/dec\_smo\_flows\_v0.6\_20231018.pptx?api=v2
      - · Recording: https://zoom.us/rec/share
      - /kCgci6A4wZKg3UBB937Insb3UgiK64BHeWMsUei6A5Dlgl80HcnuXHRDDcGODJtl.B3yYJ8XJ3\_O4ccQ0)
  - Will present latest version at TOC call this week
  - o Lots of changes in O-RAN TR document in last weeks (Nov Train). Trying to keep updated.

## **LFN DTF**

- https://events.linuxfoundation.org/lfn-developer-testing-forum/
- 13-16 November, Budapest, Hungary
- Will discuss next week

## NONRTRIC rApp Manager - Demo & Discussion (Aravindhan Ayyanathan)

Slides:



Video:



- Makes a lot of use of ONAP ACM to support rApps that contain a composition of K8s microservices, ML Models, Policies, Workflows, Configuration, A1 Policy, etc
  - Multiple rApp instances for rApp types
  - ° rApp is Lifecycle Managed as a single composition of App elements
    - Different Element types are handled by pluggable 'Participants'/Handlers
      - Current Participants: K8s/Helm, A1 policy, ONAP Policy, KServe (ML), HTTP configurator, DME, others
- Adds Service Management & Exposure SME (Not already supported in ACM)
  - o All produced & Consumed services are described in App package, so Service Registration & Service Discovery needs to be handled.
  - Uses NONRTRIC CAPIF Core function
  - o R1-SME aligned
- Add Data Management & Exposure DME (Not already supported in ACM)

- o All produced & consumed Data Types are described in App package, so Data Producer Registration & Data Type Discovery & Data Job creation needs to be handled.
- Uses NONRTRIC Information Coordinator Service
- Similar to R1-DME

- Prototype rApp Package presented Not yet Stable!
  rApps, rApp instances have well-defined state models
  Call sequences for various rApp & rApp Instance workflows presented.
- Demo:
   Show a sample rApp package
   Deploy & prime the rApp
   Table instance showing Create one instance - showing all its constituent parts configured, started & running. Service & Data types registed & discovered, Data Jobs created.
  - Delete the created instance showing all its constituent parts stopped & removed
     Delete the rApp & its definition showing rApp environment cleaned up

# **Questions / Comments / AOB:**

None this week.

Meeting ends 76min