O-RAN SC Technical Oversight Committee (TOC)

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Technical Charter for O-RAN Software Community

TOC Voting Members

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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

TOC Meeting Info

Technical Oversight Committee meetings are open to the public [changed as of 5/5/2022] and no longer on Wednesdays at 8 AM Eastern Time USA.  [World Time Zone Map]

reminder: Starting (May-5 2022) we meet on Thursdays, at 9am EST.  [Time Zone Map]

Zoom 2 Info:
2022 08 25

Meeting Recording:

Topic: Zoom3 O-RAN SC's Personal Meeting Room

Start Time: Aug 25, 2022 09:01 AM EST

Meeting Recording:

Agenda

1. Call for Scribe (minutes owner): James Li
2. Roll Call & Quorum Check

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1. Review and Approve Minutes of Previous Meeting
   a. **Decision**: Minutes for TOC meeting (18th August 2022) approval: Motion to be proposed by ... approved by ... and the Motion was ....

2. Review of Today’s Agenda.

3. Release Votes and Approval

4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. 2022-07-14: Need to work on clarification for SCCL license and start having O-RAN WG Material. Refer to the website on O-RAN Alliance and update the charter Following work with TSC for contributing material to be used down stream. Setup a Meeting with Stephan (he needs to approve the CLA). (Action Point: Jinri)
      ii. 2022-07-21: Meeting planned today and there will be update on this topic next week. The current focus in on O-RAN (does’nt cover 3GPP, ETSI etc)
      iii. 2022-07-28: Meeting with O-RAN Legal Team, the draft of the Project Charter as well as CLA are ready. Once the documents are reviewed the same will be added to the process. There is a continued discussion with ETSI and O-RAN WG on how to organize the documents to make them available to O-RAN SC. Documents will be shared on the reflector . Feedback to be provided by everyone after discussing with their respective legal team.
   b. 2022-08-04: Jinri is out sick, hopefully work on that will make some progress here soon as he’s feeling better.

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting (Oct’22)
   b. Plugfest
      i. 2022-07-21: O-RAN Alliance will initiate the Call for Host on July 24th
      ii. 2022-08-11: Jinri Huang: Call for host for the fall Plugfest has been issued, and there are quite a few applications for host.
   c. Challenges for the OSC community (as report to EC)
      i. 2022-07-14: There is no update this week

6. Old business and Status of Open Actions
   a. "F" Maintenance Release
      i. 2022-07-14:
         1. Non-RT RIC Project : Will revert back by next ToC meeting if there is a need for a maintenance release.
         2. O-DU High also will have some maintenance
      ii. 2022-07-21:
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   b. "G" Release
   c. OSC Lab
      i. 2022-07-21: David mentioned that some steps has been provided to zero in on the issues. If not resolved Ganesh from Radisys to provide support
   d. 5G Super Blueprint status - to be considered for H release.
      i. 2022-07-21: David mentioned that there hasnt been any progress on this. Decided to move to H release. (Updated the title header from G to H to reflect the same)

7. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
      i. "G" Release
         1. 2022-07-14 : Rittwik: Updated on the AI/ML Project and mentioned that pro & Con of separate project were discussed and it was agreed to go with new project.
            a. Samsung will commit 3-5 resources for the AI/ML Project
            b. Call Flow, data Model, touch points should be defined
            c. Define the scope and key other projects that will have deliverables
            d. Jack: Track deliverables. How will it get integrated
            e. what are the associated project that are tied
            f. Rittwik: Project disclosure
            g. Tracy: Use case management with respect to AI/ML
            h. Jack: Model Management, what SMO role etc should be covered, What we can do now
            i. Other G Release activity status was discussed.
            j. Mahesh: Overview of the SMO Plan.
            k. Jack: brought up the documentation readiness and integration touch points.
      ii. Rittwik : virtualized DU and collaboration with OAI. Jack clarified the challenges
      2. 2022-07-21: Review of all project plan are in progress
         a. primer for "G" Release (Action: David/Rittwik)
   c. Report out from PTL: Stand-Up & Report Out on Blockers
      i. James Li Integration and Testing (INT)
      ii. Mahesh Jethanandani Service Management and Orchestration (SMO)
         1. Demo on SMO VES collector setup provided by Mahesh Jethanandani. Recording available here
8. Collaboration with OAI
   a. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time
9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   a. Thoralf: GS getting started "site space" cleanup: Getting Started
      i. Update the page to notify people that it is under construction (Action: Mahesh)
      ii. LF should give permission to all O-RAN SC members (Action: Sridhar)
         1. 2022-07-21 : Action Closed
10. Planning for Next Meeting
   a.
11. Any Other Business (AOB)
12. Meeting Summary (resolutions, new action items, etc.)

2022 08 18

Recording:

Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: Aug 18, 2022 09:01 AM EST
Meeting Recording: https://zoom.us/rec/share/r_Pv3Yl2SOKFkEgD2EvfAIlgOEdiV3JfnMzBn2ULGxWBxKlvVq1KqGzPwZIMAuFD.aTtro_ClJdI01vkX

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1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting (11th August 2022) approval: Motion to be proposed by James approved by Ganesh and the Motion was approved.
2. Review of Today’s Agenda.
3. Release Votes and Approval
   a. New Project Creation for AI/ML Project
      i. 8/11/22 Voting request from Avinash (Samsung) for the creation of AI/ML project, proposed PTL and underlying projects (http://lists.o-ran-sc.org/g/toc/topic/voting_request_ai_ml/92954587): approved.
4. **Copyright update**

   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.

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   iv. 2022-08-04: Jinri is out sick, hopefully work on that will make some progress here soon as he's feeling better.

   v. 2022-08-18: Stephen created an updated CLA draft and we shared it with people to take comments and then hopefully we can get it approved.

5. **O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)**

   a. F2F Meeting (Oct’22)
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6. **Old business and Status of Open Actions**

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      iii. 2022-08-04: John Keeney Non RT RIC F maintenance is about ready, but found one nasty little bug at the last moment. Should have it done in the next day or two. Ankit Barve O-DU-high is ready and will upgrade the branch.
      
      iv. 2022-08-18:
         1. John Keeney: The work is all done, branches all finished and just the actual release operation hasn't happened, and the maintenance release images not pushed out yet.
         2. Ankit Barve: It’s done last week and branch updated.
         3. John Murray: Need to have documentation and list the images that's part of the maintenance release on the F release page. Both Non RT RIC and O-DU-high needs to have the release page updated.

   b. “G” Release
   c. OSC Lab
      
      i. 2022-07-21: David mentioned that some steps has been provided to zero in on the issues. If not resolved Ganesh from Radisys to provide support
      
      ii. 2022-08-18: David Kinsey We found some some routing entry errors and corrected them but it didn't solve the problem. We have another session set up tomorrow to identify which server has the problem. Meanwhile we see some exchange of data, for instance, the MAC address is seen by the IXR but they don't still see the clock.
      
      d. 5G Super Blueprint status - to be considered for H release.
      
      i. 2022-07-21: David mentioned that there hasn't been any progress on this. Decided to move to H release. (Updated the title header from G to H to reflect the same)

7. **Standing Agenda Items (Brief Status of Ongoing Activities)**

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            l. Rittwik : virtualized DU and collaboration with OA1. Jack clarified the challenges

   2. 2022-07-21: Review of all project plan are in progress
      
      a. primer for “G” Release *(Action: David/Rittwik)*

   3. 2022-08-04: Continued the discussion on the proposed AI/ML project

   4. 2022-08-11: John Murray: I hope to spend a little more time reviewing we’re doing in the G release. Thanks to Dave for putting the timeline together and we’re getting ready for our Dev sprint 1. We will just the maintenance release status on the Non RT RIC and O-DU-high projects next week. But it’s working in the Taiwan lab to verify the release features that were not be able to be tested in the Bedminster lab.

   5. 2022-08-18:
      
      a. John Murray: We should be officially starting our Dev one sprint over the next three weeks and we hope to see people can pre-record a DEMO showing some progress
      
      b. David Kinsey: The Madrid face to face is going to occur on week 15. The primary topic for next Wednesday’s RSAC is trying to identify things we can show from sprint one demos.
c. John Murray: Anything that's significant and relevant, even from the F release that we can package up as a pre recorded demo, which is helpful to give O-RAN alliance members who don't pay much attention to OSC a sense of things that we were able to accomplish.

d. Jini Huang: Once David Kinsey has selected or decided on the demo please let me know in a timely manner for me to work on the agenda.

Report out from PTL: Stand-Up & Report Cut on Blockers

i. James Li: Integration and Testing (INT) 2022-08-18 needs to add an INT section in the G release page

ii. Mahesh Jethanandani: Service Management and Orchestration (SMO) 2022-08-18

1. The focus of SMO for the G release is integration: integration of O-DU on the O1 interface, and try to deploy network function that using Tacker on O2 interface. Will be a lot of interoperability testing.

2. John Murray: I would ask you to add two items here: 1) interface to the AI/ML project that's just starting right now -- expecting you to work with that team to deliver an analysis on what's the path forward for integration; 2) A little more description of what you think we could do with O-CU. It's critical around the orchestration to start to be able to deploy more components. As part of the AI/ML discussion it came up about where dashboards already exist and we want to work with the existing structure. From an operation point of view, how do the operation team find the dashboards, where they are, and a consistent view? I think it's a dialogue at this point, but we may need to collect the requirements.

3. Mahesh Jethanandani: R&DC would be. agood location to have that discussion about the dashboard capabilities.


iv. Sunil Singh: RIC Applications (RICAPP): 2022-08-18 Focused on the new HW-Rust xApp and created the repo. There will be a scenario that integrates multiple xApps and the discussions are still ongoing. Also geo-location information for the xApp.

v. Thoralf Czichy: RIC Platform (RIC): 2022-08-18

1. Thoralf Czichy: There will be work on E2 and A1. One key thing is to provide a REST E2 subscription interface to replace the subscription via RMR. We will remove the RMR support early in G release, and xApp still using RMR need to adapt to the new interface.

2. John Murray: Once this is done we need to validate that all xApp can still operate under the new release.

3. Sunil Singh: Yes, all xApp needs to be modified.

4. John Murray: Need to document this change so that people don't waste time on something that they think should work, but is not there. Maybe have a ToDo list to make sure that they're updated.

vi. (TBD) O-RAN Centralized Unit (OCC)

vii. Ankur Barve: O-RAN Distributed Unit High (ODUHIGH): On Taiwan lab we started integration and reached to a point where synchronization between L1 and L2 memory issues resolved and we are trying to achieve frame synchronization slots inclination. I, along with Lewis from Intel and Taiwan team is working on it.

viii. Luis Farias: O-RAN Distributed Unit Low (ODULOW)

ix. Martin Skorupski: Operations and Maintenance (OAM): 2022-08-18

1. Martin Skorupski: It's all available on this page: there are new VES message WG 10; Java version update; better security; and continue discussion on the AI/ML project on how to integrate into SMO in the future.

2. John Murray: Does the current test fixture support the O1 interface?

3. Ganesh Shenbagaraman: I'm not sure if this got tested in the last release, but this is something that is available. I'll check with our r&d team to see if we can provide a new release image.

4. David Kinsey: We might also need some help with deployment -- we've been trying to generate the helm chart and it's been slow to get it to run on the O-cloud.

5. Martin Skorupski: The Tacker team is trying to deploy it O2 interface.

6. David Kinsey: First is to do it manually -- Take the package builder from the helm and the other artifacts to build the onboarding package, the CSR, and then we should be able to give that CSR to Tacker and it should deploy it in theory.

x. Alex Stancu: Simulations (SIM) 2022-08-18

1. Martin Skorupski: I can cover for Alex Stancu. There will be continuous work on O1 simulator, and some new features of E2 simulator. Also from the university team they want to have the NS3-E2 integration.

2. John Murray: Do we have some sense of who's using the simulators at this point?

3. Martin Skorupski: The simulators are currently used by the first version of the 5G super blueprint package with Jenkins to run test cases to validate after the deployment. oclfoudified network functions.

4. Mahesh Jethanandani: SMO uses in the same way

xi. Jackie Huang: Infrastructure (INF): 2022-08-18 needs to add an INF section in the G release page

xii. weichen ni: Documentation (DOC)

xiii. (TBD) O-RAN Radio Unit (ORU)

xiv. hoejoo lee: AI/ML 2022-08-18

1. Avinash Bhat: Started the project creation; started the discussions with other projects; Updated the wiki pages and all the details.

2. John Murray: Needs to add a section of AI/ML project under the G release page

8. Collaboration with OAI

a. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items

a. Thoralf: GS getting started “site space” cleanup: Getting Started

i. Update the page to notify people that it is under construction (Action: Mahesh)

ii. LF should give permission to all O-RAN SC members (Action: Sridhar)

1. 2022-07-21: Action Closed

10. Planning for Next Meeting

a.

11. Any Other Business (AOB)

a. 2022-08-18:

i. Jini Huang: Orange is currently preparing for two important things: 1) face to face meeting in October in Madrid, anyone interested in attending can register and get their invitation letter as well as discount accommodation and hotel. 2) FUZY
hosted by TIP after the week of the f2f meeting. Regarding SCCL, I had provided some comments regarding the Charter modification but unfortunately I haven’t got the feedback from Stephen. I will continue to push him.

ii. John Murray The two steps, the CLA and the Charter changes, we should be sharing with the active companies here so that everybody can see what we’re proposing to change, and they can share with their legal teams to collect feedback. We will have to bring it to the board for a vote for final approval.

iii. Jinri Huang I will continue to push the OSC challenges to be part of EC discussion next week.

12. Meeting Summary (resolutions, new action items, etc.)

2022 08 11

Meeting Recording:

Topic: Zoom3 O-RAN SC’s Personal Meeting Room
Start Time: Aug 11, 2022 09:01 AM

Meeting Recording:
http://zoom.us/rec/share/WARNHqxD6zQV7pgxiJSrf1A_hsR0z-gW7tnNNMuromMicXcZ_KOeNi6KYG1OYILj.CknM4R_2s7KQlthXO

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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting (4th August 2022) approval: Motion to be proposed by James approved by John Keeney and the Motion was approved.
2. Review of Today’s Agenda.
   a. AI/ML Project Overview (Avinash) - The presentation to be continued
3. Release Votes and Approval
   a. New Project Creation for AI/ML Project
      i. 8/11/22 Voting request from Avinash (Samsung) for the creation of AI/ML project, proposed PTL and underlying projects (https://lists.o-ran-sc.org/g/toc/topic/voting_request_ai_ml/92554587):
         1. Avinash (Samsung): voting request posted on TOC email list, requested 8 repositories under the project: Dashboard: GUI to provide control and display status of Training manager;Training manager: Component to manage Training jobs, Models;TMS Adapter: Component to interface with TMS (Kubeflow);IMS Adapter: Component to interface with IMS (Kserve);Data Extraction: Component which retrieves required data for training from Data Lake;Feature store SDK: SDK for retrieving features required for Training;Model storage SDK: SDK for uploading and downloading Models;AI/ML Framework Deployment: Installation scripts for the AI/ML Framework components. New repo and keep a link in it/dep repository;
         2. Jinri Huang: two questions: 1) will this be a standalone project in G-release? 2) what’s the intended interaction with relevant O-RAN alliance WGs?
         3. Avinash (Samsung): 1) yes 2) The basic framework was probably defined a year and a half back and there hasn’t been much progress. We have picked up from there and have some of those implementations and some initial
PoC of this whole framework. As we go along the discussions with respect to interfaces, for example, the integration with that SMOAC or Non RT RIC project, we've already discussed few of the interaction points. What comes out of the SMOAC discussions would need to feed back into the O-RAN alliance as well.

4. **John Murray**: We have strong expectations that over the course of the G release that a plan be pulled together around how this fits with all the other modules and we can then decide on how to move forward beyond G. If it's approved as a project, this will give each PTL and the community a chance to have a dialogue about how this goes forward along with the O-RAN alliance WGs.

5. **Mahesh Jethanandani**: I just had a question around the rationale behind the 8 repositories.

6. **Avinash (Samsung)**: The dashboard is the kind of main UI which will be required for managing this whole framework. Then there have certain basic training managers and inference managers, also we would recommend to provide an adapter layers to keep that as a separate adapter for TMS and IMS. The model storage and feature storage might need separate treatment, so we have kept them in two repositories to handle them independently. The AI/ML framework deployment will be some kind of scripts for the ML components to be manually deployed in G release.

7. **John Murray**: Having this many repositories can add to your overhead versus things like adapters been organized in the same repo in a directory structure that makes sense in terms of how you use it. Mahesh Jethanandani does the SMO project have any dashboard that would be pulling other sources and things together?

8. **Mahesh Jethanandani**: In SMO a dashboard is part of the O1 interface for configuration management and we don't have a separate repo for just the dashboard.

9. **John Keeney**: A general comment there we do have a family of repos under portal/ for dashboards for we try to consolidate dashboard projects. Similarly, I would suggest maybe that the dashboard project could be a sub repo on the portal family. In addition, all of our deployment scripts are currently in the the it/dep repo and we might want to do the same for the AI/ML framework deployment.

10. **Avinash (Samsung)**: We were not aware of this consolidation efforts and we could definitely comply with that.

11. **John Keeney**: One other comment as well, in Non RT RIC project we started off with one repo with a heap of functions and the overhead just became too much, for instance, trying to have Sonar jobs that only refer to a sub directory. So there were pros and cons, and in the end we pulled the trigger to split it out into multiple repos as there are many advantages to having more small reports than one large repo. The approach you have here seems to make more sense having multiple repos as probably more overhead trying to keep things sorted within a single repo.

12. **Avinash (Samsung)**: I have the same opinion that it's better to have more structured repos and components.

13. **Jinri Huang**: John Keeney one question to your previous comment regarding the dashboard - is the dashboard you mentioned under the portal/ the same as the one Mahesh mentioned in the SMO O1 project?

14. **John Keeney**: I wasn't aware that there was a dashboard function separately in the SMO project. If it's not too much work maybe it might make sense to consolidate the same work same ownership same project under the portal/ family repos.

15. **John Murray**: Good conversations and very good discussion. We understand some of those challenges and can find the right balance of trade offs and can move things later if we find that it makes better sense to move things around.

16. **John Murray**: So we have a proposal from Avinash on creating this AI/ML project and several repos. He'll continue to work in parallel with other projects to come up with a more integrated plan. But what do you think by the end of G release would you be able to demonstrate the progress and capabilities toward the first phase?

17. **Avinash (Samsung)**: There is already a use case for QoE optimization and already an xApp. We would demonstrate building this application in our framework and deploying it. We will reuse the same data set which is already uploaded here.

18. **John Murray**: The data that you're using as part of your testing and the framework becomes part of the open source community even though it's artificially created data. You might have to look at Linux Foundation's open source data license.

19. **Avinash (Samsung)**: Actually the QoE prediction xApp exists as part of RICAP project. We are looking at using the same data set within the repo for demonstrating this capability.

20. **John Murray**: We just have to make sure that we have a plan around managing data, which is a little different than the software and what license it's under for people to use it. It's not directly part of what we're approving today, but we just need to make sure we're following the right processes. We have a motion to create a new project, and we have the information on the PTL and the contributors and repo organization. Who can second?

21. **Jinri Huang**: I can second.

22. **John Murray**: We have full agreement on creating the AI/ML project. Avinash is going to work with Sridhar to set up the repos and add to the project page. As part of releases, PTLs will be responsible for creating their section here on the G release page to describe what's going on. Each project should have at least a header and a description on things to be accomplished in this release. This is very helpful as a reference to O-RAN alliance and other forums as this is kind of the place of record what each PTL is committing to and focusing on. We haven't added too many new projects lately, but this is a big one with lots of activities so great job! This will, over time, touch a lot of projects and I would like to make sure things are done in a consistent fashion like the documentation, and the "getting started" page.

23. **Avinash (Samsung)**: Is there some guide which could help us make sure that we cover all the points with respect to the project creation and the next steps?


25. **John Keeney**: Congratulations to the Samsung team! We still remain quite concerned about scope overlap and try to identify clear boundaries of scope and to avoid work duplication Do you think at this stage to set an explicit action that we can come back and check at the end of the G release to serve the H release and beyond to ensure that we've done our work?

26. **John Murray**: I don't know there's a formal mechanism to do that. But the AI/ML project really needs to make sure its pieces can be incorporated and maintain some modularity with a cohesive plan because it has touch points to other projects such as near RT RIC, non RT RIC, OAM, SMO projects.

27. **Avinash (Samsung)**: I think that was one of the agreements which we had last week that we will definitely try to take this up regularly in the RSAC meetings to at least make it more integrated into other projects by the end of G release. We will take it on RSAC as an action.

28. **Sridhar Rao**: This is the insights for the F release as Martin raised an issue and we got it fixed, so I just want to ensure that there are no other issues in this. Please take a look at this link and please let me know if you see any discrepancy or a mismatch.
29. **John Keeney**: I have one quick comment here, I wondered if maybe we could try to track down who are the people as the unknown category and the individual-no account category and even the others category to see if they're being correctly allocated to the correct team and project.

30. **Sridhar Rao**: I think it's a valid point that I can talk to the analytics team.

31. **John Murray**: Please look at it and bring it to the Linux foundation to get it fixed if you feel it doesn't make sense, as this is the information of record other people reference especially when articles are written.

32. **John Keeney**: On the analytics page, can I ask Sridhar what is the difference between when counted as a commit and change list that there's nearly 25 - 30% difference in the values. In most cases, one change list results in one commit so I'm not really sure I understand what is the difference.

33. **John Murray**: John please just send Sridhar an email to get on his list.

4. **Copyright update**

   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      
      i. 2022-07-14 : Need to work on clarification for SCCL license and start having O-RAN WG Material. Refer to the website on O-RAN Alliance and update the charter Following work with TSC for contributing material to be used down stream. Setup a Meeting with Stephan (he needs to approve the CLA). (**Action Point : Jinri**)

      ii. 2022-07-21 : Meeting planned today and there will be update on this topic next week. The current focus is on O-RAN (does'nt cover 3GPP, ETSI etc)

      iii. 2022-07-28 : Meeting with O-RAN Legal Team, the draft of the Project Charter as well as CLA are ready. Once the documents are reviewed the same will be added to the process. There is a continued discussion with ETSI and O-RAN WG on how to organize the documents to make them available to O-RAN SC. Documents will be shared on the reflector.

     Feedback to be provided by everyone after discussing with their respective legal team.

   iv. 2022-08-04: Jinri is out sick, hopefully work on that will make some progress here soon as he's feeling better.

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)

   a. F2F Meeting (Oct22)

   b. Plugfest

   i. 2022-07-21 : O-RAN Alliance will initiate the Call for Host on July 24th

   ii. 2022-08:11 - **Jinri Huang**: Call for host for the fall Plugfest has been issued, and there are quite a few applications for host.

   c. Challenges for the OSC community (as report to EC)

   i. 2022-07-14 : There is no update this week

6. Old business and Status of Open Actions

   a. "F" Maintenance Release

      i. 2022-07-14 :

         1. Non-RT RIC Project : Will revert back by next ToC meeting if there is a need for a maintenance release.

         2. O-DU High also will have some maintenance

   ii. 2022-07-21 :

      1. O-DU high up to fixes needs to be merged.

      2. Target to close this maintenance by 4th Aug

   iii. 2022-08:04 - **John Keeney**: Non RT RIC F maintenance is about ready, but found one nasty little bug at the last moment. Should have it done in the next day or two. **Ankit Barve**: O-DU-highis ready and will upgrade the branch.

   b. "G" Release

   c. OSC Lab

   i. 2022-07-21 : David mentioned that some steps has been provided to zero in on the issues. If not resolved Ganesh from Radisys to provide support

   d. 5G Super Blueprint status - to be considered for H release.

   i. 2022-07-21 : David mentioned that there has been any progress on this. Decided to move to H release. (Updated the title header from G to H to reflect the same)

7. Standing Agenda Items (Brief Status of Ongoing Activities)

   a. Release Manager - **Sridhar Rao** /Release Planning: Weekly TOC Scheduling

   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)

   i. "G" Release

      1. 2022-07-14 : Rittwik: Updated on the AI/ML Project and mentioned that pro & Con of separate project were discussed and it was agreed to go with new project.

         a. Samsung will commit 3-5 resources for the AI/ML Project

         b. Call Flow, data Model, touch points should be defined

         c. Define the scope and key other projects that will have deliverables

         d. Jack : Track deliverables. How will it get integrated

         e. what are the associated project that are tied

         f. Rittwik : Project disclosure

         g. Tracy: Use case management with respect to AI/ML

         h. Jack : Model Management, what SMO role etc should be covered, What we can do now

         i. Other G Release activity status was discussed.

         j. Mahesh : Overview of the SMO Plan.

         k. Jack : brought up the documentation readiness and integration touch points.

   i. 2022-07-21 : Rittwik: virtualized DU and collaboration with OAI. Jack clarified the challenges

2. 2022-07-21 : Review of all project plan are in progress

3. 2022-08-04: **Continue the discussion on the proposed AI/ML project**

   a. Primer for "G" Release **(Action : David/Rittwik)**

   a. Arvind (Samsung): Our objective is to build an AI/ML framework where a network operator could create use cases and easily deploy the use cases. We have broken down them into three broad categories: one is a workflow management function which will focus on the training part; a training management system to support various kinds of frameworks; an inference platform. Jack's comment on this broad framework is to ensure to not to build everything from scratch, make sure that we reuse as much as possible. Our objective is not to build any new program but kind of define a framework with plugs where we can upstream some projects which are already there and that's our design philosophy as well, so I think I clarified that already. Another question with respect to ensuring that we don't build any separate APP
management framework and reuse what is already there in SMO. We will reuse what is already there for deployment of applications and apart from that, there are some ML components will have to manually deploy.

b. John Keeney: One quick comment: I think we still have a little bit of work to do around defining the boundaries around the data management and exposure. I think we would have to take some discussions there before we have agreed fully on the scope. One quick comment: I think we still have a little bit of work to do around defining the boundaries around the data management. I think we would have to take some discussions there before we have agreed fully on the scope.

c. Avinash (Samsung): The data management and exposure is under discussion at the moment. Once that is clearly defined, we can support it. At the moment, we are looking at it to be an integral part of the framework itself. I also need to clarify that the overall scope of this project contains functionalities that are not clearly defined in the WG2, so do expect a lot of discussions and the need to work through at the specification level. But for the initial release it doesn't have any major touch points with any other projects. We propose to have Hoejoo Lee as the PTL for this project.

d. hoejoo lee: I've been working with Avinash develop AI/ML workflow over the past three years and look forward to working with you.

e. John Murray: How familiar are you with Linux Foundation tooling and approaches? Have you done other projects or activities with Linux Foundation?

f. hoejoo lee: About 2 years ago I joined the EdgeX project with Linux Foundation.

g. John Murray: Sridhar from LF can help.

h. Avinash (Samsung): Besides Hoejoo, we also have 4 or 5 members that can contribute to the project, and we are open to anybody who's really interested to contribute.

i. John Murray: TOC members and other participants are to share this information with your companies and see if you might work directly in this area.

j. Avinash (Samsung): Feel free to reach out to me if you're interested. A bit more on the G release scope – again there should be no impact to other projects in G, but in the future there may be impact to SMO, Near RT RIC and Non RT RIC projects.

k. Sridhar Rao: Are you considering any specific use case for demonstration?

l. Avinash (Samsung): Yes, in the next slide, we'll reuse the QoE prediction use case with the framework.

m. John Murray: I encourage you to start dialogues with other projects, like Near RT RIC, xAPP projects, and SMO, from the beginning so they are all on the same page to make sure all your development could be most effective, and to avoid recreating work.

n. Avinash (Samsung): Sure. Even if we want to do something in the upcoming releases, we have to start the dialogues now and keeps the discussion going.

o. Rittwik Jana: Should you use O1 to send the models to Near RT RIC and Non RT RIC?

p. Avinash (Samsung): In G release we plan to deploy it manually.

q. John Murray: The deployment is really part of the lifecycle management system. And that the configuration might be on O1.

r. Rittwik Jana: How common APP lifecycle management works is still in the air and we have to keep an eye on that. I kind of noticed in this diagram at least you have a direct rest API between ML APP and assist APP and you're bypassing the DME in this case.

s. Avinash (Samsung): Overall we're looking at this as one rApp. As we discussed in RSAC meeting the assistant APP in the future could potentially serve many ML Apps. It might require for larger discussions in the specifications itself. As of now, we are looking at just deploying this APP like a regular rApp and the rest ML components we will deploy it manually. How they interact can be defined but REST is what we are recommending for this particular use case. For other use cases that want to use different interface and once standardized, we will support or align to it.

t. Rittwik Jana: If we could connect it with perhaps a similar project or in some way will be a little bit better.

u. Avinash (Samsung): From the larger orchestration perspective or from a functionality perspective, it is part of SMO. Until it is really standardized or there's a lot of discussions on that specification perspective, then integration will become more and more eminent. For now we thought was to get started with this but we welcome if any comments on that.

v. Mahesh: I'm looking at this from an SMO perspective and the specifications will not guide implementation. As SMO already has, for example, from a data lake perspective, an influx db that you could start integrating with; and same thing about the Kafka bus.

w. Avinash (Samsung): What we depicted here is to reuse the SMO framework, not going to redefine it.

x. John Keeney: The influx db or Kafka bus access within SMO are only available currently to be the R1 interface.

Your thoughts here is probably fine for the G release spoke, as it's like an end to end solution that will be essentially upstream into to OSC. We are basically postponing our discussions around where the scope overlap is, which would need ongoing over the next couple releases, they would need to be probably re-implementation of some of the solution presented here and to be more compliant with the O-RAN architecture and with the existing OSC integration environment.

y. Avinash (Samsung): I completely agree. We never had a chance to discuss with you so any comments from you would be really valuable.

z. Mahesh: I would welcome you to present this at the next SMO meeting.

aa. Rittwik Jana: What is the touch point with the OAM project, because they are implementing O1 protocol. This is where I'm a little confused: I can understand from a G release standpoint, it's OK as the implementation is pretty much stand alone. But my worry is, if you go down this path, later on you might have to do a whole lot of modifications to get those touch points with the Non RT RIC and SMO. I mean it's a great start, but I just feel like chicken and egg because not everything is specified in the specification.

ab. Avinash (Samsung): To keep it simple, we have internally discuss about this and we are looking at kind of manually doing the deployment right now. With respect to interface and model storage, I think the APP management needs some discussion. In terms of rework, the AI management function and the training platform, most of the components would probably continue as we don't have those touch points or integration points discussed. There might be some changes.

ac. Rittwik Jana: You have one touch point in Near RT RIC, one in SMO, and one inside the training platform so essentially three databases and the datalake outside of it. Can we consolidate the data stores?
Avinash: The datalake is here for implementation, but in any production deployment, the datalake would be external. We have clearly called it out all the components which are marked by the gray color actually existing. We will reuse what is defined in the SMO project and we're not going to redefine the datalake when there's the influx db in the Near RT RIC. And for the APP deployment, we are looking at using the existing mechanism of deployment as well.

John Murray: Is there any other kind of technical questions? I'd like to hear about the interest level in supporting the investment of the community towards this project, particularly from the other TOC members, and if any of the operators think that this is useful and important.

Jakub Novy: I have to check with our colleagues and not able to give you the exact answer now.

John Keeney: Let's come back briefly to Rittwik's question about consolidating all these data stores. What we see here are the architecture picture, and a simplified view. There are a lot of steps and interfaces in the real data flow and coordination of the access. Let's try to boil this down and to fully understand all of these inter linkages, especially with existing platforms and functions.

Avinash: As we discussed, we will have a QoE prediction application to demonstrate the capability of the framework, which we will manually deploy. I think the data is in place and we will populate that into the data lake manually and use that for training and all the management will be done in a management function. I think that's broadly what we had with respect to the overall project and the overall project scope, as we all agree it's quite large and a lot of things are still under discussions and what we feel we can take it up as the initial scope for the G release.

John Murray: Is there any other kind of technical questions? I'd like to hear about the interest level in supporting the investment of the community towards this project, particularly from the other TOC members, and if any of the operators think that this is useful and important.

John Murray: I'm gonna push the vote for the project creation to the next week's TOC meeting. You can make a motion and post to the TOC reflector.

4. 2022-08-11: John Murray: I hope to spend a little more time reviewing we're doing in the G release. Thanks to Dave for putting the timeline together and we're getting ready for our Dev sprint 1. We will just the maintenance release status on the Non RT RIC and O-DU-high projects next week.

5. Collaboration with OAI

a. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items

a. Thoralf: GS getting started "site space" cleanup: Getting Started
i. Update the page to notify people that it is under construction (Action: Mahesh)
ii. LF should give permission to all O_RAN SC members (Action: Sridhar)
1. 2022-07-21: Action Closed

10. Planning for Next Meeting
   a.

11. Any Other Business (AOB)

12. Meeting Summary (resolutions, new action items, etc.)

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### 2022 08 04

**Recording:**

**Meeting Recording:**

- **Topic:** Zoom3 O-RAN SC's Personal Meeting Room
- **Start Time:** Aug 4, 2022 09:00 AM

**Meeting Recording:**

https://zoom.us/rec/share/j5U9OlmWuBD1Sdq7Y7d2Ni2xv57coPtbqT1xKEet-i31nvmej7F9qEK678DK3U.-3Wwpv/lvbvvcwJDF

**Agenda**
1. **Call for Scribe (minutes owner):** James Li
2. **Roll Call & Quorum Check**

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      1. Non-RT RIC Project: Will revert back by next ToC meeting if there is a need for a maintenance release.
      2. O-DU High also will have some maintenance
   ii. 2022-07-21:
      1. O-DU high upto fixes needs to be merged.
      2. Target to close this maintenance by 4th Aug
   iii. 2022-08-04: John Keeney Non RT RIC F maintenance is about ready, but found one nasty little bug at the last moment. Should have it done in the next day or two. Ankit Barve O-DU-high is ready and will upgrade the branch.
   b. "G" Release
   c. OSC Lab
   i. 2022-07-21: David mentioned that some steps has been provided to zero in on the issues. If not resolved Ganesh from Radisys to provide support
   d. 5G Super Blueprint status - to be considered for H release.
   i. 2022-07-21: David mentioned that hasnt been any progress on this. Decided to move to H release. (Updated the title header from G to H to reflect the same)
7. **Standing Agenda Items (Brief Status of Ongoing Activities)**
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
   i. "G" Release
One quick comment: I think we still have a little bit of work to do around defining the TOC members and other participants are to share this information with your companies. How common APP lifecycle management works is still in the air and we have to keep an eye on that. I kind of noticed in this diagram at least you have a direct rest API between ML APP and the rest ML components we will deploy it manually. How they interact can be defined but REST configuration might be on O1.

Wide : brought up the documentation readiness and integration touch points.

John Murray: how familiar are you with Linux Foundation tooling and approaches? Have you done other projects or activities with Linux foundation?

Mahesh: Overview of the SMO Plan.

Other G Release activity status was discussed.

Call Flow, data Model, touch points should be defined

1. 2022-07-14 : Rittwik: Updated on the AI/ML Project and mentioned that pro & Con of separate project were discussed and it was agreed to go with new project.
   a. Samsung will commit 3-5 resources for the AI/ML Project
   b. Call Flow, data Model, touch points should be defined
   c. Define the scope and key other projects that will have deliverables
   d. Jack: Track deliverables. How will it get integrated
   e. what are the associated project that are tied
   f. Rittwik : Project disclosure
   g. Tracy: Use case management with respect to AI/ML
   h. Jack: Model Management, what SMO role etc should be covered, What we can do now
   i. Other G Release activity status was discussed.
   j. Mahesh : Overview of the SMO Plan.
   k. Jack : brought up the documentation readiness and integration touch points.
   l. Rittwik : virtualized DU and collaboration with OAI . Jack clarified the challenges

2. 2022-07-21 : Review of all project plan are in progress
   a. primer for “G” Release (Action : David/Rittwik)

3. 2022-08-04: Continue the discussion on the proposed AI/ML project
   a. Avinash (Samsung): Our objective is to build an AI/ML framework where a network operator could create use cases and easily deploy the use cases. We have broken down them into three broad categories: one is a workflow management function which will focus on the training part; a training management system to support various kind of frameworks; an inference platform. Jack’s comment on this broad framework is to ensure to not to build anything from scratch, make sure that we reuse as much as possible. Our objective is not to build any new program but kind of define a framework with plugs where we can upstream some projects which are already there and that's our design philosophy as well, so I think I clarified that already. Another question with respect to ensuring that we don't build any separate APP management framework and reuse what is already there in SMO. We will reuse what is already there for deployment of applications and apart from that, there are some ML components will have to manually deploy.
   b. John Keeney: One quick comment: I think we still have a little bit of work to do around defining the boundaries around the data management and exposure. I think we would have to take some discussions there before we have agreed fully on the scope. One quick comment: I think we still have a little bit of work to do around defining the boundaries around the data management. I think we would have to take some discussions there before we have agreed fully on the scope.
   c. Avinash (Samsung): The data management and exposure is under discussion at the moment. Once that is clearly defined, we can support it. At the moment, we are looking at it to be an integral part of the framework itself. I also need to clarify that the overall scope of this project contains functionalities that are not clearly defined in the WG2, so do expect a lot of discussions and the need to work through at the specification level. But for the initial release it doesn’t have any major touch points with any other projects. We propose to have Hoejoo Lee as the PTL for this project.
   d. Hoejoo Lee: I’ve been working with Avinash develop AI/ML workflow over the past three years and look forward to working with you.
   e. John Murray: how familiar are you with Linux Foundation tooling and approaches? Have you done other projects or activities with Linux foundation?
   f. Hoejoo Lee: About 2 years ago I joined the EdgeX project with Linux Foundation.
   g. John Murray: Srithar from LF can help.
   h. Avinash (Samsung): Besides Hoejoo, we also have 4 or 5 members that can contribute to the project, and we are open to anybody who’s really interested to contribute.
   i. John Murray: TOC members and other participants are to share this information with your companies and see if you might work directly in this area.
   j. Avinash (Samsung): Feel free to reach out to me if you’re interested. A bit more on the G release scope – again there should be no impact to other projects in G, but in the future there may be impact to SMO, near RT RIC and Non RT RIC projects.
   k. Sridhar Rao: are you considering any specific use case for demonstration?
   l. Avinash (Samsung): Yes, in the next slide, we'll reuse the QoE prediction use case with the framework.
   m. John Murray: I encourage you to start dialogues with other projects, like Near RT RIC, xAPP projects, and SMO, from the beginning so they are all on the same page to make sure all your development could be most effective, and to avoid recreating work.
   n. Avinash (Samsung): Sure. Even if we want to do something in the upcoming releases, we have to start the dialogues now and keeps the discussion going.
   o. Rittwik Jana: Should you use O1 to send the models to Near RT RIC and Non RT RIC?
   p. Avinash (Samsung): In G release we plan to deploy it manually.
   q. John Murray: The deployment is really part of the lifecycle management system. And that the configuration might be on O1.
   r. Rittwik Jana: How common APP lifecycle management works is still in the air and we have to keep an eye on that. I kind of noticed in this diagram at least you have a direct REST API between ML APP and assistant APP and you're bypassing the DME in this case.
   s. Avinash (Samsung): Overall we're looking at this as one rApp. As we discussed in RSAC meeting the assistant APP in the future could potentially service many ML Apps. It might require for larger discussions in the specifications itself. As of now, we are looking at just deploying this APP like a regular rApp and the rest ML components we will deploy it manually. How they interact can be defined but REST is what we are recommending for this particular use case. For other use cases that want to use different interface and once standardized, we will support or align to it.
   t. Rittwik Jana: If we could connect it with perhaps a similar project or in some way will be a little bit better.
   u. Avinash (Samsung): From the larger orchestration perspective or from a functionality perspective, it is part of SMO. Until it is really standardized or there's a lot of discussions on that specification perspective, then integration will become more and more eminent. For now we thought was to get started with this but we welcome if any comments on that.
v. Mahesh: I’m looking at this from a SMO perspective and the specifications will not guide implementation. As SMO already has, for example, from a data lake perspective, an influx db that you could start interacting with; and same thing about the Kafka bus.

w. Avinash (Samsung): What we depicted here is to reuse the SMO framework, not going to redefine it.

x. John Keeney: The influx db or Kafka bus access within SMO are only available currently to be the R1 interface. Your thoughts here is probably fine for the G release spoke, as it’s like an end to end solution that will be essentially upstream into to OSC. We are basically postponing our discussions around where the scope overlap is, which would need ongoing over the next couple releases, they would need to be probably re-implementations of some of the solution presented here and to be more compliant with the O-RAN architecture and with the existing OSC integration environment.

y. Avinash (Samsung): I completely agree. We never had a chance to discuss with you so any comment from you would be really valuable.

z. Mahesh: I would welcome you to present this at the next SMO meeting.

aa. Rittwik Jana: What is the touch point with the OAM project, because they are implementing O1 protocol. This is where I’m a little confused; I can understand from a G release standpoint, it’s OK as the implementation is pretty much stand alone. But my worry is, if you go down this path, later on you might have to do a whole lot of modifications to get those touch points with the Non RT RIC and SMO. I mean it’s a great start, but I just feel like chicken and egg because not everything is specified in the specification.

ab. Avinash (Samsung): To keep it simple, we have internally discuss about this and we are looking at kind of manually doing the deployment right now. With respect to interface and model storage, I think the APP management needs some discussion. In terms of rework, the AI management function and the training platform, most of the components would probably continue as we don’t have those touch points or integration points discussed. There might be some changes.

ac. Rittwik Jana: You have one touch point in Near RT RIC, one in SMO, and one inside the training platform so essentially three databases and the datalake outside of it. Can we consolidate the data stores?

ad. Avinash (Samsung): The datalake is purely from a training perspective and the remaining entities are more from an inference perspective. It may not be required to have both, unless both xApp and rApp use cases are supported.

ae. John Murray: The datalake is here for implementation, but in any production deployment, the datalake would be external.

af. Avinash (Samsung): We have clearly called it out all the components which are marked by the gray color actually existing. We will reuse what is defined in the SMO project and we’re not going to redefine the datalake when there’s the influx db in the Near RT RIC. And for the APP deployment, we are looking at using the existing mechanism of deployment as well.

ag. John Keeney: Let’s come back briefly to Rittwik’s question about consolidating all these data stores. What we see here are the architecture picture, and a simplified view. There are a lot of steps and interfaces in the real data flow and coordination of the access. We are trying to boil this down and to fully understand all of these inter linkages, especially with existing platforms and functions.

ah. Avinash (Samsung): As we discussed, we will have a QoE prediction application to demonstrate the capability of the framework, which we will manually deploy. I think the data is in place and we will populate that into the data lake manually and use that for training and all the management will be done in a management function. I think that’s broadly what we had with respect to the overall project and the overall project scope, as we all agree it’s quite large and a lot of things are still under discussions and what we feel we can take it up as the initial scope for the G release.

ai. John Murray: Is there any other kind of technical questions? I’d like to hear about the interest level in supporting the investment of the community towards this project, particularly from the other TOC members, and if any of the operators think that this is useful and important.

ak. Jakub Novy: I have to check with our colleagues and not able to give you the exact answer now.

al. John Murray: I’m trying to spur the dialogue to promote the discussion and awareness to make it useful for the community. Before the H release I’m going to need to see a much better architecture on how this framework fits in as a framework, and added to the deployment without breaking things.

am. Avinash (Samsung): How do you propose to take this forward if you want to do it in G release?

an. John Murray: You have roughly 6 months to work in G release, after that I expect that architecture agreement to be in place with a lot more details, not necessarily the implementation. Also where did you post the slides?


ap. John Murray: I’m gonna push the vote for the project creation to the next week’s TOC meeting. You can make a motion and post to the TOC reflector

c. Report out from PTL: Stand-Up & Report Out on Blockers
   i. James Li: Integration and Testing (INT)
   ii. Mahesh Jethanandani: Service Management and Orchestration (SMO)
   iii. John Keeney: Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
   iv. Sunil Singh: RIC Applications (RICAPP)
   v. Thoralf Czichy: RIC Platform (RIC)
   vi. (TBD) O-RAN Centralized Unit (OCU)
   vii. Manasi Padhy: O-RAN Distributed Unit High (ODUHIGH)
   viii. Luis Farias: O-RAN Distributed Unit Low (ODULOW)
   ix. Martin Skorupski: Operations and Maintenance (OAM)
   x. Alex Stancu: Simulations (SIM)
   xi. Jackie Huang: Infrastructure (INF)
   xii. weichen ni: Documentation (DOC)
   xiii. (TBD) O-RAN Radio Unit (ORU)

8. Collaboration with OAI
   a. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   a. Thoralf: GS getting started “site space” cleanup: Getting Started
i. Update the page to notify people that it is under construction (Action: Mahesh)
ii. LF should give permission to all O_RAN SC members (Action: Sridhar)

10. Planning for Next Meeting
   a.
11. Any Other Business (AOB)
12. Meeting Summary (resolutions, new action items, etc.)

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2022 07 28

Recording:
Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Date: Jul 28, 2022 08:58 AM Eastern Time (US and Canada)
Meeting Recording:
https://zoom.us/rec/share/gYuNT_nmBmtCoNmdl-3BrKW8CiJTy9HE5qq2b6lA8Crbl1GAQo7WGN6Zz_SFqY__Zkhf8k5lZ2mN2RRQ

Agenda

1. Call for Scribe (minutes owner): Avinash Bhat
2. Roll Call & Quorum Check

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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting (21st Jul 2022) approval: Motion to be proposed by Avinash Bhat approved by Thoralf and the Motion was approved.
2. Review of Today's Agenda.
   a. Magma Project wants to present to O-RAN SC. request for a 10 min slot
      i. Amar Padmanabhan (PTL of Magma Project) presented the MOCN GW Overview. Slides can be posted on the Reflector (Action: Sridhar)
   b. AI/ML Project Overview (Avinash) - The presentation to be continued next week
3. Release Votes and Approval
4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.
      ii. 2022-05-12: summary of the open issues
         1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
         2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
         3. Extend OSC SCCL. Open
      iii. 2022-05-19: Jinri: O-RAN (Brian) is addressing previous request from TOC
      iv. 2022-05-26: no news
v. 2022-06-09: James Li: Request from SDFG co-chair to OSC PTLs to bring up any copyright requests to 3GPP/ETSI. Jack clarified on the past discussions pointing to the issue in referencing from code implementation to these source specification documents. This is still not a resolved issue. Jinri added comments to clarify that the SDFG request is more towards the list of historical requests to 3GPP. Jack and Jinri will check the past requests. PTLs are requested to forward any past request to Jinri. John Keeney pointed to challenges in determining when to make a copyright request. Jack said in view of all these challenges, the legal team is working on a broad approval for use.

vi. 2022-06-23: Jack: Copyright request is still ongoing, in next few months some progress is expected

vii. 2022-07-14: Need to work on clarification for SCCL license and start having O-RAN WG Material. Refer to the website on O-RAN Alliance and update the charter following work with TSC for contributing material to be used down stream. Setup a Meeting with Stephan (he needs to approve the CLA). (Action Point: Jinri)

viii. 2022-07-21: Meeting planned today and there will be update on this topic next week. The current focus is on O-RAN (doesn’t cover 3GPP, ETSI etc)

ix. 2022-07-28: Meeting with O-RAN Legal Team, the draft of the Project Charter as well as CLA are ready. Once the documents are reviewed the same will be added to the process. There is a continued discussion with ETSI and O-RAN WG on how to organize the documents to make them available to O-RAN SC. Documents will be shared on the reflector.

Feedback to be provided by everyone after discussing with their respective legal team.

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting (Oct’22)
   b. Plugfest
   i. 2022-07-21: O-RAN Alliance will initiate the Call for Host on July 24th
   c. Challenges for the OSC community (as report to EC)
   d. 2022-04-20: James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC). Jinri might request help from PTLs (via reflector mailing list).
   e. 2022-05-05: Jinri sent out a survey. PTLs are invited to contribute with identified issues.
   f. 2022-05-19: Jinri gives a summary of the survey. AP Jinri will start a review on TOC email reflector. Members are invited to review the list of issues and identify potential way forward before the discussion at the meeting.
   g. 2022-05-26: Jinri: item still open for contributions. On Licensing issues, it could be beneficial to list the individual licenses that need to be addressed by O-RAN. This would speed up O-RAN review.
   h. 2022-06-02: John Keeney: Raised a question regarding status of the survey
   i. Jinri: EC could not take it up due to other urgent business, but some people are in process of initial analysis.
   j. 2022-07-14: There is no update this week

6. Old business and Status of Open Actions
   a. "F" Maintenance Release
      i. 2022-07-14:
         1. Non-RT RIC Project: Will revert back by next toc meeting if there is a need for a maintenance release.
         2. O-DU High also will have some maintenance
      ii. 2022-07-21:
         1. O-DU high upto fixes needs to be merged.
         2. Target to close this maintenance by 4th Aug
   b. "G" Release
   c. OSC Lab
      i. 2022-05-26: Jack: Lab issues for O-DU low integration should be solved. Also access to the lab is now available for interested members involved in integration and testing activity
      ii. 2022-06-02: PTP clock sync issue update
         Ankit: Checked scripts for synchronization of the clock but ptp sync still failing to get in sync with grandmaster and internal clock only used by ODU.
         David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further
      iii. 2022-06-09: Luis: to discuss with Rich and to have a remote debug session for clock sync issue.
      iv. 2022-06-16: Issue still remains, Jack to have a check what next step could be to resolve this issue
      v. 2022-07-21: David mentioned that some steps has been provided to zero in on the issues. If not resolved Ganesh from Radisys to provide support
   d. 5G Super Blueprint status - to be considered for H release.
      i. 2022-07-21: David mentioned that there hasn’t been any progress on this. Decided to move to H release.

7. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requirements Software Architecture Committee (RSAC; link incl. meeting details)
      i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
         1. 2022-04-06: James talked about David Kinsey’s mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David’s e-mail.
         2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to “tempilate” the Viavi depot to make it easier to deploy.
         3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang) area: ‘Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities’. This would help this community for Ex. SMO: how to manage infra easily - kind of questions.
         4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this)
      5. 2022-05-12: workshop likely to be on Wednesday May 18th. James Li will check and confirm
      6. 2022-05-19: James: OTF workshop did not take place. Code base was out of date and need update
      7. 2022-06-16: David: AI ML repo integration discussed in the RSAC and recommendation is to go ahead with AI ML as an independent project
         Jack: Assessment of capabilities, target plan to be discussed for AI ML project
         Avinash: A detailed plan to be presented
      ii. "G" Release
         1. Jack: How do we track our support of MVP?
         2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
         3. 2022-04-06: Jack called for first input. RSAC planning committee will again coordinate.
4. 2022-05-12: Rittwik: for “G” release with do not expect to implement many MVP use cases. Which ones still TBD.
   Jack: priority should be given to those exploiting and validating OSC software capability
5. 2022-05-26: James Li: in preparation for release G software, PTLs should plan providing information about the characteristics of the code that could help planning integration and testing activity beforehand
6. 2022-06-02 Action point : Jack to update G release timeline calendar for review and voting
   David: We are running behind for G release planning, it could not be done in the last RSAC due to limited participants
7. 2022-06-09: Jack: Raised a question regarding O-DU-LOW new functionality under G release?
   Luis: Incremental improvements and optimization expected in G release but as of now no new feature expected on ORAN Fronthaul interface
   Jack: All PTLs to update and provide tentative G release plan to Jinri for the presentation on 13th June in I2f meeting
8. 2022-06-16: Jack: G release page to be linked in Release section and subsequent sections to be added
   David: To schedule each project planning (in RSAC) in first three weeks of G release
   Jack: Activity to plan in G release. Deployment of all modules with health check
   Rittwik: Raised a query to have a specific use case for Taiwan lab
   Jack: Both labs repeating same use case independently helps in removing local dependency and better documentation for end user to use and replicate the system
9. 2022-07-14 : Rittwik: Updated on the AI/ML Project and mentioned that pro & Con of separate project were discussed and it was agreed to go with new project.
   a. Samsung will commit 3-5 resources for the AI/ML Project
   b. Call Flow, data Model, touch points should be defined
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   i. James Li: Integration and Testing (INT)
   ii. Mahesh Jethanandani: Service Management and Orchestration (SMO)
   1. Demo on SMO VES collector setup provided by Mahesh Jethanandani . Recording available here
   iii. John Keeney: Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
   iv. Sunil Singh: RIC Applications (RICAPP)
   v. Thoralf Czichy: RIC Platform (RIC)
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x. Alex Stancu: Simulations (SIM)
   xi. Jackie Huang: Infrastructure (INF)
   xii. weichen ni: Documentation (DOC)
xiii. (TBD) O-RAN Radio Unit (ORU)
8. Collaboration with OAI
   a. 2022-05-05: James and Jinri got in touch with OAI about contributions in the area of O-CU development. First contributions in the context of F release are under evaluation. Jack reminded that licensing approach of OAI need to be verified before source-code adoption is agreed. Binary/test fixture solution are possible as an alternative
   b. 2022-05-12: Meeting with OAI is planned later this week. One agenda item will be clarifying options to use OAI code in OSC projects
   c. 2022-05-19: call rescheduled to tomorrow (May 20th). Christian (Orange) is in OAI board and will take the action to handle the bilateral communication
   d. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time
9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   a. Thoralf : GS getting started "site space" cleanup: Getting Started
   i. Update the page to notify people that it is under construction (Action : Mahesh)
   ii. LF should give permission to all O_RAN SC members (Action : Sridhar)
   1. 2022-07-21 : Action Closed
10. Planning for Next Meeting
   a. 
11. Any Other Business (AOB)
12. Meeting Summary (resolutions, new action items, etc.)
Meeting Recording:
https://zoom.us/rec/share/ULt8HnFjcVTbCxy2g9yFOn2PZF7IM_OdGqXsZ3bm5e88Tvcb9tO4_iTxyxIplgsxLpLpLJOMRyD-2nQ

Agenda

1. Call for Scribe (minutes owner): Avinash Bhat
2. Roll Call & Quorum Check

<table>
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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. **Decision:** Minutes for TOC meeting (14th Jul 2022) approval: Motion to be proposed by Avinash Bhat seconded by Jinri Huang. Motion was approved.
2. Review of Today's Agenda.
   a. No new agenda for this week
3. Release Votes and Approval
   a. No Items for Approval this week.
4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20 : no major progress/updates.
      ii. 2022-05-12: summary of the open issues
         1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
         2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
         3. Extend OSC SCCL. Open
            iii. 2022-05-19: Jinri: O-RAN (Brian) is addressing previous request from TOC
            iv. 2022-05-26: no news
      v. 2022-06-09: James Li: Request from SDFG co-chair to OSC PTLs to bring up any copyright requests to 3GPP/ETSI. Jack clarified on the past discussions pointing to the issue in referencing from code implementation to these source specification documents. This is still not a resolved issue. Jinri added comments to clarify that the SDFG request is more towards the list of historical requests to 3GPP. Jack and Jinri will check the past requests. PTLs are requested to forward any past request to Jinri. John Keeney pointed to challenges in determining when to make a copyright request. Jack said in view of all these challenges, the legal team is working on a broad approval for use in open source software.
      vi. 2022-06-23: Jack: Copyright request is still ongoing, in next few months some progress is expected
      vii. 2022-07-14 : Need to work on clarification for SCCL license and start having O-RAN WG Material. Refer to the website on O-RAN Alliance and update the charter. Following work with TSC for contributing material to be used down stream. Setup a Meeting with Stephan (he needs to approve the CLA). (Action Point: Jinri)
      viii. 2022-07-21 : Meeting planned today and there will be update on this topic next week. The current focus in on O-RAN doesn't cover 3GPP, ETSI etc.
5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting (Oct'22)
   b. Plugfest
      i. 2022-07-21 : O-RAN Alliance will initiate the Call for Host on July 24th
      c. Challenges for the OSC community (as report to EC)
   d. i. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC). Jinri might request help from PTLs (via reflector/mailing list).
      ii. 2022-05-05 Jinri sent out a survey. PTLs are invited to contribute with identified issues.
      iii. 2022-05-19 Jinri gives a summary of the survey. AP Jinri will start a review on TOC email reflector. Members are invited to review the list of issues and identify potential way forward before the discussion at the meeting.
iv. 2022-05-26 Jinri: item still open for contributions. On Licensing issues, it could be beneficial to list the individual licenses that need to be addressed by O-RAN. This would speed up O-RAN review

v. 2022-06-02: John Keeney: Raised a question regarding status of the survey Jinri: EC could not take it up due to other urgent business, but some people are in process of initial analysis.

vi. 2022-07-14 : There is no update this week

6. Old business and Status of Open Actions

a. "F" Maintenance Release
   i. 2022-07-14 :
      1. Non-RT RIC Project : Will revert back by next ToC meeting if there is a need for a maintenance release.
      2. O-DU High also will have some maintenance
   ii. 2022-07-21 :
      1. O-DU high upto fixes needs to be merged.
      2. Target to close this maintenance by 4th Aug

b. "G" Release

c. OSC Lab
   i. 2022-06-26: Jack : Lab issues for O-DU low integration should be solved. Also access to the lab is now available for interested members involved in integration and testing activity
   ii. 2022-06-02: PTP clock sync issue update
      Ankit: Checked scripts for synchronization of the clock but ptp sync still failing to get in sync with grandmaster and internal clock only used by ODU.
      David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further
   iii. 2022-06-09: Luis: to discuss with Rich and to have a remote debug session for clock sync issue.
   iv. 2022-06-16: Issue still remains, Jack to have a check what next step could be to resolve this issue
   v. 2022-07-21 : David mentioned that some steps has been provided to zero in on the issues. If not resolved Ganesh from Radisys to provide support
   vi. 5G Super Blueprint status - to be considered for H release.
      i. 2022-07-21 : David mentioned that there hasnt been any progress on this. Decided to move to H release. (Updated the title header from G to H to reflect the same)

7. Standing Agenda Items (Brief Status of Ongoing Activities)

   i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
      1. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
      2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to "templatize" the Viavi deployment to make it easier to deploy.
      3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang ) area : Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. This would help this community for Ex. SMO : how to manage infra easily - kind of questions.;
      4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this)
      5. 2022-05-12: workshop likely to be on Wednesday May 18th. James Li will check and confirm
      6. 2022-05-19: James: OTF workshop did not take place. Code base was out of date and need update
      7. 2022-06-16:David: AI ML repo integration discussed in the RSAC and recommendation is to go ahead with AI ML as an independent project
         Jack: Assessment of capabilities, target plan to be discussed for AI ML project
         Avinash: A detailed plan to be presented
   ii. "G" Release
      1. Jack: How do we track our support of MVP?
      2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
      3. 2022-04-06: Jack called for first input. RSAC planning committee will again coordinate.
      4. 2022-05-12: Rittwik: for "G" release with do not expect to implement many MVP use cases. Which ones still TBD.
         Jack: priority should be given to those exploiting and validating OSC software capability
      5. 2022-05-26: James Li : in preparation for release G software, PTLs should plan providing information about the characteristics of the code that could help planning integration and testing activity beforehand
   6. 2022-06-02 Action point : Jack to update G release timeline calendar for review and voting
      Jack: G release planning status
      David: We are running behind for G release planning, it could not be done in the last RSAC due to limited participants
   7. 2022-06-09: Jack: Raised a question regarding O-DU-LOW new functionality under G release?
      Luis: Incremental improvements and optimization expected in G release but as of now no new feature expected on ORAN Fronthaul interface
      Jack: All PTLs to update and provide tentative G release plan to Jinri for the presentation on 13th June in I2f meeting
   8. 2022-06-16: Jack: G release page to be linked in Release section and subsequent sections to be added
      David: To schedule each project planning (in RSAC) in first three weeks of G release
      Jack: Activity to plan in G release: Deployment of all modules with health check
      Rittwik: Raised a query to have a specific use case for Taiwan lab
      Jack: Both labs repeating same use case independently helps in removing local dependency and better documentation for end user to use and replicate the system
   9. 2022-07-14 : Rittwik: Updated on the AI/ML Project and mentioned that pro & Con of separate project were discussed and it was agreed to go with new project.
      a. Samsung will commit 3-5 resources for the AI/ML Project
      b. Call Flow, data Model, touch points should be defined
      c. Define the scope and key other projects that will have deliverables
      d. Jack : Track deliverables. How will it get integrated
7. B. Project disclosure
   c. Use case management with respect to AI/ML
   d. Jack: Model Management, what SMO role etc should be covered, What can we do now
   i. Other G Release activity status was discussed.
   j. Mahesh: Overview of the SMO Plan.
   k. Jack: brought up the documentation readiness and integration touch points.
   l. Rittwik: virtualized DU and collaboration with OAI. Jack clarified the challenges

10. 2022-07-21 : Review of all project plan are in progress
   a. primer for “G” Release (Action: David/Rittwik)
   c. Report out from PTL: Stand-Up & Report Out on Blockers
      i. James Li Integration and Testing (INT)
      ii. Mahesh Jethanandani Service Management and Orchestration (SMO)
         1. Demo on SMO VES collector setup provided by Mahesh Jethanandani. Recording available here
      iii. John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
      iv. Sunil Singh RIC Applications (RICAPP)
      v. Thoralf Czichy RIC Platform (RIC)
      vi. (TBD) O-RAN Centralized Unit (OCU)
      vii. Manasi Padhy O-RAN Distributed Unit High (ODUHIGH)
      viii. Luis Farias O-RAN Distributed Unit Low (ODULOW)
      ix. Martin Skorupski Operations and Maintenance (OAM)
      x. Alex Stancu Simulations (SIM)
      xi. Jackie Huang Infrastructure (INF)
      xii. weicheni Documentation (DOC)
      xiii. (TBD) O-RAN Radio Unit (ORU)
   8. Collaboration with OAI
      a. 2022-05-05: James and Jinri got in touch with OAI about contributions in the area of O-CU development. First contributions in the context of F release are under evaluation. Jack reminded that licensing approach of OAI need to be verified before source-code adoption is agreed. Binary/test fixture solution are possible as an alternative
      b. 2022-05-12: Meeting with OAI is planned later this week. One agenda item will be clarifying options to use OAI code in OSC projects
      c. 2022-05-19: call rescheduled to tomorrow (May 20th), Christian (Orange) is in OAI board and will take the action to handle the bilateral communication
      d. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time
   9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
      a. Thoralf: GS getting started "site space" cleanup: Getting Started
         i. Update the page to notify people that it is under construction (Action: Mahesh)
      ii. LF should give permission to all O_RAN SC members (Action: Sridhar)
         1. 2022-07-21 : Action Closed
   10. Planning for Next Meeting
      a. Magma Project wants to present to O-RAN SC. request for a 10 min slot (Sridhar)
      b. AI/ML Project Overview
   11. Any Other Business (AOB)
   12. Meeting Summary (resolutions, new action items, etc.)

2022 07 14

Recording:

Meeting Recording:

Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: Jul 14, 2022 08:57 AM

Meeting Recording:
https://zoom.us/rec/share/USiCKncwcJ_Z2NlW24BB5t4bZtIkpd5EiZResUGJ6HyT-bkJfJBo55HQ61eBSs9LEQyxzS89jpxgbP

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      a. GS getting started “site space” cleanup: Getting Started (Proposed by Thoralf/Mahesh)
      b. From RSAC Meeting: Creation of new project for AI/ML
   c. Release Votes and Approval
      a. No Items for Approval this week.

2. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
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   e. 2022-04-06, 2022-04-13, 2022-04-20: no news

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. Action Point: Rittwik and RSAC to prepare for this meeting. 2022-04-20: Open
      iii. 2022-05-05: Jinri: no details on the agenda for the June vF2F are available yet.
      iv. 2022-05-19: if people have topics to raise to the F2F, they are invited to share with Jinri and the group by email
      v. 2022-05-26: Jinri: dates are set to June 13th-17th. David: proposal to hold OSC session on Monday 13th, time slot #2. One hour should be sufficient for status and workplan presentation.
      vi. 2022-06-02: David: As first slot of O-RAN vF2I is on June 13, all PTLs to provide slides to David for F release update and G release plan
      vii. 2022-06-09: David: Copied F release update from the F release status page update. But for G release tentative plan most of the projects do not have any update.
      viii. Luis will be updating F release status page
      All PTLs to update tentative G release plan to be presented on 13th June in IF2 meeting
   b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.
   c. Plugfest
      i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
      ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
      iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open
      iv. 2022-05-19 Information about the Spring Plug Fest shared by Tracy
   d. O-RAN spending
      i. 2022-04-06
         1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
         2. David responded with potential need for simulation tool
         3. Jinri reminded participants of the meeting to check for any additional spending needs.
4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan “network appliance” solution with software. No response. We assume to continue with the “network appliance” model. Ultan requested some additional information from David (cc James+Jinri).
5. 2022-05-05: David got info from Viavi. Benefits on the solution are still under evaluation.
   e. Challenges for the OSC community (as report to EC)
      i. 2022-04-20: James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC).
      Jinri might request help from PTLs (via reflector/mailing list).
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         Jinri: EC could not take it up due to other urgent business, but some people are in process of initial analysis.
      vi. 2022-07-14: There is no update this week

6. Old business and Status of Open Actions
   a. "F" Release
      i. 2022-05-18: Timeplan review
         1. Release is planned by end of June. Large scale software changes should be completed by the end of this week, in order to have time to test and release
         2. Integration and testing page for F release in https://wiki.o-ran-sc.org/display/IAT/F%20Release+Integration+and+Testing
      ii. 2022-05-19: Jack: by end of June we will also have to prepare the usual Press Release. It is expected that PTLs would have to update their project content and status in the release table (within 1 week). This will be used as baseline for the press release
      iii. 2022-05-26: at the next meeting we will go through the status of the individual projects so as to start the code scan in the following days
      iv. 2022-06-02: Jack: Tracking F release status page update
          Near-Real-time RIC: To be updated
          Near-Real-time RAN Intelligent Controller Platform: To be updated
          Non-Real time RIC: Updated
          OAM: To be updated
          OCU: To be updated
          ODU-HIGH: To be updated
          ODU-Low: To be updated
          SIM: To be updated
          INF: To be updated
          INT: James and Sridhar: To continue exploring tools and solution for cross platform test framework for integration and testing
          DOC: All project individually documents for each release but to have a consolidated documentation is an open topic
          SMO: To be updated
          All PTLs should update F release status in the release table to start code and license scan in following days
      v. 2022-06-09: Sridhar: To coordinate software scan activity for all projects to have a report next week
      vi. 2022-06-16: Sridhar: Scanning is ongoing and report expected to be released next week
          Jack: PTLs to quickly respond to any issues reported in scanning as it may delay "F" release plan
      vii. 2022-06-23: Sridhar: License scan completed for all except com projects (com/log, com/pylog) and expected to complete this week. There is no issue to be reported
          Mahesh: For SMO there are 4 repo two are ready for branch and remaining are being discussed with Sridhar regarding permission issue
          Luis: L1 binary for F release is expected at the end of the week. To update F release page as well the for O-DU-LOW part by next week
          Jack: Branching for all projects to be done by 30th June before TOC
          Thoralf: Docker image links are to be placed in F Release Integration and Testing
          Xiaohua: Jinri asked PTLs to share all F release highlight points for upcoming press release
      viii. 2022-06-30: Sridhar: License scanning is completed and approved with LF
          Branching status for all projects:
          Near-Real-time RIC: KPI MON-GO not branched. Jack: to be pushed in maintenance F release
          Near-Real-time RAN Intelligent Controller Platform: Done
          Non-Real time RIC: Done
          OAM: Done
          OCU: NA
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David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further.

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iv. 2022-06-016: Issue still remains. Jack to have a check what next step could be to resolve this issue.

d. 5G Super Blueprint status - to be considered for G release.

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         Rittwik: Raised a query to have a specific use case for Taiwan lab
         Jack: Both labs repeating same use case independently helps in removing local dependency and better documentation for end user to use and replicate the system
      9. 2022-07-14 : Rittwik: Updated on the AI/ML Project and mentioned that pro & Con of separate project were discussed and it was agreed to go with new project.
         a. Samsung will commit 3-5 resources for the AI/ML Project
         b. Call Flow, data Model, touch points should be defined
         c. Define the scope and key other projects that will have deliverables
         d. Jack: Track deliverables. How will it get integrated
         e. what are the associated project that are tied
         f. Rittwik : Project disclosure
         g. Tracy: Use case management with respect to AI/ML
         h. Jack : Model Management, what SMO role etc should be covered, What we can do now
         i. Other G Release activity status was discussed.
         j. Mahesh : Overview of the SMO Plan.
         k. Jack : brought up the documentation readiness and integration touch points
      l. Rittwik : virtualized DU and collaboration with OAI . Jack clarified the challenges
   c. Report out from PTL: Stand-Up & Report Out on Blockers
      i. James Li Integration and Testing (INT)
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      ii. Mahesh Jethanandani Service Management and Orchestration (SMO)
         1. Demo on SMO VES setup by Mahesh Jethanandani. Recording available here
      iii. John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONTRIC)
      iv. Sunil Singh RIC Applications (RICAPP)
      v. Thoralf Czichy RIC Platform (RIC)
      vi. (TBD) O-RAN Centralized Unit (OCU)
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d. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   a. Thoralf : GS getting started "site space" cleanup: Getting Started
      i. Update the page to notify people that it is under construction (Action : Mahesh)
      ii. LF should give permission to all O_RAN SC members (Action : Sridhar)

10. Planning for Next Meeting
11. Any Other Business (AOB)
12. Meeting Summary (resolutions, new action items, etc.)

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2022 07 07

Recording:
The Meeting was cancelled

Meeting Recording:
As there was no meeting there is no recording updated

2022 06 30

Recording:

Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: Jun 30, 2022 08:59 AM

Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: Jun 30, 2022 08:59 AM

Meeting Recording:
https://zoom.us/rec/share/MygwkhQZMDQQBKCTvdrTn8RWc4BPw2s2S4Sd07X1H_kbGl_soMkChgPCh25qCcx.V0sF9HV00SokIPKP

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Agenda

1. Call for Scribe (minutes owner): Ganesh Shenbagaraman
2. Roll Call & Quorum Check

<table>
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<tr>
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1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting (16 Jun 2022) approval: proposed by Ganesh Shenbagaraman and seconded by John Paul. The motion is approved
   b. Decision: Minutes for TOC meeting (23 Jun 2022) approval: proposed by Ganesh Shenbagaraman and seconded by John Paul. The motion is approved
   c. Scribe from next week will be JinGuk/Avinash (Samsung)

2. Review of Today’s Agenda.
   a. F release
   b. Presentation from Aarna Networks

3. Release Votes and Approval
   a. F release motion (except KPIMON-GO): James Li proposed motion and seconded by Jinri. The motion is approved

4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.
      ii. 2022-05-12: summary of the open issues
         1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
         2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
      iii. 2022-05-19: Jinri: O-RAN (Brian) is addressing previous request from TOC
      iv. 2022-05-26: no news
      v. 2022-06-09: James Li: Request from SDFG co-chair to OSC PTLs to bring up any copyright requests to 3GPP/ETSI. Jack clarified on the past discussions pointing to the issue in referencing from code implementation to these source specification documents. This is still not a resolved issue. Jinri added comments to clarify that the SDFG request is more towards the list of historical requests to 3GPP. Jack and Jinri will check the past requests. PTLs are requested to forward any past request to Jinri. John Keeney pointed to challenges in determining when to make a copyright request. Jack said in view of all these challenges, the legal team is working on a broad approval for use in open source software.
      vi. 2022-06-23: Jack: Copyright request is still ongoing, in next few months some progress is expected

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G release.
      ii. 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. Action Point: Rittwik and RSAC to prepare for this meeting. 2022-04-20 : Open
      iii. 2022-05-05: Jinri: no details on the agenda for the June vF2F are available yet.
      iv. 2022-05-19: if people have topics to raise to the F2F, they are invited to share with Jinri and the group by email
      v. 2022-05-26: Jinri: dates are set to June 13th-17th. David: proposal to hold OSC session on Monday 13th, time slot#2. One hour should be sufficient for status and workplan presentation
      vi. 2022-06-02: David: As first slot of O-RAN vF2 is on June 13, all PTLs to provide slides to David for F release update and G release plan
      vii. 2022-06-09: David: Copied F release update from the F release status page update. But for G release tentative plan most of the projects do not have any update.
      viii. 2022-05-12: summary of the open issues
         All PTLs to update tentative G release plan to be presented on 13th June in I2F meeting
         b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.
         c. Plugfest
            i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
            ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
            iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open
            iv. 2022-05-19 Information about the Spring Plug Fest shared by Tracy
         d. O-RAN spending
            i. 2022-04-06
               1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
               2. David responded with potential need for simulation tool
               3. O-RAN reminded participants of the meeting to check for any additional spending needs.
               4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan “network appliance” solution with software. No response. We assume to continue with the “network appliance” model. Ultan requested some additional information from David (cc James+Jinri).
               5. 2022-05-05: David got info from Viavi. Benefits on the solution are still under evaluation.
         e. Challenges for the OSC community (as report to EC)
            i. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC).
               Jinri might request help from PTLs (via reflector/mailing list).
            ii. 2022-05-05 Jinri sent out a survey. PTLs are invited to contribute with identified issues.
iii. 2022-05-19 Jinri gives a summary of the survey. AP Jinri will start a review on TOC email reflector. Members are invited to review the list of issues and identify potential way forward before the discussion at the meeting.

iv. 2022-05-26 Jinri: item still open for contributions. On Licensing issues, it could be beneficial to list the individual licenses that need to be addressed by O-RAN. This would speed up O-RAN review.

v. 2022-06-02: John Keeney: Raised a question regarding status of the survey. Jinri: EC could not take it up due to other urgent business, but some people are in process of initial analysis.

6. Old business and Status of Open Actions
   a. "F" Release:
      i. 2022-05-18: Timeplan review
         1. Release is planned by end of June. Large scale software changes should be completed by the end of this week, in order to have time to test and release
         2. Integration and testing page for F release in [https://wiki.o-ran-sc.org/display/IAT/F%2BRelease%2BI%2BIntegration%2Band%2BTesting](https://wiki.o-ran-sc.org/display/IAT/F%2BRelease%2BI%2BIntegration%2Band%2BTesting)
      ii. 2022-05-19: Jack: by end of June we will also have to prepare the usual Press Release. It is expected that PTLs would have to update their project content and status in the release table (within 1 week). This will be used as baseline for the press release.
      iii. 2022-05-26: at the next meeting we will go through the status of the individual projects so as to start the code scan in the following days.
   iv. 2022-06-02: Jack: Tracking F release status page update
      Near-Real-time RIC: To be updated
      Near-Real-time RAN Intelligent Controller Platform: To be updated
      Non-Real time RIC: Updated
      OAM: To be updated
      OCU: To be updated
      ODU-HIGH: To be updated
      ODU-Low: To be updated
      SIM: To be updated
      INF: To be updated
      INT: James and Sridhar: To continue exploring tools and solution for cross platform test framework for integration and testing
      DOC: All project individually documents for each release but to have a consolidated documentation is an open topic
      SMO: To be updated
      All PTLs should update F release status in the release table to start code and license scan in following days.
   v. 2022-06-09: Sridhar: To coordinate software scan activity for all projects to have a report next week.
      Jack: Branching for F release on 20th June 2022 followed by package and documentation release on 30th June 2022.
   vi. 2022-06-16: Sridhar: Scanning is ongoing and report expected to be released next week.
      Jack: PTLs to quickly respond to any issues reported in scanning as it may delay "F" release plan.
   vii. 2022-06-23: Sridhar: License scan completed for all except com projects (com/golog, com/log, com/pylog) and expected to complete this week. There is no issue to be reported. Mahesh: For SMO there are 4 repo two are ready for branch and remaining are being discussed with Sridhar regarding permission issue.
      Luis: L1 binary for F release is expected at the end of the week. To update F release page as well the for O-DU-LOW part by next week.
      Jack: Branching for all projects to be done by 30th June before TOC.
      Thoralf: Docker image links are to be placed in F Release Integration and Testing.
      Xiaohua: Jinri asked PTLs to share all F release highlight points for upcoming press release.
   viii. 2022-06-30: Sridhar: License scanning is completed and approved with LF.
      Branching status for all projects:
      Near-Real-time RAN Intelligent Controller Platform: Done
      Non-Real time RIC: Done
      OAM: Done
      OCU: NA
      ODU-HIGH: Done
      ODU-Low: Done
      SIM: Done
      INF: Done
      INT: NA
      DOC: NA
      SMO: Done
      Mahesh: Document page not getting updated for the SMO project.
      James: To check for this issue.
      Jinri: Reminder to all PTLs to share F release highlights for press release.

b. OSC Lab
   i. 2022-05-26: Jack: Lab issues for O-DU low integration should be solved. Also access to the lab is now available for interested members involved in integration and testing activity.
   ii. 2022-06-02: PTP clock sync issue update.
      Ainkt: Checked scripts for synchronization of the clock but ptp sync still failing to get in sync with grandmaster and internal clock only used by ODU.
      David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further.
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    c. 5G Super Blueprint status - to be considered for G release.

7. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
   1. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
   2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to "templatize" the Viavi deployment to make it easier to deploy.
   3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang) area: Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. This would help this community for Ex. SMO: how to manage infra easily - kind of questions:
   4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this)
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10. Planning for Next Meeting
   a. Aarna networks presentation planned for next week

11. Any Other Business (AOB)

12. Meeting Summary (resolutions, new action items, etc.)

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2022 06 23

Recording:

Meeting Recording:

Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: Jun 23, 2022 08:59 AM
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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. **Decision:** Minutes for TOC meeting (16 Jun 2022) approval: To be approved in next meeting as recording was not available.

2. Review of Today’s Agenda.
   a. Today’s focus will be on preparing for F release, license scan, branching and documentation
   b. Sridhar/Matt: Gerrit and Jenkins Update Time slot booking announcement and request for any conflict?
      No issue raised in the TOC call

3. Release Votes and Approval
   a. F Release

   Thoralf Czichy proposed motion to create new repos and seconded by Xiaoha/Jinri. The motion has been approved

4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.
      ii. 2022-05-12: summary of the open issues
         1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
         2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
         3. Extend OSC SCCL: Open
      iii. 2022-05-19: Jinri: O-RAN (Brian) is addressing previous request from TOC
      iv. 2022-05-26: no news
   v. 2022-06-09: James Li: Request from SDFG co-chair to OSC PTLs to bring up any copyright requests to 3GPP/ETSI. Jack clarified on the past discussions pointing to the issue in referencing from code implementation to these source specification documents. This is still not a resolved issue. Jinri added comments to clarify that the SDFG request is more towards the list of historical requests to 3GPP. Jack and Jinri will check the past requests. PTLs are requested to forward any past request to Jinri. John Keeney pointed to challenges in determining when to make a copyright request. Jack said in view of all these challenges, the legal team is working on a broad approval for use in open source software.
   vi. 2022-06-23: Jack: Copyright request is still ongoing. In next few months some progress is expected

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. **Action Point:** Rittwik and RSAC to prepare for this meeting. 2022-04-20: Open
      iii. 2022-05-05: Jinri: no details on the agenda for the June vF2F are available yet.
      iv. 2022-05-19: if people have topics to raise to the F2F, they are invited to share with Jinri and the group by email
      v. 2022-05-26: Jinri: dates are set to June 13th-17th. David: proposal to hold OSC session on Monday 13th, time slot #2. One hour should be sufficient for status and workplan presentation
vi. 2022-06-02: David: As first slot of O-RAN v2I is on June 13, all PTLs to provide slides to David for F release update and G release plan

vii. 2022-06-09: David: Copied F release update from the F release status page update. But for G release tentative plan most of the projects do not have any update. Luis will be updating F release status page

viii. 2022-06-16: Jack: Thanks David and other members part of I2I participation (13th June)

John Keeney: Raised a question about mechanism for getting feedback for I2I presentation

David: MVP and TIFG are two ways to get feedbacks but as TIFG is more focus on testing hence with MVP there is a better chance to get feedback.

Jack: Suggested to figure out ways to get feedback from real users of software

Xi. 2022-06-23: RSAC committee to track MVP items and have a tracker table

b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.

c. Plugfest

i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.

ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.

iii. 2022-04-06 Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information).

2022-04-20: Open

iv. 2022-05-19 Information about the Spring Plug Fest shared by Tracy

d. O-RAN spending

i. 2022-04-06

1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.

2. David responded with potential need for simulation tool

3. Jinri reminded participants of the meeting to check for any additional spending needs.

4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan “network appliance” solution with software. No response. We assume to continue with the “network appliance” model. Ultan requested some additional information from David (cc James+Jinri).

5. 2022-05-05: David got info from Viavi. Benefits on the solution are still under evaluation.

e. Challenges for the OSC community (as report to EC)

i. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC). Jinri might request help from PTLs (via reflector/mailing list).

ii. 2022-05-05 Jinri sent out a survey. PTLs are invited to contribute with identified issues.

iii. 2022-05-19 Jinri gives a summary of the survey. AP Jinri will start a review on TOC email reflector. Members are invited to review the list of issues and identify potential way forward before the discussion at the meeting.

iv. 2022-05-26 Jinri: item still open for contributions. On Licensing issues, it could be beneficial to list the individual licenses that need to be addressed by O-RAN. This would speed up O-RAN review

v. 2022-06-02: John Keeney: Raised a question regarding status of the survey

Jinri: EC could not take it up due to other urgent business, but some progress is in process of initial analysis.

6. Old business and Status of Open Actions

a. “F” Release:

i. 2022-05-18: Timeplan review

1. Release is planned by end of June. Large scale software changes should be completed by the end of this week, in order to have time to test and release

2. Integration and testing page for F release in https://wiki.o-ran-sc.org/display/IAT/F+Release+Integration+and+Testing

ii. 2022-05-19: Jack: by end of june we will also have to prepare the usual Press Release. It is expected that PTLs would have to update their project content and status in the release table (within 1 week). This will be used as baseline for the press release

iii. 2022-05-26: at the next meeting we will go through the status of the individual projects so as to start the code scan in the following days

iv. 2022-06-02: Jack: Tracking F release status page update

Near-Real-time RIC: To be updated

Near-Real-time RAN Intelligent Controller Platform: To be updated

Non-Real-time RIC: Updated

OAM: To be updated

OCU: To be updated

ODU-HIGH: To be updated

ODU-Low: To be updated

SIM: To be updated

INF: To be updated

INT: James and Sridhar: To continue exploring tools and solution for cross platform test framework for integration and testing

DOC: All project individually documents for each release but to have a consolidated documentation is an open topic

SMO: To be updated

All PTLs should update F release status in the release table to start code and license scan in following days

v. 2022-06-09: Sridhar: To coordinate software scan activity for all projects to have a report next week

Jack: Branching for F release on 20th June 2022 followed by package and documentation release on 30th June 2022

vi. 2022-06-16: Sridhar: Scanning is ongoing and report expected to be released next week

Jack: PTLs to quickly respond to any issues reported in scanning as it may delay “F” release plan

vii. 2022-06-23: Sridhar: License scan completed for all except com projects (com/golog, com/log, com/pylog) and expected to complete this week. There is no issue to be reported

Mahesh: For SMO there are 4 repo two are ready for branch and remaining are being discussed with Sridhar regarding permission issue

Luis: L1 binary for F release is expected at the end of the week. To update F release page as well the for O-DU-LOW part by next week

Jack: Branching for all projects to be done by 30th June before TOC

Thoralf: Docker image links are to be placed in F Release Integration and Testing

Xiaohua: Jinri asked PTLs to share all F release highlight points for upcoming press release

b. OSC Lab
i. 2022-05-26: Jack: Lab issues for O-DU low integration should be solved. Also access to the lab is now available for interested members involved in integration and testing activity

ii. 2022-06-02: PTP clock sync issue update
   Ankit: Checked scripts for synchronization of the clock but ptp sync still failing to get in sync with grandmaster and internal clock only used by ODU.
   David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further

iii. 2022-06-09: Luis: to discuss with Rich and to have a remote debug session for clock sync issue.
   iv. 2022-06-16: Issue still remains, Jack to have a check what next step could be to resolve this issue

c. 5G Super Blueprint status - to be considered for G release.

7. Standing Agenda Items (Brief Status of Ongoing Activities)
   a. Release Manager -Sridhar Rao /Release Planning; Weekly TOC Scheduling
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
      i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
      1. 2022-04-06: James talked about David Kinsey’s mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David’s e-mail.
      2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to “templatize” the Viavi deployment to make it easier to deploy.
      3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang ) area: Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. ; This would help this community for Ex. SMO : how to manage infra easily - kind of questions;
      4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this)
      5. 2022-05-12: workshop likely to be on Wednesday May 18th. James Li will check and confirm
      6. 2022-05-19: James: OTF workshop did not take place. Code base was out of date and need update
      7. 2022-06-16: David: AI ML repo integration discussed in the RSAC and recommendation is to go ahead with AI ML as an independent project

   Jack: Assessment of capabilities, target plan to be discussed for AI ML project
   A: Detailed plan to be presented

ii. “G” Release
   1. Jack: How do we track our support of MVP?
   2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
   3. 2022-04-06: Jack called for first input. RSAC planning committee will again coordinate.
   4. 2022-05-12: Rittwik: for “G” release with do not expect to implement many MVP use cases. Which ones still TBD.
   5. 2022-05-26: James Li: in preparation for release G software, PTLs should plan providing information about the characteristics of the code that could help planning integration and testing activity beforehand
   6. 2022-06-02 Action point : Jack to update G release timeline calendar for review and voting

   Jack: G release planning status
   David: We are running behind for G release planning, it could not be done in the last RSAC due to limited participants

   2022-06-09: Jack: Raised a question regarding O-DU-LOW new functionality under G release?
   Luis: Incremental improvements and optimization expected in G release but as of now no new feature expected on ORAN Fronthaul interface
   Jack: All PTLs to update and provide tentative G release plan to Jinri for the presentation on 13th June in I2I meeting

   2022-06-16: Jack: G release page to be linked in Release section and subsequent sections to be added
   David: To schedule each project planning (in RSAC) in first three weeks of G release
   Jack: Activity to plan in G release: Deployment of all modules with health check
   Rittwik: Raised a query to have a specific use case for Taiwan lab
   Jack: Both labs repeating same use case independently helps in removing local dependency and better documentation for end user to use and replicate the system

c. Report out from PTL: Stand-Up & Report Out on Blockers
   i. James Li Integration and Testing (INT)
   ii. Mahesh Jethanandani Service Management and Orchestration (SMO)
      1. Demo on SMO VES collector setup provided by Mahesh Jethanandani. Recording available here
   iii. John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
   iv. Sunil Singh RIC Applications (RICAPP)
   v. Thoralf Czichy RIC Platform (RIC)
   vi. (TBD) O-RAN Centralized Unit (OCU)
   vii. Manasi Padhy O-RAN Distributed Unit High (ODUHIGH)
   viii. Luis Farias O-RAN Distributed Unit Low (ODULOW)
   ix. Martin Skorupski Operations and Maintenance (OAM)
   x. Alex Stancu Simulations (SIM)
   xi. Jackie Huang Infrastructure (INF)
   xii. weichen ni Documentation (DOC)
   xiii. (TBD) O-RAN Radio Unit (ORU)

   2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

   8. Collaboration with OAI
      a. 2022-05-05: James and Jinri got in touch with OAI about contributions in the area of O-CU development. First contributions in the context of R release are under evaluation. Jack reminded that licensing approach of OAI need to be verified before source-code adoption is agreed. Binary/test fixture solution are possible as an alternative
      b. 2022-05-12: Meeting with OAI is planned later this week. One agenda item will be clarifying options to use OAI code in OSC projects
      c. 2022-05-19: call rescheduled to tomorrow (May 20th). Christian (Orange) is in OAI board and will take the action to handle the bilateral communication
      d. 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

   9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items

10. Planning for Next Meeting
   a. Aarna networks presentation planned for next week
11. Any Other Business (AOB)

   a. Keysight (John Faulkner, Paolo Marini) give a presentation on Keysight test systems capability. Material will be distributed over the TOC reflector.
   b. Ganesh Shenbagaraman (Radisys) to nominate new PTL name for the O-RAN Distributed Unit High (ODUHIGH) project.
   c. David: How to plan integration of new AI ML project with other projects such as OAM, SMO & non-RTRIC. To create a subproject or a separate repo as new project?
      Avinash: Propose to have a discussion on different options to integrate in upcoming RSAC or TOC meeting. All relevant project PTLs need to discuss and finalize integration approach (upcoming RSAC meeting could be used for this discussion).
   d. Jinri: Concern from MVP-C co-chair Suzy about lack of representation from OSC in MVP package progress with Rittwik not playing that role anymore. Rittwik and Jack clarified that this can be tracked within O-RAN and SMO PTL. This discussion will be continued.
   e. Discussion on 16-Jun-22: Brandon Wick (Aarna networks) talked about Aarna's contribution to SMO project in OSC and brought up the topic of press release from O-RAN OSC. Jack explained the process followed for PR after each release.
   f. Jack: All active ORAN sites to be updated, and unused sites (oran github) to be archived if required.

12. Meeting Summary (resolutions, new action items, etc.)

2022 06 16

Recording:

Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: Jun 16, 2022 08:58 AM

Meeting Recording: https://zoom.us/rec/share/o6fStEfS-k68eNbDxs9yHmCJPK2-DjZwMp_gTajnBuUFo0_ujiPHw_ZdjgnAvoxWJ.e5vn1fJ-caQyQ0e

Agenda

1. Call for Scribe (minutes owner): Ganesh Shenbagaraman
2. Roll Call & Quorum Check

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<tr>
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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting (02 Jun 2022) approval: proposed by Ganesh Shenbagaraman and seconded by John Paul. The motion is approved.
   b. Minutes of TOC meeting (09 Jun 2022) approval: proposed by Ganesh Shenbagaraman and seconded by John Paul. The motion is approved.
2. Review of Today’s Agenda.
   a. Today’s focus will be on preparing for F release, license scan, branching and documentation
3. Release Votes and Approval
4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.
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2. **Old business and Status of Open Actions**

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3. **O-RAN RELATED BUSINESS**

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1. Jack: How do we track our support of MVP?
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4. 2022-05-12: Rittwik: for “G” release with do not expect to implement many MVP use cases. Which ones still TBD.
   Jack: priority should be given to those exploiting and validating OSC software capability
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6. 2022-06-02 Action point : Jack to update G release timeline calendar for review and voting
Jack: G release planning status
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7. 2022-06-09: Jack: Raised a question regarding O-DU-LOW new functionality under G release?
Luis: Incremental improvements and optimization expected in G release but as of now no new feature expected on ORAN Fronthaul interface
Jack: All PTLs to update and provide tentative G release plan to Jinri for the presentation on 13th June in f2f meeting
8. 2022-06-16: Jack: G release page to be linked in Release section and subsequent sections to be added
David: To schedule each project planning (in RSAC) in first three weeks of G release
Jack: Activity to plan in G release: Deployment of all modules with health check
Rittwik: Raised a query to have a specific use case for Taiwan lab
Jack: Both labs repeating same use case independently helps in removing local dependency and better documentation for end user to use and replicate the system
c. Report out from PTL: Stand-Up & Report Out on Blockers
i. James Li Integration and Testing (INT)
ii. Mahesh Jethanandani Service Management and Orchestration (SMO)
   1. Demo on SMO VES collector setup provided by Mahesh Jethanandani . Recording available here
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Collaboration with OAI

- 2022-05-05: James and Jinri got in touch with OAI about contributions in the area of O-CU development. First contributions in the context of F release are under evaluation. Jack reminded that licensing approach of OAI need to be verified before source-code adoption is agreed. Binary/test fixture solution are possible as an alternative.

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- 2022-05-26: discussed with OAI last week. Licensing will be addressed by OAI and reported next time.

New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items

Planning for Next Meeting

- Keysight (John Faulkner, Paolo Marini) give a presentation on Keysight test systems capability. Material will be distributed over the T OC reflector.

- Ganesh Shenbagaraman (Radisys) to nominate new PTL name for the O-RAN Distributed Unit High (ODUHIGH) project.

- David: How to plan integration of new AI ML project with other projects such as OAM, SMO & non-RTRIC. To create a subproject or a separate repo as new project?
  - Avinash: Propose to have a discussion on different options to integrate in upcoming RSAC or TOC meeting. All relevant project PTLs need to discuss and finalize integration approach (upcoming RSAC meeting could be used for this discussion).

- Jinri: Concern from MVP-C co-chair Suzy about lack of representation from OSC in MVP package progress with Rittwik not playing that role anymore. Rittwik and Jack clarified that this can be tracked within O-RAN and SMO PTL. This discussion will be continued.

- Discussion on 16-Jun-22: Brandon Wick (Aarna networks) talked about Aarna’s contribution to SMO project in OSC and brought up the topic of press release from O-RAN OSC. Jack explained the process followed for PR after each release.

- Jack: All active ORAN sites to be updated, and unused sites (oran github) to be archived if required.

Meeting Summary (resolutions, new action items, etc.)

2022 06 09

Recording:

Meeting Recording:

Topic: Zoom3 O-RAN SC’s Personal Meeting Room
Start Time: Jun 9, 2022 08:51 AM

Meeting Recording:
https://zoom.us/rec/share/AN47ffN2eACgbSIlAMA6Rck0hvtWTWdQ4cqR07Es1W58iR6BXH_30gZ4LFXG4Fz.y8z6MaMuyzrxLvBR

Agenda

1. Call for Scribe (minutes owner): Ganesh Shenbagaraman
2. Roll Call & Quorum Check

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1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting approval: Minutes for TOC meeting approval: To be approved in next meeting as recording could not be accessed.

2. Review of Today’s Agenda
   a. Today’s focus will be on preparing for F release, license scan, branching and documentation
b. James Li: Aarna Network expressed interest to present details of their open-source SMO to O-RAN community
Jack: Session (20-25 mins slot) to be scheduled tentatively on 30th June post F release.
James: To inform Aarna networks about the meeting
3. Release Votes and Approval
4. Copyright update

a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.

i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.
ii. 2022-05-12: summary of the open issues
   1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
   2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
iii. 2022-05-19: Jinri: O-RAN (Brian) is addressing previous request from TOC
iv. 2022-05-26: no news
v. 2022-06-09: James Li: Request from SDFG co-chair to OSC PTLs to bring up any copyright requests to 3GPP/ETSI. Jack clarified on the past discussions pointing to the issue in referencing from code implementation to these source specification documents. This is still not a resolved issue. Jinri added comments to clarify that te SDFG request is more towards the list of historical requests to 3GPP. Jack and Jinri will check the past requests. PTLs are requested to forward any past request to Jinri. John Keeney pointed to challenges in determining when to make a copyright request. Jack said in view of all these challenges, the legal team is working on a broad approval for use in open source software.

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)

a. F2F Meeting

i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
ii. 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. Action Point: Rittwik and RSAC to prepare for this meeting. 2022-04-20: Open
iii. 2022-05-05: Jinri: no details on the agenda for the June vF2F are available yet.
iv. 2022-05-19: if people have topics to raise to the F2F, they are invited to share with Jinri and the group by email
v. 2022-05-26: Jinri: dates are set to June 13th-17th. David: proposal to hold OSC session on Monday 13th, time slot#2. One hour should be sufficient for status and workplan presentation.
vi. 2022-06-02: David: As first slot of O-RAN vF2F is on June 13, all PTLs to provide slides to David for F release update and G release plan.

b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.

c. Plugfest

i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open
iv. 2022-05-19 Information about the Spring Plug Fest shared by Tracy

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   1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
   2. David responded with potential need for simulation tool
   3. Jinri reminded participants of the meeting to check for any additional spending needs.
   4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan “network appliance” solution with software. No response. We assume to continue with the “network appliance” model. Ultan requested some additional information from David (cc James+Jinri).

ii. 2022-05-05: David got info from Viavi. Benefits on the solution are still under evaluation.

5. Challenges for the OSC community (as report to EC)

i. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC).
   Jinri might request help from PTLs (via refector/mailing list).
ii. 2022-05-05 Jinri sent a survey. PTLs are invited to contribute with identified issues.
iii. 2022-05-19 Jinri gives a summary of the survey. AP Jinri will start a review on TOC email reflector. Members are invited to review the list of issues and identify potential way forward before the discussion at the meeting.
iv. 2022-05-26: Jinri: item still open for contributions. On Licensing issues, it could be beneficial to list the individual licenses that need to be addressed by O-RAN. This would speed up O-RAN review

v. 2022-06-02: John Keeney: Raised a question regarding status of the survey
   Jinri: EC could not take it up due to other urgent business, but some people are in process of initial analysis.

6. Old business and Status of Open Actions

a. “F” Release

i. 2022-05-18: Timeplan review
   1. Release is planned by end of June. Large scale software changes should be completed by the end of this week, in order to have time to test and release
   2. Integration and testing page for F release in https://wiki.o-ran-sc.org/display/1AT/F-Release+Integration+and+Testing
ii. 2022-05-19: Jack: by end of June we will also have to prepare the usual Press Release. It is expected that PTLs would have to update their project content and status in the release table (within 1 week). This will be used as baseline for the press release
iii. 2022-05-26: at the next meeting we will go through the status of the individual projects so as to start the code scan in the following days
iv. 2022-06-02: Jack: Tracking F release status page update 
   Near-Real-time RIC: To be updated  
   Non-Real-time RIC: Updated 
   OAM: To be updated 
   ODU-HIGH: To be updated 
   SIM: To be updated 
   INF: To be updated 
   INT: James and Sridhar to continue exploring tools and solution for cross platform test framework for integration and testing 
   DOC: All project individually documents for each release but to have a consolidated documentation is an open topic 
   SMO: To be updated 
   All PTLs should update F release status in the release table to start code and license scan in following days 
  v. 2022-06-09: Sridhar: To coordinate software scan activity for all projects to have a report next week 

Jack: Branching for F release on 20th June 2022 followed by package and documentation release on 30th June 2022

b. OSC Lab 
   i. 2022-05-26: Jack: Lab issues for O-DU low integration should be solved. Also access to the lab is now available for interested members involved in integration and testing activity 
   ii. 2022-06-02: PTP clock sync issue update 
      Ankita: Checked script for synchronization of the clock but ptp sync still failing to get in sync with grandmaster and internal clock only used by ODU. 
      David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further. 
   iii. 2022-06-09: Luis: to discuss with Rich and to have a remote debug session for clock sync issue. 

c. 5G Super Blueprint status - to be considered for G release.

7. Standing Agenda Items (Brief Status of Ongoing Activities)


b. Requirements Software Architecture Committee (RSAC, link incl. meeting details) 
   i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled. 
      1. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail. 
      2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to "templatize" the Viavi deployment to make it easier to deploy. 
      3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang ) area: Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. This would help this community for Ex. SMO: how to manage infra easily - kind of questions; 
      4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this) 
      5. 2022-05-12: workshop likely to be on Wednesday May 18th. James Li will check and confirm 
      6. 2022-05-19: James: OTF workshop did not take place. Code base was out of date and need update 
   ii. "G" Release 
      1. Jack: How do we track our support of MVP? 
      2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure. 
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10. Planning for Next Meeting

11. Any Other Business (AOB)

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2022 06 02

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Meeting Recording:
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1. Review and Agree to Minutes of Previous Meeting

a. Decision: Minutes for TOC meeting approval: proposed by Ganesh Shenbagaraman and seconded by Jinri Huang. The motion is approved.

2. Review of Today’s Agenda

a. Ultan Kelly: Prof Ray from Taiwan lab wants to arrange a visit to the OSC lab to recreate setup at Taiwan lab.

Jack: Further discussion to be done offline and Jack will be contact point for the visit and logistic

Ultan Kelly to provide contact details to Prof Ray

b. Today’s focus will be on review of release planning

3. Release Votes and Approval

4. Copyright update
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      iii. 2022-05-26: at the next meeting we will go through the status of the individual projects so as to start the code scan in the following days
      iv. 2022-06-02: Jack: Tracking F release status page update
         Near-Real-time RIC: To be updated
         Near-Real-time RAN Intelligent Controller Platform: To be updated
         Non-Real time RIC: Updated
         OAM: To be updated
         OCU: To be updated
         ODU-HIGH: To be updated
         ODU-Low: To be updated
         SIM: To be updated
         INF: To be updated
         INT: James and Sridhar: To continue exploring tools and solution for cross platform test framework for integration and testing
         DOC: All project individually documents for each release but to have a consolidated documentation is an open topic
         SMO: To be updated
         All PTLs should update F release status in the release table to start code and license scan in following days
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   i. 2022-05-26: Jack : Lab issues for O-DU low integration should be solved. Also access to the lab is now available for interested members involved in integration and testing activity
   ii. 2022-06-02: PTP clock sync issue update
      Anklt: Checked scripts for synchronization of the clock but ptp sync still failing to get in sync with grandmaster and internal clock only used by ODU.
      David: We have checked Hardware and configuration. Server 190 is being connected to the home gateway and configured as expected. Clock sync between grandmaster and fronthaul gateway has been verified. Issue needs to be debugged further
   c. 5G Super Blueprint status - to be considered for G release.

7. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
      i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
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      5. 2022-05-26: James Li : in preparation for release G software, PTLs should plan providing information about the characteristics of the code that could help planning integration and testing activity beforehand
      6. 2022-06-02 Action point : Jack to update G release timeline calendar for review and voting

   c. Report out from PTL: Stand-Up & Report Out on Blockers
      i. James Li Integration and Testing (INT)
      ii. Mahesh Jethanandani Service Management and Orchestration (SMO)
         1. Demo on SMO VES collector setup provided by Mahesh Jethanandani. Recording available here
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   c. 2022-05-19: call rescheduled to tomorrow (May 20th). Christian (Orange) is in OAI board and will take the action to handle the bilateral communication
   d. 2022-05-22: discussed with OAI last week. Licensing will be addressed by OAI and reported next time

9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items

10. Planning for Next Meeting
11. Any Other Business (AOB)
   a. Keysight (John Faulkner, Paolo Marini) give a presentation on Keysight test systems capability. Material will be distributed over the TOC reflector.
   b. Ganesh Shenbagaraman (Radisys) to nominate new PTL name for the O-RAN Distributed Unit High (ODUHIGH) project

Meeting Summary (resolutions, new action items, etc.)

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**2022 05 26**

**Recording:**

Topic: Zoom3 O-RAN SC
Start Time: May 26, 2022 at 9am EDT

Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: May 26, 2022 08:58 AM
Meeting Recording:
https://zoom.us/rec/share/zHOileWAAdLUsX2heGU011ssOVuh13rvTZwpyhwQ93fu3ILwT7VL8p_osKAZk.pom--njlIWJKdKkX

Agenda

1. Call for Scribe (minutes owner): Andrea Buldorini (TIM)
2. Roll Call & Quorum Check

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   a. Decision: Minutes for TOC meeting approval: proposed by Andrea and seconded by Jinri. The motion is approved.
   b. Scribe from next week will be Ganesh/Ankit (Radisys)
2. Review of Today’s Agenda
3. Release Votes and Approval
4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
   i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20 : no major progress/updates.
   ii. 2022-05-12: summary of the open issues
      1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
      2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
      3. Extend OSC SCCL. Open
   iii. 2022-05-19: Jinri: O-RAN (Brian) is addressing previous request from TOC
   iv. 2022-05-26: no news
5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it's still a virtual meeting. Action Point: Rittwik and RSAC to prepare for this meeting. 2022-04-20: Open
      iii. 2022-05-05: Jinri: no details on the agenda for the June vF2F are available yet.
      iv. 2022-05-19: if people have topics to raise to the F2F, they are invited to share with Jinri and the group by email
      v. 2022-05-26: Jinri: dates are set to June 13th-17th. David: proposal to hold OSC session on Monday 13th, time slot#2. One hour should be sufficient for status and workplan presentation
   b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.
   c. Plugfest
      i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
      ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
      iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open
      iv. 2022-05-19 Information about the Spring Plug Fest shared by Tracy
   d. O-RAN spending
      i. 2022-04-06
      1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
      2. David responded with potential need for simulation tool
3. Jinri reminded participants of the meeting to check for any additional spending needs.
4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan "network appliance" solution with software. No response. We assume to continue with the "network appliance" model. Ulan requested some additional information from David (CC James+Jinri).
5. 2022-05-05: David got info from Viavi. Benefits on the solution are still under evaluation.

e. Challenges for the OSC community (as report to EC)
   i. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC). Jinri might request help from PTLs (via reflector/mailing list).
   ii. 2022-05-05 Jinri sent out a survey. PTLs are invited to contribute with identified issues.
   iii. 2022-05-19 Jinri gives a summary of the survey. AP Jinri will start a review on TOC email reflector. Members are invited to review the list of issues and identify potential way forward before the discussion at the meeting.
   iv. 2022-05-26: Item still open for contributions. On Licensing issues, it could be beneficial to list the individual licenses that need to be addressed by O-RAN. This would speed up O-RAN review

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            b. Jack: this would probably be fully addressed in G release; Integration and Testing project will be crucial in Rel-G to demonstrate that OSC software platform is solid and enabling future development of more sophisticated use cases.
      iii. John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
      iv. Sunil Singh RIC Applications (RICAPP)
      v. Thoralf Czichy RIC Platform (RIC)
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     xi. Jackie Huang Infrastructure (INF)
     xii. weichen ni Documentation (DOC)
     xiii. (TBD) O-RAN Radio Unit (ORU)
a. 2022-05-05: James and Jinri got in touch with OAI about contributions in the area of O-CU development. First contributions in the context of F release are under evaluation. Jack reminded that licensing approach of OAI need to be verified before source-code adoption is agreed. Binary/test fixture solution are possible as an alternative
b. 2022-05-12: Meeting with OAI is planned later this week. One agenda item will be clarifying options to use OAI code in OSC projects
c. 2022-05-19: call rescheduled to tomorrow (May 20th). Christian (Orange) is in OAI board and will take the action to handle the bilateral communication

9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
10. Planning for Next Meeting
11. Any Other Business (AOB)

   a. Zoom login issue (Thoralf).
      i. Had to cancel RIC/RIC xApp project meeting due to problems with access to the verification code (extra verification step). We (as also other subprojects use https://zoom.us/j/9644759813 ).
      ii. Verification code is sometimes requested. A distribution list was created and used as zoom account. If anybody else needs to use the bridge, ask Sridhar Racto be added
b. Repos Committers rights (see minutes of 2022-05-05). Mahesh had completed the process to be authorized as committer. If other PTLs would like to become committers, it is necessary to update the INFO file accordingly
12. Meeting Summary (resolutions, new action items, etc.)

2022 05 12

Recording:

Topic: Zoom3 O-RAN SC
Start Time: May 12, 2022 at 9am EDT

Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: May 12, 2022 08:54 AM

Meeting Recording:
https://zoom.us/rec/share/ivAtRpYxgnq8iR0ZVbOoULj-JVgpHphuR6yW6siVn9M1OtKiTZNEWCIAWNzW6xm1.VZ1UrD4vWyJ DyBFI

Agenda

1. Call for Scribe (minutes owner): Andrea Buldorini (TIM)
2. Roll Call & Quorum Check

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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting approval: proposed by Andrea and seconded by Thoralf. The motion is approved.
2. Review of Today’s Agenda
   a. Thoralf would like the Zoom login issue to be addressed.
      i. Had to cancel yesterday’s RIC/RIC xApp project meeting due to problems with access to the verification code (extra verification step). We (as also other subprojects use https://zoom.us/j/9644759813 ). Postponed to the next call
   b. Today focus will be on “F” Release status
3. Release Votes and Approval
4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.

ii. 2022-05-12: summary of the open issues
   1. Response from O-RAN has not addressed it yet. It is clarified that O-RAN EC is in charge of it.
   2. Updating CLA for SCCL to align to the charter. This was approved by TOC but not updated to the OSC site – equivalent to the one already there in Specification Code Project. Refer to Stephan (with support from the community).
   3. Extend OSC SCCL: Open

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some issues as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. Action Point: Rittwik and RSAC to prepare for this meeting. 2022-04-20: Open
      iii. 2022-05-05: Jinri: no details on the agenda for the June vF2F are available yet.
   b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.
   c. Plugfest
      i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
      ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
      iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open
   d. O-RAN spending
      i. 2022-04-06
         1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
         2. David responded with potential need for simulation tool
         3. Jinri reminded participants of the meeting to check for any additional spending needs.
         4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan "network appliance" solution with software. No response. We assume to continue with the "network appliance" model. Ulan requested some additional information from David (cc James+Jinri).
      5. 2022-05-05: David got info from Viavi. Benefits on the solution are still under evaluation.
   e. Challenges for the OSC community (as report to EC)
      i. 2022-04-20: James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC).
      ii. Jinri might request help from PTLs (via reflector/mailing list).
      iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open

6. Old business and Status of Open Actions
   a. "F" Release
      i. 2022-05-18: Timeplan review
         1. Release is planned by end of June. Large scale software changes should be completed by the end of this week, in order to have time to test and release
         2. Integration and testing page for F release in https://wiki.o-ran-sc.org/display/IAT/Integration+and+Testing
      b. 5G Super Blueprint status - tabled for D and E, will be re-evaluated for F release.
         i. Tag this activity for G release.
         ii. 2022-04-06: no news
         iii. 2022-05-12: no news
   b. "G" Release
      1. Jack: How do we track our support of MVP?
      2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
      3. 2022-04-06: Jack called for first input. RSAC planning committee will again coordinate.
      4. 2022-05-12: Rittwik: for "G" release with do not expect to implement many MVP use cases. Which ones still TBD.
      5. 2022-05-18: workshop likely to be on Wednesday May 18th. James Li will check and confirm

7. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requriements Software Architecture Committee (RSAC, link incl. meeting details)
      i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
         1. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
         2. 2022-04-06: Rittwik reported with PTP standup not yet done. They are also trying to "templatize" the Viavi deployment to make it easier to deploy.
         3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang) area :Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. ; This would help this community for Ex. SMO: how to manage infra easily - kind of questions.;
         4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this)
         5. 2022-05-18: workshop likely to be on Wednesday May 18th. James Li will check and confirm
   c. Report out from PTL: Stand-Up & Report Out on Blockers
      i. 2022-04-06: no news
      ii. James Li Integration and Testing (INT)
      iv. John Keeney: Non-Real Time RIC (RIC) (NonRTRIC)
      v. Sunil Singh RIC Applications (RICAPP)
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8. Collaboration with OAI
   a. 2022-05-05: James and Jinri got in touch with OAI about contributions in the area of O-CU development. First contributions in the context of F release are under evaluation. Jack reminded that licensing approach of OAI need to be verified before source-code adoption is agreed. Binary/test fixture solution are possible as an alternative
   b. 2022-05-12: Meeting with OAI is planned later this week. One agenda item will be clarifying options to use OAI code in OSC projects
9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
10. Planning for Next Meeting
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12. Meeting Summary (resolutions, new action items, etc.)

2022 05 05

Recording:
Topic: Zoom3 O-RAN SC
Start Time: May 05, 2022 at 9am EDT
Meeting Recording:
Topic: Zoom3 O-RAN SC's Personal Meeting Room
Start Time: May 5, 2022 09:00 AM
Meeting Recording:
https://zoom.us/rec/share/ieWP8jI_MCo5tr2q3mqXrl5jCuZ2_4gHUWAzLz6xh7FcRGAuWbylZ4rLUohILOmV2G_WilLkFNNCKb3

Agenda
1. Call for Scribe (minutes owner): Andrea Buldorini (TIM)
2. Roll Call & Quorum Check

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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

1. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting approval: proposed by Arun and seconded by Andrea. The motion is approved.
2. Review of Today’s Agenda
3. Release Votes and Approval
   a. Request by Mahesh to get committer’s rights as PTL to speed up procedures (on behalf of LF IT staff). (see https://lists.o-ran-sc.org /g/toc/message/685). It is proposed to request access rights for other OSC PTLs. Jack propose to coordinate among PTLs to adopt a common approach across all the projects if possible. Shridar Rao will also verify with LF IT group what would be the best approach. Mahesh and Shridar will get info from PTLs to make one request to LF.
   i. Motion to enable PTLs as committers by Mahesh; Jinri seconds. The motion is approved.
   b. Request by CommScope to reactivate the archived OAM/TR069-Adapter repo; LFN requires approval by TOC
   i. Motion to reactivate TR069 by Martin; Jinri second; The motion is approved
4. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20 : no major progress/updates.

5. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it's still a virtual meeting. **Action Point:** Rittwik and RSAC to prepare for this meeting. 2022-04-20 : Open
      iii. 2022-05-05: Jinri: no details on the agenda for the June F2F are available yet.
   b. O-RAN ALLIANCE industry summit will take place in June, with both live and virtual events.
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      i. 2022-04-06: James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC).
      ii. Jinri might request help from PTLs (via reflector/mailing list).
      iii. 2022-05-05 Jinri sent out a survey. PTLs are invited to contribute with identified issues.

6. Old business and Status of Open Actions
   a. "F" Release:
      i. **Action Point:** PTLs to add a line showing code coverage stats for F release.
      ii. 2022-04-06: we checked the page F Release - not all subprojects have a heading or reference to this.
      iii. 2022-04-13: page F Release still does not reflect the progress and required stats.
         1. **Action Point:** PTLs from non-RT RIC (ok), O-DU (not ok), Simulators (ok), Infrastructure (ok), SMO (not ok): to check and update the stats on the F Release respective pages
         2. 2022-04-20: Jackie (Windriver) asked how to create "F" release in JIRA for his project. Answer: Try this link and if it does not work, contact Sridhar Rao (srao@linuxfoundation.org).
      b. 5G Super Blueprint status - tabled for D and E, will be re-evaluated for F release.
      i. Tag this activity for G release.
      ii. 2022-04-06: no news

7. Standing Agenda Items (Brief Status of Ongoing Activities)
      i. OTF Workshop scheduled for RSAC call on May-4 (8AM EDT) did not take place due to technical difficulties. It will be rescheduled.
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9. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   a. Presentation by Ultan (Viavi) and Avinash Bath (Samsung) on their view and interest in OSC.
      i. 2022-04-27: Kexuan Sun (Viavi) presented the RIC Test solution.
      ii. 2022-05-05: Avinash Bath (Samsung) presented “OSC contribution goals”
   1. Jack: suggest to coordinate with other project on the data movement strategy, also taking into account existing LF initiatives on data management and AI

10. Planning for Next Meeting
11. Any Other Business (AOB)
12. Meeting Summary (resolutions, new action items, etc.)

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2022 04 27

Recording:

Topic: Zoom3 O-RAN SC
Start Time: Apr 27, 2022 08:00 AM


Agenda

1. Call for Scribe (minutes owner): Arun Kumar
2. Roll Call & Quorum Check

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1. Review and Agree to Minutes of Previous Meeting
   a. **Decision:** Minutes for TOC meeting approval: proposed by Arun and seconded by Bin. The motion is approved.
2. Review of Today’s Agenda
   a. we go through the items below. Note that we have special (non-regular) items in 5a and 10a
3. Release Votes and Approval
   a. Presentation by Northeastern University (Michele P & Andrea L) on a contribution ns-3 based simulator
      i. **2022-04-27:** Polese, Michele from NE Univ: presented the tool capabilities overall. The ‘ns3-oran-interface or ns-O-RAN’, is the intended repo for OSC contribution. The motion to create a new repo ‘ns3-O-RAN-e2’ and under licence type GPL2 in the Sim project is approved.
1. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.
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ii. Jack: 2022-03-30: I don't see Tracy today. We will talk about it next week.
iii. 2022-04-06: Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open

4. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
      i. OTF Workshop will be held on the 2022-04-13: now planned for April 7 in RSAC call. 2022-04-13: new date: May 4 8am EDT
      1. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
      2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to "templatize" the Viavi deployment to make it easier to deploy.
      3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang) area: Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. ; This would help this community for Ex. SMO: how to manage infra easily - kind of questions;
      4. 2022-04-20: Environment not yet ready (OTF team and infrastructure team working on this)
   ii. "G" Release
      1. Jack: How do we track our support of MVP?
      2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
      3. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
   iii. Action Point: PTLs to add a line showing code coverage stats for F release.
   iv. 2022-04-06: we checked the page F Release - not all subprojects have a heading or reference to this.
      1. Action Point: PTLs from non-RT RIC (ok), O-DU (ok), Simulators (ok), Infrastructure (ok), O-RAN Distributed Unit High (OK), Infrastructure (not ok) to check and update the stats on the F Release respective pages
   v. 2022-04-06: Jackie (Windriver) asked how to create "F" release in JIRA for his project. Answer: Try this link and if it does not work, contact Sridhar Rao (srao@linuxfoundation.org).
   b. 5G Super Blueprint status - tabled for D and E, will be re-evaluated for F release.
      i. Tag this activity for G release.
   c. O-RAN spending
      i. 2022-04-06
         1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
         2. David responded with potential need for simulation tool
         3. Jinri reminded participants of the meeting to check for any additional spending needs.
         4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan "network appliance" solution with software. No response. We assume to continue with the "network appliance" model. Ultan requested some additional information from David (cc Jinri).
   d. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC). Jinri might request help from PTLs (via reflector/mailing list).

5. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   a. Presentation by Ultan (Viavi) and JinGuk (Samsung) on their view and interest in OSC.
      i. 2022-04-27: Kexuan Sun (Viavi) presented the RIC Test solution.
   b. Reminder: Starting next week (=May-5) we meet on Thursdays, May 5, at 9am EST. 2022-04-27: Andrea Buldorini will be the scribe for May.
   c. Sridhar Rao (srao@linuxfoundation.org)
Meeting Recording:
https://zoom.us/rec/share/nWK6FeSFAQGqXVUB8BX._q9VJ5FP9J3xJTxwWpc_z78HTqYwMYRljf93gtVBTThh.3xoTamh5pxweZVkm

Agenda

1. Call for Scribe (minutes owner): Thoralf Czichy
2. Roll Call & Quorum Check

<table>
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<td>China Mobile</td>
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<td>James Li</td>
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<td>Deutsche Telekom</td>
<td>Jakub Novy (starting 2022-04-20)</td>
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<td>Ondej Hudousek</td>
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<td>Nokia</td>
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<td>x</td>
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<td>x</td>
<td>Vincent Danno</td>
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<td>Radisys</td>
<td>Ganesh Shenbagaraman</td>
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<td>x</td>
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<td>Bin Yang</td>
<td>x</td>
<td>Jackie Huang</td>
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<td>Viavi Solutions</td>
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<td>Kexuan Sun</td>
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<td>JinGuk Jeong</td>
<td>x</td>
<td>Avinash Bhat</td>
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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.

3. Review and Agree to Minutes of Previous Meeting
   a. **Decision:** Minutes for TOC meeting approval: proposed by Thoralf and seconded by Bin Yang. The motion is approved.

4. Review of Today’s Agenda
   a. we go through the items below.

5. Release Votes and Approval
   a. -

6. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
      i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06, 2022-04-13, 2022-04-20: no major progress/updates.

7. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it's still a virtual meeting. **Action Point:** Rittwik and RSAC to prepare for this meeting. 2022-04-20: Open
   b. Plugfest
      i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
      ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
      iii. 2022-04-06: **Action Point:** Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information). 2022-04-20: Open
   c. O-RAN spending
      i. 2022-04-06
         1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
         2. David responded with potential need for simulation tool
         3. Jinri reminded participants of the meeting to check for any additional spending needs.
      4. 2022-04-20: David sent inquiry to Viavi regarding replacing on-loan "network appliance" solution with software. No response. We assume to continue with the "network appliance" model. Ultan requested some additional information from David (cc James+Jinri).
   d. 2022-04-20 James and Jinri: are starting the work on identifying any challenges for the OSC community (as report to EC). Jinri might request help from PTLs (via reflector/mailing list).

8. Old business and Status of Open Actions
   a. "F" Release:
      i. **Action Point:** PTLs to add a line showing code coverage stats for F release.
      ii. 2022-04-06: we checked the page F Release - not all subprojects have a heading or reference to this.
      iii. 2022-04-13: page F Release still does not reflect the progress and required stats.
      1. **Action Point:** PTLs: from non-RT RIC (ok), O-DU (not ok), Simulators (ok), Infrastructure (ok), SMO (not ok): to check and update the stats on the F Release respective pages
      iv. 2022-04-20: Jackie (Windriver) asked how to create "F" release in JIRA for his project. Answer: Try this link and if it does not work, contact Sridhar Rao (srao@linuxfoundation.org).
   b. 5G Super Blueprint status - tabled for D and E, will be re-evaluated for F release.
      i. Tag this activity for G release.
9. Standing Agenda Items (Brief Status of Ongoing Activities)
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
      i. OTF Workshop will be held on the April 7 in RSAC call. 2022-04-13: now planned for Apr-21 9am EDT. **2022-04-20: likely new date: May-4 8am EDT**
         1. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
         2. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to "templatize" the Viavi deployment to make it easier to deploy.
         3. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang) area :Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities. This would help this community for Ex. SMO: how to manage infra easily - kind of questions;
      ii. "G" Release
         1. Jack: How do we track our support of MVP?
         2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
      c. Report out from PTL: Stand-Up & Report Out on Blockers
         i. 2022-04-06: no news
         ii. James Li Integration and Testing (INT)
         iv. John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
         v. Sunil Singh RIC Applications (RICAPP)
         vi. Thoralf Czichy RIC Platform (RIC)
         vii. (TBD) O-RAN Centralized Unit (OCU)
         viii. Marnasi Padhy O-RAN Distributed Unit High (ODUHIGH)
         x. Martin Skorupski Operations and Maintenance (OAM)
         xi. Alex Stancu Simulations (SIM)
         xii. Jackie Huang Infrastructure (INF)
         xiii. weichen ni Documentation (DOC)
        xiv. (TBD) O-RAN Radio Unit (ORU)
   10. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
   11. Planning for Next Meeting
      a. Presentation by Ultan (Viavi) and JinGuk (Samsung) on their view and interest in OSC.
      b. Presentation by Northeastern University on a ns-3 based simulator to discuss under item 5
   12. Any Other Business (AOB)
      a. 2022-04-20: new meeting time proposal by Jinri: https://lists.o-ran-sc.org/g/toc/message/676. Jinri has made a motion starting May-5 to use Thursdays, 9am EST. Apr-27 still the Wednesday timeslot. Ganesh seconded. The motion was approved.
   13. Meeting Summary (resolutions, new action items, etc.)

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**2022 04 13**

**Recording:**

**Topic:** Zoom3 O-RAN SC

**Start Time:** Apr 13, 2022 08:00 AM

**Meeting Recording:**

https://zoom.us/rec/share/fGQnbh3PqvajDi_mSM-cT0FTThRlhTCyrWmN5wBTCi9VsiRUNoZedJqYoBPzuRPlo.lWBgu_G-0-p3y9N

**Agenda:**

1. Call for Scribe (minutes owner): Arunkumar Halebid
2. Roll Call & Quorum Check

**Company** | **Contact Name** | **Attendance** | **Alternate Contact** | **Attendance**
--- | --- | --- | --- | ---
AT&T | Jack Murray Co-Chair | x | David Kinsey |
China Mobile | Jinri Huang Co-Chair | x | James Li |
Deutsche Telekom | David Streibel Jakub Nový (starting 2022-04-20) | x | Ondej Hudousek |
Ericsson | John-Paul Lane | x | John Keeney |
NTT DOCOMO | Masafumi Masuda | | Anil Umesh |
Nokia | Arunkumar Halebid | x | Thoralf Czichy |
Orange | William Diego | x | Vincent Danno |
Radisys | Ganesh Shenbagaraman | | Manasi Padhy |
TIM | Andrea Buldorini | x | Scarpina Salvatore |
3. Review and Agree to Minutes of Previous Meeting

- **Decision:** Minutes for TOC meeting approval: proposed by Arun and seconded by David. The motion is approved.

4. Review of Today’s Agenda

- We go through the items below.

5. Release Votes and Approval


6. Copyright update

- Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
  - This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06: no news; 2022-04-13: no major progress/updates.

7. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)

- **F2F Meeting**
  - Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
  - 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. **Action Point:** Rittwik and RSAC to prepare for this meeting. 2022-04-13: Open;

- **Plugfest**
  - Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
  - Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
  - 2022-04-06: **Action Point:** Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information).

- **O-RAN spending**
  - 2022-04-06
    - O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
    - David responded with potential need for simulation tool.
  - 2022-04-06: James talked about David Kinsey’s mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David’s e-mail.

8. Old business and Status of Open Actions

- **“F” Release**
  - **Action Point:** PTLs to add a line showing code coverage stats for F release.
  - 2022-04-06: we checked the page F Release - not all subprojects have a heading or reference to this.
    - **Action Point:** PTLs from non-RT RIC, O-DU, Simulators, Infrastructure, SMO: to check and update the stats on the F Release respective pages.
  - 5G Super Blueprint status - tabled for D and E, will be re-evaluated for F release.
    - Tag this activity for G release.
  - 2022-04-06: no news.

9. Standing Agenda Items (Brief Status of Ongoing Activities)

- **Release Manager/Sridhar Rao:** Release Planning: Weekly TOC Scheduling
  - Trishan has moved on. Need to work with LF to secure a replacement.
  - **Action Point:** Jack to send another message to Arpit requesting when replacement for Trishan is available. DONE(2022-04-13), Sridhar Rao (srao@linuxfoundation.org) will replace Trishan

- **Requirements Software Architecture Committee (RSAC, link incl. meeting details)**
  - OTF Workshop
    1. OTF Workshop will be held on the April-7 in RSAC call. 2022-04-13: now planned for Apr-21 8am EDT. 2022-04-20: likely new date: May-4 8am EDT.
    2. 2022-04-06: James talked about David Kinsey’s mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David’s e-mail.
    3. 2022-04-06: Rittwik reported issues with PTP standup not yet done. They are also trying to “templatize” the Viavi deployment to make it easier to deploy.
    4. 2022-04-13: Jack brought up: if Infrastructure (Jackie Huang) area: Interest in the community to consider integration of any new upstream projects etc. and open to evaluate such opportunities.; This would help this community for Ex. SMO: how to manage infra easily - kind of questions;
  - 2022-04-06: no news.

- **“G” Release**
  - 1. Jack: How do we track our support of MVP?
  - 2. David Kinsey: Rittwik and I do coordinate, but do not measure. We will work to see how we measure.
  - 2022-04-06: Jack called for first input. RSAC planning committee will again coordinate.

- **Report out from PTL:** Stand-Up & Report Out on Blockers
  - 2022-04-06: no news.
  - **James Li Integration and Testing (INT)**
  - John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
  - Sunil Singh RIC Applications (RICAPP)
  - Thoralf Czichy RIC Platform (RIC)
  - (TBD) O-RAN Centralized Unit (OCU)
  - Manasi Padhy O-RAN Distributed Unit High (ODUHIGH)
xi. Martin Skorupski  Operations and Maintenance (OAM)
xii. Alex Stancu  Simulations (SIM)
xiii. Jackie Huang  Infrastructure (INF)
xiv. weichen ni  Documentation (DOC)
xv. TBD  O-RAN Radio Unit (ORU)

10. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
11. Planning for Next Meeting
12. Any Other Business (AOB)
13. Meeting Summary (resolutions, new action items, etc.)

2022 04 06
Recording: https://zoom.us/rec/share/7peastzm9puzm6XrAbwqDXxb_sIClHCeNzTFRDX7b3PNiy0dDVPLva9Srmb2u1Vi.Bltds6sNlQRlifVlgz

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1. Call for Scribe (minutes owner): Thoralf Czichy (standing in for Arunkumar Halebid)
2. Roll Call & Quorum Check

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*Quorum: 50% or more of total TOC voting members unless excluded due to attendance.
3. Review and Agree to Minutes of Previous Meeting
   a. Decision: Minutes for TOC meeting approval: proposed by Masafumi and seconded by Jinri. The motion is approved.
4. Review of Today’s Agenda
   a. Potential new spending (Jinri) - covered by O-RAN related business in item 7.
5. Release Votes and Approval
6. Copyright update
   a. Is SCCL discussion progressing in O-RAN Alliance? Does the Alliance have plans to publish code-like specifications under SCCL anytime soon? Need to follow up with O-RAN legal team and O-RAN EC to determine current status of SCCL.
   i. This is currently stalled and we are waiting on updates from O-RAN legal team. 2022-04-06: no news
7. O-RAN-related business (marketing, WG interaction, TSC/EC update etc.)
   a. F2F Meeting
      i. Jack: We need to be prepared for the June one. We have some items as part of the F Release and planning for the G Release.
      ii. 2022-04-06: Jack and Jinri confirmed that it’s still a virtual meeting. Action Point: Rittwik and RSAC to prepare for this meeting
   b. TOC Nomination
      i. Action Point: Jinri to get reaffirmation from TSC for the 6 seats including Samsung as of April 6. DONE
      ii. 2022-04-06: Jinri confirmed that this (6 seats incl. new seat for Samsung) was approved. Next vote would be in March 2023. Seats are by company. If person leaves, company provides substitute. In technical teams nomination is linked to persons.
   c. Plugfest
      i. Jinri: There are 2 plugfests this year. It will be great if we can have regular updates on the preparation work.
      ii. Jack: 2022-03-30: I don’t see Tracy today. We will talk about it next week.
      iii. 2022-04-06: New Action Point: Jinri to check details and come back with more information. O-RAN members should have received call for participation (with deadline and host information).
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   1. O-RAN is collecting spending request. Jinri sent e-mail on this to TOC mailing list.
   2. David responded with potential need for simulation tool
   3. Jinri reminded participants of the meeting to check for any additional spending needs.

8. Old business and Status of Open Actions
   a. "F" Release:
      i. Action Point: PTLs to add a line showing code coverage stats for F release.
      ii. 2022-04-06: we checked the page F Release - not all subprojects have a heading or reference to this.
   b. 5G Super Blueprint status - tabled for D and E, will be re-evaluated for F release.
      i. Tag this activity for G release.
      ii. 2022-04-06: no news

9. Standing Agenda Items (Brief Status of Ongoing Activities)
   a. Release Manager Trishan de Lanerolle /Release Planning: Weekly TOC Scheduling
      i. Trishan has moved on. Need to work with LF to secure a replacement.
   b. Requirements Software Architecture Committee (RSAC, link incl. meeting details)
      i. OTF Workshop
         1. OTF Workshop will be held on the April 7 in RSAC call.
         2. 2022-04-06: James talked about David Kinsey's mail on possible delay in OTF adoption. O-cloud usage should help with the current OTF-related issues. Details see David's e-mail.
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         3. 2022-04-06: Jack called for first input. RSAC planning committee will again coordinate.
   c. Report out from PTL: Stand-Up & Report Out on Blockers
      i. 2022-04-06: no news
      ii. James Li Integration and Testing (INT)
      iii. Mahesh Jethanandani Service Management and Orchestration (SMO)
      iv. John Keeney Non-Real Time RIC (RAN Intelligent Controller) (NONRTRIC)
      v. Sunil Singh RIC Applications (RICAPP)
      vi. Thoralf Czichy RIC Platform (RIC)
      vii. (TBD) O-RAN Centralized Unit (OCU)
      viii. Manasi Padhy O-RAN Distributed Unit High (ODUHIGH)
      ix. Luis Farias O-RAN Distributed Unit Low (ODULOW)
      x. Martin Skorupski Operations and Maintenance (OAM)
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      xii. Jackie Huang Infrastructure (INF)
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10. New Agenda Items (New Business): New Items Submitted (+speaker) & Open Call to TOC For Additional Items
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