

# RICAPP Meetings

Note: Recording of meetings available here: [Project meetings](#)

2024-05-07

Presentation on the RICAPP for the upcoming session. - Done

A demonstration of O-RAN Software Community RICAPPs and Usecases.

New Bug reports in JIRA:

1. [RICAPP-236](#) - Array Index Out of Bounds Panic in handleIndication Method - In progress
2. [RICAPP-235](#) - Segmentation Fault in cgo Decoding Routine of kpimon-go xApp - In progress
3. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
4. [RICAPP-233](#) - Missing Readiness and Liveness Probes in kpimon-go xApp Deployment Configuration
5. [RICAPP-221](#) - The image size of kpimon-go is too big.

HW xApps

- HW-RUST: - Maintain the app for J release support.
  - RICAPP-232 - Demo is done today
- HW-CPP: - Maintain the app for J release support.
- HW-GO: - Maintain the app for J release support.
- HW-Python - Subscription part will be implemented.
  - Need to drop from J release.

Other xApps:

- TS - Alexandra - will send the updates for this release.
- QP - No Updates
- AD xApp - No updates
- KPIMON-GO - Lots of issues - need to fix.
- RC - No Updates
- CCC - Alexandra will send the updates on the release
- ad-cell - AI - No updates - Will send a mail to Samsung team

RIC Benchmarking:

- Bouncer xApp - Not planned for J release update

2024-04-23

Presentation on the RICAPP for the upcoming session. - Done

A demonstration of O-RAN Software Community RICAPPs and Usecases.

New Bug reports in JIRA:

1. [RICAPP-236](#) - Array Index Out of Bounds Panic in handleIndication Method - In progress
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3. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
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- HW-GO: - Maintain the app for J release support.
- HW-Python - Subscription part will be implemented.
  - Need to drop from J release.

Other xApps:

- TS - Alexandra - AI- Sunil will write a mail. - Registration Process to be fixed after CPP framework fix.
- QP -
- AD xApp -
- KPIMON-GO - Lots of issues - need to fix.
- RC
- CCC - Need to check with the committers. - Will work on the J release.
- ad-cell - AI - Sunil will write to the committers for the status.

RIC Benchmarking:

- Bouncer xApp - Not yet planned for J release.

New Proposal?

## 2024-04-09

**Meeting didn't happen as Sunil was on leave.**

Presentation on the RICAPP for the upcoming session.

A demonstration of O-RAN Software Community RICAPPs and Usecases.

New Bug reports in JIRA:

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- HW-GO: -
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- RC
- CCC - Need to check with the committers. - Will work on the J release.
- ad-cell - AI - Sunil will write to the committers for the status.

RIC Benchmarking:

- Bouncer xApp - Not yet planned for J release.

New Proposal?

## 2024-03-26

Presentation on the RICAPP for the upcoming session.

A demonstration of O-RAN Software Community RICAPPs and Usecases.

New Bug reports in JIRA:

1. [RICAPP-236](#) - Array Index Out of Bounds Panic in handleIndication Method
2. [RICAPP-235](#) - Segmentation Fault in cgo Decoding Routine of kpimon-go xApp
3. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
4. [RICAPP-233](#) - Missing Readiness and Liveness Probes in kpimon-go xApp Deployment Configuration
5. [RICAPP-221](#) - The image size of kpimon-go is too big.

HW xApps

- HW-RUST: - Maintain the app for J release support.
- HW-CPP: -
- HW-GO: -
- HW-Python - Subscription part will be implemented.
  - Need to drop from J release.

Other xApps:

- TS - Alexandra - AI- Sunil will write a mail. - Registration Process to be fixed after CPP framework fix.
- QP -
- AD xApp -
- KPIMON-GO - Lots of issues - need to fix.
- RC
- CCC - Need to check with the committers. - Will work on the J release.

- ad-cell - AI - Sunil will write to the committers for the status.

RIC Benchmarking:

- Bouncer xApp - Not yet planned for J release.

New Proposal?

## 2024-03-12

New Bug reports in JIRA:

1. [RICAPP-236](#) - Array Index Out of Bounds Panic in handleIndication Method
2. [RICAPP-235](#) - Segmentation Fault in cgo Decoding Routine of kpimon-go xApp
3. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
4. [RICAPP-233](#) - Missing Readiness and Liveness Probes in kpimon-go xApp Deployment Configuration
5. [RICAPP-221](#) - The image size of kpimon-go is too big.

HW xApps

- HW-RUST: - Maintain the app for J release support.
- HW-CPP: -
- HW-GO: -
- HW-Python - Subscription part will be implemented.

Other xApps:

- TS - Alexandra - AI- Sunil will write a mail. - Registration Process to be fixed after CPP framework fix.
- QP -
- AD xApp -
- KPIMON-GO - Lots of issues - need to fix.
- RC
- CCC - Need to check with the committers. - Will work on the J release.
- ad-cell - AI - Sunil will write to the committers for the status.

RIC Benchmarking:

- Bouncer xApp - Not yet planned for J release.

New Proposal?

## 2024-02-13

New Bug reports in JIRA:

1. **new** [RICAPP-236](#) - Array Index Out of Bounds Panic in handleIndication Method
2. [RICAPP-235](#) - Segmentation Fault in cgo Decoding Routine of kpimon-go xApp
3. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
4. [RICAPP-233](#) - Missing Readiness and Liveness Probes in kpimon-go xApp Deployment Configuration
5. [RICAPP-221](#) - The image size of kpimon-go is too big.

HW xApps

- HW-RUST: - Maintain the app for J release support.
- HW-CPP: -
- HW-GO: -
- HW-Python - Subscription part will be implemented.

Other xApps:

- TS - Alexandra - AI- Sunil will write a mail
- QP -
- AD xApp -
- KPIMON-GO
- RC
- CCC - Need to check with the committers.
- ad-cell - AI - Sunil will write to the committers for the status.

RIC Benchmarking:

- Bouncer xApp

New Proposal?

## 2024-01-30

New Bug reports in JIRA:

1. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
2. [RICAPP-233](#) - Missing Readiness and Liveness Probes in kpimon-go xApp Deployment Configuration
3. [RICAPP-221](#) - The image size of kpimon-go is too big.

HW xApps

- HW-RUST:
- HW-CPP:
- HW-GO:
- HW-Python - AI - Subhash - Subscription part will be implemented.

Other xApps:

- TS
- QP
- AD xApp
- KPIMON-GO
- RC
- CCC
- ad-cell

RIC Benchmarking:

- Bouncer xApp

New Proposal

## 2024-01-16

New Bug reports in JIRA:

1. [RICAPP-234](#) - Possible Negative-Sized Array Allocation due to Unhandled Negative Return Value in kpimon-go
2. [RICAPP-233](#) - Missing Readiness and Liveness Probes in kpimon-go xApp Deployment Configuration
3. [RICAPP-221](#) - The image size of kpimon-go is too big.

HW xApps

- HW-RUST:
- HW-CPP:
- HW-GO:
- HW-Python - AI - Subhash - Subscription part will be implemented.

Other xApps:

- TS
- QP
- AD xApp
- KPIMON-GO
- RC
- CCC
- ad-cell

RIC Benchmarking:

- Bouncer xApp

New Proposal

## 2023-12-05

No issues were discussed.

## 2023-11-21:

- Status
  - HW xApps
    - HW-RUST:

- moved to I-Release
  - xApp is ready - code check in.
- HW-CPP: maintain the code for the I release.
- HW-GO: maintain the code for the I release.
- HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
  - 28-03-2023: Naman will raise the ticket.
- Traffic Steering Use case:
  - TS xApp :
    -
  - QP & AD xApp : Enhancements
    - No Updates
  - KPIMON-GO xApp
  - RC xApp- E2SM 2.0.x Update.
- RIC Benchmarking:
  - Bouncer xApp - E2SM updation (E2SM KPM ver 2.0 & E2SM RC ver 1.03)
  - Next plan? - Plan by next week - No update
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
  - 2023-07-18: Subhash will check and ask them to contact Sunil.
  - 2023-08-22: Any update on the code check-in status?
- New Proposal
  - E2SM-CCC service model. The idea is to implement something related to slice assurance, and potentially integrate it with other use cases from the O-RAN SC.
  - 2023-08-01 - Will send for the approval for the TOC call on 03-Aug-2023. - Approved by TOC
  - 29-08-2003 - Branch created - review & merge pending from LF
- Tickets
  - [RICAPP-222] ASN decoders for kpm ran function description and asn encoders for action definition format1 and format3.
  - [RICAPP-223] Creating UE/CELL metrics hashmap based upon the KPIS supported by each E2 node.
  - [RICAPP-224] F1AP gnbDuConfigurationUpdate parser.

## 2023-09-26

Saravanan said there's a review pending on Sunil. Saravanan should find two existing committers that give +1 and then ask from Sunil to merge.

Tuan - E2SIM E2SM-kpm v1, but xApp uses v2. Tuan might work on this. Needs to contact [Alex Stancu](#) for commit

## 2023-09-12:

- Status
  - HW xApps
    - HW-RUST:
      - moved to I-Release
    - HW-CPP: maintain the code for the I release.
    - HW-GO: maintain the code for the I release.
    - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
      - 28-03-2023: Naman will raise the ticket.
    - Traffic Steering Use case:
      - TS xApp :
        -
      - QP & AD xApp : Enhancements
        - No Updates
      - KPIMON-GO xApp
      - RC xApp- E2SM 2.0.x Update.
  - RIC Benchmarking:
    - Bouncer xApp - E2SM updation (E2SM KPM ver 2.0 & E2SM RC ver 1.03)
    - Next plan? - Plan by next week - No update
  - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
    - 2023-07-18: Subhash will check and ask them to contact Sunil.
    - 2023-08-22: Any update on the code check-in status?
  - New Proposal
    - E2SM-CCC service model. The idea is to implement something related to slice assurance, and potentially integrate it with other use cases from the O-RAN SC.
    - 2023-08-01 - Will send for the approval for the TOC call on 03-Aug-2023. - Approved by TOC
    - 29-08-2003 - Branch created - review & merge pending from LF
  - Others?

## 2023-08-29:

- Status

- HW xApps
  - HW-RUST:
    - moved to I-Release
  - HW-CPP: maintain the code for the I release.
  - HW-GO: maintain the code for the I release.
  - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
    - 28-03-2023: Naman will raise the ticket.
    - ?
  - Traffic Steering Use case:
    - TS xApp :
      - ?
    - QP & AD xApp : Enhancements
      - No Updates
    - KPIMON-GO xApp
    - RC xApp- E2SM 2.0.x Update.
- RIC Benchmarking:
  - Bouncer xApp - E2SM updation (E2SM KPM ver 2.0 & E2SM RC ver 1.03)
  - Next plan? - Plan by next week - No update
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
  - 2023-07-18: Subhash will check and ask them to contact Sunil.
  - 2023-08-22: Any update on the code check-in status?
- New Proposal
  - E2SM-CCC service model. The idea is to implement something related to slice assurance, and potentially integrate it with other use cases from the O-RAN SC.
  - 2023-08-01 - Will send for the approval for the TOC call on 03-Aug-2023. - Approved by TOC
  - 29-08-2003 - Branch created - review & merge pending from LF
- Others?

## 2023-08-22:

- Status
  - HW xApps
    - HW-RUST:
      - moved to I-Release
    - HW-CPP: maintain the code for the I release.
    - HW-GO: maintain the code for the I release.
    - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
      - 28-03-2023: Naman will raise the ticket.
      - ?
    - Traffic Steering Use case:
      - TS xApp :
        - ?
      - QP & AD xApp : Enhancements
        - ?
      - KPIMON-GO xApp
      - RC xApp- E2SM 2.0.x Update.
  - RIC Benchmarking:
    - Bouncer xApp - E2SM updation (E2SM KPM ver 2.0 & E2SM RC ver 1.03)
    - Next plan? - Plan by next week
  - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
    - 2023-07-18: Subhash will check and ask them to contact Sunil.
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  - New Proposal
    - E2SM-CCC service model. The idea is to implement something related to slice assurance, and potentially integrate it with other use cases from the O-RAN SC.
    - 2023-08-01 - Will send for the approval for the TOC call on 03-Aug-2023. - Approved by TOC
    - Branch creation - AI - Sunil.
    - Energy saving was raised by RSAC as a use case that we should work on and that has high priority on O-RAN side as well.
  - Others?

## 2023-08-01:

- H-Release:
  - 2023-07-18: Subhash to still create H release branch for hello world xApp. other xApps already have this.
  - 2023-08-01: - ?
- Status
  - HW xApps (h-release branch?)
    - HW-RUST: Will add the new hw-rust app in H-release.
      - moved to I-Release
      - 2023-07-18: first version is available in I release (still only in staging repo). Unsure how to move to release repo. Support for E2 subscription is still missing.

- HW-CPP: maintain the code for the I release.
- HW-GO: maintain the code for the I release.
- HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
  - 28-03-2023: Naman will raise the ticket.
  - ?
- Traffic Steering Use case:
  - TS xApp :
    - ?
  - QP & AD xApp : Enhancements
    - ?
  - KPIMON-GO xApp
  - RC xApp- E2SM 2.0.x Update.
- RIC Benchmarking:
  - Bouncer xApp - E2SM updation ( E2SM KPM ver 2.0 & E2SM RC ver 1.03)
  - Next plan?
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
  - 2023-07-18: Subhash will check and ask them to contact Sunil
  - 2023-08-01: Next week commit will be initiated
- New Proposal
  - 2023-07-18
  - E2SM-CCC service model. The idea is to implement something related to slice assurance, and potentially integrate it with other use cases from the O-RAN SC.

Could you please drive this new repo creation in the O-RAN SC?

We were discussing about the name of this xApp and we have some suggestions:

1. slice-sla (*preferred and more specific - implies only on slicing*)
  2. slice-assurance
  3. ccc (*if you thing a more general xApp name would be better*)
- 2023-08-01 - Will send for the approval for the TOC call on 03-Aug-2023.
  - Energy saving was raised by RSAC as a use case that we should work on and that has high priority on O-RAN side as well.
- Others?

## 2023-07-18:

- H-Release:
  - 2023-07-18: Subhash to still create H release branch for hello world xApp. other xApps already have this.
- Status
  - HW xApps (h-release branch?)
    - HW-RUST: Will add the new hw-rust app in H-release.
      - 28-03-2023: No updates: Most likely to move to next release.
      - moved to I-release
      - 2023-07-18: first version is available in H (still only in staging repo). Unsure how to move to release repo. Support for E2 subscription is still missing.
    - HW-CPP: maintain the code for the H release.
    - HW-GO: maintain the code for the H release.
    - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
      - 28-03-2023: Naman will raise the ticket.
    - Traffic Steering Use case - Done (branch Created)
      - TS xApp :
        - 28-03-2023: Registration of TS xapp.
      - QP & AD xApp : Enhancements
        - Plan to test multiple model and comparison analysis.
        - Multi-Thread approach for Training and Inference
      - KPIMON-GO xApp:
        - 28-03-2023:
      - RC xApp- E2SM 2.0.x Update.
        - GRPC dependency
        - Checking the specs. E2 term on GRPC
  - RIC Benchmarking:
    - Bouncer xApp - E2SM updation ( E2SM KPM ver 2.0 & E2SM RC ver 1.03) - Done (branch Created)
  - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
    - Cell-AD xApp: (Release Branch?)
    - Branch creation - Issue in check-in the info.yaml file - Issue Fixed. Merge is pending from LFN team
    - 28-03-2023
      - Issue Fixed - Branch created
    - 2023-07-18: Subhash will check and ask them to contact Sunil
  - Himanshu Purohit from GS Lab - contribute to the xApps in OSC. -
  - New Proposal
    - 2023-07-18
    - E2SM-CCC service model. The idea is to implement something related to slice assurance, and potentially integrate it with other use cases from the O-RAN SC.

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  3. ccc (*if you thing a more general xApp name would be better*)
- Energy saving was raised by RSAC as a use case that we should work on and that has high priority on O-RAN side as well.
  - Others?
    - RIC-375 ticket on RMR for xApps.
    - Simulator (SIM) - E2AP version 2.0.
    - NS3 Simulator - E2AP 1.0

## 2023-06-06

issues with review (can't participate and click the "REPLY" button. Can raise support requests to <https://jira.linuxfoundation.org/plugins/servlet/desk>

Nitin: RC xApp update was done (E2SM upgraded, E2AP 2.0 still need - Thoralf unsure if E2AP v3.0 is already supported by RIC platform)

## 2023-05-23

we did not discuss anything, hw-rust part was discussed on platform side.

## 2023-05-09

Abhijit trying to get first release of hw-rust xapp RICAPP-212. No blocker. Planning to provide this in scope of H release.

## 2023-04-25:

- H-Release Plan on xApps:
  - Status
    - HW xApps
      - HW-RUST: Will add the new hw-rust app in H-release.
        - 28-03-2023: No updates: Most likely to move to next release.
      - HW-CPP: maintain the code for the H release.
      - HW-GO: maintain the code for the H release.
      - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
        - 28-03-2023: Naman will raise the ticket.
    - Traffic Steering Use case
      - TS xApp :
        - 28-03-2023: Registration of TS xapp.
      - QP & AD xApp : Enhancements
        - Plan to test multiple model and comparison analysis.
        - Multi-Thread approach for Training and Inference
      - KPIMON-GO xApp:
        - 28-03-2023:
      - RC xApp- E2SM 2.0.x Update.
        - GRPC dependency
        - Checking the specs. E2 term on GRPC
  - RIC Benchmarking:
    - Bouncer xApp - E2SM updation ( E2SM KPM ver 2.0 & E2SM RC ver 1.03)
  - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
    - Cell-AD xApp:
    - Branch creation - Issue in check-in the info.yaml file - Issue Fixed. Merge is pending from LFN team
    - 28-03-2023
      - Issue Fixed - Branch created
  - Himanshu Purohit from GS Lab - contribute to the xApps in OSC. - No update
  - Others?
    - RIC-375 ticket on RMR for xApps. - will work in H-Release
    - Simulator (SIM) - E2AP version 2.0.
    - NS3 Simulator - E2AP 1.0

## 2023-04-11:

no items were discussed.

## 2023-03-28:

- H-Release Plan on xApps:
  - Status
    - HW xApps
      - HW-RUST: Will add the new hw-rust app in H-release.
        - 28-03-2023: No updates: Most likely to move to next release.
      - HW-CPP: maintain the code for the H release.
      - HW-GO: maintain the code for the H release.
      - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
        - 28-03-2023: Naman will raise the ticket.
    - Traffic Steering Use case
      - TS xApp :
        - 28-03-2023: Registration of TS xapp.
      - QP & AD xApp : Enhancements
        - Plan to test multiple model and comparison analysis.
        - Multi-Thread approach for Training and Inference
      - KPIMON-GO xApp:
        - 28-03-2023:
      - RC xApp- E2SM 2.0.x Update.
        - GRPC dependency
        - Checking the specs. E2 term on GRPC
    - RIC Benchmarking:
      - Bouncer xApp - E2SM updation ( E2SM KPM ver 2.0 & E2SM RC ver 1.03)
    - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
      - *Cell-AD xApp:*
      - *Branch creation - Issue in check-in the info.yaml file - Issue Fixed. Merge is pending from LFN team*
      - *28-03-2023*
        - *Issue Fixed - Branch created*
    - Himanshu Purohit from GS Lab - contribute to the xApps in OSC. - No update
    - Others?
      - RIC-375 ticket on RMR for xApps. - will work in H-Release
      - Simulator (SIM) - E2AP version 2.0.
      - NS3 Simulator - E2AP 1.0

## 2023-3-14:

- H-Release Plan on xApps:
  - Status
    - HW xApps
      - HW-RUST: - No updates - Will add the new hw-rust app in H-release
      - HW-CPP: maintain the code for the H release.
      - HW-GO: maintain the code for the H release
      - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
    - Traffic Steering Use case
      - TS xApp :
      - QP xApp : Enhancements
      - AD xApp : Enhancements
      - KPIMON-GO xApp:
      - RC xApp- E2SM 2.0.x Update.
        - GRPC dependency
        - Checking the specs. E2 term on GRPC
    - RIC Benchmarking:
      - Bouncer xApp - E2SM updation
    - New proposals from Viavi - Not discussed in call with viavi
    - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the ML model to improve the efficiency.
      - *Cell-AD xApp:*
      - Subhash/Saravanan suggested that Sunil organizes a meeting with LF (Sridhar (srao@l...org) (/Matt (mwatkins@l...org)) on creation of repo for *Cell-AD xApp*.
      - *Branch creation - Issue in check-in the info.yaml file - Issue Fixed. Merge is pending from LFN team*
    - Himanshu Purohit from GS Lab - contribute to the xApps in OSC. - No update
    - Others?
      - Subhash - added in KPIMON-GO as a committer, issue in merge - now added as committer in the repo - Done. Remove from the next meeting.
      - RIC-375 ticket on RMR for xApps. - will work in H-Release
      - Simulator (SIM) - E2AP version 2.0.
      - NS3 Simulator - E2AP 1.0

## 2023-02-29:

- Subhash/Saravanan suggested that Sunil organizes a meeting with LF (Sridhar (srao@l...org) (/Matt (mwatkins@l...org)) on creation of repo for *Cell-AD xApp*.

## 2023-2-14:

- H-Release Plan on xApps:
  - Status
    - HW xApps
      - HW-RUST: - No updates - Will add the new hw-rust app in H-release
      - HW-CPP: maintain the code for the H release.
      - HW-GO: maintain the code for the H release
      - HW-Python - AI - Subhash - Subscription part will be implemented. ticket need to be created.
    - Traffic Steering Use case
      - TS xApp :
      - QP xApp : Enhancements
      - AD xApp : Enhancements
      - KPIMON-GO xApp:
      - RC xApp- E2SM 2.0.x Update.
        - GRPC dependency
        - Checking the specs. E2 term on GRPC
  - RIC Benchmarking:
    - Bouncer xApp - E2SM update
  - New proposals from Viavi - Not discussed in call with viavi
  - Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
    - *Cell-AD xApp:*
    - *Branch creation - Issue in check-in the info.yaml file -*
      - *IT-25087 Getting error in creating new repo under ricapp/ad-cell*
      - *Need to do the complete procedure again*
  - Himanshu Purohit from GS Lab - contribute to the xApps in OSC. - No update
  - Others?
    - Subhash - added in KPIMON-GO as a committer, issue in merge - now added as commiter in the repo
    - RIC-375 ticket on RMR for xApps. - will work in H-Release

## 2023-1-31:

- H-Release Plan on xApps ()
  - HW xApps
    - HW-RUST: - No updates
    - HW-CPP ; maintain the code for the release.
    - HW-GO
    - HW-Python - Subscription part will be implemented. ticket need to be created.
  - Traffic Steering Use case
    - TS xApp :
    - QP xApp :
    - AD xApp :
    - KPIMON-GO xApp:
    - RC xApp- E2SM 3.0 Update.
      - GRPC dependency
      - Checking the specs. E2 term on GRPC
- RIC Benchmarking:
  - Bouncer xApp -
- New xApp documentation page for the G-Release.
- New proposals from Viavi
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
  - *Cell-AD xApp:*
  - *Branch creation - Issue in checkin the info.yaml file -*
    - *IT-25087 Getting error in creating new repo under ricapp/ad-cell*
- Himanshu Purohit from GS Lab - contribute to the xApps in OSC.
- Others?
  - Subhash - already added in KPIMON-GO as a committer. - Sunil: will crosscheck with the Amit on this
  - RIC-375 ticket on RMR for xApps.

## 2023-1-17:

- H-Release Plan on xApps (Next meeting)
  - HW xApps
    - HW-RUST
    - HW-CPP
    - HW-GO
  - Traffic Steering Use case
    - TS xApp :
    - QP xApp :

- AD xApp :
  - KPIMON-GO xApp:
  - RC xApp- E2SM 3.0 Update.
    - GRPC dependency
- RIC Benchmarking:
  - Bouncer xApp -
- New xApp documentation page for the G-Release.
- New proposals from Viavi
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
  - Cell-AD xApp:
  - Branch creation - Issue in checkin the info.yaml file
- Himanshu Purohit from GS Lab - contribute to the xApps in OSC.
- Others?

## 2023-01-03:

- G-Release Demo
  - TS use case update demo - 3rd Jan 2023 (HCL Team)

## 2022-12-20:

- G-Release updates
  - HW xApps - Maintain the code to support G-Release
    - HW-RUST - Moved to next release
  - Traffic Steering Use case
    - TS xApp : @Alexandre, need to create the release branch and update the wiki pages.
    - QP xApp : release branch created
    - AD xApp : release branch created
    - KPIMON-GO xApp: @Sandeep working on the JJB to release image on the nexus repo
    - RC xApp- release branch updated
- RIC Benchmarking:
  - Bouncer xApp - Only testing is done in this release. No code changes.
- New xApp documentation page for the G-Release. - **In-progress**
- Viavi (Agustin) proposed to contribute- **Move to next release**
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
  - TOC approval - Done in TOC call (14th Dec 2022)
  - Branch creation - Pending
- Himanshu Purohit from GS Lab - contribute to the xApps in OSC.
- G-Release Demo
  - TS use case update demo - 3rd Jan 2023 (HCL Team)
  - ?
- Others?

## 2022-12-06:

- HW xApps
  - HW(go) - Maintain the code to support the G Release.
  - HW(python) - Adding RIC Subscription using python xApp framework
    - 2022-08-16: No updates.
  - HW(cpp) - No Updates
  - HW(Rust) - New xApp to support RUST framework.
    - Repo created
      - [hw-rust initial INFO.yaml \(1ad7f5a52\)](#) · Gerrit Code Review ([linuxfoundation.org](https://linuxfoundation.org))
    - 2022-08-16: info.yaml is merged
    - 2022-08-30: no updates
    - **2022-10-11: Working on the SDL module of the framework.**
- Traffic Steering Use case
  - TS xApp : Waiting on the fix for the RC xApp. ( Mail Conversation).
  - QP xApp
  - AD xApp
  - KPIMON-GO xApp: **Adding Subhash as committer - in-progress**
  - RC xApp - GRPC interface on RC xApp
    - Dependency on E2 TERM for GRPC support
- RIC Benchmarking
  - Bouncer xApp - RIC Benchmarking
  - E2SIM
- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
  - [xApp testing for D Release](#)
  - New xApp documentation page for the F-Release. - **In-progress**

- **2022-09-13:** Covered the xApps latest release and active xApps in the community. Updated the page for RICAPP section [RIC Applications \(RICAPP\) - RIC Applications - Confluence \(o-ran-sc.org\)](#).
- AI/ML framework - 10+ Mins of presentation by the AI/ML team to check the impact on RIAPP. (Subhash will update on the dates)
  - Joseph from AI ML framework team - will present on (13-Sep-2022)
- Viavi (Agustin) proposed to contribute
  - Provide encoders/decoders with ASN1c
  - Open-source command-line tool to translate binary APER to/from human-readable XML .
    - **2022-09-13 - Waiting for the final proposal from Viavi team (Agustin)**
- setare.alagheband <setare.dgm1378@gmail.com> : MSc Student in Telecommunication: wants to contribute in TS use case xApps.
  - **2022-09-13:** Shown interest on AD xApp (TS use case). Initiated a call for tomorrow to discuss next steps.
  - Had discussion - Next steps will be finalized for
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
  - Following are the details : *To Automate anomaly detection using Statistical/ML models to reduce effort to less than an Hour, we analysed multiple machine learning algorithms like Isolation Forest, CBLOF, KNN, OCSVM, XGBOOST, Random Forest. Among all machine-learning algorithms, XGBoost has performed well on seen and unseen data. Hence, we can say that XGBoost model can work on multiple circle in cellular network.*
  - Next steps - **2022-10-11**
    - New repo needed? - No new repo is needed. Modification is needed.
      - Friday - 6:30IST - Call with TS stake holders
    - TOC approval
- Others?

## 2022-11-22:

we discussed Saurabh's xapp proposal for ad-cell. Thoralf to send reminder to Sunil.

Bimo asked for KPIMon xapp - how to get latest source code that support E2SM KPM v2.0. Amit commented earlier that this is supported, and was used in a demo, but not possible to find source code. Please, send a reminder to Amit/Deepanshu deepanshu.k@h.. and also include James jlijanyj@ch...) and Thoralf (thoralf.czichy@n..). link to the video referred to: [Contributions](#) .

## 2022-11-08:

Saurabh (and Saravanan) (Samsung): new repo for AD due to too many changes in existing xApp. New repo needed. Check from OSC main mailing list on proposal for new repo.

Deepanshu: commented that indeed existing AD (UE-level) is different from cell-level AD in new xApp and that's why there's a new repo. Sunil was planning to schedule a call on this.

## 2022-10-11:

### Status:

- HW xApps
  - HW(go) - Maintain the code to support the G Release.
  - HW(python) - Adding RIC Subscription using python xApp framework
    - 2022-08-16: No updates.
  - HW(cpp) - No Updates
  - HW(Rust) - New xApp to support RUST framework.
    - Repo created
      - [hw-rust initial INFO.yaml \(lad7f5a52\)](#) · Gerrit Code Review ([linuxfoundation.org](#))
    - 2022-08-16: info.yaml is merged
    - 2022-08-30: no updates
    - **2022-10-11: Working on the SDL module of the framework.**
- Traffic Steering Use case
  - TS xApp : Waiting on the fix for the RC xApp. ( Mail Conversation).
  - QP xApp
  - AD xApp
  - KPIMON-GO xApp: **Adding Subhash as committer - in-progress**
  - RC xApp - GRPC interface on RC xApp
    - Dependency on E2 TERM for GRPC support
- RIC Benchmarking
  - Bouncer xApp - RIC Benchmarking
  - E2SIM
- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
  - [xApp testing for D Release](#)
  - New xApp documentation page for the F-Release. - **In-progress**
  - **2022-09-13:** Covered the xApps latest release and active xApps in the community. Updated the page for RICAPP section [RIC Applications \(RICAPP\) - RIC Applications - Confluence \(o-ran-sc.org\)](#).
- AI/ML framework - 10+ Mins of presentation by the AI/ML team to check the impact on RIAPP. (Subhash will update on the dates)

- Joseph from AI ML framework team - will present on (13-Sep-2022)
- Viavi (Agustin) proposed to contribute
  - Provide encoders/decoders with ASN1c
  - Open-source command-line tool to translate binary APER to/from human-readable XML .
    - **2022-09-13 - Waiting for the final proposal from Viavi team (Agustin)**
- setare alagheband <setare.dgm1378@gmail.com> : MSc Student in Telecommunication: wants to contribute in TS use case xApps.
  - **2022-09-13:** Shown interest on AD xApp (TS use case). Initiated a call for tomorrow to discuss next steps.
  - Had discussion - Next steps will be finalized for
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
  - Following are the details : *To Automate anomaly detection using Statistical/ML models to reduce effort to less than an Hour, we analysed multiple machine learning algorithms like Isolation Forest, CBLOF, KNN, OCSVM, XGBOOST, Random Forest. Among all machine-learning algorithms, XGBoost has performed well on seen and unseen data. Hence, we can say that XGBoost model can work on multiple circle in cellular network.*
  - Next steps - **2022-10-11**
    - New repo needed? - No new repo is needed. Modification is needed.
      - Friday - 6:30IST - Call with TS stake holders
    - TOC approval
- Others?

## 2022-09-13:

### Status:

- HW xApps
  - HW(go) - Maintain the code to support the G Release.
  - HW(python) - Adding RIC Subscription using python xApp framework
    - 2022-08-16: No updates.
  - HW(cpp) - No Updates
  - HW(Rust) - New xApp to support RUST framework.
    - Repo created
      - [hw-rust initial INFO.yaml \(lad7f5a52\)](#) · [Gerrit Code Review \(linuxfoundation.org\)](#)
    - 2022-08-16: info.yaml is merged
    - 2022-08-30: no updates
    - **2022-09-13: ?**
- Traffic Steering Use case
  - TS xApp : Waiting on the fix for the RC xApp. ( Mail Conversation).
  - QP xApp
  - AD xApp
  - KPIMON-GO xApp: **Adding Subhash as committer - in-progress**
  - RC xApp - GRPC interface on RC xApp
    - Dependency on E2 TERM for GRPC support
- RIC Benchmarking
  - Bouncer xApp - RIC Benchmarking
  - E2SIM
- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
  - [xApp testing for D Release](#)
  - New xApp documentation page for the F-Release. - **In-progress**
  - **2022-09-13:** Covered the xApps latest release and active xApps in the community. Updated the page for RICAPP section [RIC Applications \(RICAPP\) - RIC Applications - Confluence \(o-ran-sc.org\)](#).
- AI/ML framework - 10+ Mins of presentation by the AI/ML team to check the impact on RIAPP. (Subhash will update on the dates)
  - Joseph from AI ML framework team - will present on (13-Sep-2022)
- Viavi (Agustin) proposed to contribute
  - Provide encoders/decoders with ASN1c
  - Open-source command-line tool to translate binary APER to/from human-readable XML .
    - **2022-09-13 - Waiting for the final proposal from Viavi team (Agustin)**
- setare alagheband <setare.dgm1378@gmail.com> : MSc Student in Telecommunication: wants to contribute in TS use case xApps.
  - **2022-09-13:** Shown interest on AD xApp (TS use case). Initiated a call for tomorrow to discuss next steps.
- Saravanan from Samsung team propose improvement in AD xApp in terms of improving the the ML model to improve the efficiency.
  - Following are the details : *To Automate anomaly detection using Statistical/ML models to reduce effort to less than an Hour, we analysed multiple machine learning algorithms like Isolation Forest, CBLOF, KNN, OCSVM, XGBOOST, Random Forest. Among all machine-learning algorithms, XGBoost has performed well on seen and unseen data. Hence, we can say that XGBoost model can work on multiple circle in cellular network.*
  - [AD ORAN Proposal.pptx](#)
- Others?

## 2022-08-30:

### Status:

- HW xApps
  - HW(go) - Maintain the code to support the G Release.
  - HW(python) - Adding RIC Subscription using python xApp framework

- 2022-08-16: No updates.
  - HW(cpp) - No Updates
  - HW(Rust) - New xApp to support RUST framework.
    - Repo created
      - [hw-rust initial INFO.yaml \(lad7f5a52\)](#) · [Gerrit Code Review \(linuxfoundation.org\)](#)
    - 2022-08-16: info.yaml is merged
    - 2022-08-30: updates?
- Traffic Steering Use case
  - TS xApp : Waiting on the fix for the RC xApp. ( Mail Conversation).
  - QP xApp
  - AD xApp
  - KPIMON-GO xApp: **Adding Subhash as committer - in-progress**
  - RC xApp - GRPC interface on RC xApp
    - Dependency on E2 TERM for GRPC support
- RIC Benchmarking
  - Bouncer xApp - RIC Benchmarking
  - E2SIM
- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
  - [xApp testing for D Release](#)
  - New xApp documentation page for the F-Release. - **In-progress**
- AI/ML framework - 10+ Mins of presentation by the AI/ML team to check the impact on RIAPP. (Subhash will update on the dates)
- Viavi (Agustin) proposed to contribute
  - Provide encoders/decoders with ASN1c
  - Open-source command-line tool to translate binary APER to/from human-readable XML .
    - **TOC approval in the next call (1-Sep-2022) - Discuss**
- setare alagheband <setare.dgm1378@gmail.com> : MSc Student in Telecommunication: wants to contribute in TS use case xApps.
- Others?

## 2022-08-16:

### Status:

- HW xApps
  - HW(go) - Maintain the code to support the G Release.
  - HW(python) - Adding RIC Subscription using python xApp framework
    - 2022-08-16: No updates.
  - HW(cpp) - No Updates
  - HW(Rust) - New xApp to support RUST framework.
    - Repo created
      - [hw-rust initial INFO.yaml \(lad7f5a52\)](#) · [Gerrit Code Review \(linuxfoundation.org\)](#)
    - 2022-08-16: info.yaml is merged
- Traffic Steering Use case
  - TS xApp : Waiting on the fix for the RC xApp. ( Mail Conversation).
  - QP xApp
  - AD xApp
  - KPIMON-GO xApp
  - RC xApp - GRPC interface on RC xApp
    - Dependency on E2 TERM for GRPC support
- RIC Benchmarking
  - Bouncer xApp - RIC Benchmarking
  - E2SIM
- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
  - [xApp testing for D Release](#)
  - New xApp documentation page for the F-Release.
- AI/ML framework - 10+ Mins of presentation by the AI/ML team to check the impact on RIAPP. (Subhash will update on the dates)

## 2022-08-02:

### Status:

- Status:
  - HW xApps
    - HW(go) - Maintain the code to support the G Release.
    - HW(python) - Adding RIC Subscription using python xApp framework
    - HW(cpp) - No Updates
    - HW(Rust) - New xApp to support RUST framework.
      - Repo created
        - [hw-rust initial INFO.yaml \(lad7f5a52\)](#) · [Gerrit Code Review \(linuxfoundation.org\)](#)
  - Traffic Steering Use case
    - TS xApp
    - QP xApp
    - AD xApp
    - KPIMON-GO xApp

- RC xApp - GRPC interface on RC xApp
      - Dependency on E2 TERM for GRPC support
  - RIC Benchmarking
    - Bouncer xApp - RIC Benchmarking -
    - E2SIM
- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
  - [xApp testing for D Release](#)

## 2022-07-19:

Status:

- G Release Planning
  - HW xApps
    - HW(go) - Maintenance release - Support for any change
    - HW(python) - RIC Subscription using python xApp framework
    - HW(cpp) -
    - HW(Rust) - New xApp to support RUST framework.
  - Traffic Steering Use case
    - TS xApp - check with Matti - on Network slicing
    - QP xApp
    - AD xApp
    - KPIMON-GO xApp
    - RC xApp - GRPC interface on RC xApp
  - RIC Benchmarking
    - Bouncer xApp - RIC Benchmarking -
    - E2SIM
  - New Proposal
    - Load Prediction?
    - Slice Assurance?
    - Geolocation?
    - Any other
- Updates:
  - SDK: VMWare still in the process of creating the repo, will place initial code in few weeks (for next release) in ric-sdk-cpp - looking for people to help implement the SDK interface on the OSC RIC
    - discussion with VMWare still ongoing (separation between header and definition (Implementation) - C++ // pros and cons for either approach ).
  - repo request for ricapp/hw-rust:
    - Repo request approved
  - HW (python): no updates
  - HW(go): maintenance release? no updates
  - RC: Nitin updated the latest E2APv2.0 is now used. Branch still to be created.
  - TS: no updates from Alexandre. Ready and F release branch to be created.
  - Bouncer: no updates
  - KPIMON:
    - kpimon-go implementation is under review: <https://gerrit.o-ran-sc.org/r/c/ric-app/kpimon-go/+8537>
    - umamaheshwari asked for details, e.g. ask for xapp descriptor to actually deploy it.
    - Mohan asked for xapp verification.
    - Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
      - [xApp testing for D Release](#)
  - QP/AD: no updates in F release

## 2022-07-05:

Status:

- Updates:
  - SDK: VMWare still in the process of creating the repo, will place initial code in few weeks (for next release) in ric-sdk-cpp - looking for people to help implement the SDK interface on the OSC RIC
    - discussion with VMWare still ongoing (separation between header and definition (Implementation) - C++ // pros and cons for either approach ).
  - repo request for ricapp/hw-rust:
    - Repo request approved
  - HW (python): no updates
  - HW(go): maintenance release? no updates
  - RC: Nitin updated the latest E2APv2.0 is now used. Branch still to be created.
  - TS: no updates from Alexandre. Ready and F release branch to be created.
  - Bouncer: no updates
  - KPIMON:
    - kpimon-go implementation is under review: <https://gerrit.o-ran-sc.org/r/c/ric-app/kpimon-go/+8537>
    - umamaheshwari asked for details, e.g. ask for xapp descriptor to actually deploy it.
    - Mohan asked for xapp verification.

- Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
    - [xApp testing for D Release](#)
- QP/AD: no updates in F release

## 2022-06-21:

Status:

- Updates:
  - SDK: VMWare still in the process of creating the repo, will place initial code in few weeks (for next release) in ric-sdk-cpp - looking for people to help implement the SDK interface on the OSC RIC
    - discussion with VMWare still ongoing (separation between header and definition (Implementation) - C++ // pros and cons for either approach ).
  - repo request for ricapp/hw-rust: next TOC meeting
  - HW (python): no updates
  - HW(go): maintenance release? no updates
  - RC: Nitin updated the latest E2APv2.0 is now used. Branch still to be created.
  - TS: no updates from Alexandre. Ready and F release branch to be created.
  - Bouncer: no updates
  - KPIMON: no updates
    - kpimon-go implementation is under review: <https://gerrit.o-ran-sc.org/r/c/ric-app/kpimon-go/+8537>
    - umam asked for details, e.g. ask for xapp descriptor to actually deploy it.
    - Mohan asked for xapp verification.
    - Matti remembers there was some description of the D release integration of xApps working together (but QP driver is not used anymore, and RC is now included).
      - [xApp testing for D Release](#)
  - QP/AD: no updates
  - Sunil to update status later.

## 2022-06-07:

Status:

- Updates:
  - VMware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - **Update: (7-6-2022) CLA issue - Resolved. Will resume the work on repo request.**
    - REST API for RIC subscription in Bouncer xApp and CPP framework - F release
      - REST API based Implementation in bouncer xApp - Implementation Done
      - REST API for RIC subscription on the CPP framework. -Implementation Done - **Code check-in in progress**
    - HW (Python) - Subscription - **Target to complete F-Release** - Need to check with Naman. (Subscription) - In Progress - Subhash will update this in the mail.
    - HW(GO) - In maintenance release.
    - RC xApp -
      - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
      - No updates in the current releases. Need to create the JIRA ticket to check the status
      - E2SM RC 1.0.1 and E2AP 2.0 - compiled and Testing.
      - **26-4-2022:- Testing is done - Minor update is needed - Call process ID - Not mandatory.**
        - **JIRA ticket - RICAPP-194** - Epic ticket created for RC xApp version for F Release.
    - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. **No Updates** (James)
    - AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - session planed next week on OTF. -No Discussion - **Moving to the G release**
    - TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
      - Sangeetha working on Integration setup. E2AP Version 1.1 support.
      - we will check with VIAVI if they support E2.0 by the end of this release.
      - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population. - Getting RAW data. Need to decode the data.
        - Closed loop - Not yet
        - A1 policy - Done
        - Check-in in progress and
        - RICAPP-187 & RICAPP-188
        - 11-05-2022:- Checked-in the code - OSC lab and testing with RC xApp.
        - TS demo on 24th May. - Done
        - **07-jun-2022- Updates? - Sunil : Will send the mail to check on the testing status.**
    - KPIMON xApp.
      - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
        - Repo Creation - Need to check with Mavenir and VMWare mails.
          - HCL will look into the wiki.
          - Samsung will be added as a committer. Subhash will provide the committers list.- List provided - **Working on the code check-in**
          - **07-Jun-2022 - Facing issue in the info.yaml - Working on this to resolve the issue.**
    - Subscription issue with the python framework - (Rest based implementation) - **Moving to G release**

## 2022-05-24:

### Status:

- Updates:
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implementation. - Done
      - Checking on the xAPP framework. - In progress
  - HW (Python) - Subscription - **Target to complete F-Release** - Need to check with Naman. (Subscription) - In Progress
  - HW(GO) - In maintenance release.
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
    - No updates in the current releases. Need to create the JIRA ticket to check the status
    - E2SM RC 1.0.1 and E2AP 2.0 - compiled and Testing.
    - **26-4-2022:- Testing is done - Minor update is needed - Call process ID - Not mandatory.**
      - **JIRA ticket - RICAPP-194** - Epic ticket created for RC xApp version for F Release.
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. **No Updates** (James)
  - AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - session planed next week on OTF. -**No Discussion - Moving to the next release**
  - TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
    - Sangeetha working on Integration setup. E2AP Version 1.1 support.
    - we will check with VIAVI if they support E2.0 by the end of this release.
    - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population. - Getting RAW data. Need to decode the data.
      - Closed loop - Not yet
      - A1 policy - Done
      - Check-in in progress and
      - RICAPP-187 & RICAPP-188
      - 11-05-2022:- Checked-in the code - OSC lab and testing with RC xApp.
      - TS demo on 24th May.
  - KPIMON xApp.
    - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
      - Repo Creation - Need to check with Mavenir and VMWare mails.
        - HCL will look into the wiki.
        - Samsung will be added as a committer. Subhash will provide the committers list.- List provided - **Working on the code check-in**
  - Subscription issue with the python framework - Need to check with Amit. (Rest based implementation)

## 2022-05-10:

### Status:

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook - CLA issue is not resolved. Files are available for Python SDK. Files with BSD license. It is ok to have the BSD files. **No Updates**
  - Vmware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue - **Same status - They will work in April**
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implementation. - Done
      - Checking on the xAPP framework. - In progress
  - HW (Python) - Subscription - **Target to complete F-Release** - Need to check with Naman. (Subscription) - In Progress
  - HW(GO) - In maintenance release.
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
    - No updates in the current releases. Need to create the JIRA ticket to check the status
    - E2SM RC 1.0.1 and E2AP 2.0 - compiled and Testing.
    - **26-4-2022:- Testing is done - Minor update is needed - Call process ID - Not mandatory.**
      - **JIRA ticket - RICAPP-194** - Epic ticket created for RC xApp version for F Release.
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. **No Updates** (James)
  - AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - session planed next week on OTF. -**No Discussion - Moving to the next release**
  - TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
    - Sangeetha working on Integration setup. E2AP Version 1.1 support.
    - we will check with VIAVI if they support E2.0 by the end of this release.
    - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population. - Getting RAW data. Need to decode the data.
      - Closed loop - Not yet
      - A1 policy - Done
      - Check-in in progress and

- RICAPP-187 & RICAPP-188
- 11-05-2022:- Checked-in the code - OSC lab and testing with RC xApp.
- TS demo on 24th May.
- KPIMON xApp.
  - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
  - Repo Creation - Need to check with Mavenir and VMWare mails.
    - HCL will look into the wiki.
    - Samsung will be added as a committer. Subhash will provide the committers list.- List provided - **Working on the code check-in**
- Subscription issue with the python framework - Need to check with Amit. (Rest based implementation)

## 2022-04-26:

**Status:**

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook - CLA issue is not resolved. Files are available for Python SDK. Files with BSD license. It is ok to have the BSD files. **Any Updates?**
  - VMware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue - **Same status - They will work in April**
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implementation. - Done
    - Checking on the xAPP framework. - In progress
  - HW (Python) - Subscription - **Target to complete F-Release** - Need to check with Naman. (Subscription) - No updates
  - HW(GO) - In maintenance release.
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
    - No updates in the current releases. Need to create the JIRA ticket to check the status
    - E2SM RC 1.0.1 and E2AP 2.0 - compiled and Testing.
    - **26-4-2022:- Testing is done - Minor update is needed - Call process ID - Not mandatory.**
      - **JIRA ticket - Content to be shared**
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. **No Updates** (James)
  - AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - session planed next week on OTF. -**No Discussion**
  - TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
    - Sangeetha working on Integration setup. E2AP Version 1.1 support.
    - we will check with VIAVI if they support E2.0 by the end of this release.
    - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population. - Getting RAW data. Need to decode the data.
      - Closed loop - Not yet
      - A1 policy - Done
      - Check-in in progress and
      - RICAPP-187 & RICAPP-188
  - KPIMON xApp.
    - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
    - Repo Creation - Need to check with Mavenir and VMWare mails.
      - HCL will look into the wiki.
      - Samsung will be added as a committer. Subhash will provide the committers list.- List provided - **Working on repo creation**
  - Subscription issue with the python framework - Need to check with Amit. (Rest based implementation)

## 2022-04-12:

**Status:**

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook - CLA issue is not resolved. Files are available for Python SDK. Files with BSD license. It is ok to have the BSD files. **Any Updates?**
  - VMware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue - **Same status - They will work in April**
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implementation. - Done
    - Checking on the xAPP framework. - In progress
  - HW (Python) - Subscription - Target to complete F-Release - Need to check with Naman. (Subscription) - No updates
  - HW(GO) - In maintenance release.
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
    - No updates in the current releases. Need to create the JIRA ticket to check the status

- E2SM RC 1.0.1 and E2AP 2.0 - compiled and Testing.
  - **ToDo** - Raise Jira tickets for the RC-xApp -
- LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates (James)
- AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - session planed next week on OTF. - **No updates**
- TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
  - Sangeetha working on Integration setup. E2AP Version 1.1 support.
  - we will check with VIAVI if they support E2.0 by the end of this release.
  - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population. - Getting RAW data. Need to decode the data.
- KPIMON xApp.
  - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
    - Repo Creation - Need to check with Mavenir and VMWare mails.
      - HCL will look into the wiki.
      - Samsung will be added as a committer. Subhash will provide the committers list.- List provided - **Working on repo creation**
- Subscription issue with the python framework - Need to check with Amit. (Rest based implementation)

## 2022-03-29:

### Status:

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook - CLA issue is not resolved. Files are available for Python SDK. Files with BSD license. It is ok to have the BSD files. **Any Updates?**
  - Vmware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue - **Same status - They will work in April**
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implemenation. - Done
      - Checking on the xAPP framework. - Working on
  - HW (Python) - Subscription - Target to complete F-Release - Need to check with Naman. (Subscription) - No updates
  - HW(GO) - In maintenance release.
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
    - No updates in the current releases. Need to create the JIRA ticket to check the status
    - E2SM RC 1.0.1 and E2AP 2.0 - compiled and Testing.
    - **ToDo** - Raise Jira tickets for the RC-xApp
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates (James)
  - AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - session planed next week on OTF.
  - TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
    - Sangeetha working on Integration setup. E2AP Version 1.1 support.
    - we will check with VIAVI if they support E2.0 by the end of this release.
    - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population. - Getting RAW data. Need to decode the data.
    - Subhash - cli tool for RNIB can be used to populate the info. Need to check
  - KPIMON xApp.
    - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
      - Repo Creation - Need to check with Mavenir and VMWare mails.
        - HCL will look into the wiki.
        - Samsung will be added as a committer. Subhash will provide the committers list.
  - Subscription issue with the python framework - Need to check with Amit. (Rest based implementation)
  - Code coverage on RICAPP. - **Discussion**

## 2022-03-15:

### Status:

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook - CLA issue is not resolved. Files are available for Python SDK. Files with BSD license. It is ok to have the BSD files. Matti will reply to this.
  - Vmware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue - Same status.
    - Same status.
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implemenation. - Done
      - Checking on the xAPP framework
  - Test Automation - Subscription Deletion - Completed - code check-in - In progress
    - A1 Mediator E2E test (Tested with HW, Need to check with Bouncer xApp). - Already covered in RICP. - Manual Testing completed. Automation Completed - Code check-in in progress

- HW (Python) - Subscription - Target to complete F-Release - Need to check with Naman. (Subscription) - No updates
- RC xApp -
  - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
  - No updates in the current releases. Need to create the JIRA ticket to check the status
- LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates (James)
- AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet. - No updates
- TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
  - Sangeetha working on Integration setup. E2AP Version 1.1 support.
  - we will check with VIAVI if they support E2.o by the end of this release.
  - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population.
  - Subhash - cli tool for RNIB can be used to populate the info. Need to check
- KPIMON xApp.
  - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo. - Approval done
    - Repo Creation - Need to check with Mavenir and VMWare mails.
      - HCL will look into the wiki.
      - Samsung will be added as a committer. Subhash will provide the committers list
- Subscription issue with the python framework - Need to check with Amit.
- New proposal
  - Network Slice AD - HCL & Alexandre

## 2022-03-01:

### Status:

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook - CLA issue is not resolved. Files are available for Python SDK. Files with BSD license. It is ok to have the BSD files. Matti will reply to this.
  - Vmware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue - Same status.
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implementation. - In-progress
  - Test Automation - Subscription Deletion - Completed - code check-in - In progress
    - A1 Mediator E2E test (Tested with HW, Need to check with Bouncer xApp). - Already covered in RICP. - Manual Testing completed. Automation in progress
  - HW (Python) - Subscription - Target to complete F-Release - Need to check with Naman. (Subscription) - No updates
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates
  - AI - Sunil - OTF testing for xApps - Had internal discussion with the team. No conclusion yet.
  - TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Checked with Deepanshu
    - Alexandre - Any updates? E2 Config info in E2 Setup - RNIB - Information population.
    - Subhash - cli tool for RNIB can be used to populate the info. Need to check
  - KPIMON xApp.
    - HCL will work on this xApp - New repo needs to be created. Will get the TOC approval for the new repo.
  - Subscription issue with the python framework - Need to check with Amit.
  - New proposal
    - Network Slice AD management - HCL & Alexandre -

## 2022-02-15:

### Status:

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available. - No reply from Facebook
  - Vmware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk) - CLA issue
  - REST API in progress for RIC subscription in Bouncer xApp and CPP framework - F release
    - REST API based Implementation. - In-progress
  - Test Automation - Subscription Deletion - In progress, A1 Mediator E2E test (Tested with HW, Need to check with Bouncer xApp). - Already covered in RICP.
  - HW (Python) - Subscription - Target to complete F-Release - Need to check with Naman. (Subscription)
  - HW (GO) - New release is pushed for E- Maintenance Release. - Updated, new image is available in Nexus repo. - need to update the release table in wiki page. - Updated. Closed.
  - RC xApp -
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. - In progress. Jenkins job is fixed.
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates
  - AI - Sunil - OTF testing for xApps - Need to check with HCL team and update in next meeting.

- TS - Some parameters need to be checked from where to grab these parameters from AD and QP messages - Need to check with Deepanshu.
- KPIMON xApp.
  - Mail sent to [wansu.yoo@samsung.com](mailto:wansu.yoo@samsung.com) for the ownership. - No Response.
  - HCL will work on this xApp -
- New proposal
  - Network Slice AD management - HCL & Alexandre - No updates.

## 2022-02-01:

### Status:

- Updates:
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps. committer is not available.
  - Vmware working on the repo creation. Aditya is working on the info.yaml file. (Repo for cpp sdk)
  - Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering.
    - TS is receiving the Policy in the current release. But not using the policy. - Already fixed. - Completed
  - The integration of TS and RC xApps using protobuf. - Mail send to clarify some fields to Mavenir & HCL.(17 Dec 2021) - Implemented - Completed
  - REST API in progress for RIC subscription in Bouncer xApp (C++ framework, xApp) - F release
    - REST API based Implementation. - In-progress
  - Test Automation - Subscription Deletion - In progress, A1 Mediator E2E test (Tested with HW, Need to check with Bouncer xApp). - Already covered in RICP. Wiki page need to shared with Mavenir team.
  - HW (Python) - Subscription - Target to complete F-Release - Need to check with Naman.
  - HW (GO) - New release is pushed for E- Maintenance Release. - Updated, new image is available in Nexus repo. - need to update the rel table in wiki page.
  - RC xApp - image pushed to the nexus. Doc page is created. - Done
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0. Jenkins job is failing.
    - Integration with TS
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates
  - KPIMON xApp.
    - Mail sent to [wansu.yoo@samsung.com](mailto:wansu.yoo@samsung.com) for the ownership. - No Response. Need to raise in the TOC meeting?
  - New proposal
    - Network Slice AD management - HCL & Alexandre

## 2022-01-18:

### Status:

- F Release - Items to be discussed
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - CLA issue is still not resolved. Need to figure out the next steps.
    - Nitin shared the repo creation to Aditya faced some issue. - Work in progress
  - Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering.
    - TS is receiving the Policy in the current release. But not using the policy. - Already fixed.
  - The integration of TS and RC xApps using protobuf. - Mail send to clarify some fields to Mavenir & HCL.(17 Dec 2021) - Implemented
  - REST API in progress for RIC subscription in Bouncer xApp (C++ framework, xApp) - F release
    - REST API based implementation.
  - Test Automation - Subscription Deletion, A1 Mediator E2E test. - Already covered in RICP. Wiki page need to shared with Mavenir team.
  - HW (Python) - Subscription - Target to complete F-Release
  - HW (GO) - New release is pushed for E Release.
  - RC xApp - image pushed to the nexus. Doc page is created but it is not updated. Checking with Team
    - Latest E2AP version (2.0) - Upgrade will be done. RC xApp will support new version. Dependency on RICP for E2AP 2.0.
    - Integration with TS
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet. No Updates
  - KPIMON xApp.
    - Mail sent to [wansu.yoo@samsung.com](mailto:wansu.yoo@samsung.com) for the ownership.
  - Any new proposal
    - Network Slice AD management - HCL & Alexandre
  - Demo - HW (Python) - Naman

## 2022-01-04:

### Status:

- F Release - Items to be discussed
  - SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - Nitin shared the repo creation to Aditya faced some issue. Will discuss in the next meeting

- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering.
    - TS is receiving the Policy in the current release. But not using the policy.
  - The integration of TS and RC xApps using protobuf. - Mail send to clarify some fields to Mavenir & HCL.(17 Dec 2021)
  - REST API in progress for RIC subscription in Bouncer xApp (C++ framework, xApp)
  - Test Automation - Subscription Deletion, A1 Mediator E2E test.
  - HW (Python) - Subscription
  - RC xApp - image still not pushed to the nexus. CI Jenkins jobs is failing.
    - E2AP version - Upgrade? RC xApp will support new version
    - Integration with TS
  - LP xApp - existing KPM metrics - checking with china team to use metrics. but no conclusion yet.
  - KPIMON xApp.
    - Got the response. will change the ownership. (AI Sunil) - Need to initiate the communication with the team
    - [wansu.yoo@samsung.com](mailto:wansu.yoo@samsung.com)
  - Any new proposal?
    - Network Slice AD management - HCL & Alexandre
- Updates

## 2021-12-21:

### Status:

- SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - Facebook - Still Waiting for legal approval - moved to F release.
- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering. Alexandre - Will work on this. Code is not commented out. Need to check the flow to receive the policy update.
  - The integration of TS and RC xApps using protobuf. Updates?
- Updates
  - LP: Issue in Checking the large files. Bucket from the infrastructure perspective. Getting error. - James - https credential needed (for checkout) - wiki page need to be created (James)
    - Wiki page creation - Documentation on RIC Platform. [How to Check in Large File\(s\) to Gerrit - O-RAN SC - Confluence \(o-ran-sc.org\)](#)
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription -Moving to F release
    - Automation: Subscription duplication implemented, Done - Demo today
      - RIC -779 – EPIC(xapp testing nanobot enhancements: wider coverage of functionality, e.g., Subscription deletion)
    - Bouncer - Subscription delete message implementation in bouncer and e2sim. - Implemented
      - Automation of Subscription Delete message -Moving to F release
  - HW: (Go & Python) - GO Python subscription is pending.
    - mirroring in GitHub - HW GO - Raise the LFN ticket (Subash) - Ticket raised - Issue resolved
      - Python - no progress - move to F release
- Mavenir - RC xApp - Presented a proposal. - Nitin : implementation done, testing also completed, Code check-in & Release status
  - Repo creation - complete. Submitted the code. (AI- Sunil) - need steps to submit the image to nexus repo.
  - wiki page for RC xApp. - (AI - Sunil will create the wiki page & documentation for readme) - Wiki page updated, For Document need to send mail to be updated.
  - Jenkins job not triggered. - LF ticket need to be raised.
- KPIMON xApp.
  - Got the response. will change the ownership. (AI Sunil) - Need to initiate the communication with the team
  - [wansu.yoo@samsung.com](mailto:wansu.yoo@samsung.com)
  - Repo is locked up- need to check with the original committer. Need to initiate a mail with the team.
- Demo - 21-Dec
  - RC demo (Dummy xApp to RC to RAN SIM)
  - Bouncer and RIC Automation
  - HW GO xApp

## 2021-12-07:

### Status:

- SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - Facebook - Still Waiting for legal approval - move to F release.
- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering. Alexandre - Will work on this. Code is not commented out. Need to check the flow to receive the policy update.
  - Update - the integration of TS and RC xApps using protobuf. The code is not yet finished. Hope I can finish it today.
- Updates
  - LP: Issue in Checking the large files. Bucket from the infrastructure perspective. Getting error. - James - https credential needed (for checkout) - wiki page need to be created (James)
    - Wiki page creation - Documentation on RIC Platform. [How to Check in Large File\(s\) to Gerrit - O-RAN SC - Confluence \(o-ran-sc.org\)](#)
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription -Moving to F release
    - Automation: Subscription duplication implemented, testing in-Progress
      - RIC -779 – EPIC(xapp testing nanobot enhancements: wider coverage of functionality, e.g., Subscription deletion)
  - **sub task** - RIC-829 --- subscription duplication – one scenario Completed( with delay of 2secs, deployed 2 bouncer xApps and checking the subscription duplication)

- Another scenario--2 (one xapp communication completed with E2node till indication then deployed another xapp to check for duplication , automation done - completed
    - code check-in progress
  - Bouncer - Subscription delete message implementation in bouncer and e2sim. - Implemented
    - Automation of Subscription Delete message -Moving to F release
- HW: (Go & Python) - GO Python subscription is pending.
  - mirroring in GitHub - HW GO - Raise the LFN ticket (Subash) - Ticket raised - Issue resolved
  - Python - no progress - Subscription in progress. (Can be moved to next release) JIRA ticket?.
- Mavenir - RC xApp - Presented a proposal. - Nitin : implementation done, testing also completed, final testing is on-going. gRPC request to Control.
  - gRPC - Documentation to Alexandre. - Shared the document.
  - Need to create a repo. TOC approval is done. - waiting for LF support. Issue will be resolved soon.
  - Repo creation - complete. Submitted the code. (AI- Sunil) - need steps to submit the image to nexus repo.
  - wiki page for RC xApp. - (AI - Sunil will create the wiki page & documentation for readme)
- Concerns: No response from KPIMON xApp folks - Subhash need to reach out for KPIMON.
  - Code submission is creating a bottleneck. Subhash informed the team and we will get the response in this week.
    - Got the response. will change the ownership. Sunil - Need to initiate the communication with the team
  - [wansu.yoo@samsung.com](mailto:wansu.yoo@samsung.com)
- Demo - 21-Dec
  - RC demo (Dummy xApp to RC to RAN SIM)
  - Bouncer and RIC Automation
  - HW xApp
- F-Release planning - xApps side.
  - Sunil will attend the RSAC meeting.

## 2021-11-23:

### Status:

- SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - Facebook - Still Waiting for legal approval.
- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering. Alexandre - Will work on this. Code is not commented out. Need to check the flow to receive the policy update.
- Updates
  - LP: Issue in Checking the large files. Bucket from the infrastructure perspective. Getting error. - James - https credential needed (for checkout) - wiki page need to be created (James)
    - Wiki page creation - Documentation on RIC Platform. [How to Check in Large File\(s\) to Gerrit - O-RAN SC - Confluence \(o-ran-sc.org\)](#)
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription - In progress
    - Automation: Subscription duplication implemented, testing in-Progress
      - RIC -779 – EPIC(xapp testing nanobot enhancements: wider coverage of functionality, e.g., Subscription deletion)
        - **sub task** - RIC-829 --- subscription duplication – one scenario Completed( with delay of 2secs, deployed 2 bouncer xApps and checking the subscription duplication)
        - Another scenario--2 (one xapp communication completed with E2node till indication then deployed another xapp to check for duplication , automation done - completed
    - Bouncer - Subscription delete message implementation in bouncer and e2sim. - Implemented
      - Automation of Subscription Delete message - In progress
  - HW: (Go & Python) - Python subscription is pending.
    - mirroring in GitHub - HW GO - Raise the LFN ticket (Subash) - Ticket raised - Issue resolved
    - Python - no progress - Subscription in progress. (Can be moved to next release) JIRA ticket?.
- Mavenir - RC xApp - Presented a proposal. - Nitin : implementation done, testing also completed, final testing is on-going. gRPC request to Control.
  - gRPC - Documentation to Alexandre. - Shared the document.
  - Need to create a repo. TOC approval is done. - waiting for LF support. Issue will be resolved soon.
- Concerns: No response from KPIMON xApp folks - Subhash need to reach out for KPIMON.
  - Code submission is creating a bottleneck. Subhash informed the team and we will get the response in this week.
    - Reached out to the team , but no response. next steps?? - will check with TOC to change the committers.. Not sure? - Matti will check with Subhash.
- F-Release planning - xApps side.
  - Sunil will attend the RSAC meeting.

## 2021-11-09:

### Status:

- SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - No Update.
- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering. Alexandre - Will work on this. - No updates.
- Updates
  - LP: Issue in Checking the large files. Bucket from the infrastructure perspective. Getting error. - James - https credential needed (for checkout) - wiki page need to be created (James)
    - Adding prediction details to SDL (influxDb). Checked -in - completed
    - We need to checkout and confirm - AI Sunil

- Wiki page creation - Documentation on RIC Platform. Matti will check this
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription - In progress
    - Automation: Subscription duplication implemented, testing in-Progress
      - RIC -779 – EPIC(xapp testing nanobot enhancements: wider coverage of functionality, e.g., Subscription deletion)
    - **sub task** - RIC-829 --- subscription duplication – one scenario Completed( with delay of 2secs, deployed 2 bouncer xApps and checking the subscription duplication)
    - Bouncer - Subscription delete message implementation in bouncer and e2sim. testing in progress
  - HW: (Go & Python) - Python subscription is pending.
    - mirroring in GitHub - HW GO - Raise the LFN ticket (Subash) - Ticket raised - Issue resolved
      - Python - no progress - Subscription in progress. (Can be moved to next release).
- Mavenir - RC xApp - Presented a proposal. - Nitin : implementation done, testing also completed, final testing is on-going. gRPC request to Control.
  - gRPC - Documentation to Alexandre. Nitin will share.
  - Need to create a repo. TOC approval is done. - issue in Lfntool installation. - Thoralf will share the steps and help the team.
- Concerns: No response from KPIMON xApp folks - Subash need to reach out for KPIMON.
  - Code submission is creating a bottleneck. Subash informed the team and we will get the response in this week.
  -

## 2021-10-26:

### Status:

- SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods - No Updates
- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering. Alexandre - Will work on this.
- Updates
  - LP: Issue in Checking the large files. Bucket from the infrastructure perspective. Getting error. - James - https credential needed (for checkout) - wiki page need to be created (James)
    - Adding prediction details to SDL (influxDb). Checked -in - completed
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription - In progress
    - Automation: Subscription duplication implemented, testing in-Progress
      - RIC -779 – EPIC(xapp testing nanobot enhancements: wider coverage of functionality, e.g., Subscription deletion)
    - **sub task** - RIC-829 --- subscription duplication – one scenario Completed( with delay of 2secs, deployed 2 bouncer xapps and checking the subscription duplication)
    - Bouncer - Subscription delete message implementation in bouncer.
  - HW: (Go & Python) - Python subscription is pending.
    - mirroring in GitHub - HW GO - Raise the LFN ticket (Subash) - Not raise yet
- Mavenir - RC xApp - Presented a proposal. - Nitin : implementation in progress. gRPC request to Control.
  - Need to create a repo. TOC approval is done.
- Concerns: No response from KPIMON xApp folks - Subash need to reach out for KPIMON.
  - Code submission is creating a bottleneck.

## 2021-10-12:

### Status:

- SDK repos: Facebook is waiting for a resolution on the CLA issue before submitting code, C++ repo approved but needs to be created using self-service methods
- Viavi ask: Adding A1-P to be added to the traffic steering use case - could be as simple as specifying what anomaly types to consider in traffic steering.
- Updates
  - LP: Issue in Checking the large files. Bucket from the infrastructure perspective. Getting error.
    - Adding prediction details to SDL (influxDb).
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription
    - AD: Area anomaly added
    - QP: Serving cell throughput added
    - Automation: Subscription duplication implemented, testing pending
      - RIC -779 – EPIC(xapp testing nanobot enhancements: wider coverage of functionality, e.g., Subscription deletion)
    - **sub task** - RIC-829 --- subscription duplication – In-progress almost done. .
    - Bouncer - Subscription delete message implementation in bouncer.
  - HW: (Go & Python) - Python subscription is pending.
    - mirroring in GitHub - HW GO - Raise the LFN ticket (Subash)
- Raja - Mavenir E release discussion - RC xApp - Repo creation go ahead. Facing issue in the repo creation.
- Nitin from Mavenir - Can we deploy xApps without AppManager? yes.... with Helm chart we can deploy.
- Concerns: No response from KPIMON xApp folks -

## 2021-09-28:

#### Status:

- RICAPP PTL: Election completed and Sunil Singh (HCL) was the winner. OSC TOC approved the new PTL in the 9-22-21 call.
  - All repos need to be updated (INFO.yaml) with Sunil as the PTL: Matti would like to remain a committer in ric-app/mc, ric-app/hw, and ric-app/ric-sdk-py
  - LF confirmed no majority of +1s needed for just PTL change (since it was approved by TOC).
- Bugs:
  - RICAPP-177 (HW-C++ - typo in unit test - assigned to Shraboni).
- Updates:
  - Viavi has proposed schema for the inFlux information to be used in the Release E xApps: [InFlux DB schema \(E Release\)](#)
  - RC xApp repo has been approved by TOC and Matti issued an LF ticket to create the repo.
  - FB agreed to submit python-sdk candidate in the sdk repo
  - Meeting with Matti + Thoralf + Mavenir about gRPC, + Subhash + James + Sunil - let's plan it for the hour after the next RIC/RICAPP meeting (Thoralf will send an invitation)
  - James found a solution for large file problem (use GIT LFS <https://git-lfs.github.com/>) : The quick version is that with the git-lfs plugin, you will tell LFS (large file storage) to specifically track certain files within the repo. After that, you work with those files as normal, but when they're pushed or pulled, they come from a separate storage location (in this case, an S3 bucket). This would be something we would add to the repo; there would be no need for a new repo. Access would be the same, and users could even work on the repo without git-lfs; they would still have access to the code, just not the large files. And anyone with access to the repo and git-lfs installed would have access to all files.
    - Still some details need to be ironed out.
  - LP: No other updates.
  - AD/QP/Bouncer:
    - REST API in progress for RIC subscription
    - AD: Area anomaly added
    - QP: Serving cell throughput added
    - Automation: Subscription duplication implemented, testing pending
    - No much progress on Bouncer.
  - HW: No updates.

## 2021-09-14:

#### Status:

- Updates:
  - AD/QP/Bouncer:
    - Bouncer: REST API for RIC subscription
    - AD: Adding area information in anomaly alert - new field
    - QP: Include throughput current serving cell.
    - Automation: Enhancing common xApp testing automation. Subscription duplication, subscription deletion.
    - Benchmarking results: No new results because lab issues.
    - Matti will send ONeS slides for Bouncer and AD to be checked.
  - LP:
    - Verification fails when trying to commit AI-model. Still very large image (1.4 GB).
    - Deepanshu had same issue - looking for LF recommendation (LF ticket).
  - HW:
    - Can we use test automation for HW xApps? Let's plan for a meeting with HCL to discuss how to use the automation. HCL will test first with other xApps.
    - HW go: alarm, metric, and E2 subscription; HW python: Only E2 subscription missing. Python xApp framework updated as well. (Need to figure out who will updated xApp framework python for E2 subscription.)
- RICAPP PTL election:
  - Voting start got delayed - have there been any technical difficulties?

## 2021-08-31:

#### Status:

- Release E planning:
  - RC: Mavenir has agreed to implement the RC xApp that implements a subset of the E2 SM RC related to UE-level handover request CONTROL message.
- RICAPP PTL role:
  - PTL election process (info from Trishan at LF):

"Generally, the committers in a project select or appoint a PTL from their ranks. The PTL is usually an comitter on the project. An election or selection process by the committers of the project can be up to the project, depending on how they operate, if it's a small group, without multiple candidates, it could be as simple decision taken in a meeting or if multiple candidates are in the running, then an vote can be taken by the committers. If it's a new project, just being formed, the PTL is assigned or volunteers from one of the companies leading it for the initial term.

Once the project has selected someone they bring that name to the TSC/ToC for approval."
  - Candidate statement deadline Sept 3rd.
  - [Candidate statements here](#)
  - Public voting among RICAPP committers: Sept 6-11.

2021-08-17:

**Status:**

- Release E planning:
  - HW-C++: Shraboni agreed to update HW-C++ to call new subscription API in xApp framework-C++ (if HCL agrees to update it)
  - HW-python/go: Attempt to address documentation missing on readthedocs - email bounced.
  - RC: Meeting with Mavenir was delayed by Mavenir (to next week)
  - LP: issue integrating with Torch
  - MassiveMIMO xApp: possibly in E Release
  - QP/AD: (add load prediction and potentially geo-location as features)
  - Bouncer: start working on again.
  - Possible other contributions:
    - Geo-location (Viavi) - still waiting for final word from Viavi - the Viavi simulator may just provide location in inFlux directly (without an xApp in this release)
    - Network slicing: Nothing expected from RICAPP (but we can do something if we have the cycles)
  - Integration (Viavi simulator, KPIMON, AD, QP, LP, TS, RC)
    - The expectations of KPIMON and RC need to be specified exactly for Viavi to know what needs to be provided
- Open networking presentation - input?
- RICAPP PTL role:
  - OSC (Jack Murray) suggested we determine the new PTL within the project (RICAPP)
  - For continuity of the project, ideally the new RICAPP PTL would come from the current RICAPP committers and active participants
  - The new PTL should be elected by the current RICAPP committers (voting details to be determined)
  - Some project members have expressed interest!
  - Next step:
    - Candidates prepare candidate statement: name, company, experience with open source project, background in the RICAPP project, mission statement
    - Candidate statements posted on RICAPP wiki
    - Deadline: Sept 3rd.
    - Voting details determined by next meeting (Aug 31st) and voting happens after the next meeting.
- OSC lab access problem (Subhash) - Matti will email Rich - problem resolved (account had expired).

2021-08-03:

**Status:**

- Release E planning:
  - HW (python, go, C++):
    - Do they need to use the REST interface for E2 subscription? (dependency on xApp framework work - under discussion)
    - Add new features (python JIRA tickets already there, go to be added).
    - Document now showing in readthedocs - Matti will send email
  - RC:
    - Talks underway about Mavenir contributing a new xApp that implements the E2SM RC CONTROL message for UE handover request
    - The current TS xApp would call the new RC xApp (instead of the REST call to the Viavi E2 simulator)
  - LP:
    - Consume data from inFlux and create a new name space for predictions
    - Implement AI model for video related prediction (VM size got very large)
  - QP/AD:
    - Integrate load prediction with QP - let's discuss
    - Integration with Viavi simulator - TBD.
  - Bouncer:
    - Robustness of platform and additional E2 messages
    - Possible use of REST interface for subscription
  - Possible other contributions
    - Geo-location (Viavi) - need to get the final word from Viavi
    - Network slicing: Multiple interested parties but what needs to be implemented still unclear - Matti will reach out to Rittwik
  - Integration (Viavi simulator, KPIMON, AD, QP, LP, TS, RC)
    - Coordinate between Viavi simulator and KPIMON xApp on which metrics and how are communicated using E2SM KPM
    - Need to discuss with E2SM KPM experts on the intended way of communicating signal strength measurements
    - Enhancement of the Anomaly detection and traffic steering use case with potentially geo-location to be determined
- RICAPP PTL role: Some folks have expressed interest - Matti will find out about the process.
- Open networking presentation - input

2021-07-06:

**Status:**

- OSC lab: Decision - Dawn release will not require integration testing in the OSC lab but let's try and see if we can integrate there for the maintenance release
  - Any remaining access problems? No.
- Dawn status:
  - All set: Bouncer, TS, MC, HW-go, HW-python, LP (need to very docker image),
  - AD/QP (code checked, branch to be created, image to be created in release)
  - HW-C (image?), KPIMON (no response from Samsung Korea/China teams) - Matti will send email

- Documentation of the Anomaly detection and traffic steering execution? (osc wiki page) - Sunil will check with Deepanshu
- Release E planning:
  - Need to coordinate between Viavi simulator and KPIMON xApp on which metrics and how are communicated using E2SM KPM
  - Need to discuss with E2SM KPM experts on the intended way of communicating signal strength measurements
  - Viavi still considering providing a simple open source geo-location xApp
  - Interest on RAN slicing xApp from HCL and academic partners
  - Enhancement of the Anomaly detection and traffic steering use case with load prediction and potentially geo-location to be determined
- RICAPP PTL role: Anybody interested in taking over?

2021-06-22:

Status:

- OSC lab:
  - Everybody has access issues resolved? Subhash - question about OpenVPN use.
  - Testing problems (E2 sim + RIC)
  - Subhash: problem in own environment (<https://lists.o-ran-sc.org/g/discuss/message/313>)
- KPIMON: New one not tested - HCL will try to deploy.
- AD,QP,Bouncer: AD waiting for inFlux, QP final testing with TS code (this week), Bouncer updates this week - Sonar needs to added (not sure if this week)
- LP: some steps to be done release - Matti will send instructions to James
- HW: minor updates.
- TS: Alexandre new committer

2021-05-25

Status:

- OSC lab:
  - VPN accounts: Shubash, James, Agustin, Alexandre - 4 people already have access (Sangeetha, Chardru, ..)
  - Access to VM: Shubhash waiting, James will get a separate VM
  - Integration via Viavi simulator updating inFlux directly (no time to implement KPM 2.0.3 for D Release)
- KPIMON:
  - Any luck testing - not yet.
- LP xApp (ChinaMobile):
  - demo possible - not in 2 weeks.
- AD & QP xAPP:
  - Added influxDB component, Deployed and tested in RIC environment in both QP and AD
  - Implemented time series model for QP and deployed in RIC platform
  - Tested communication between all three xApp's (TS,AD,QP) - made local changes to TS; Alexandre not committed code yet.
  - No code commit yet
  - Shown demo on TS use case
- Bouncer xAPP
  - The Bouncer code has been checked in successfully to ric-app/bouncer repository
  - Link : <https://gerrit.o-ran-sc.org/r/c/ric-app/bouncer/+6052>
  - Looking for new people to work on Bouncer.
- HW:
  - C++: Not much progress in D
  - python: waiting for HeeWon commit, waiting for Naman - some features in D release.
  - go: able to send policy, REST interface for subscription should be available (Thoralf) - need to check if go framework uses REST interface for subscription
- Slow moving items:
  - SSP (Samsung): Initial discussion - Patent issue raised by Jun - Matti waiting for TOC response (may be hard with Apache license)
  - "Portability SDK": discussions continue on E2, SDL, and A1 interface in the SDK - contributing to WG-3 RIC Arch periodically
  - Subhash: Committer changes needed (Rahul Naman) - Matti needs to start the vote (today).

=====

OLD MEETINGS:

2019-08-13

1. Quick overview of the RICAPP project and its goals for Release Amber (by Rajesh Panta)

## 2019-08-27

1. Status update on RICAPP epics for O-RAN Amber release: which ones will be completed for sure, completed likely, and which ones will move to Release B.

## 2019-09-10

1. Review of one page status update for the O-RAN SC TOC
2. Discussion on ideas for B Release
  - a. Impacts of A1/O1/E2 standardization
  - b. E2 Control messages
  - c. xApp composition/chaining?
  - d. Resiliency (xApp replication, for example)
  - e. New xApp ideas/volunteers?

## 2019-09-24

1. xApp updates:
  - a. AC - mostly completed - documentation, persistence using SDL C++ library, A1-spec based policy guidance with support for multiple policy instances in progress
  - b. MC - legal review completed, development can move back to LF, deployable xApp with some initial reports generated and sent using VES
  - c. ML xApp - initial work, not a realistic working xApp in Amber release
  - d. KPImon - repo created, feasibility analyzed
  - e. UE Manager - moving to RIC platform project
2. Discussion on open issues and release B ideas.

## 2019-10-08

1. OAM repo discussion with [Martin Skorupski](#)
2. xApp status update: AC, MC, KPI Mon
3. ML xApp presentation ([Guy Jacobson](#))

## 2019-10-22

1. Release A Planning: Code freeze (Nov 2nd), only bug fixes and documentation after that
2. Release A xApp status
  - a. AC xApp: code, CI/CD/test coverage, some documentation done - implements pre-spec A1/E2
  - b. MC xApp: code done, in repo soon - CI/CD, test coverage, and documentation to do
  - c. ML xApp: sample code in repo - may not be a real xApp in Release A
  - d. KPIMon xApp: repo created, sample message reviewed -
3. xApps in Release B
  - a. Multiple ML xApps for the Release B use case (Rittwik) - see <https://oranalliance.atlassian.net/wiki/spaces/NonRTRIC/pages/235634729/WG2+E2F+4+San+Jose+Meeting-Oct.+2019>
  - b. Extensions of the current xApps

## 2019-11-05

1. any news from any of the xApps?
  - a. no news

## 2019-11-19

1. Amber Release status for xApps
2. Bronze Release planning:
  - a. Traffic steering use case and xApps needed to support that (presentation by [Gueyoung Jung](#))

## 2019-12-03

1. Amber Release status for xApps - <https://wiki.o-ran-sc.org/display/TOC/Project+Readiness+for+Amber+Release>
2. xApp documentation - already covered in RIC platform meeting
3. Bronze Release - TS use case
  - a. Other Bronze epics will be discussed in the next meeting

## 2019-12-17

1. Any updates from team?
  - a. Main developer of AC xApp is leaving AT&T
  - b. Netsia - no resources available at the beginning of Bronze
2. Bronze epics from RSAC team

## 2020-01-14

1. Review of Bronze epics
2. Open issues/questions

## 2020-01-21

1. Review of traffic steering use case and xApps for the use case.

## 2020-02-04

1. Plan and timeline for Bronze release
2. Open questions?

## 2020-02-18

1. Status update of Bronze release
2. Open questions?

## 2020-03-03

1. Still waiting for TOC to approve repo requests
2. HelloWorld: version 2 ready - deployment/config, rmr + SDL
3. TS/QP/QP Driver: Design, learning of xApp frameworks
  - a. Python/C++ xApp frameworks under development (see gerrit)
4. KPIMON: Dev will start this week (Samsung)

## 2020-03-17

1. Finally a TOC approval for new xApp repos, repos created
2. Status update (Matti)
3. name-space and message schemas (Ron)

## 2020-03-31

1. Sprint demo:
  - a. Last one: MC xApp with simulator
  - b. This week: QP-Driver and its use of the xApp python framework
2. Traffic steering use case detailed documentation: [Traffic Steering Use Case xApps](#)
3. Status update:
  - a. Mock-up data created in TS-UE-NIB and TS-cell-NIB
  - b. JSON payloads for messages between xApp defined and refined
  - c. QP-driver code in repo, others hopefully soon
  - d. Stretch goal: TS, QP-Driver, and QP exchanging RMR-messages with payload by the end of this sprint
  - e. KPIMON: Anticipated completion May 3rd

## 2020-04-14

1. Status update (Matti): [RICAPP-04-14.pptx](#)

## 2020-04-28

1. Sprint demo: HelloWorld xApp
2. Two week extension for xApp from O-RAN SC TOC
3. Status

## 2020-05-12

1. Status at code freeze:
  - a. MC - done
  - b. HW - done, needs documentation
  - c. Traffic steering use case xApps:
    - i. TS - done, testing in progress, needs documentation
    - ii. QP-Driver - done, testing in progress
    - iii. QP - unknown
    - iv. KPIMON - waiting for legal review

## 2020-06-09

1. Bronze status:
  - a. MC - done,
  - b. HW - being tested,
  - c. TS-QP-driver-QP: being tested,
  - d. KPIMON - legal review, hopefully in maintenance release
2. Cherry plan:
  - a. Utilize new RIC SDK APIs: alarms, logging, config change, A1-P
  - b. Extend the TS use case: E2 CONTROL, real ML model, integration with more realistic simulator

## 2020-06-23

1. Bronze status:
  - a. TS use case xApps (TS, QP-D,QP) ready, tested, and released, KPIMON delayed until maintenance release due to legal review (+ testing required)
  - b. HW demo and MC xApp also ready, tested and released
2. Cherry progress:
  - a. Planning underway for the extension to the traffic steering use case, WG-3 spec will likely arrive late but we will try to accommodate it if possible
  - b. QP-D: raises and cancels alarms (SDL availability) - first RIC component to raise an alarm
  - c. In progress: all open source xApps using RIC SDK APIs for O1-PM/FM (alarms/metrics), O1-CM (configuration) and A1-P (policy intent).

## 2020-07-07

1. Bronze and Bronze maintenance status update.

- a. Bronze done with 5 xApps
  - b. Waiting for Samsung KPIMON and Viavi simulator output for the maintenance release.
- 2. Cherry progress.
- 3. How to contribute:
  - a. Help with an existing xApp (Find an unassigned user story here <https://jira.o-ran-sc.org/projects/RICAPP/> and contact me)
  - b. Suggest a new xApp idea/.
- 4. HCL is interested in contributing to the ML pipeline in xApp (QP) - followup by email
- 5. Idea on how infra metrics could be used in xApps was discussed - in the O-RAN architecture they should be only exposed to nonRT RIC, need to think if RIC's own infra metrics could be somehow used by xApps.

## 2020-07-21

- 1. Bronze Maintenance status:
  - a. Received extension from TOC, still waiting for KPIMON and Viavi simulator trace file
- 2. Cherry progress:
  - a. HelloWorld (C++) user stories available to anybody interested
  - b. Discussions on new xApps:
    - i. HCL (Matti set up a call Wed morning at 9am ET - 6:30pm India)
    - ii. Samsung (to be discussed)
  - c. Still pruning epics and user stories
- 3. James ChinaMobile: new xApp idea - will reach out to Matti by email

## 2020-08-04

- 1. Bronze Maintenance status:
  - a. Received KPIMON code and was able to build image and run, problem with SubManager supporting KPM E2SM blocked completion of use case. Full TS use case delayed to Cherry Release.
- 2. Cherry progress:
  - a. Existing user stories (HelloWorld, QP-Driver) available for anybody interested
  - b. Discussions on new xApp ideas with HCL, ChinaMobile, and Samsung - licensing details to be determined, then Matti will request new repos. (see slides: [RICAPP-20-08-04.pptx](#))
  - c. Rittwik will follow up with Viavi on data.

## 2020-08-17

- 1. Cherry status:
  - a. TS use case: Hope that we will get data from Viavi RAN simulator very soon (for E2 SIM as well as training xApps).
  - b. KPIMON xApp (Samsung): SubManager bug has been fixed - still exploring why E2 submission request does not complete.
  - c. AD xApp (HCL): Repo requested from OSC TOC, approvals by email, LF repo creation request submitted, meeting to review design soon.
  - d. HelloWorld xApp: HCL will take some user stories
  - e. QP: HCL will provide alternative ML model (Matti will create separate user stories)
  - f. ChinaMobile decision on license.
  - g. Matti will send UE/cell schema to Neeraj Gupta.
  - h. Akash will email Matti about HelloWorld xApp.
- 2. Discussion soon with Samsung about Cherry xApp work.

## 2020-09-01

- 1. Cherry status:
  - a. HCL updates (Ramesh) - Matti will set up a meeting on Thursday. Include Subhash.
  - b. Viavi software has been installed - Matti will follow up see how we can share data.
  - c. KPIMON xApp (Samsung): Issues with RIC platform (routing etc) and E2 Simulator have been resolved, KPIMON receives E2 REPORT messages but fails to process them (maybe simulator payload issue).
  - d. AD xApp (HCL): Repo created, waiting for data (Viavi)
  - e. MC xApp (AT&T): Integrated with SonarCloud - we will share hints after we get it fully working.
  - f. HelloWorld xApp: User stories available: code coverage/sonar, integration with C++ framework (alarms, metrics, config), simulator extension - Matti will assign
  - g. QP xApp (AT&T, HCL): Waiting for data - discuss on Thursday.
  - h. TS xApp: HCL (Vaishali) attempted to test A1 policy - waiting for guidance from Ron.
  - i. Any updates from ChinaMobile - final decision this week.
  - j. Does KPIMON collect other information than Ron's schema - Matti will check.
- 2. Discussion soon with Samsung about Cherry xApp work.

## 2020-09-14

1. Cherry status:
  - a. Viavi simulator has been installed - hopefully we can share data any day now!
  - b. KPIMON xApp (Samsung): KPIMON receives E2 REPORT messages but fails to process it - close to resolution.
  - c. Load Predictor (ChinaMobile): Agreement on license, waiting data + Matti will request a repo.
  - d. Signal Storm Protection (Samsung): Ironing out details - Cherry goal to implement simple detection.
  - e. HelloWorld xApp: Work will resume on abstracting E2AP and HelloWorld E2 SM as C++ objects.
  - f. Anomaly Detection (AD): Meeting with HCL, waiting for data. Trying different algorithms with sample data.

## 2020-09-29

1. Cherry status:
  - a. Viavi simulator: we can receive data from the simulator but all the fields are not there yet (e.g., UE throughput/PRB usage, UE ID) - Viavi is working on an updated version hopefully this week. Share with Subhash and Neeraj.
  - b. QP xApp: Simple ML model trained to predict signal strength using Viavi data (that being only relevant input data available).
  - c. KPIMON xApp (Samsung): Samsung has taken over the integration testing using E2 Simulator - Beijing team on vacation this week.
  - d. Load Predictor (ChinaMobile): Repo request sent to TOC.
  - e. Signal Storm Protection (Samsung): Repo request sent to TOC, use case presented in WG-1 UCTG.
  - f. HelloWorld xApp: Subscription related bug fixed by Samsung, E2 AP/SM abstraction designed and implementation in progress.
  - g. Anomaly Detection (AD - HCL): Updates from Neeraj. Demo in 2.5 weeks?
  - h. Akash, Vaishali: New message type - Matti will add two message types, coordinate with Ron on message format. Need to check Routing Manager. Matti will schedule a meeting with Neeraj later this week.

## 2020-10-13

1. Hello world (HW) python and go repos requested (Samsung) - waiting for TOC approvals
2. Load Prediction (LP) and Signal Storm Protection (SSP) repos approved by TOC - waiting for LF
  - a. Meeting with James about LP tomorrow.
3. Viavi simulator updated - now producing all requested fields, simulates UE mobility - waiting for legal issues at Viavi before sharing output. LF recommends new repo for the simulator data.
4. KPIMON: Debugging session last night - new versions of SubMan, RM, etc disappeared from nexus staging
5. AD: Message types added, demo this week!
6. vF2F slides for RICAPP (Matti)

## 2020-10-27

1. Hello world (HW) python and go repos approved by TOC (Samsung) and repo creation requested - waiting for LF
2. HW (C++) now includes C++ classes for E2AP (to be moved to C++ framework) + E2 HW SM, subscription flow works, adding unit tests
3. Load Prediction (LP) and Signal Storm Protection (SSP) repos create and LP discussed with James (ChinaMobile)
4. Viavi simulator updated - legal issues at Viavi resolved. Requested SIM PTL (Alex) to request a repo.
5. KPIMON: Works with E2 SIM now - detailed testing underway + unit testing, documentation, xapp descriptor - Matti will reach out
6. QP: Adding ML model still underway (AT&T, HCL - working on that, meeting soon)
7. AD demoed at sprint demo (HCL)
  - a. - files being checked in right now, issue with interaction with TS, RM config update to be checked in, e2e test for Cherry release, Sunil will replace Neeraj from HCL
8. Matti will send WG-1 use case document to Ramesh (for network slicing documentation)

## 2020-11-10

1. Traffic steering use case video at the demo meeting last week.
2. Hello world (HW) python and go repos created (Samsung)
  - a. get started in Cherry, issues with JJBs/info.yaml, Subhash needs help from xapp go framework (Nune - Matti emailed Subhash and Nune)
3. HelloWorld (C++) user stories completed with regard to E2AP/E2SM wrapping classes.
4. Viavi simulator: Repo created in SIM project, either Viavi or AT&T will commit simulator output data set
5. KPIMON: Still some cleanup to do (Ron reported a bug) + documentation, unit tests etc
6. AD xApp:
  - a. Trained ML model cannot be committed to LF (size limit) - alternative plan?

- b. First patch of code submitted - O-RAN job builder verification step missing
7. QP: Still waiting for AT&T version to be submitted? Could HCL submit theirs first? HCL will submit theirs by Friday.

## 2020-11-24

Cherry target: KPIMON, QP-D, QP, TS, HW (C++), AD, MC

Dawn: Cherry + LP, SSP, HW (Python/go), Bouncer in its own repo

1. QP: dealing with some issue with tox and image build, HCL: QP-D QP communication is not working, images of components not available - Matti will check with Felix which versions he is using for e2e testing
2. KPIMON: Ron working on E2 simulator to generate payloads accepted by KPIMON - traffic steering use case test flow documented [Traffic Steering Flows](#)
3. AD xApp: Test flow documented [AD xApp Flows - Integration and Testing - Confluence \(o-ran-sc.org\)](#), in review stage (Matti/Ron)
4. HW health check flow to be documented (Matti)
5. LP xApp: Problems with committing code
6. HW (Python/go): HW go issue resolved with Nune, python issue with JJB - will reach out to LF
7. SSP xApp: ?
8. Bouncer xApp: Matti will have to request the repo. RTT 1sec, E2T to xApp taking almost 1 sec.

## 2020-12-08

Cherry target: KPIMON, QP-D, QP, TS, HW (C++), AD, MC

Dawn: Cherry + LP, SSP, HW (Python/go), Bouncer in its own repo

### Status:

Cherry items:

- Traffic steering: Ron has succeeded in getting the traffic steering use case working (E2 SIM, nRT RIC platform, KPIMON, TS, QP-D, QP) with small fixes to KPIMON, TS, and QP. Unfortunately the ML-based QP did not make it to the repo in time.
- Some fixes to KPIMON hoped in Cherry Maintenance (move from direct Redis to SDL).
- Anomaly Detection: HCL had a meeting with Felix on testing the use case on Monday - result: Everything is fixed! Testing procedure updated.

Dawn items:

- LP xApp (ChinaMobile): CCLA issue delaying commits but development continues
- HW (Python/go - Samsung): Working with LF team - Jenkins jobs seem to be running.
- SSP (Samsung): Trying to set up a meeting with Jun Song to discuss details for Dawn.
- Bouncer xApp (HCL): Matti still to request a repo - Maintenance release.
  - Perf results: Initial message slow, good after that.
- QP: Maybe HCL could take over the QP xApp? - Cherry Maintenance? Deepanshu as the HCL committer - Matti will follow up by email.
  - Matti will set up a meeting next week or Jan first week to discuss Dawn plan.
- AD xApp: What are the Dawn plans?
  - Integrate with Viavi simulator or from E2
  - Time series data base (on top of SDL enhancements done in the RIC platform)
- TS xApp: Some kind of pre-spec E2 CONTROL message to E2 SIM and from there to Viavi simulator.
  - Spec may be available in March. O-CU integration (Radisys or open source O-CU) - E2 SM to be determined in Jan.
- Any new use cases: A1-EI, network slicing? (Rittwik will find out what the MVP use case is).

## 2020-12-22

Cherry: KPIMON, QP-D, QP, TS, HW (C++), AD, MC

Dawn: Cherry + LP, SSP, HW (Python/go), Bouncer in its own repo

### Status:

Cherry maintenance items:

- Some fixes to KPIMON hoped in Cherry Maintenance (move from direct Redis to SDL, fix xapp descriptor).
- AD: Image generation.

Dawn items:

- LP xApp (ChinaMobile): CCLA issue delaying commits but development continues; email to committers bouncing?
- HW (Python/go - Samsung): Good progress.

- Rahul: Python - A1, SDL, R-NIB, E2 missing (blocked by RIC-664), Matti will share Shraboni's HW E2 SM (new epic RICAPP-156 - Matti will take a look)
- SSP (Samsung): Trying to set up a meeting with Jun Song to discuss details for Dawn.
- Bouncer xApp (HCL): TOC request submitted, need a couple of more yes votes.
- QP: Discussed with initial committers and Guy is OK with adding HCL - need another HCL person in addition to Deepanshu.
- AD xApp: What are the Dawn plans?
  - Anything new needed from Viavi simulator? SINR?
- TS xApp: Some kind of pre-spec E2 CONTROL message to E2 SIM and from there to Viavi simulator.
  - Spec may be available in March. O-CU integration (Radisys or open source O-CU) - E2 SM to be determined in Jan.
  - Viavi simulator provides a REST interface to request handover.
- Any new use cases: A1-EI, network slicing? (Rittwik will find out what the MVP use case is).

## 2021-01-04

### Status:

- Bouncer xApp: Matti reminded OSC TOC about more votes needed for repo request.
- QP, QP-D: Need another HCL committer. (HCL provided Chandrasekaran) - Matti will start vote
- AD:
  - Go ahead with new commits in master branch
  - Anything new needed from Viavi simulator (e.g., SINR) - HCL will get back Matti
  - Access to OSC lab? Matti will initiate - HCL + Samsung.
- LP xApp (ChinaMobile): CCLA issue delaying commits but development continues;
  - Still waiting for lawyer.
- HW (Python/go - Samsung):
  - JJB build has been resolved with LF, blocker on E2 wrapper still there. Matti will share Shraboni's E2 SM python wrapper.
  - Matti will resurrect E2AP library discussion.
  - Dawn release.
- SSP (Samsung): Trying to set up a meeting with Jun Song to discuss details for Dawn.
- TS xApp:
  - Viavi simulator REST interface to request handover is ready - Ron is testing.
- Subhash: Performance bench-marking results in demo recording (Dec 17).

## 2021-01-19

### Status:

- Bouncer xApp: Repo created, INFO.yaml populated
  - committer change (Vaishali out - Matti will start the vote)
  - other updates?
- QP, QP-D: New committers added, introductory email to Guy and new committers
  - INFO.yaml updates
  - HCL will discuss Guy's code
- AD:
  - Input for Viavi still needed on what anomalies would make sense to simulate, Viavi will provide simulator as a binary
  - Meeting invite? (Thursday 10:30am ET)? - Matti will send meeting details by email (include Subhash)
  - Access to OSC lab - any progress
  - Image build pending - will push change in Cherry Maintenance
- LP xApp (ChinaMobile):
  - Legal review passed, CCLA submitted to LF, James will doublecheck
- HW (Python/go - Samsung):
  - Subhash needs OSC access as well - Subhash will email Felix
  - libe2ap - Samsung Hewon (RIC-687) - Thoralf will email committers, Matti will ask Scott to create package for E2AP
  - problem with metric and alarm - Alarm Adaptor has helm issue - Thoralf is aware.
- TS xApp: no new updates
- SSP (Samsung): Waiting to discuss with Samsung.
- KPIMON: Samsung promised cleanup for Cherry maintenance release
- "Portability SDK"

## 2021-02-02

### Status:

- "Portability SDK" repo request revised and still waiting for enough TOC votes.
- Viavi simulator discussions to support AD use case:
  - *The goal of the scenario is to simulate an anomaly where a small set of UEs are not getting adequate signal strengths due to some temporal event in their locality.*

*The RIC will detect the anomaly and may take corrective actions.*

*The RAN Simulator will group users into indoor, pedestrian and vehicle groups. Some outdoor users will have less than average throughput and the RIC should identify these as outliers and take action to improve performance. Chosen UEs will fall below a throughput threshold for a period due to an obstacle blocking the signal, which is represented as a shadow-region on the topology map.*

- LP xApp (ChinaMobile):
  - Updates? - will check by email.
- TS xApp:
  - no new updates, have to start working on E2 CONTROL message
- HW (C++):
  - Refactoring E2AP generated files and wrapper implementation out of the xApp
- HW (Python/go - Samsung):
  - Subhash needs OSC access as well - Subhash will email Felix - still pending
  - libe2ap - Samsung Hewon (RIC-687) - Thoralf will email committers - followup on the mail (Matti)
  - Matti will ask Scott to create package for E2AP - still in progress
  - alarm adaptor - commit coming soon, let Rahul know
- SSP (Samsung): Waiting to discuss with Samsung.
- KPIMON:
  - Samsung submitted Cherry maintenance fixes (SDL versus direct Redis, on-boarding).
  - Next steps: Update Influx DB (in addition to SDL)
- Bouncer xApp:
  - committer change (Vaishali out - Matti will start the vote)
  - Testing with multiple E2 sims, code needs to be moved to repo
- QP, QP-D:
  - HCL will discuss Guy's code
  - Time series algorithm built and tested in lab, waiting to discuss with Guy - invite Guy
- AD:
  - Access to OSC lab - any progress - Alok reached out, no response (Chandru, Depansu)
  - Image build succeeded (staging yes), release waiting LF ticket to be resolved.
  - Documentation - Matti will reach out to documentation PTL.

## 2021-02-16

### Status:

- "Portability SDK" repo request approved by TOC - issues with new LF process (Matti's account)
- LP xApp (ChinaMobile): gerrit and LF issues resolved
- TS xApp: no new updates, have to start working on E2 CONTROL message
- HW (C++): Refactoring E2AP generated files and wrapper implementation out of the xApp
- HW (Python/go - Samsung):
  - Matti will ask Scott to create package for E2AP - **DONE**
  - Internal discussions going on Samsung
- SSP (Samsung): Waiting to discuss with Samsung after Feb 22nd.
- KPIMON:
  - Next steps: Update Influx DB (in addition to SDL) - work will start after Feb 22nd.
- Bouncer xApp:
  - committer change (Vaishali out - Matti will start the vote)
  - Code checkin the newly created repo – Needs to be done.
- QP, QP-D:
  - RICAPP-151 Design and Implementing simple time series algorithm in QPxAPP
  - Merge both the algorithm in qp code(guy code and our algorithm) and send both the predicted throughput to the traffic steering - two predictions in separate messages, we should add a model id.
  - QP-D not needed - not started yet.
- AD:
  - Discussions with Viavi on the anomaly use case - larger sample requested, feasibility of detection to be determined experimentally.
  - Committer change vote in progress - no vote from Akash and Vaishali yet, Sunil will remind them.
  - Matti yet to reach out to DOC PTL.
  - Online learning based approach is created.
  - Loading viavi data into InfluxDB and verifying the data – Will complete in this week - need to coordinate with Samsung on inFlux format.

## 2021-03-02

### Status:

- "Portability SDK" repo created, INFO.yaml pending LF merge - discussions on what is "portability SDK" continues in WG-3 and elsewhere.
- AD:
  - Committer update: INFO.yaml updated - just merged this morning.
  - Waiting to get access to Viavi simulator
  - Matti reached out to DOC chair (Waichen Ni) about getting AD readthedocs populated. (WN: "have you run the command 'tox -e docs, docs-linkcheck' on your local system?")
  - How to get LF to count the AD lines of code to give HCL credit.

- HW:
  - C++: Refactored to use the new E2AP package (E2AP package in staging and release); will further refactor between xApp and c++ framework
  - Python/go - Samsung):
    - Resolution on Internal discussion? Still on-going - trying to get stakeholders together.
    - Python: E2 subscription remains, rest completed - alarm to be tested - Alarm Adaptor issue - should be solved (Thoralf). Unit testing remains, documentation partially done.
    - Rahul provided user story - Matti will check (RICAPP-156)
- LP xApp (ChinaMobile):
  - Updates? Progressing - will deliver main flow and documentation, unit test this week.
- TS xApp: no new updates, have to start working on E2 CONTROL message - Matti will try to find resources.
- SSP (Samsung): Initial discussion - will use some E2SM NI message.
- KPIMON:
  - Next steps: Update Influx DB (in addition to SDL) - waiting to hear back from Samsung. Matti will reach out again. Include James in email discussion.
  - HCL is attempting to run KPIMON.
- Bouncer xApp:
  - committer change (Vaishali out - Matti will start the vote) - HCL will send new committer info.
  - Code checkin the newly created repo – Not started yet.
- QP, QP-D, AD:
  - Loaded viavi data(in csv format) into InfluxDB and verified the data.
  - Working on InfluxDB **relay** setup in our lab machine.
  - Matti still to provide user stories.
  - Matti will check with Guy about what he is doing and about coordination with HCL.

## 2021-03-15

### Status:

- Bouncer xApp:
  - committer change (Vaishali out - Matti will start the vote) - HCL will send new committer info - Matti waiting for committer info - Sunil will send
  - Code checkin the newly created repo – yet to start
- QP, QP-D, AD:
  - Got the VIAVI simulator access and exploring the simulator for different UE level scenarios - anomaly use case is available.
  - InfluxDB **relay** setup in our lab machine - Completed..
  - Discussions with Guy - Guy needs to set up the next meeting (Matti will check)
  - Matti reached out to DOC chair (Waichen Ni) about getting AD readthedocs populated. (WN: "have you run the command 'tox -e docs, docs-linkcheck' on your local system?") - document still not showing up (Matti will followup with DOC chair).
  - How to get LF to count the AD lines of code to give HCL credit - HCL will reach out to LF
- HW:
  - C++: Refactoring between xApp and c++ framework continues.
  - Python/go - Samsung):
    - Resolution on Internal discussion: Hangup on Alpine image - discussion continues by email. Which xApps depend on Alpine (LP, QP, AD) - see if Ubuntu can be used? HCL will try Ubuntu - previously problems.
    - go: no code pushed yet,
  - Matti - Get Subhash access to Viavi simulator.
- LP xApp (ChinaMobile):
  - Waiting for inFlux as a part of the platform.
  - Main program checked in, working on documentation and un it test.
  - Get James access to Viavi simulator.
- SSP (Samsung): Initial discussion - will use some E2SM NI message.
- KPIMON:
  - Next steps: Update Influx DB (in addition to SDL) - Matti reached out (inc James, Subhash etc) - no response
  - Samsung is waiting for inFlux solution
  - HCL is attempting to run KPIMON - success! Will try to help Nikhil.
- "Portability SDK": discussions on what is "portability SDK" continues in WG-3 and elsewhere.
- TS xApp: no new updates, have to start working on E2 CONTROL message - Matti will try to find resources.
- See if ONF simulator could be used with OSC RIC (Samsung, Nokia also members) - see what collaboration would be possible.

## 2021-03-30

### Status:

- Bouncer xApp:
  - committer change (Vaishali out - Matti will start the vote) - HCL will send new committer info - Matti waiting for committer info - Sunil will recheck.
  - code checking not started yet
  - xApp replication - Brazil university - initial step: add state to the xApp, store the state in SDL layer.

- AD & QP xAPP:
  - Got the VIAVI simulator access and exploring the simulator for different UE level scenarios.
  - Still in progress - demo given to Viavi.
  - InfluxDB setup in our lab machine - Completed
- HW:
  - C++: Refactoring between xApp and c++ framework continues.
  - Python/go (Samsung):
    - python: E2AP - HeeWon + Scott discussion, need to refresh the thread; available inside Samsung. Matti will refresh the thread. Somebody new will take over work for Rahul.
    - go: E2AP - send E2 related message
  - Matti - Get Subhash access to Viavi simulator - no response yet. Subhash will refresh.
  - Open lab access: Common RIC installation. HCL - VM is not there yet. Need to find VM size - coordinate with Rittwik.
- LP xApp (ChinaMobile):
  - Waiting for inFlux as a part of the platform.
  - Slowly adding piece.
  - Get James access to Viavi simulator - Augustin replied this morning, add username this week.
- SSP (Samsung): Initial discussion - will use some E2SM NI message. Patent issue raised by Jun.
- KPIMON:
  - Next steps: Update Influx DB (in addition to SDL) - Matti reached out (inc James, Subhash etc) - no response
  - Samsung is waiting for inFlux solution
  - HCL is attempting to run KPIMON - success! Will try to help Nikhil.
- "Portability SDK": discussions continue, initial goal: define proposed SDK interface in python.
- TS xApp: no new updates, have to start working on E2 CONTROL message - Matti will try to find resources.
- See if ONF simulator could be used with OSC RIC (Samsung, Nokia also members) - see what collaboration would be possible - still to be done.
- Viavi binary in OSC lab - Viavi call?

## 2021-04-13

### Status:

- Viavi had meetings with James and Subhash - no access yet.
- Bouncer xApp:
  - committers changed
  - code checking not started yet - maybe start this week
  - Matti discussed with Brazilian professor about first steps towards replicated xApps with Bouncer as an example.
- AD & QP xAPP:
  - Got the VIAVI simulator access and exploring the simulator for different UE level scenarios - facing issue (simulator stop, black screen) - Viavi shared sample data to bypass simulator use
  - Getting issues in data generation. Raised the issues with the Viavi team. Viavi team shared the sample data. We are working on that.
  - InfluxDb - Checked in ric/deb repo, but Felix asked to put the files in [it/dep.git] /ric-common/Common-Template/helm/ric-common/templates /
    - Need further clarification from Felix - Matti will try to get Felix to join HCL call
  - Nikhil having problems with AD/TS - Chandru replied.
- HW:
  - C++: Refactoring between xApp and c++ framework moving slowly.
  - Python/go (Samsung):
    - python: E2AP - HeeWon + RIC-687.
    - go: E2AP - no new updates. Will try out this week to send an E2 message.
  - Open lab access: Common RIC installation. Matti worked with Felix but I guess the VM is still not there. Matti will continue bugging Felix.
- LP xApp (ChinaMobile):
  - Updates?
- SSP (Samsung): Initial discussion - will use some E2SM NI message. Patent issue raised by Jun - Matti brought up patent issue at TOC call.
- KPIMON:
  - Samsung indicates KPIMON has been updated to KPM 2.0 - Matti encourages to check in updated code.
  - Samsung is waiting for inFlux solution?
- "Portability SDK": discussions continue, initial goal: define proposed SDK interface in python.
- TS xApp: no new updates, have to start working on E2 CONTROL message - Matti will try to find resources.
- See if ONF simulator could be used with OSC RIC (Samsung, Nokia also members) - see what collaboration would be possible - still to be done.
- Viavi binary in OSC lab - yes.
- Subhash: Committer changes needed (Rahul Naman).

## 2021-04-27

### Status:

- Anomaly detection use case flow and dev. resources confirmed: [AD-TS-flow.pptx](#)

- KPIMON:
  - Update by email: Influx update added - Samsung promises to check in code now.
- LP xApp (ChinaMobile):
  - update by email: James working with Viavi - may need a new RMR message type.
- Viavi access for Subhash - yes
- Bouncer xApp:
  - code checking not yet started
- AD & QP xAPP:
  - Got the VIAVI simulator access and exploring the simulator for different UE level scenarios.
    - Still we have issues in data generation. We are working with the viavi team on that.
    - We worked on the data shared by the Viavi team. Showed the AD demo in the last viavi call.
  - InfluxDb – Checked in ric/deb repo, Incorporated review comments from Felix. Tested in our lab environment.
    - Unable to check-out the it/deb repo. need to check with Felix. (Already sent a mail regarding the issue)
- HW:
  - C++: Refactoring between xApp and c++ framework moving slowly.
  - Python/go (Samsung):
    - python: waiting for HeeWon commit.
    - go: Update next week.
- Open lab access: Common RIC installation. Apparently VM is there but nobody has access yet - Matti will continue bugging Felix.
- Slow moving items:
  - SSP (Samsung): Initial discussion - Patent issue raised by Jun - Matti waiting for TOC response (may be hard with Apache license)
  - "Portability SDK": discussions continue on E2, SDL, and A1 interface in the SDK - contributing to WG-3 RIC Arch periodically
  - See if ONF simulator could be used with OSC RIC (Samsung, Nokia also members) - should be possible if E2 AP and KPM versions match (KPM 2.0.3 if I heard correctly)
  - Subhash: Committer changes needed (Rahul Naman) - Matti needs to start the vote (today).

## 2021-05-11

### Status:

- OSC lab:
  - Felix created accounts for HCL and provided access to the RIC integration VM - working on the process
  - Alexandre Huff (TS xApp) has account as well -
  - Viavi access to install E2 simulator?
  - Need to get a list of people who need VPN accounts.
  - SoftEther (openVPN protocol, tunnelbrick works) for VPN connection, openSSH fine for connecting to the VM
  - Matti will send email to get list of people for VPN + VM accounts - add James to the list: name, affiliation, office phone, public key
- KPIMON:
  - New code checked in LF repo - HCL will try to test it soon.
- LP xApp (ChinaMobile):
  - question about KPIMON populating influx in test mode, working with Viavi
  - working with partners to see if ML model and demo is possible
- AD & QP xAPP:
  - Got the VIAVI simulator access and exploring the simulator for different UE level scenarios.
  - Validating new version of viavi instance. Demo readied with old version data for AD.
  - Working on QP changes for demo/D release - removing QP driver
- InfluxDb
  - Pushed it/deb changes and it merged.
  - ric/deb changes pushed again after Thoralf comment.
- Bouncer xAPP
  - Code checkin the newly created repo –
  - The Bouncer code has been checked in successfully to ric-app/bouncer repository
  - Link : <https://gerrit.o-ran-sc.org/r/c/ric-app/bouncer/+6052>
- HW:
  - C++: Refactoring between xApp and c++ framework moving slowly.
  - Python/go (Samsung):
    - python: waiting for HeeWon commit, waiting for Naman
    - go: able to send policy, send subscription request over HTTP - Matti will check with Nokia about REST interface on Subscription Manager.
- Slow moving items:
  - SSP (Samsung): Initial discussion - Patent issue raised by Jun - Matti waiting for TOC response (may be hard with Apache license)
  - "Portability SDK": discussions continue on E2, SDL, and A1 interface in the SDK - contributing to WG-3 RIC Arch periodically
  - See if ONF simulator could be used with OSC RIC (Samsung, Nokia also members) - should be possible if E2 AP and KPM versions match (KPM 2.0.3 if I heard correctly) -
  - Subhash: Committer changes needed (Rahul Naman) - Matti needs to start the vote (today).

