

# ODU High Status

Updated: 17 Nov 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-357> - Done
  - Study for creation of multiple bearers
- <https://jira.o-ran-sc.org/browse/ODUHIGH-365> - Done
  - Study and Design for Requirements for 3gpp functionality for slicing support
- <https://jira.o-ran-sc.org/browse/ODUHIGH-366> - Done
  - Study and Design for Requirements [3gpp functionality for slicing support ]
- <https://jira.o-ran-sc.org/browse/ODUHIGH-358> - Done
  - Support for more than one DRB in UE context Setup Request
- <https://jira.o-ran-sc.org/browse/ODUHIGH-369> - Done
  - Support for Slice Configuration (3gpp functionalities)
- <https://jira.o-ran-sc.org/browse/ODUHIGH-356> - In Progress
  - Feature study and design for HARQ
- <https://jira.o-ran-sc.org/browse/ODUHIGH-352> - In progress
  - Support for multiple UE
- <https://jira.o-ran-sc.org/browse/ODUHIGH-359> - Done
  - Support to add and modify more than one DRB in UE context Mod Request
- <https://jira.o-ran-sc.org/browse/ODUHIGH-377> - Done
  - As an O-DU L2 developer, I want to understand the RRM policy application in Scheduler to support RAN Slicing
- <https://jira.o-ran-sc.org/browse/ODUHIGH-368> - Done
  - Slice information associated during PDU session establishment procedure
- <https://jira.o-ran-sc.org/browse/ODUHIGH-369> - Done
  - As an O-DU L2 developer, I want to support Slice related Configuration
- <https://jira.o-ran-sc.org/browse/ODUHIGH-381> - Done
  - As an O-DU L2 developer, I want to implement O-DU Scheduler algorithm for scheduling DL packet as per RRM policy
- <https://jira.o-ran-sc.org/browse/ODUHIGH-371> - Done
  - As an O-DU L2 developer, I want to implement slice Information/Mapping to RLC DB
- <https://jira.o-ran-sc.org/browse/ODUHIGH-380> - Done
  - As an O-DU L2 developer, I want to implement automatic PRB allocation per DL slot using Bitmap
- <https://jira.o-ran-sc.org/browse/ODUHIGH-385> - Done
  - As an O-DU L2 developer, I want to implement automatic PRB allocation per UL slot using Bitmap
- <https://jira.o-ran-sc.org/browse/ODUHIGH-375> - to be started
  - As an O-DU L2 developer, I want to implement application of slice configuration received over O1 interface
- <https://jira.o-ran-sc.org/browse/ODUHIGH-378> - Done
  - As an O-DU L2 developer, I want to implement UL/DL Throughput calculation Per Slice
- <https://jira.o-ran-sc.org/browse/ODUHIGH-379> - to be started
  - As an O-DU L2 developer, I want to implement SMO/O1 sends REconfiguration with Optimized RRM Policy
- <https://jira.o-ran-sc.org/browse/ODUHIGH-389> - Done
  - As an O-DU L2 developer, I want to implement DL Throughput calculation Per Slice

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-362>
  - Finalizing cell configuration parameters - In Progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-383>
  - Cell and Network slicing configuration over O1 - In Progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-384>
  - VES PM data for slicing use case - In Progress

Dependency/Blockers:

Blocked for PTP grandmaster at OSC lab to start the end to end integration activities

Updated: 20 Oct 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-357> - Done
  - Study for creation of multiple bearers
- <https://jira.o-ran-sc.org/browse/ODUHIGH-365> - Done

- Study and Design for Requirements for 3gpp functionality for slicing support
- <https://jira.o-ran-sc.org/browse/ODUHIGH-366> - Done
  - Study and Design for Requirements [3gpp functionality for slicing support ]
- <https://jira.o-ran-sc.org/browse/ODUHIGH-358> - Done
  - Support for more than one DRB in UE context Setup Request
- <https://jira.o-ran-sc.org/browse/ODUHIGH-369> - In Progress
  - Support for Slice Configuration (3gpp functionalities)
- <https://jira.o-ran-sc.org/browse/ODUHIGH-356> - In Progress
  - Feature study and design for HARQ
- <https://jira.o-ran-sc.org/browse/ODUHIGH-359> - In Progress
  - Support to add and modify more than one DRB in UE context Mod Request
- <https://jira.o-ran-sc.org/browse/ODUHIGH-377> - Done
  - As an O-DU L2 developer, I want to understand the RRM policy application in Scheduler to support RAN Slicing
- <https://jira.o-ran-sc.org/browse/ODUHIGH-368> - Done
  - Slice information associated during PDU session establishment procedure
- <https://jira.o-ran-sc.org/browse/ODUHIGH-369> - Done
  - As an O-DU L2 developer, I want to support Slice related Configuration
- <https://jira.o-ran-sc.org/browse/ODUHIGH-381> - WIP
  - As an O-DU L2 developer, I want to implement O-DU Scheduler algorithm for scheduling DL packet as per RRM policy
- <https://jira.o-ran-sc.org/browse/ODUHIGH-371> - WIP
  - As an O-DU L2 developer, I want to implement slice Information/Mapping to RLC DB
- <https://jira.o-ran-sc.org/browse/ODUHIGH-380> - WIP
  - As an O-DU L2 developer, I want to implement automatic PRB allocation per DL slot using Bitmap
- <https://jira.o-ran-sc.org/browse/ODUHIGH-385> - WIP
  - As an O-DU L2 developer, I want to implement automatic PRB allocation per UL slot using Bitmap
- <https://jira.o-ran-sc.org/browse/ODUHIGH-375> - to be started
  - As an O-DU L2 developer, I want to implement application of slice configuration received over O1 interface
- <https://jira.o-ran-sc.org/browse/ODUHIGH-378> - to be started
  - As an O-DU L2 developer, I want to implement UL/DL Throughput calculation Per Slice
- <https://jira.o-ran-sc.org/browse/ODUHIGH-379> - to be started
  - As an O-DU L2 developer, I want to implement SMO/O1 sends REconfiguration with Optimized RRM Policy

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-362>
  - Finalizing cell configuration parameters - In Progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-383>
  - Cell and Network slicing configuration over O1 - In Progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-384>
  - VES PM data for slicing use case - In Progress

Dependency/Blockers:

Blocked for PTP grandmaster at OSC lab to start the end to end integration activities

Updated: 15th Sept 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-357> - Done
  - Study for creation of multiple bearers
- <https://jira.o-ran-sc.org/browse/ODUHIGH-365> - Done
  - Study and Design for Requirements for 3gpp functionality for slicing support
- <https://jira.o-ran-sc.org/browse/ODUHIGH-366> - Done
  - Study and Design for Requirements [3gpp functionality for slicing support ]
- <https://jira.o-ran-sc.org/browse/ODUHIGH-358> - Done
  - Support for more than one DRB in UE context Setup Request
- <https://jira.o-ran-sc.org/browse/ODUHIGH-369> - In Progress
  - Support for Slice Configuration (3gpp functionalities)
- <https://jira.o-ran-sc.org/browse/ODUHIGH-356> - In Progress
  - Feature study and design for HARQ
- <https://jira.o-ran-sc.org/browse/ODUHIGH-359> - In Progress
  - Support to add and modify more than one DRB in UE context Mod Request
- <https://jira.o-ran-sc.org/browse/ODUHIGH-368> - To be done
  - Slice information associated during PDU session establishment procedure

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIG-362>
  - Finalizing cell configuration parameters - In Progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-383>
  - Cell and Network slicing configuration over O1 - In Progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-384>
  - VES PM data for slicing use case - In Progress

Dependency/Blockers:

Blocked for PTP grandmaster at OSC lab to start the end to end integration activities

Updated: 7th July 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - Done
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - Done
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress will be continued in E release
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - Done
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress will be continued in E release (Irrespective of FDD or TDD stack)
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified. Call flow updated at  
<https://wiki.o-ran-sc.org/display/RSAC/Closed+Loop+Automation+Call+Flow+-+O-DU+High+APIs>.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Issue with mis-coordination between cell delete and DL RRC message, resolved.
    - Code changes for CU Interaction is completed
    - Code changes for Config update over F1 interface is completed
    - O1 Integration for O-DU for CLA is completed ( Cell stop and Cell restart)
    - Blocker : code segmentation is observed, analysis is going on (code optimization is required to be scoped in E release)
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - Done
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - PDSCH for SIB1 is detected at L1 but L1 does not process it. Pointer is to check the PDSCH PDU parameters
    - Further debug sessions needed to close the ongoing issues.
    - There is no breakthrough even after several debug sessions with O-DU Low
    - SIB1 detection at L1 is successful. PHY.XML is updated with removing the hardware accelerator (<dpgkBasebandFecMode> from 1 to 0 to force the SW encoder)
    - For the CLA usecase, Cell stop request is received from O-DU high to low but O-DU low sends stop indication multiple times. This issue is fixed in L1 later binary 20.08. This binary update will happen in D-maintenance phase.
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - Done
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM configured as per H/W and S/W requirements of Radisys CU
    - The Network interfaces and CentOS version needs to be revisited for the CU machine. This is achieved with limited OSC lab setup.
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - Done
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Viavi confirmed receiving at O-RU. Needs verification from UE sim.

- Debug session is planned on 23rd June to achieve SSB and SIB1 transmission till UE simulator and then follow with RACH procedure.
- Latest issue: the eCPRI packets differentiation between control plane and user plane through vlan id is supported by Intel, however O-RU support the packet differentiation based on eCPRI packet type. hence the fronthaul transmission validation is blocked.
- Intel shall update the L1 package supporting C/U plane differentiation using eCPRI packet type in the D-release maintenance phase.

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-347> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Tested locally with SMO both with IPv4 and IPv6. Able to mount and connect ODU.
    - Integration with SMO in working fine with IPv4 but with IPv6 could not tested as it is not enabled in OSC lab
    - Integration with O-DU code for cell down and up scenario is completed, validation is completed
    - Edit-config testing from SMO to ODU for cell down/up is in completed in OSC lab
- <https://jira.o-ran-sc.org/browse/ODUHIG-349> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- Intel/Viavi to confirm successful decoding of SSB/SIB1 at UE sim (TM500).

Updated: 30th June 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
    - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
  - <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
    - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
  - <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
    - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
      - Basic code changes complete. Testing in progress for data path
  - <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
    - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
      - Basic code changes complete. Testing to be done for data path
  - <https://jira.o-ran-sc.org/browse/ODUHIG-264> - Done
    - As an O-DU L2 developer, I want to add support for Mu1
      - Code changes at DU APP completed.
      - Resource allocation for SSB to msg5 completed
      - Code changes for UE registration flow in progress
      - Updates to k0, k1, k2 in progress
  - <https://jira.o-ran-sc.org/browse/ODUHIG-265> - Done
    - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
      - Code changes at DU APP completed.
      - Resource allocation for SSB to msg5 completed
      - Code changes for UE registration flow in progress
      - Updates to k0, k1, k2 in progress will be continued in E release
  - <https://jira.o-ran-sc.org/browse/ODUHIG-266> - Done
    - As an O-DU L2 developer, I want to add support for TDD mode
      - Code changes at DU APP completed.
      - Resource allocation for SSB to msg5 completed
      - Code changes for UE registration flow in progress
      - Updates to k0, k1, k2 in progress will be continued in E release (Irrespective of FDD or TDD stack)
  - <https://jira.o-ran-sc.org/browse/ODUHIG-299> - Done
    - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
      - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
      - Basic configuration is agreed to support CLA use case.
      - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified. Call flow updated at
- <https://wiki.o-ran-sc.org/display/RSAC/Closed+Loop+Automation+Call+Flow+-+O-DU+High+APIs>
- UE delete functionality complete

- Cell delete functionality complete
  - Issue with mis-coordination between cell delete and DL RRC message, resolved.
  - Code changes for CU Interaction is completed
  - Code changes for Config update over F1 interface is completed
  - O1 Integration for O-DU for CLA is completed ( Cell stop and Cell restart)
  - Blocker : code segmentation is observed, analysis is going on (code optimization is required to be scoped in E release)
- <https://jira.o-ran-sc.org/browse/ODUHIGH-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - PDSCH for SIB1 is detected at L1 but L1 does not process it. Pointer is to check the PDSCH PDU parameters
    - Further debug sessions needed to close the ongoing issues.
    - There is no breakthrough even after several debug sessions with O-DU Low
    - SIB1 detection at L1 is successful. PHY.XML is updated with removing the hardware accelerator (<dpdkBasebandFecMode> from 1 to 0 to force the SW encoder)
    - For the CLA usecase, Cell stop request is received from O-DU high to low but O-DU low sends stop indication multiple times. This issue is fixed in L1 later binary 20.08. This binary update will happen in D-maintenance phase.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM configured as per H/W and S/W requirements of Radisys CU
    - The Network interfaces and CentOS version needs to be revisited for the CU machine.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Viavi confirmed receiving at O-RU. Needs verification from UE sim.
    - Debug session is planned on 23rd June to achieve SSB and SIB1 transmission till UE simulator and then follow with RACH procedure.
    - Latest issue: the eCPRI packets differentiation between control plane and user plane through vlan id is supported by Intel, however O-RU support the packet differentiation based on eCPRI packet type. hence the fronthaul transmission validation is blocked.

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIGH-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIGH-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-328> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-347> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Tested locally with SMO both with IPv4 and IPv6. Able to mount and connect ODU.
    - Integration with SMO in working fine with IPv4 but with IPv6 could not tested as it is not enabled in OSC lab
    - Integration with O-DU code for cell down and up scenario is completed, validation is completed
    - Edit-config testing from SMO to ODU for cell down/up is in completed in OSC lab

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- Viavi to confirm successful decoding of SSB/SIB1 at UE sim (TM500).

Updated: 23rd June 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-264> - Done
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.

- Resource allocation for SSB to msg5 completed
  - Code changes for UE registration flow in progress
  - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - Done
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress will be continued in E release
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - Done
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress will be continued in E release (Irrespective of FDD or TDD stack)
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified. Call flow updated at  
  
<https://wiki.o-ran-sc.org/display/RSAC/Closed+Loop+Automation+Call+Flow+-+O-DU+High+APIs>.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Issue with mis-coordination between cell delete and DL RRC message, resolved.
    - Code changes for CU Interaction is completed
    - Code changes for Config update over F1 interface is completed
    - O1 Integration for O-DU for CLA is completed ( Cell stop and Cell restart)
    - Blocker : code segmentation is observed, analysis is going on (code optimization is required to be scoped in E release)
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - PDSCH for SIB1 is detected at L1 but L1 does not process it. Pointer is to check the PDSCH PDU parameters
    - Further debug sessions needed to close the ongoing issues.
    - There is no breakthrough even after several debug sessions with O-DU Low
    - SIB1 detection at L1 is successful. PHY.XML is updated with removing the hardware accelerator (<dpdkBasebandFecMode> from 1 to 0 to force the SW encoder)
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM configured as per H/W and S/W requirements of Radisys CU
    - The Network interfaces and CentOS version needs to be revisited for the CU machine.
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Viavi confirmed receiving at O-RU. Needs verification from UE sim.
    - Debug session is planned on 23rd June to achieve SSB and SIB1 transmission till UE simulator and then follow with RACH procedure.

#### Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-347> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Tested locally with SMO both with IPv4 and IPv6. Able to mount and connect ODU.
    - Integration with SMO in working fine with IPv4 but with IPv6 could not tested as it is not enabled in OSC lab
    - Integration with O-DU code for cell down and up scenario is completed, validation is completed
    - Edit-config testing from SMO to ODU for cell down/up is in progress in OSC lab

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- Viavi to confirm successful decoding of SSB/SIB1 at UE sim (TM500).



Updated: 16th June 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified. Call flow updated at
      - <https://wiki.o-ran-sc.org/display/RSAC/Closed+Loop+Automation+Call+Flow+-+O-DU+High+APIs>.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Issue with mis-coordination between cell delete and DL RRC message, resolved.
    - Code changes for CU Interaction is completed
    - Code changes for Config update over F1 interface is completed
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - PDSCH for SIB1 is detected at L1 but L1 does not process it. Pointer is to check the PDSCH PDU parameters
    - Further debug sessions needed to close the ongoing issues.
    - There is no breakthrough even after several debug sessions with O-DU Low
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM configured as per H/W and S/W requirements of Radisys CU
    - The Network interfaces and CentOS version needs to be revisited for the CU machine.
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Viavi confirmed receiving at O-RU. Needs verification from UE sim.

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-347> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Testing locally with SMO is in progress
    - Looking into IPv6 related configuration issue
    - Integration with O-DU code for cell down and up scenario is completed, validation in progress

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- SIB1 PDSCH is detected at L1 but cannot be processed at L1. Debug sessions to be continued to address this. This is blocker to achieve radio mode integration.
- Viavi to confirm successful decoding of SSB at UE sim (TM500).

Updated: 9th June 2021

#### JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
    - Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified. Call flow updated at <https://wiki.o-ran-sc.org/display/RSAC/Closed+Loop+Automation+Call+Flow+-+O-DU+High+APIs>.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Issue with mis-coordination between cell delete and DL RRC message, resolved.
    - Code changes for CU Interaction under review
    - Code changes for Config update over F1 interface is completed
- <https://jira.o-ran-sc.org/browse/ODUHIGH-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - PDSCH for SIB1 is detected at L1 but L1 does not process it. Pointer is to check the PDSCH PDU parameters
    - Further debug sessions needed to close the ongoing issues.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM configured as per H/W and S/W requirements of Radisys CU
    - The Network interfaces and CentOS version needs to be revisited for the CU machine.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Viavi confirmed receiving at O-RU. Needs verification from UE sim.

#### Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIGH-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIGH-322> - Done



- As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Edit-config implementation for o-ran-sc-du-hello-world YANG (admin state changes), Done
    - Integration with O-DU code for cell down and up scenario in progress
    - Integration testing with OAM in progress

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- SIB1 PDSCH is detected at L1 but cannot be processed at L1. Debug sessions to be continued to address this.
- Viavi to confirm successful decoding of SSB at UE sim (TM500).

Updated: 2nd June 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB to msg5 completed
    - Code changes for UE registration flow in progress
    - Updates to k0, k1, k2 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified. Call flow updated at
      - <https://wiki.o-ran-sc.org/display/RSAC/Closed+Loop+Automation+Call+Flow+-+O-DU+High+APIs>.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Issue with mis-coordination between cell delete and DL RRC message, resolved.
    - Code changes for CU Interaction under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - Awaiting inputs from Intel
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM to be configured as per H/W and S/W requirements of Radisys CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Viavi confirmed receiving at O-RU. Needs verification from UE sim.

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM

- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Edit-config implementation for o-ran-sc-du-hello-world YANG (admin state changes), in review
    - Integration with O-DU code for cell down and up scenario in progress
    - Integration testing with OAM in progress

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- SIB1 PDSCH reached L1 but cannot be observed in logs. Awaiting response from Intel.
- Viavi to confirm successful decoding of SSB at UE sim (TM500).

Updated: 26th May 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed
    - Msg1 to msg4 changes completed.
    - Resource table optimization in process
    - Reviewing other layers for relevant changes
    - Code changes for UE registration flow in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed
    - Msg1 to msg4 changes completed.
    - Resource table optimization in process
    - Reviewing other layers for relevant changes
    - Code changes for UE registration flow in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed
    - Msg1 to msg4 changes completed.
    - Resource table optimization in process
    - Reviewing other layers for relevant changes
    - Code changes for UE registration flow in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Issue with mis-coordination between cell delete and DL RRC message, resolved.
    - Code changes for CU Interaction under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - Awaiting inputs from Intel
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM to be configured as per H/W and S/W requirements of Radisys CU

- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Awaiting input from Viavi

Updates from HCL:

- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Edit-config implementation for o-ran-sc-du-hello-world YANG (admin state changes), is done.
    - Integration with O-DU code for cell down and up scenario in progress
    - Integration testing with OAM in progress

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- SIB1 PDSCH reached L1 but cannot be observed in logs. Awaiting response from Intel.
- SSB reached O-RU. awaiting analysis from Viavi.

Updated: 19th May 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - Msg1 to msg4 changes completed.
    - Resource table optimization in process
    - Reviewing other layers for relevant changes
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - Msg1 to msg4 changes completed.
    - Resource table optimization in process
    - Reviewing other layers for relevant changes
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - Msg1 to msg4 changes completed.
    - Resource table optimization in process
    - Reviewing other layers for relevant changes
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified.
    - UE delete functionality complete

- Cell delete functionality complete
  - Code changes for CU Interaction under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
    - Awaiting inputs from Intel
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - New VM to be configured as per H/W and S/W requirements of Radisys CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - In review
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
    - Awaiting input from Viavi
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server(VM) configuration (H/W and S/W) to mount Radisys CU as a test fixture.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- SIB1 PDSCH reached L1 but cannot be observed in logs. Awaiting response from Intel.
- SSB reached O-RU. awaiting analysis from Viavi.

Updated: 12th May 2021

#### JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-247> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-297> - Done
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
- <https://jira.o-ran-sc.org/browse/ODUHIG-322> - Done
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - Tracking RACH allocation in review
    - Msg 2 to Msg 4 allocation in review
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - Tracking RACH allocation in review
    - Msg 2 to Msg 4 allocation in review
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - Tracking RACH allocation in review
    - Msg 2 to Msg 4 allocation in review
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified.
    - UE delete functionality complete
    - Cell delete functionality complete
    - Code changes for CU Interaction under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode

- SSB transmission successful
  - Debugging issue with Sib1 transmission , PDCCH is received but no PDSCH seen at O-DU low.
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - Awaiting server allocation
- <https://jira.o-ran-sc.org/browse/ODUHIG-327> - In review
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - WIP
  - As an O-DU L2 developer, I want to support End to End testing scenarios
    - Testing of broadcast messages at O-RU emulator set to begin
- <https://jira.o-ran-sc.org/browse/ODUHIG-328> - TODO
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server allocation to mount Radisys CU as a test fixture. Bare metal server preferred.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.
- SIB1 PDSCH reached L1 but cannot be observed in logs. Awaiting response from Intel.

Updated: 28th April 2021

#### JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - RACH allocation in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - RACH allocation in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation for SSB and SIB1 completed.
    - RACH allocation in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified.
    - UE delete functionality complete
    - Cell delete functionality under review
    - Code changes for CU Interaction under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission w.r.t error observed at O-DU Low
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - Awaiting server allocation
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server allocation to mount Radisys CU as a test fixture. Bare metal server preferred.
- Unable to use valgrind with Intel libraries. Debugging must be carried out with Alternate methods.

Updated: 21st April 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation for SIB1 under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation for SIB1 under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation for SIB1 under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress. Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified.
    - UE delete functionality under review
    - Cell delete functionality under review
    - Code changes for CU Interaction in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission w.r.t symbol allocation/overlapping
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - Awaiting server allocation
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially. Use admin state as unlocked to validate the RU link failure.
- Server allocation to mount Radisys CU as a test fixture. Bare metal server preferred.
- Unable to use valgrind with Intel libraries. Debugging issue with seg fault using Brute Force method.

Updated: 14th April 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation for SIB1 under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation for SIB1 under review



- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation for SIB1 under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
    - Basic configuration is agreed to support CLA use case.
    - Internal call flow/message sequence between O-CU and O-DU for cell activation and deactivation is clarified.
    - UE delete functionality under review
    - Cell delete functionality under review
    - Code changes for CU Interaction in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - Awaiting server allocation
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA. However basic configuration e.g. cell state/operational state/admin state shall be supported initially.
- Server allocation to mount Radisys CU as a test fixture. Bare metal server preferred.
- Unable to use valgrind with Intel libraries. Debugging issue with seg fault using Brute Force method.

Updated: 7th April 2021

#### JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Brainstorming for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation design for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation design for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
    - UE delete functionality under review
    - Cell delete functionality coding in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - Awaiting server allocation
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

#### Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.
- Server allocation to mount Radisys CU as a test fixture. Bare metal server preferred.
- Unable to use valgrind with Intel libraries. Debugging issue with seg fault using Brute Force method.

Updated: 31st March 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Brainstorming for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Resource allocation design for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Code changes and testing completed for SSB.
    - Brainstorming for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
    - UE delete functionality under review
    - Cell delete functionality coding in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB transmission successful
    - Debugging issue with Sib1 transmission
- <https://jira.o-ran-sc.org/browse/ODUHIGH-268> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
    - Using Radisys commercial CU as a test fixture
    - Awaiting server allocation
- <https://jira.o-ran-sc.org/browse/ODUHIGH-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.
- Server allocation to mount Radisys CU as a test fixture. Bare metal server preferred.

Updated: 24th March 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing in progress for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes completed for SSB.
    - Brainstorming for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth

- Code changes at DU APP completed.
  - Code changes completed for SSB.
  - Brainstorming for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Code changes completed for SSB.
    - Brainstorming for SIB1 in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
    - Coding changes in progress for UE delete from DU APP to RLC
    - UE delete functionality from DU APP to MAC under review
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - SSB testing blocked. Awaiting debug session with Intel
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.
- SSB integration testing with O-DU Low in Radio mode. Awaiting debug session with Intel.

Updated: 17th March 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes completed for SSB.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Code changes completed for SSB.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress for time domain.
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
    - Coding changes in progress for UE delete from DU APP to RLC
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - Received slot indications
    - Fixed config issues
    - SSB testing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.

Updated: 10th March 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Code changes have been completed for AM and UM modes
    - Testing in progress with a debugging issue of number of packets not being received at DU app.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Code changes have been completed for AM and UM mode
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Code changes completed for SSB.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Code changes completed for SSB.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress for time domain.
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
    - Yang modules to be supported by O-DU to ensure the end-to-end functionality of the use case "Closed loop" is in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
    - Received slot indications
    - SSB testing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.

Updated: 03 March 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - Done
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Code changes have been completed for AM and UM modes
    - Testing in progress with a debugging issue of number of packets not being received at DU app.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Code changes have been completed for AM and UM mode
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode

- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.

Updated: 24 February 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Code changes have been completed for AM and UM modes
    - Testing in progress with a debugging issue of number of packets not being received at DU app.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - Done
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Code changes have been completed for AM and UM mode
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions on the O-DU PNF Registration and Activation process is ongoing
- <https://jira.o-ran-sc.org/browse/ODUHIG-267> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
- <https://jira.o-ran-sc.org/browse/ODUHIG-268> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
- <https://jira.o-ran-sc.org/browse/ODUHIG-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Dependency/Blockers:

- O1 configuration for day-1 shall need to be completed to start with CLA.

Updated: 17 February 2021

JIRA: Epics Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Code changes have been completed for AM and UM modes
    - Testing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - WIP
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Code changes have been completed for AM and UM modes
    - Testing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - WIP
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Basic code changes complete. Testing to be done for data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-264> - WIP
  - As an O-DU L2 developer, I want to add support for Mu1
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-265> - WIP
  - As an O-DU L2 developer, I want to add support for 100 MHz Bandwidth
    - Code changes at DU APP completed.
    - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-266> - WIP
  - As an O-DU L2 developer, I want to add support for TDD mode

- Code changes at DU APP completed.
  - Resource allocation at SCH in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-299> - WIP
  - As an O-DU L2 developer, I want to develop O-DU High Layers to support Closed Loop Automation Use-case
    - Discussions in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-267> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low in Radio Mode
- <https://jira.o-ran-sc.org/browse/ODUHIGH-268> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with O-CU
- <https://jira.o-ran-sc.org/browse/ODUHIGH-269> - TODO
  - As an O-DU L2 developer, I want to support End to End testing scenarios

Updated: 16 December 2020

Documentation and release related activities for Cherry release have been completed

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface using custom yang files
    - Code yet to be merged
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - Done
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - Code merged into master branch.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - Done
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High completed aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be begin once O-RU integration is complete
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - WIP
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Design in progress
    - PUCCH code changes in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Code under review for signalling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
    - Code under review for signalling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- Custom Yang files will be used for Dev activity.
- FAPI files being used provided by INTEL, which is not completely in-line with the latest released version from SCF.

Updated: 9 December 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP



- As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface using custom yang files
    - Code yet to be merged
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - Done
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - Code merged into master branch.
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - Done
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High completed aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be begin once O-RU integration is complete
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - WIP
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Design in progress
    - PUCCH code changes in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Code under review for signalling
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

#### Dependency/Blockers:

- Custom Yang files will be used for Dev activity.
- FAPI files being used provided by INTEL, which is not completely in-line with the latest released version from SCF.

Updated: 2 December 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface using custom yang files
    - Code yet to be merged
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - Done
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - Code merged into master branch.
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - Done
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High completed aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be begin once O-RU integration is complete
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - WIP
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
    - Design in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - WIP
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
    - Code changes have been identified
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

#### Dependency/Blockers:

- Custom Yang files will be used for Dev activity.

- FAPI files being used provided by INTEL, which is not completely in-line with the latest released version from SCF.

Updated: 25 November 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface using custom yang files
    - Code yet to be merged
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - Done
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - Code merged into master branch.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High to completed aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be planned
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- Custom Yang files will be used for Dev activity.
- FAPI files being used provided by INTEL, which is not completely in-line with the latest released version from SCF.

Updated: 18 November 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface using custom yang files
    - Code merged into dev branch, facing issues with merging into master branch
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - Code merged into dev branch, facing issues with merging into master branch
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High to completed aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be planned
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - TODO

- As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- HCL unable to merge O1 code into master branch.
- Custom Yang files will be used for Dev activity.
- FAPI files being used provided by INTEL, which is not completely in-line with the latest released version from SCF.

Updated: 11 November 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface using custom yang files
    - get-config implementation in O1 code to write into a file for ODU to read at startup.
    - Code completed, check-in pending
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - get-alarm list code completed. Check-in pending
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High to start aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be planned
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- Custom Yang files will be used for Dev activity.
- FAPI files being used provided by INTEL, which is not completely in-line with the latest released version from SCF.

Updated: 4 November 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - Done
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - CM supported limited to IP and port configs for F1 and E2 interface
    - Custom yang file created
    - get-config implementation in O1 code to write into a file for ODU to read at startup, in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case

- get-alarm list to be supported i.e., Health Status Retrieval
  - get-alarm list code under review post basic unit testing
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High successfully integrated with O-DU Low in timer mode
    - O-DU High to start aligning with latest FAPI files from Intel for Radio mode
    - Radio mode testing to be planned
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- Custom Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 28 October 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - Coding complete
    - Fixing issues found during testing
    - Designing data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Basic scripts ready
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
    - CM support limited to IP/port on F1, E2 interface.
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - Code under review post basic unit testing
    - Internal Demo completed
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High integration with O-DU Low: O-DU High completed dev of non FAPI msg UL IQ SAMPLE REQ.
    - UL IQ SAMPLE REQ has reached O-DU Low FT. Testing response in progress.
    - O-DU High binaries have been tested till msg-5 with test stub on ATT servers.
    - O-DU High binaries have been test with docker containers
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - WIP
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
    - Design in progress.
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 14 October 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - Coding complete
    - Testing in progress
    - Designing data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Basic scripts ready
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - scripts to install libraries are done. - under review
    - dev activity completed - under review
    - Internal Demo planned for this week
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High integration with O-DU Low: First message reached O-DU Low. However, in timer mode, Intel expects another prelim msg to be sent from O-DU High before config.REQ. This must be added to O-DU High.
    - O-DU High binaries have been tested till msg-5 with test stub on ATT servers.
    - O-DU High binaries have been test with docker containers
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- in timer mode, Intel expects another prelim msg to be sent from O-DU High before config.REQ. This must be added to O-DU High referring to Intel's test stub(testMac).
- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 7 October 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - Coding complete
    - Testing in progress
    - Designing data path
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Basic scripts ready
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - scripts to install libraries are done.
    - dev activity completed. Unable to raise for review
    - Internal Demo planned for next week

- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High binaries have been tested till msg-5 with test stub on ATT servers.
    - O-DU High binaries have been test with docker containers
    - O-DU High has begun integration with O-DU Low and resolving memory issues.
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- Code committer privileges not enabled for HCL committers yet.
- Memory issues on enabling WLS
- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 30 September 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - DL/UL RRC messages complete
    - UE/RB reconfig/config in review
    - planning data path
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Basic scripts ready
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - scripts to install libraries are done.
    - dev activity completed. Unable to raise for review
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High binaries have been tested till msg-5 with test stub on ATT servers.
    - O-DU High binaries have been test with docker containers
    - O-DU High has begun integration with O-DU Low but facing difficulties with linking WLS and DPDK libraries.
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency/Blockers:

- Code committer privileges not enabled for new committers yet.
- Issues with linking O-DU high with O-DU low WLS and DPDK libraries.
- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 23 September 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP



- As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - DL/UL RRC messages complete
    - UE/RB reconfig/config in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Basic scripts ready
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - scripts to install libraries are done.
    - dev activity in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - O-DU High binaries have been tested till msg-5 with test stub on ATT servers.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency:

- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 16 September 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIGH-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - msg-5 complete
    - DL/UL RRC message processing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIGH-191> - Done
  - As an O-DU L2 developer, I want to explore O1 interface
    - Made certain exploration and begun work on CM and health check use-case
- <https://jira.o-ran-sc.org/browse/ODUHIGH-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Basic scripts ready
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - scripts to install libraries are done.
    - dev activity in progress
- <https://jira.o-ran-sc.org/browse/ODUHIGH-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - ATT Server accessible now
    - Ported binaries on the servers and successfully executed until msg-5.
- <https://jira.o-ran-sc.org/browse/ODUHIGH-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIGH-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIGH-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency:

- Unable to install lib-sctp on Intel server to proceed with compilation.
- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 9 September 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - msg-5 testing in progress
    - security mode command processing dev in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - WIP
  - As an O-DU L2 developer, I want to explore O1 interface
    - O1 interface to be a separate binary since it is being developed independently.
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Brainstorming and usage of netopeer2, sysrepo in progress
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
    - scripts to install libraries are done.
    - dev activity in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - Aligned O-DU High with FAPI files provided by Intel as part of Bronze release
    - Awaiting server access from ATT Lab
    - Discussed integration plan in RSAC
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency:

- Integration with O-DU Low not started since ATT servers are not accessible.
- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 2 September 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - msg-5 processing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - Done
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - WIP
  - As an O-DU L2 developer, I want to explore O1 interface
    - Analysis of CM yang files in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Brainstorming and usage of netopeer2, sysrepo in progress
    - System design in progress
    - 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - Aligned O-DU High with FAPI files provided by Intel as part of Bronze release
    - Discussed integration plan in RSAC

- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares
    - integration plan discussion begun.

Dependency:

- Integration with O-DU Low not started since ATT servers are unavailable
- 3GPP Yang files will be used for Dev activity but will not be checked-in to public repo.

Updated: 26 August 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - msg-5 processing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - WIP
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
    - Support for format A1 - C0 - done
    - Support for format C2 - WIP
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - WIP
  - As an O-DU L2 developer, I want to explore O1 interface
    - Analysis of HC usecase in progress
    - Analysis of CM yang files in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface for CM
    - Brainstorming and usage of netopeer2, sysrepo in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - WIP
  - As an O-DU L2 developer, I want to support Health Check use-case
    - get-alarm list to be supported i.e., Health Status Retrieval
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - Aligned O-DU High with FAPI files provided by Intel as part of Bronze release
    - Awaiting servers/machines from ATT
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares

Blocker:

- Lack of clarity on usage of 3gpp Yang files for CM due to copyright issues

Dependency:

- Integration with O-DU Low not started since ATT servers are unavailable

Updated: 12 August 2020

Jira: EPICS Status below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
    - msg-5 processing in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-188> - WIP
  - As an O-DU L2 developer, I want to add support for all short PRACH formats
    - Support for format A1 - done
    - Support for format A2 - WIP
- <https://jira.o-ran-sc.org/browse/ODUHIG-191> - WIP
  - As an O-DU L2 developer, I want to explore O1 interface

- Analysis of HC usecase in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-196> - WIP
  - As an O-DU L2 developer, I want to Establish Netconf session for O1 interface
    - Brainstorming and usage of netopeer2, sysrepo in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-214> - WIP
  - As an O-DU L2 developer, I want to support on-demand Health Check use-case
    - Study in progress
- <https://jira.o-ran-sc.org/browse/ODUHIG-189> - WIP
  - As an O-DU L2 developer, I want to integrate O-DU High with O-DU Low
    - Aligned O-DU High with FAPI files provided by Intel as part of Bronze release
- <https://jira.o-ran-sc.org/browse/ODUHIG-184> - TODO
  - As an O-DU L2 developer, I want to implement single UE DL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-185> - TODO
  - As an O-DU L2 developer, I want to implement single UE UL data path and bench-marking
- <https://jira.o-ran-sc.org/browse/ODUHIG-186> - TODO
  - As an O-DU L2 developer, I want to add support for 64QAM modulation scheme in DL
- <https://jira.o-ran-sc.org/browse/ODUHIG-187> - TODO
  - As an O-DU L2 developer, I want to add support for 16QAM modulation scheme in UL
- <https://jira.o-ran-sc.org/browse/ODUHIG-190> - TODO
  - As an O-DU L2 developer, I want to integrate O-DU High with Viavi softwares

#### Dependency:

- Integration with O-DU Low not started since ATT servers are unavailable
- Clarity on using netconf/VES for alarm notification as part of on-demand Health check

Updated: 13 May 2020

Jira: EPICS Status is mentioned below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-1> - DONE
  - As an O-DU L2 developer, I want to create F1AP module based on F1 interface APIs and develop them as per the architecture defined
- <https://jira.o-ran-sc.org/browse/ODUHIG-8> - DONE
  - As an O-DU L2 developer, I want to implement FAPI interface towards O-DU low
- <https://jira.o-ran-sc.org/browse/ODUHIG-9> - DONE
  - As an O-DU L2 developer, I want to implement cell broadcast procedure at MAC Layer
- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP (Implemented until RAR)
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIG-11> - DONE
  - As an O-DU L2 developer, I want to implement E2 interface
- <https://jira.o-ran-sc.org/browse/ODUHIG-27> - DONE (partially)
  - As an O-DU L2 developer, I want to develop RLC layer interfaces

#### Risks:

- E2SM Specification baseline is still not available while the development is being done using below draft specifications.
  - ORAN WG3.E2AP v01.00
  - ORAN WG3.E2SM v01.00
- WLS, FAPI interface files baseline - FAPI interface development is dependent on this.
- UE Attach Scenario development - Completed till msg-2,

#### Status:

Raised 18 change requests in WG8 AAD Specification; Already presented to the WG8 Task groups to be addressed in subsequent releases of the document.

O-DU High layers (MAC, RLC, and app):

- Re-align seed code to 3GPP Release 15.3.0 - Done (completed for all the messages until msg-2)
- Align seed code to WG8 AAD specification and interfaces - MAC - RLC Interface is done, RLC-F1AP interface is partially done (completed for all the data path messages)
- Implementation of cell broadcast procedure and UE attach procedure (SA mode) for FDD mode and FR1 (Numerology = 0, Bandwidth = 20 MHz) and basic scheduler APIs for single UE and single HARQ transmission
  - Cell Broadcast procedure - WIP
  - UE attach - WIP

F1-U interface development - Done

E2 Traffic Steering implementation based on draft specification - Done (with some limitations due to specifications)

F1-C interface enhancement: Done (procedures identified for bronze released is done)

- Support for following additional F1AP messages:
  - Initial UL RRC Message Transfer

- UL/DL RRC Message Transfer
  - UE Context Setup Request/Response
- Enhance F1AP messages:
  - F1AP Setup Request/Response
  - GNB DU Config Update

Basic FAPI messages Implementation - WIP (based on Intel FAPI 1.0.5 version)

Out of Scope:

- Use cases – Traffic Steering, Health Check related messages and call flows
- TDD functionality, NSA
- End to end testing

Limitations/Dependencies:

- FAPI Implementation – Dependency on O-DU Low to open source WLS files, interface files
- Testing: Currently only some unit testing can be done due to lack of test infrastructure i.e UE or UE simulator, O-RU, O-CU, and core components.

=====

Updated: 23 April 2020

Jira: EPICS Status is mentioned below:

- <https://jira.o-ran-sc.org/browse/ODUHIG-1> - DONE
  - As an O-DU L2 developer, I want to create F1AP module based on F1 interface APIs and develop them as per the architecture defined
- <https://jira.o-ran-sc.org/browse/ODUHIG-8> - WIP
  - As an O-DU L2 developer, I want to implement FAPI interface towards O-DU low
- <https://jira.o-ran-sc.org/browse/ODUHIG-9> - WIP
  - As an O-DU L2 developer, I want to implement cell broadcast procedure at MAC Layer
- <https://jira.o-ran-sc.org/browse/ODUHIG-10> - WIP
  - As an O-DU L2 developer, I want to implement UE attach procedure with basic scheduling
- <https://jira.o-ran-sc.org/browse/ODUHIG-11> - DONE
  - As an O-DU L2 developer, I want to implement E2 interface
- <https://jira.o-ran-sc.org/browse/ODUHIG-27> - DONE (partially)
  - As an O-DU L2 developer, I want to develop RLC layer interfaces

Risks:

- E2SM Specification baseline is still not available while the development is being done using below draft specifications.
  - ORAN WG3.E2AP v01.00
  - ORAN WG3.E2SM v01.00
- WLS, FAPI interface files baseline - FAPI interface development is dependent on this.
- UE Attach Scenario development - Completed till msg-2,

Status:

Raised 18 change requests in WG8 AAD Specification; Already presented to the WG8 Task groups to be addressed in subsequent releases of the document.

O-DU High layers (MAC, RLC, and app):

- Re-align seed code to 3GPP Release 15.3.0 - Done (completed for all the messages until msg-2)
- Align seed code to WG8 AAD specification and interfaces - MAC - RLC Interface is done, RLC-F1AP interface is partially done (completed for all the data path messages)
- Implementation of cell broadcast procedure and UE attach procedure (SA mode) for FDD mode and FR1 (Numerology = 0, Bandwidth = 20 MHz) and basic scheduler APIs for single UE and single HARQ transmission
  - Cell Broadcast procedure - WIP
  - UE attach - WIP

F1-U interface development - Done

E2 Traffic Steering implementation based on draft specification - Done (with some limitations due to specifications)

F1-C interface enhancement: Done (procedures identified for bronze released is done)

- Support for following additional F1AP messages:
  - Initial UL RRC Message Transfer
  - UL/DL RRC Message Transfer
  - UE Context Setup Request/Response
- Enhance F1AP messages:
  - F1AP Setup Request/Response
  - GNB DU Config Update

Basic FAPI messages Implementation - WIP (based on Intel FAPI 1.0.5 version)

Out of Scope:

- Use cases – Traffic Steering, Health Check related messages and call flows

- TDD functionality, NSA
- End to end testing

Limitations/Dependencies:

- FAPI Implementation – Dependency on O-DU Low to open source WLS files, interface files
- Testing: Currently only some unit testing can be done due to lack of test infrastructure i.e UE or UE simulator, O-RU, O-CU, and core components.

=====

Updated: 10 April 2020

Risks:

- E2SM Specification baseline is still not available while the development is being done using draft specifications
- WLS, FAPI interface files baseline - FAPI interface development is dependent on this.
- UE Attach Scenario development - in medium risk due to the effort needed to complete the development

Status:

Raised 16 changes in WG8 AAD Specification; working with Ganesh to get them addressed in the next release of the document.

O-DU High layers (MAC, RLC, and app):

- Re-align seed code to 3GPP Release 15.3.0 - WIP
- Align seed code to WG8 AAD specification and interfaces - MAC - RLC Interface is done, RLC-F1AP interface is WIP
- Implementation of cell broadcast procedure and UE attach procedure (SA mode) for FDD mode and FR1 (Numerology = 0, Bandwidth = 20 MHz) and basic scheduler APIs for single UE and single HARQ transmission
  - Cell Broadcast procedure - WIP
  - UE attach - Open

F1-U interface development - Done

E2 Traffic Steering implementation based on draft specification - Done (with some limitations due to specifications)

F1-C interface enhancement: Done (procedures identified for bronze released is done)

- Support for following additional F1AP messages:
  - Initial UL RRC Message Transfer
  - UL/DL RRC Message Transfer
  - UE Context Setup Request/Response
- Enhance F1AP messages:
  - F1AP Setup Request/Response
  - GNB DU Config Update

Basic FAPI messages Implementation - Open

Out of Scope:

- Use cases – Traffic Steering, Health Check related messages and call flows
- TDD functionality, NSA
- End to end testing

Limitations/Dependencies:

- FAPI Implementation – Dependency on O-DU Low to open source WLS files, interface files
- Testing: Currently only some unit testing can be done due to lack of test infrastructure i.e UE or UE simulator, O-RU, O-CU, and core components.

=====

Updated: 26 March 2020

Risks:

- E2SM Specification baseline is still not available while the development is being done using draft specifications
- WLS, FAPI interface files baseline - FAPI interface development is dependent on this
- UE Attach Scenario development - in medium risk due to the effort needed to complete the development

Status:

O-DU High layers (MAC, RLC, and app):

- Re-align seed code to 3GPP Release 15.3.0
- Align seed code to WG8 AAD specification and interfaces - WIP
- Implementation of cell broadcast procedure and UE attach procedure (SA mode) for FDD mode and FR1 (Numerology = 0, Bandwidth = 20 MHz) and basic scheduler APIs for single UE and single HARQ transmission



F1-U interface development - WIP

E2 Traffic Steering implementation based on draft specification - WIP

F1-C interface enhancement: Done

- Support for following additional F1AP messages:
  - Initial UL RRC Message Transfer
  - UL/DL RRC Message Transfer
  - UE Context Setup Request/Response
- Enhance F1AP messages:
  - F1AP Setup Request/Response
  - GNB DU Config Update

Basic FAPI messages Implementation - Open

Out of Scope:

- Use cases – Traffic Steering, Health Check related messages and call flows
- TDD functionality, NSA
- End to end testing

Limitations/Dependencies:

- FAPI Implementation – Dependency on O-DU Low to open source WLS files, interface files
- Testing: Currently only some unit testing can be done due to lack of test infrastructure i.e UE or UE simulator, O-RU, O-CU, and core components.