# 2022 meeting minutes

## **Meetings connection details**

available at TransportPCE meetings https://wiki.opendaylight.org/display/ODL/TransportPCE+meetings

## 12/15/2022 (last meeting for 2022)

#### **General information**

- Gilles released this week Transportpce artifacts for Sulfur-SR3 and updated the S-SR3 release note
- Gilles took into acount ODL feedback received on TransportPCE to ease our integration inside integreation/distribution. He added to both
  transportpce and transportpce-models projects a new artifacts module and features declaration module. There have been still small issues with
  the declaration of features in tpce, but it shall be resolved now and we shall be in time for Cl SR1. The main remaining issues could be associated
  with integration/distribution.

#### Review

- Status on transportpce-models changes merged this week:
  - "Clean feature dependencies" (upstream dependencies), "Add artifact module", Add features-transport-pce-models" (feature BOM) have been merged on stable/chlorine branch and backported on the master branch (not merged yet)
- Status on transportpce changes merged this week:
  - o "Handle missing spanloss in PCE without crashing" pushed by Jonas allows better handling of OMS attributes
  - "Fix Netconf version" solves an issue bumping to CI-SR1
  - "Bump of upstream dependencies to S SR3"
  - "Refactor NBI notification Utils" is optimizing code using streams and allows reducing the cyclomatic complexity
  - o "Refactor functional tests lighty support": another way to manage the restconf url which has not exactly the same prefix with lighty.
- · transportpce changes under review:
  - Relation chain from Gilles related to the feature cleaning ("Fix Feature issues", "Add artifacts to transport-pce", "Add features -transport-pce", "Clean for Mayen files") is comparable to what has been done in tpce/models. This Changes are running and could be merged.
  - o "Increase project version" prepares S-SR4 iteration (should be released in case of future security issues)
  - o "Handle missing LLDP nbr-list" could be merged
  - "Autonomous impairment aware path computation" proposed by Olivier. It complements the work initiated with catalog primitives. It
    allows toce to do impairment aware path computation in accordance with the OpenROADM specifications
    - At least the PCE wiki page or/and the documentation will need to be updated with this important functional increment.
- integration/distribution change under review:
  - "Add transportpce projects to distribution": Gilles prepares a new change to replace the first attempt of tpce and tpce-models integration.
     It sticks much better to the documentation. Remains the tpce versions to adjust (with or without snapshot termination?)

#### A.O.B.

We received some feedback from Andrea Fumagalli which is in line with the feedback that provided Tianliang. Tianliang will write a JIRA ticket
associated with the corrections to be applied.

## 12/08/2022

#### **General information**

- · S-SR3 has been approved by TSC and is being released. Gilles staged our stable/sulfur branch last Friday, so we are fine for this release.
- CI-SR1 should be in a short time submitted for approval by TSC. Initially, Tpce was supposed to be integrated has a managed project for CI SR1.
   But some issues were identified with its integration. So its integration is being questioned. Gilles pushed some changes to solve identified issued on transportpce-models and transportpce sides. We could be ready for integration, but Gilles is not sure that it will accepted as it is. Gilles asked whether we could delay the integration of tpce as a managed project. There was no objection.

## Review

- Status on transportpce changes merged this week:
  - Relation chain about the migration to S-SR3 has been merged by Robert Varga
  - Relation chain concerning the migration to CI-SR1 has also been merged.
  - o "Bump upstream dependencies" allows aligning on the latest version of our upstream dependencies and has been pushed by Robert.
  - "Fix Netconf version" is also related to CI-SR1
  - T-API notification Junit tests: Gilles has reworked this change pushed by Javier a long while ago to allow the change to pass the gate.
     Gilles mocked some classes that did not need to be instantiated.

- · Status on transportpce-models changes merged this week:
  - Different changes have been merged. It seems that Robert also did some work on this project as it was a managed project.
- · transportpce-models changes under review:
  - "Clean features dependencies": Solves an out of memory issue rolling out the distribution. The issue was mainly due to a wrong declaration of upstream dependencies in our features. So Gilles has been cleaning the way upstream dependencies are declared
  - o "Add artifact modules": declaration of features and bundle eases version management use in transportPCE
- transportpce changes under review:
  - "Fix feature issues": does the same work for tpce integration.
  - "Handle missing LLDP nbr-list" has been pushed by Jonas: For Roadm-to-Roadm link discovery we could have to handle empty list which causes NPE. Gilles proposed as alternative solution to dedicate one specific method to check the different lists.
  - o "Handle missing spanloss in PCE without crashing." Is another change pushed by Jonas which needs to be reviewed
  - o "Fix persistence when Karaf is started", first change pushed last week by Jonas also needs to be reviewed.

### A.O.B.

- HoneyNode sends device change notifications, but the mechanism of subscription to notification is not handled. RESTCONF interface of Honeynode may be used to modify the node configuration. An example of implementation is presented in the test 13 of device change notifications functional test.
- Tianlang submitted a paper which was accepted for OFC, describing ONE Engine and interactions with HoneyNode and TransportPCE.
- Javier has also been proposing a paper "Open Disaggregated Optical Network Control with Network Management as Code" which was accepted
  for OFC. Nokia introduces an Automation Engine that analyzes topology changes to trigger the Continuous Delivery procedure of SDN
  applications on a micro-service architecture.

## 12/01/2022

#### **General information**

The following karaf bug TRNSPRTPCE-701 - karaf client fails in karaf-4.3.8 and 4.4.2 VERIFIED affects S-SR3 and CI-SR1. A workaround has been proposed migrating functional tests to lighty build.

The corresponding relation chain has been merged on master and stable/sulfur branches, so that TransportPCE is now ready to release S-SR3. Gilles will stage S-SR3.

For what concerns CI, the dedicated relation chain to CI-SR1 migration is also now running on the gate. Guillaume merges it on meeting, so TransportPCE is also ready to release CI-SR1. But since we should be a managed project in CI-SR1, remains to see how the integration may be finalized in integration/distribution and may be also autorelease.

master branch is now aligned on CI-SR1, with functional tests running wiht lighty.io runtime

#### Review

- Status on transportpce changes merged this week:
  - o the different relation chains related to S-SR3 and CI-SR1 migration
  - o a lighty refactoring of OpenRoadmInterfaces by Guillaume
- transportpce changes under review:
  - "First persistence when Karaf is restarted" => new change pushed by Jonas to solve Bug TRNSPRTPCE-706. We need to modify
    returned code in associated functional test prior to merge this change. To be tested locally by everyone.
  - "Hack To update degree port on portMapping" has been reviewed by Guillaume who made some comments => need to be tested again
    on real equipment by UTD, to apply necessary modifications on it before being merged.

## A.O.B.

- Christophe upgraded the simulator to CI. Apart of the notification mechanism which still does not work, which was already identified, everything is
  working fine.
- Feedback from TianLiang on SC22 demos: Link restoration does not work if there are 2 hops on a path. The restoration is not triggered at all.
   This is the case not only with real equipment but also with HoneyNode. Need to be investigated...
   SuperComputing: Every demos planned by UTD were successfully ran in SuperComputing. A path restoration on real devices takes about 9 minutes (tier-down, new path setting). Mainly due to the OLM timers specifed by OpenROADM.

## 11/24/2022

## No Meeting (Thanksgiving in U.S.)

## 11/17/2022

#### **General information**

- SC2022 has started. The restoration demo is running.
- LFN Developer and Testing Forum is also currently hosted in Seatle. Robert will make some ODL presentation of interest for us during the event. But unfortunatelly, we can not attend virtually the event for free.
- Stable P branch: Gilles bumped last week the branch to P-SR4 and solved the Pylint issue. ("Bump Upstream dependencies to P-SR4")
- Changes concerning S-SR3 and CI-SR1 are not merged yet due to the karaf regression: TRNSPRTPCE-701 VERIFIED



### **Review**

- Status on transportpce changes merged this week:
  - on transportpce project, only change "Bump Upstream dependencies to P-SR4" on stable/phosphorus branch
- transportpce changes under review:
  - "Update pre-commit and tox configuration": Allows Commit message to be evaluated at different stages. Merged during the meeting. Could be backported now on other branches.
  - o relation chain on Regen ("Update portMapping data for Regen xpdr-type"...): not tested with latest Honeynode version
  - "Hack to update degree port on portMapping" is ready to be merged.
- integration/distribution:
  - Following an exchange with Sangwook on slack, Gilles pushed the following change "Fix transportpce.version parameter use" to fix a mistake with transportpce version. However we also need to release our Artifact for CI, which can not be done until Jira ticket TRNSPRTPCE-701 (regarding Karaf issue) has been solved

#### A.O.B.

• The rest of the meeting is dedicated to the Sprint-29 demo. See directly te Jira.

## 11/10/2022

#### General information

Status on the different release trains:

- · S-SR3 has been submitted to TSC for approval.
- CI-SR1 has also been submitted, but it will be a bit delayed because it must include TransportPCE and we are not ready. The change "Add transportpce projects in Chlorine distribution" has been submitted in the distribution/integration project so that TransportPCE can be integrated as a managed project. Gilles took into acount at least one comment. The rest of the review depends now on committers.
- P-SR4 is also in preparation. Stable branch for SR4 is in preparation.
- Gilles discovered an issue with the newest versions of karaf used for CI-SR1 and S-SR3: all T-API functional tests are failing because of a regression. A Jira Ticket has been raised on transportPCE. We are not able to install the Karaf client feature. Robert Varga is working on the issue.

## **Review**

- Status on transportpce changes merged this week:
  - on transportpce project: "Update of user and developer guide"
  - on transportpce-models project: "Bump upstream dependencies to CI SR1", and "Upgrade project version for CI SR1"
- · transportpce changes under review:
  - o Gilles pushed a serie of changes to maintain stable/branches (P-SR4, S-SR3, CI-SR1) which includes for each of them the upgrade of the project version and the bump of upstream dependencies to their adequate newest releases.
  - Relation chain of Regen feature: HoneyNode does not include the regen functionality. Christophe updated the release of HoneyNode to include regen feature so that Bala shall be able to use it for testing this chain (Using HoneyNode-pluggin-aggregator7.1.8). Bala also see that monitoring mode (on ODUCn interfaces) needs to be updated to support Regen (not-terminated, /monitoring)
  - "Hack to update degree port on portMapping" change has been proposed by Gilles to solve the restauration issue for the SC-2022 demo. The PortMapping now updates the port operational-state depending on both the operational-states of the port and the supported OTS interface for degrees. This looks fine to Bala, but he will review it tomorrow before we merge this change.
  - Relation chain associated with Kafka: we need to take time to review Nathan changes, and we understood that there is no specific urgency from UTD side to have these changes reviewed

#### A.O.B.

The Meeting of next week will be extended of an half to 1 hour to organize the demo of the Sprint.

## 11/03/2022

## **General information**

· Gilles pushed a serie of changes to update the project version to the next release development, for CL SR1, S-SR3 and P-SR4.

#### Review

- No change merged this week.
- transportpce changes under review:

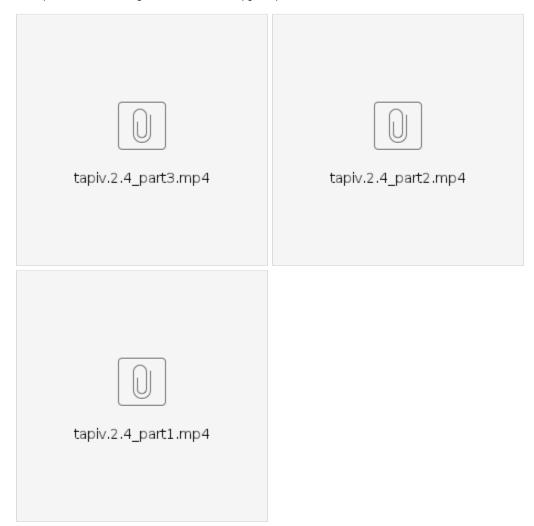
С

- Gilles proposed change 102917: Hack to update degree port on portmapping | https://git.opendaylight.org/gerrit/c/transportpce/+/102917 to solve the Bug raised by Tianliang. The first patch set still leads to some exceptions, but Gilles pushed a new patch set to remove these exceptions. TianLiang will give a try to the second patch to see if it works. UTD has to pack all equipment next Tuesday which gives limited time.
- Lighty simulators: Christophe made the migration to S and his working on the migration to Cl. He experiences some issues with the PM-handling yang models when migrating to Sulfur.

## 10/28/2022

## Dedicated meeting to TAPI v2.4 upgrade

Javier provides the recordings from the TAPI v2.4 upgrade presentation



## 10/27/2022

## **General information**

CI GA status: CI GA distribution seems not been released yet. All upstream dependencies have been released, and it was possible for us to
release both transportpce-models and transportpce projects. According to the release schedule (<a href="https://docs.opendaylight.org/en/latest/release-process/release-schedule.html">https://docs.opendaylight.org/en/latest/release-process/release-schedule.html</a>), we should need to release CI-SR1 and S-SR3, but nothing seems ready yet.

#### Review

- Status on transportpce changes merged this week:
  - "Change log level in FrequenciesServiceImpl" is correcting the Level of a LOG from Error to Warn to avoid misinterpretations, especially during the Orange Research Exhibition demo
  - "Update Java version check in installMavenCentOS": new change from Nathan to solve a bad java revision check on the CI. Backported by Guillaume on stable/chlorine branch
- · transportpce changes under review:
  - nothing new on the 3 changes proposed by Bala on Regen functionality. Bala is currently working on a new one to add regen functional
    tests. All the relation chain could be merged at the same time when every changes will be ready
  - o Guillaume and Nathan had a lot of exchanges this week on different topics: CI, Java version check, Kafka broker.
  - Nathan reworked his change 99746 related to send log messages outside Transportpce, in a kafka broker. Gilles raises the fact that this implementation is also outside the use of nbinotification module that had been developed for this kind of usage. Gilles would prefer we re-use as far as possible the existing base and developments provided on NBI notifications. Gilles thinks it would be preferable to use MDSAL internal notifications for communication between internal modules and towards nbiNotification module. Nathan explains that the core issue is we try to make a single Kafka producer. But there is some instability which leads to some failure of half of the tox jobs (weird failures). Nathan is about to abandon the Kafka approach. The solution he has in mind are:
    - 1. Solution could be to rely on nbiNotification, but this imply to make a lot of changes in a lot of classes that use notifications.
    - 2. Use the ODL karaf.Log and KarafAppender pluggin but it may imply to override ODL parent settings
    - 3. Completely abandon the Kafka approach and move to an approach based on promtail...

#### A.O.B.

Bala experiences some issues testing equipment with last version of TransportPCE, with all what concerns capabilities announcement. The
device if-supported-capabilities seems not being correctly recognized by MappingUtil class. Bala will investigage more deeply.

### 10/13/2022

### **General information**

- CI GA status: Gilles attended last week TSC meeting. It was decided that we will wait for a complete integration as MSI (Managed Snapshot Integrated Project) projects (splitting transportPCE and Models) until CI SR1. Since last Thursday, nothing happened and CI SR0 is still not released. The release has not been approved yet.
- OpenLab is officially created. This was announced today during the OpenROADM meeting. It will provide a common secure space for conducting
  interoperability validation of OpenROADM compliant equipment. To perform this it will work on automation of some test based on TOX and may
  use transportPCE as a controller being part of the test chain

## **Code Review**

- Status on transportpce changes merged this week:
  - o "Increase project version to 7.0.0 Snapshot" will allow having the master branch now aligned with Argon.
  - "Update user and developer guide for Chlorine" is notably correcting the url used on REST API to be compliant with RFC 8040.
  - "Update link-status of service-path-list" is improving the behavior of service restoration and has been pushed for the SDLRI demo.
- transportpce changes under review:
  - o "Change log level in FrequenciesServiceImpl" is correcting the Level of a LOG from Error to Warn to avoid misinterpretations.
  - "Support create/delete interfaces for regen": source and destination tp are Network tps for on Regenerators. This is used to trigger ODUCn interfaces creation on relevant ports.

#### A.O.B.

- Lighty simulators can send notification, but Christophe still experiences some issues with the serialization. Thus, Tpce is not able to process this notification. DeviceChangeNotifications yang model includes an instance-id which is not correctly serialized.
- Notifications handling for SC22 demo: we need some clarification on the streams announced in the capabilities provided by the devices. Bala
  mentions that the equipment may only announce the support of OpenROADM streams, even if they support Netconf notifications which is a
  MUST. Tpce also does not process at that time DeviceChangeNotifications on interfaces. Gilles will try to find a workaround and provide a patch
  that allows subscribing to the Netconf stream even if its support is not announced by the device, and that also allow handling notifications coming
  from state-changes on interfaces.
- Next week meeting is cancelled since both Gilles and Christophe will be at the Orange SDLRI playing the demo of optical restoration.

## 10/06/2022

## **General information**

- Sulfur-SR2: Guillaume released tpce last week and took care of the release note this week.
- Chlorine status:

- yesterday the CI release has been proposed for TSC approval. 2 members already voted no since transportpce/models and transportpce
  were not included in the distribution as a managed projects.
- Gilles managed several tasks to prepare the integration
  - he pushed yesterday a change on transportpce/models to have an odl-tapi-models feature as it is already the case for odl-openroadm-models. It seems important for the ODL integration point of view because this is mainly features which need to be declared. He also pulled the stable/clorine branch and pushed a change on releng/builder project (still under review) to build models on clorine branch.
  - On transportpce side, Gilles merged all the relation chain on the chlorine migration step 2 (building the project using openroadm and tapi models as an upstream dependency) and pulled the stable/chlorine.
  - on integration/distribution project, Gilles initialized a change (and Guillaume amended it) to integrate these two projects in the
    distribution as managed project, but the documentation doesn't fit exactly to our projects (we don't have artifacts modules). We
    need support from the community on this last step. Gilles will attend the forthcoming TSC meeting to discuss this point.

### **Code Review**

- Status on transportpce changes merged this week:
  - O Most of the merged changes of this week are associated with the second step of the migration to Cl. Let's notice two new changes: "Reintroduce karaf restart in tapi functional tests" and "Remove openroadm and tapi models from project". With the export of tapimodels, when we install odl-transportpce-tapi featue, restart of other transportpce bundles fails. So, currently the workaround consist in logging out and logging in again in karaf to have all bundle starting correctly. This point should be added in the clorine developer guide.
- · transportpce changes under review:
  - "PortMapping to support regen capabilities" and "Update port-mapping to support regen capabilities": one comment from Guillaume was
    not addressed yet because there is still an additional change in the relation chain that addresses it but has not been pushed
  - "Update link status of service-path list": it allows updating, on the service-path, the status of link resources terminated on a tp when its status changes, correcting internal notification mechanism.

## 09/29/2022

#### **General information**

- Sulfur-SR2: Guillaume successfully released tpce in S-SR2 release. S-SR2 ODL distribution has however still not been officially released yet. The
  release note has not been provided yet. Guillaume will take care of it.
- Chlorine: All kernel projects are more or less ready. On our side, the first step of the migration is done. The second step is well advanced (use OR and T-API models as an upstream dependency)
- The bug (critical) raised last week by Bala is closed: CI imposes to use only RFC8040 compliant urls, which implies to update Postman collections.
- The DDF will be collocated with the Seattle ONE events (November).
- API doc is not working on the Chlorine distribution. A Jira Ticket shall be raised first in tpce, and if we are confident that it is not on our side, then in the Netconf project. Bala will take care of it.

- Status on the new transportpce/models repo dedicated to compile openroadm and tapi models
  - committers rights of tpce are now also effective on this new repo. So transportpce committers are also committers on transportpce /models project.
  - The CI has been configured by Cedric, and merged by Guillaume on the releng/builder project
  - o change "Add OpenROADM and TAPI models" (merged) adds models to the project.
  - Currently, a new relation chain to clean repo files is under review: "Add some linters via tox and pre-commit", "Enable linting in TAPI and OR models", "Fix Tabs and trailing blanks in OR models", "Fix MSDOS file terminators in TAPI models".
    - Guillaume proposes to rebase Gilles's change on top of this relation chain to clean every things.
- Status on transportpce changes merged this week:
  - o "Bump MRI upstreams" pushed by Robert is updating dependency for Chlorine.
  - o "Add allure-pytest tox profile" provided by Tianlang has been merged
- transportpce changes under review:
  - o Gilles's relation chain related to the chlorine migration step 2, with compiled models imported by maven dependencies
    - "Remove useless yang models from-test common", is removing an old transportpce model that is not used anymore for a while
    - "Update transportpce-common-types model" is adding pm-granularity to tpce models to solve some issues we have with this parameter when we use the one coming from OR models with models outside transportpce project (linkage issue)
    - "Fix bad imports" cleans up some imports made in tpce that were not the correct ones.
    - "Remove openroadm and tapi models building" removes the compilation of T-API and OR models, uploading a new bundle corresponding to the newly created transportpce/models project. There is still an issue with T-API functional tests because bundles do not restart automatically when we install odl-transportpce-tapi feature without restarting Karaf. Gilles is updating tapi functional tests with a workaround waiting to understand what happen in karaf.
  - Bala's releation chain to integrate the support of regen in transportpce:
    - "Port-Mapping to support regen capabilities" adds a regen profiles container which includes the supported regen profiles when the Xpdr-type is a regen.
    - "Update portMapping data for Regen xpdr-type" provides code to complement portMapping with the information required to handle Regens.

- Christophe is still working on lighty simulators, providing some code that allows reaching the same functional level as what we currenlty
  have with Honeynode. He still has an issue to solve with notifications sent by the lighty simulator.
- Olivier pushed an OpenConfig version of the SwitchPonder configuration on the LFN/HoneyNode Gitlab that will allow to test future openconfig feature developements inside transportpce

#### A.O.B.

A question was raised by Bala: shall we make 1.2.1 support deprecated? It seems that there are no more proposed/deployed products based on
openroadm models 1.2.1. We will need to think about it, since this leads to additional complexity when handling objects in the service and
network models that do have different format in R 1.2.1 and the next releases.

### 09/22/2022

#### General information

- Sulfur-SR2 is underway. Guillaume staged the release.
- ODL CI release is a bit late. Transportpce master branch is already on CI, but we still have to migrate the models to the new repo on which we
  don't have any rights. Also there is no CI on this repo. The CI needs to be prepared. The export of the models may be delayed to the next
  distribution of ODL if we are not ready on time.
- About the issue observed in the labs with code aligned on CI (no more mounting of any equipment), Guillaume suggested that Bala raises a JIRA
  Ticket in TransportPCE appending all the needed traces and log (all Karaf Logs), so that investigations can be initiated relying on this ticket. App
  dev and Kernel project lists could be used to raise the issue based on the JIRA Ticket.

#### **Code Review**

- Changes merged this week:
  - Re-open Drop service name from ODU Connection name
  - Gilles tested the relation chain provided by Thierry to improve the SDLR demonstration (path reroute), which works well, he also reviewed the code, and the changes have been merged.
  - Changes provided by Guillaume associated with the migration to Chlorine.
- Changes under review:
  - "Add allure Pytest tox profiles for local use" has been reviewed and reworked by Guillaume who expects Tianlang to try the modifications on his local environment to provide feedback.

#### A.O.B.

Bala presented what he has done for handling regenerator in the Renderer going through a presentation.

## 09/15/2022

#### **Code Review**

- · Changes merged this week:
  - Except what have been merged on Sulfur branch (Rest of the relation chain concerning migration of funcional tests to RFC 8040) most
    of the changes are related to the migration to Chlorine on which master branch is aligned:
    - "Adapt transportPCE code to Chlorine" is the change with the most important code adaptations to chlorine.
  - Few additional small changes proposed to improve the things:
    - "Adapt functional test to Clorine" concerns mainly OLM functional tests (migrated before chlorine)
    - "Improve feature install in functional tests": considering latest evolutions, there is no more need to restart the controller after features have been installed.
    - Guillaume proposed some optimization through "Refactor code after Chlorine Bump" which brings some optimization based on else if, and "Refactor Renderer OpenRoadmInterfaces step 1". For this last change, addressing latest comments, as Ethernet CSMACD in some yang OR identities, we will need to push a correction.
- · Changes under review:
  - o few changes to improve code after the migration to chlorine
    - "Clean poms after Chlorine bump": provides some updates in the dependency (some RFC reference have evolved)
    - "Fix raw types build warning": notification need types. If they are not specified, some warning are generated, otherwise "generic needs to be specified"
    - "Fix unchecked build warnings" also allows to avoid generating unnecessary warnings
  - ==> We can now consider that step 1 of migration towards Chlorine has been accomplished
  - Relation Chain from Thierry associated with service restoration. Olivier reviewed them and is OK with the different changes. Gilles will
    test the code before merging these changes.
  - "Drop service name from ODU connection name" is in merge conflict. This is probably due to the migration towards Chlorine. Bala will rebase it to check.

## A.O.B.

 The "developer guide" need to be updated because Json samples used for the service create are not integrating the evolutions of models to 10.1 (the documentation sill uses the 5.1 models). A JIRA user story will be created for next sprint.

- One bug reported by Jonas in last August: https://jira.opendaylight.org/browse/TRNSPRTPCE-681. Gilles replied today...
- Last part of the meeting was dedicated to Sprint29 planning:
  - Bala mentioned that we should consider, not for this sprint but the sprint after, refactoring the PCE to better consider equipment capabilities and select the most appropriate operational-modes
  - Olivier will split the story proposed by Javier "T-API Renderer" because it includes also some functionalities to retrieve a topology through a SBI
  - O Gilles will add a story dedicated to the move of the models to a dedicated project.
  - O Sprint starts on the 19/9 and ends on the 13/10.

### 09/08/2022

#### **General information**

• Sulfur-SR2: Guillaume tryed yesterday to stage the release, but we need to check before if everything has been backported. Managed project are still not completely ready.

#### **Code Review**

- · Changes merged this week:
  - Few changes related to the gate
  - Migration of functional tests to RFC8040: The migration to RFC 8040 is fully accomplished with the latest "Switch functional tests to RFC8040" change that has been merged.
  - o Alignment of master branch to Sulfur branch (S-SR2)
  - 3 changes on the catalog (Olivier and Guillaume)
- · Changes under review:
  - O Relation chain regarding the rerouting of the services still needs to be reviewed.
  - "Adding allure-pytest plugin": the plugin allows to save Pytest reports, with some elements on how the tests have been performing, as well as the time needed to perform them. This can be used to improve debugging which is now very verbose. Guillaume highlights that this change will need to be reworked if we need to get the report in the CI since they cannot be accessed as they are today. Thus it brings benefit when used locally.
  - Chlorine migration: this is more or less finished. "Bump some dependencies to Chlorine", "Adapt transportPCE to Chlorine" & "Adapt functional tests to Chlorine" allow to get a +1 on Chlorine branch which demonstrates that we are in good shape for Chlorine and that everything needed was done for the migration. Guillaume added a final change "Improve feature install in functional tests" on top of those.

## 09/01/2022

## **General information**

- Sulfur-SR2:
  - According to the initial schedule plan, should have been released on the 26<sup>th</sup> of august. We are more or less ready on transportPCE side. Dependencies have been bumped. Since Pylint dependencies and runners of the gate have been updated, the code also needed to be updated (see the 2 changes "Release Python version fixed for PCE functional tests").
- Chlorine should be released on the 19<sup>th</sup> of September. On our side the migration is well advanced.
- Gilles splited the Video of the Avortex demo in 3 parts and pushed it to Confluence.

- Changes merged this week:
  - "Fix new Pylint issues in functional tests", "Release Python version fixed for PCE functional tests" are needed for the migration to Sulfur-SR2.
  - Part of the new relation chain pushed by Gilles that completes and finishes the migration of functional tests to RFC8040: "Migrate end2end functional tests to RFC8040", "Refactor test\_utils\_rfc8040.py portmapping methods", "Migrate PCE functional tests to RFC8040", "Fix few functests assert RFC8040 uncompatibilities", "Migrate hybrid functional tests to RFC8040"
- · Changes under review:
  - "Shift tox nbinotifications to with\_docker profile", "Migrate with\_docker func test to RFC8040", "Migrate TAPI functional tests to RFC 8040": The rest of the relation chain on the migration of all remaining functional tests to RFC8040. Gilles finished a priori to fix issues on TAPI functional tests
  - "Adapt some dependencies to chlorine" and "Adapt transportPCE code to Chlorine": the rest of the initial relation chain, now dedicated to Chlorine migration. First review already done by Guillaume.
  - "Fix checkbashisms auto install in tox for CentÓS8" is proposed by Guillaume to solve issues on the gate. Still under working
  - The relation chain associated with the primitives to retrieve parameters from the catalog (1Initial change from Olivier + 2 refactoring changes provided by Guillaume) is ready to merge since all comments have been addressed.
  - "Reopen Drop service name from ODU connection name": a patch had been provided in May to adjust (and reduce) the connection name. But the service-name was removed which sometime can leads to issues. This patch solves the issue: we don't drop the service name from the Network and client interfaces, but only from the ODU connection name.
  - "Update transportPce-pce yang": part of a new relation chain from Thierry on service reroute. Thierry proposed a new RPC "path-computation-reroute-request" needed to handle intermediate phases in reroute process. "Implement path-computation-reroute-request" provides the implementation of the RPC.

### 08/25/2022

### **General information**

- Sulfur-SR2: Netconf upstream dependency still missing to be able to bump to S-SR2. Otherwise, all changes already merged on master are backported on stable/sulfur
- Chlorine migration:
  - The new dedicated transportpce/models repo is at least created
  - o Gilles started the project migration to chlorine without exporting models first. Once it will be ok, models will be moved outside the project.

### **Code Review**

- · No change merged this last week
- Changes under review:
  - 1 change from Bala: "Re-open:Drop service-name from ODU connection name" to have the service-name in the interface name, necessary when a high order termination point supports several low order interfaces
  - Relation chain from Thierry on service reroute: already discussed last week. Waiting feedback from Olivier.
  - o new relation chain of 9 changes proposed by Gilles on the Chlorine migration + migration of all remaining functional tests to RFC8040
    - "Bump upstream dependencies to chlorine": just the bump
    - "Adapt some dependencies to Chlorine": to better distinguish dependency impacts on Chlorine
    - "Adapt TransportPCE code to Chlorine": to see code modifications brought by Chlorine
    - "Migrate end2end functional tests to RFC8040": pursue the RFC8040 migration started by Guillaume for all end2end tests
    - "Refactor functional tests": rename some functions of tests-utils to be more explicit
    - "Migrate pce functional tests to RFC8040": choice to only use json file as portmapping and topology input files to perform tests, to ease the migration. To that end, Gilles has converted xml input files to json input files
    - "Migrate hybrid functional tests to RFC8040", "Migrate TAPI functional tests to RFC8040", "Migrate nbinotifications funct tests to RFC8040": continue the rest of functional tests, but Gilles didn't have time to tests these last tests, so it remains probably some bugs...
    - = > so, the chlorine migratio is well advanced and at first sight, no strong issue detected...

### A.O.B.

· Gilles tried to load on confluence the AVORTEx demo video, but file is too big. Need to cut it...

## 08/18/2022

## **General information**

- Chlorine kenel projects in a good share (CSIT migration to jdk167 finished)
- S-SR2 planning available at Sulfur SR2 Release Checklist branch unlock 08/22 and deadline for SM 08/26
- transportpce/models repo created https://git.opendaylight.org/gerrit/admin/repos/q/filter:transportpce https://git.opendaylight.org/gerrit/admin/repos/transportpce/models

## **Code Review**

- No change merged this last week:
- Changes under review:
  - O Waiting for feedback for the changes presented last week
  - WIP ODU Drop service name bug correction pushed by Bala this week

## A.O.B.

- question about tox to perform a few tests selectively: answer can be found in docs at https://docs.opendaylight.org/projects/transportpce/en/latest/tox-guide.html
- Last meeting video cannot be seen outside Orange (teams configuration problem?)
   => waiting for Gilles Thouenon return: apparently he is the only one who can retrieve the original file on its personal folder and share it outside Orange.

## 08/11/2022

### **General information**

- Gilles requested a new git repo for the project dedicated to the models.
   Curently still waiting for TSC validation of this project structure evolution.
- S-SR2 has been delayed. Code freeze planned next week.

- · No change merged this last week:
- Changes under review:
  - "Primitives to retrieve parameters from Catalog": Olivier proposed this change to provide generic methods to retrieve physical
    parameters associated with the performance of the devices, described in the catalog. He first focused on the primitive associated with
    PCE operation (that shall be called by the PostAlgoPathValidator). This change includes the primitive (CatalogUtils), Unitary tests, and
    the json file used to populate the Catalog
  - Refactoring of the previous change proposed by Guillaume. Double introduces precision problems in the formulation. There is also a 10 factor in the spacing correction of the formula not present in ADD case. Guillaume assumed it was forgotten but this requires confirmation from catalogs formulas further investigation.
  - Patch computation reroute request proposed by Thierry. Discussion about various aspects including "exclude parameters" with Bala and Shweta.

#### A.O.B.

· Bala reopened a JIRA ticket about naming convention and DUs because some unexpected side-effects were noticed.

## 08/04/2022

### **General information**

- Gilles requested a new git repo for the project dedicated to the models. All OpenROADM and T-API models will be moved to this repo so that we
  can build them separately. Curently waiting for TSC validation of this project structure evolution. We hope this new project structure will be
  effective for Chlorine Release.
- S-SR2 has been delayed. Deadline needs to be confirmed

#### **Code Review**

- · Changes merged this last week:
  - o "Migrate OTN E2E functional tests to RFC 8040 step [1 to 6]"
  - Gilles has backported the latest changes developed on master to Sulfur so that this branch is up to date for forthcoming S-SR2 integration

#### Changes under review:

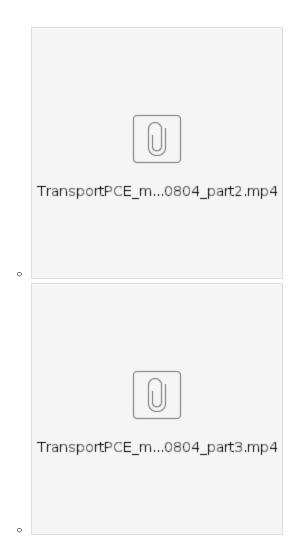
0

- "Primitives to retrieve parameters from Catalog": Olivier proposed this change to provide generic methods to retrieve physical
  parameters associated with the performance of the devices, described in the catalog. He first focused on the primitive associated with
  PCE operation (that shall be called by the PostAlgoPathValidator). This change includes the primitive (CatalogUtils), Unitary tests, and
  the json file used to populate the Catalog
- o "Refactor common CatalogUtils" has been pushed by Guillaume to propose some optimizations on the code provided for the primitives.

#### A.O.B.

AT&T presented the AVORTEx project dedicated to the validation of OpenROADM equipment. AT&T uses TransportPCE in the design validation
phase with pre GA equipment. Automated validation is based on RobotFramework, TransportPCE and Honeynode simulators used in a first step
to test testing script. AT&T is planning to opensource the code dedicated to this. Up to the transportPCE team to provide an answer on their
interest to integrate these tests on their git repo.





## 07/28/2022

## **General information**

- Today is the official deadline for Releasing Sulfur SR2, but at first sight it will be postmoned since nothing seems ready from ODL side. However, on TransportPCE side stable/sulfur branch is currently up to date with backports.
- Gilles requested a new git Repo to start exporting the openroadm and tapi models outside the project, in a dedicated new ODL project. He still needs to run the new git repo creation procedure and then to move models on this new repo.
- · We still need the Netconf project dependency for Chlorine to be able to start the TransportPCE project migration to Chlorine.

## **Code Review**

- 3 changes have been merged durint the week: "FixTypo developer guide", "Switch tests from nose to Pytest", and "Refactor networkmodel OpenRoadmTopology part 4"
- Discussion about changes under review:
  - º "Migrate OTN E2E functional tests to RFC 8040 step [1 to 6]": Guillaume propose these different changes to address the migration towards RFC 8040. These changes are ready to be merged. To Migrate all the tests to RFC8040, we still need to work on E2E tests (to have all 1.2.1); T-API, Hybrid test on PCE including GNPy and Notifications (to have 2.2.1); 7.1 being almost done with still a bug to solve.
  - ° "Bump Lighty.io to Sulfur SR1" was merged during the meeting.

#### A.O.B.

- Javier tested Swagger interface, and it seems there is an issue with GNPy model. Gilles also observed this phenomena. Javier will open a ticket
  and provide associated additional information to help to debug this issue.
- Olivier went through his presentation Service-create-handling, and as usual, not all the slides could be covered during the meeting, meaning this will be continued in one of the next meeting...
- Let's remind that **next week, a 1/2 hour time slot will be dedicated to a short demo by Bala** to show ATT progress on their activity on the creating automation framework for validating OpenROADM equipment with TransportPCE.

## 07/21/2022

#### **General information**

- Gilles has been working on the preparation of Sulfur-SR2 release, backporting alreday merged changes.
- Olivier made a proposal to reorganize the Sprint planning and demo and sent a mail to explain the new process we could put in place. Any
  feedback and suggestion to improve the process is the welcome.

### **Code Review**

- · changes merged during the week:
  - "Fix Pce calculation bug when validating nodes", "Upgrade Honeynode sims version", "Refactor networkmodel OpenROADM topology part 1,2,3..." and "upgrade project version to S-SR2" are part of the Sulfur-SR2.
  - Most of the T-API changes pushed by Javier have been merged. Gilles made a comment on the fact that we will need to refactor nbinotification after these changes have been merged.
  - "Add tests for autonomous service rerouting" provides the functional test for service rerouting and basically corresponds to the sequence
    of actions we plan to perform during the demo for the Orange SDLRI. Bala proposes that we organize a demo of what has been done in
    this scope. UTD could also be invited to this demo.
  - "Replaces tpce topology yang models by existing ord models" allows removing yang model that were in built in transportPCE and that
    are no more needed since equivalent models are provided now in OpenROADM.
- Discussion about changes under review:
  - o "Migrate OTN E2E functional tests to RFC 8040 step1, 2,..." are completing the migration towards RFC 8040, needed for Chlorine.
  - o "Switch tests from nose to Pytest" addresses planned deprecation of nose
  - "T-API notifications Junit test" needs to be reworked: with T-API, notification topics are created dynamically which makes it complicated
    to mock. We will need to find a workaround to make the tests. Javier is also waiting for feedback on "Fix getTopologyDetails in tapi func
    tests" to solve identified issues.

#### A.O.B.

Bala proposes to make a demo on automated test validation for OpenROADM devices that AT&T is currently developing. Depending on the
availability of the Orange team, this could be done either at the end of July or beginning of August.

### 07/14/2022

#### No Meeting (Bank Holliday in France)

## 07/07/2022

## **General information**

- Gerrit version will be upgraded the 10<sup>th</sup> (or 11<sup>th</sup>) of July. Jenkins, Gerrit and few other services might be unavailable for few hours during this upgrade.
- S-SR1 was non officially released by Guillaume last Friday during the TSC meeting. But it needs to pass CSIT before it is officially released.
- Guillaume presented our proposal to export TransportPCE models (OpenROADM/T-API) to another project. The TSC seems OK in the principle, but Gilles needs to send a confirmation e-mails.
- Chlorine:
  - This distribution will require at least a JDK 17. Gilles recommend we upgrade our JDK. Christophe mentions that JDK 11 may still be required for Honeynode. However, JDK-17 could also be used provided that the features introduced after JDK-11 are not used.
  - Netconf project for Chlorine shall be migrated at the end of July. This is the last upstream dependency we need to migrate TransportPCE project. The migration will then need to be performed during August.

- All changes merged during the week had already been reviewed during last meeting, except "Refactor networkmodel OpenRoadm topology part 1
  to 3", which are dedicated to solve issues highlighted by SONAR. "Upgrade Honeynode sim version" provides latest version of Honeynode that
  includes latest changes associated with the handling of PMs by HoneyNode. This version is required to perform the last functional test suite
  proposed by Thierry.
- Discussion about changes under review:
  - T-api Relation chain has been rebased by Javier. The 4 first changes at the bottom of the stack, up to "T-API notification functional test" could be merged if we don't solve open Gilles's comment on change 97438.
  - In "Migrate OTN E2E functional tests to RFC 8040 step 1/2", Guillaume initiated the work to migrate to RFC 8040 the E2E tests associated with the OTN services
  - ° "Switch tests from nose to pytest" will help us handling nose deprecation with Python next versions
  - "Refactor networkmodel OpenRoadm topology part 4" is currently under analysis. Discussion on Gilles's comment, since Guillaume doesn't want we use Table structure available from odlparent dependency.
  - o "Replace tpce-topology yang by existing ordmodels" has been updated and Thierry fixed some typos

- O "Add tests for autonomous service rerouting" is a new functional test suite which maps to the Orange demonstration under preparation. A PM going out of range in HoneyNode will generate a port state change which will trigger the corresponding notification, resulting in a service state change in the tpce service DataStore for 2 impacted services. Only one of them being re-routable. We then check that this last is rerouted correctly by transportPCE. Currently in Honeynode, when a PM is going out of range, we only manage the state change of the port, but don't update the state of the interface. Bala mentions that interface state change is linked to the type of Alarms. In case the alarm is something like LOS then the interface shall be also out of service (och/otsi). Salem from UTD suggested to implement the change of the interface state.
- · Sprint kanban review:
  - TRNSPRTPCE-655 on Lighty.io simulator: Christophe wanted to support different model types. But as soon as some dependencies to
    OR models does not include the revision, lighty by default takes the latest one as the default. This being solved, when tpce is connected
    with lighty for interface creation, it creates loops and the Netconf connection is not released properly. So this still needs to be solved.

## 06/30/2022

### **General information**

- P-SR3: This week, our stable/phosphorus branch has been unlocked, and Guillaume has merged immediatly all pending changes and released in stride. The release note needs to be updated now.
- S-SR1: stable/sulfur branch has been created by Guillaume so that we can start the Sulfur SR1 integration. For Sulfur release, we have T-API connectivity, and all changes from Thierry to manage the Orange Demo (service restoration)
- Chlorine:
  - It is hight time we discuss with the TSC how we will move to a managed project and handle the migration to Chlorine. The first upstream dependencies are now available. We already knows that a lot of API have been broken which means a lot of work to manage the migration.
  - O Yesterday, the TSC meeting focused on a new CI implementation. Guillaume mentioned we may ask for the creation of a new subproject dedicated to Yang models. This will allow exporting the compilation of the models outside TransportPCE. This would also allow Robert to use this specific model project to test his modifications on Yang tools. Additionally, it will save time in building the project. Once yang model are compiled, we could use them through dependencies. This may not be limited to OpenROADM but also include T-API yang models. Pre-compiled per release models will also be helpful for the implementation of simulators based on lighty.io. Bala has some interrogations about how the corresponding jar files will be supported on MacOS systems. Guillaume mentions that Mac OS can be installed with case sensitive file system.

#### **Code Review**

- 11 changes have been merged durint the week:
  - The 3 first changes at the bottom of the T-API relation chain
  - o The relation chain of Thierry focusing on the internal Orange demo
  - "Fix some indentation issues in OpenRoadmTopology": has been merged, but we did not agree on merging it. We were supposed to discussed the code style changes proposal before. This discussion shall happen so that we agree on the final rules.
  - o "Update docs conf.yaml version to Sulfur" is updating the references to make them compatible with S.
  - o "Update project version for Chlorine release train"
- Discussion about changes under review:
  - Guillaume pushed a change on the new sulfur branch "Update git review for Sulfur" to push on the right branch with gitreview.
  - "Initial TAPI notification implementation": Gilles made some comment on the fact that the code use manual instantiation of NbiNotificationsImpl. It would be worth using blueprint to let Karaf instanciating objects, but further investigation is required, as the class implements 2 different interfaces. We could probably make one of the interfaces extending the other which would allow to use the blueprint.
  - o "T-API notification Junit test": can not be merged as it is. It seems we absolutely need to mock the implementation of the Kafka server.
  - "T-API notification functional tests": when we want to have T-API notification we need both the nbiNotification and T-API features. Lighty shall be di-activated in the seteny parameters.
  - ° "Update developer guide" has been reviewed by Gilles and Olivier. We may need to rework the order to merge it quickly
  - "Fix PceCalculation bug when validating nodes": this change proposed by Thierry solves a bug in service-create which makes under
    certain conditions path computation failing (when network port available is not on the first Xponder but on another available Xponder,
    the pce does not go through this last in the loop to capture available ports/xponders)
  - "Add tests for autonomous service rerouting": include 2 main tests to check that a restorable service can be rerouted whereas a service
    that is not declared as restorable will not be restored in case of failure. It also includes a new functional test suite that corresponds to the
    sequence of actions we should run for the Orange demonstration. One shall note that this test suite will fail until we upgrade Honeynode
    to its latest release (implies to merge latest changes on Gitlab)
  - "Replace tpce-topology yang by existing ordmodels ": propose some adaptations of some transportations of some transportations."

## 06/23/2022

## **General information**

- P-SR3: stable/phosphorus branch is still locked. The status did not change since last week.
- S-SR1: we migrated master on S-SR1. Gilles merged all the relation chain on Friday, after Emmanuelle solved all the remaining migration issues.
   The handling of Decimal64 was the main issue to solve.
  - "Change LOG level in PCE" is not directly related to the migration but has been merged at the same time since it was used to help for the debugging of PCE failures
- Chlorine: Some upstream dependencies are already available. We already know that yangtool API has been broken which means that we could
  have important side effect to solve...
- · Self-nomination period for the LFN Governing Board Committer Representative (LGBMCR) election has started.

### **Code Review**

- · changes merged durint the week:
  - All the relation chain concerning sulfur migration
  - o "fix functional test issue when list in dict" allows reordering elements of a list in a dictionary
  - "pce(gnpy) for Sulfur"
- Discussion about changes under review:
  - o Thierry's relation chain:
    - "Fix bug service-create": This is a bug dsicovered when testing the Orange demo. A service creation with an existing service name was overriding the service which has the same name, with no possibility to change anything associated with the first service. This fix introduce some check on service-name consistency
    - "Update SH test": There were a lot of redundant variables in SH tests. This change addresses the issue and introduces a new test associated with the service name, to check its consistency.
    - "Add service-resiliency handling in service-create": adds the handling of service-resiliency attribute in the input of the service-create rpc. Thierry addressed the comment made by Guillaume and Gilles.
    - Thierry is also working on a new functional tests suite associated with the whole relation chain corresponding to service restoration, with the goal of automating the demo we planned for the next Research Exhibition Demo in Orange. The topology will include two Xponders and 3 ROADMS. Two services will be created, only one of them being restorable. They will use the same path. A degradation of the line will be simulated on one of the node so that it goes out of service. Only the service declared as restorable will be restored by TransportPCE controller.
  - o T-API relation chain:
    - Javier rebased his changes, but this needs to be done again, since the migration to Sulfur was done after.
    - Gilles tested the first 2 changes and provided some editorial comments. These changes could be merged in a short time.
    - The third change brings some issues. Gilles made some comments that will need to be addressed. Javier will try to do it beginning of next week to solve the loop issue, but he will be off part of the week.
    - Gilles could work on the change on the top of the relation chain since it is not linked to the others.
    - It should be possible top merge some of the T-API changes to be part of Sulfur.
  - Quentin proposed some changes related with the code styles. "Refactoring code issues in OpenRoadm Topology" is one of those. Some
    of the code style proposal might be questionable. This is the reason why it was propose to Guillaume to write the code style rules
    somewhere so that the contributors can check them and validate/invalidate them. Quentin made a first proposal on the wiki (https://wiki.
    opendaylight.org/pages/viewpage.action?pageId=27066507)

#### 06/16/2022

### **General information**

- P-SR3: our stable/phosphorus branch is always locked. The backport of relevant changes from master has been done (Update of GNPy, OFEC, Windows compilation, maven update,...)
- S-SR1 migration: we bumped upstream dependencies to the latest, including yangtools 8.0.6 which fixes our Deciml64 bug. We have experienced some side effects, notably on GNPy API (the number of fraction digit is now correctly taken into account and entails some code modifications). This is why Emmanuelle made a change to modify the handling of decimal64 with GNPy. Version of dependencies on lighty side still need to be updated (reason why the change gets a -1). Everything shall be fine by tomorrow. As soon as the proposed changes will pass the gate, Gilles will merge them, so that we will be ready for integration in the next S-SR1 ODL distribution.

## **Code Review**

- · 3 changes have been merged during the week, and especially a new one to update the Maven version to be used in the gate.
- Discussion about changes under review:
  - "Adding additional kafka message": This change provides interesting elements for the purpose of Demos. Anyway it does not use
    "nbinotification" module. It would be preferable to use this last, but one shall note that we have planned to refactor nbiNotification (in the
    current sprint). After it has been refactored, the proposal of UTD which is very interesting could be integrated, so that we can rely on
    what was done to improve nbinotification module.
  - ° relation chain proposed by Thierry and related to the next Orange Exhibition Research demo:
    - "Fix issues in listeners" fix a bugs related with the handling of admin/operational state and adds some unitary tests
    - "Add service-resiliency compliance check" and "Add service-resiliency handling in service-create" allow to handle service resiliency in the service-create request, which is necessary for autonomous service rerouting.
    - "Implement an autonomous service rerouting": implements a listener of the service data store that detects when the operation state of a service changes. That triggers a service reroute, making it into two steps: 1<sup>st</sup>, service-delete, and 2<sup>nd</sup>, service creation with a new path bypassing links and nodes affected by failures. Associated unitary tests are provided.
    - In Parallel, Thierry also developed some code in Honeynode to handle the RPC pm-interact which allows creating, reading and setting some PMs in HoneyNode. This was developed on the master branch (based on OR 7.1 device release)
  - "Updating the usage section of the developer guide": this change was pushed by Roshan to update the documentation in which some references were obsoletes. Olivier will have a look to it before being merged.
  - relation chain related to T-API: We agreed during the sprint planning that as soon as the master branch will be migrated to Sulfur, all changes associated with T-API will be rebased on Sulfur and that the review will be launched from there
  - "Support for parameterization of SIMs attributes": this is a new change pushed by Nathan so that the CI/CD chain could be switched
    from simulators to an external platform, providing some parameters for the connections to real equipments. Gilles proposed to use
    environment variables that can be set (see comment under Jira ticket (https://jira.opendaylight.org/browse/TRNSPRTPCE-674).

### 06/09/2022

#### **General information**

- P-SR3: state did not change since last meeting. The branch is still locked. This release was approved durint the last TSC meeting.
- S-SR1: release process has been relaunched since it was not approved during the last TSC meeting. There were 2 main issues: first is wrong
  revision taken into account (can be solved), second is more critical and is about wrong decimal conversion with negative number (rounding issue).
  Target is to have the second issue solved before end of June. We shall be part of S-SR1. The only things that remains to do is to rebase the latest
  changes.
- · We received a number of questions from Roshan regarding the way to populate the operational-mode catalog. Answered on the Ify.

#### **Code Review**

- 7 changes have been merged during the week. All of them have already been discussed last week. They have not been backported to P at that time. Gilles will do that on tomorrow.
- · Discussion about changes under review:
  - "Updating the usage section of the developer guide": new change proposed by Roshan to solve some issues with the documentation. It
    was reviewed by Guillaume. It seems it shall be merged after the bump in Sulfur because the old version of the apidoc is still supported.
  - "Fix issues from PortMappingList & NetworkModelList": new change proposed by Thierry to solve some issues related to admin
    /operation state changes. Status change is not correctly reflected in the topology. We also did not handle correctly administrative and
    operational state. Thierry's change solves this, handling separately admin and operational states. Some Junit test have also been added
  - o "Fix some indentation issues in OpenROADM topology". This change is the first of a chain that will be dedicated to the improvement of the code style of some of the classes with high cyclomatic complexity and a lot of indentation issues. Gilles mentions that we will need to discuss internally in the project between TransportPCE developpers the rules we want to apply to improve the code style before merging this kind of changes.
  - "Fix the pom files to compile in Windows OS" has been pushed by Bala so that his trainees can work on Windows compatible PC. The change solves an issue with the path interpretation using Windows OS.
  - o "Override asciidoctori-diagram to 2.2.1" has been abandoned since this was an intermediate change that is not needed anymore.

### A.O.B.

Bala observed that "Adding additional Kafka messages" is leading to very long compilation time locally and to some timeout issue with Maven
jobs on the gate. Thierry suggested it might be associated with some Kafka Publisher when they are not enabled in the Junit tests

### 06/02/2022

#### **General information**

- P-SR3 is on its way for releasing. On our side we are ready. Just one change (the bump to P-SR3 upstream dependencies) is not merged because the branch is locked.
- S SR1: 2 negative votes for releasing. One of the reason is that we still have some issue with TransportPCE. Decimal64 issue is not solve with the proposed version of Yangtools (8.0.5). 8.0.6 solves this issue but is not the versioned proposed for S SR1. Emmanuelle pushed some changes to solve our issue with GNPy functional tests. The 2 remaining issue is the Decimal64 one, and a regression that does not allow to use current OpenROADM models (problem importing some yang models with specific revisions).
- We received some questions this week about current implementation of the catalog in TransportPCE. It seems that the people who tried to
  populate the catalog through the apidoc are experiencing the same issue as we had already experienced. We may need to identify where the
  issue comes from and raise a ticket if necessary.
- Next sprint planning is planned on Wednesday the 15 th of June from 3 to 5 PM CET
- A meeting is planned for discussions on how to make the PCE evolve towards T-API on Monday the 13<sup>th</sup> of June from 10AM to 12PM CET

- Only 1 change (Bump upstream dependency to P-SR3) has been merged during the week.
- · Discussion about changes under review:
  - "Remove supportedIfCapability conversion from T-API" & "Update GNPy version used for functional tests", could be merge
  - "Add support for 100G OFEC" relation chain. For "Functional tests for 100G OFEC 31.6 Gbauds", Gilles proposes to integrate these tests in the existing test suite so that we can save time when running the tests. However, Bala mentions that even if it seems duplicated, it would be better to keep it separated, because a lot of parameters differs in the settings, and at the end we could have then a lot of tests in the same test file. Gilles will investigate a bit more about the interest of the different approaches. At the end, we decided that this relation chain (except "adding additional Kafka messages") shall be merged asap and the optimization for the tests could be made later on.
  - o Gilles propose that we merge in a short time the change "Fix functional test issue when list in dict".
  - Migration to Sulfur relation chain:
    - "Bump upstream dependencies to S-SR1" points to 8.0.6 version of yang tools to solve Decimal64 bug.
    - "Quick and dirty fix to sulfur build problems in CI" solves the bug we have with yang tool handling revisions of yang models.
    - "Adapt transportPCE code to Sulfur" includes needed changes to migrate to Sulfur.
    - "Pce(gnpy) for Sulfur" solves the side effect issues we have with GNPY.
    - "Change log level in MappingUtils" and "Change Log level in PCE" allow to reduce the number of logs which complexifies the debugging.
  - T-API Relation chain: Gilles did not have the time to review Javier's Change. He probably won't have time to do so before the 10<sup>th</sup> of June.
  - Thierry has been working on HoneyNode to handle the rpc that is used to set, create, modify and delete PMs. He is currently focusing on the code to change port state when a PM goes out of the specified range.

## Meeting canceled (Bank Holliday in France)

## 05/19/2022

#### General information

- ODL release train: ODL is preparing P-SR3 and S-SR1. Our stable/phosphorus branch shall be already locked in order to prepare P-SR3. We are
  up to date regarding the backport of changes integrated on master, and Gilles will bump dependencies tomorrow. For Sulfur SR1 we are not
  really concerned since we did not migrate to Sulfur yet.
- Next DDF is planned the second week of June (13<sup>th</sup> to 16<sup>th</sup>), remotely (at least partially).

#### **Code Review**

- Only 2 changes have been merged during the week in order to enforce the lighty build on the gate: "Use draft-bierman02 REST in [12].2.1 func tests" and "Reenforce Lighty build in the gate"
- Discussion about other changes under review:
  - "Disable GNPy func test voting" proposes a new tox profile to disable the voting aspect of some functional tests when necessary (here, GNPy for the migraiton to Sulfur, which will help going further in the integration of tpce in Sulfur).
  - "Add support for 100 OFEC" proposed by Bala, allows rendering 100G service over Transponders that implement FlexO B100G hierarchy. This will need to be completed by future work, when we will handle operational-modes so that the SH could trigger the right interfaces creation from the transponders capabilities. Bala will also complement current functional tests with this new device configuration capability.
  - Javier has rebased all changes related to T-API on master and asked few questions. He has analyzed the reason why test 13 fails, and
    provided some insights. This will be reviewed by Gilles & Christophe who did not have time to make it, because we had an internal
    demonstration event. Some of the changes experienced some issues with the CI-CD chain, which is probably due to gate overload.

In "update TAPI connectivity service on port change", Javier made some refactoring to correct some issues in handling the state of services.

In "TAPI notification functional test", Javier didn't know where to put the dependencies for the NBI test (Seems that he handled it in the right way!).

His changes shall now all be in review state. Guillaume already made his review. Gilles will start reviewing them.

Olivier started presenting the document related to TRNSPRTPCE 653-652 & 546. We had time to discuss A/Zend container node and
port constraints, as well as how rate shall be proceeded in service-create request. The discussion on how we shall handle ports in
topology (their availability and the commissioned rate) will be addressed in next meeting.

## 05/12/2022

## **General information**

- Sulfur migration: TransportPCE will not be part of Sulfur GA, but there is no issue to join the distribution in later releases. Robert made some
  investigations and corrected one bug in yangtools (8.0.5 release), which solves the issue we had with adding OMS attributes to links. This will
  help us progressing, since it was blocking the functional test. We expect to join Sulfur SR1. It seems also that lighty in has been released for
  Sulfur.
- Virtual sessions will not be accepted in next DDF, so we won't present anything.

## **Code Review**

- Since the last meeting, few changes have been merged:
  - Regarding the enforcement of Lighty in the CI: "Clean yang modules instantiations in lighty", "Add new method in PortMapping interface", "Bump lighty to P-SR2", "Upgrade HoneyNode version" which adds nc-notification.yang module, "update network models revision to 10.1 in lighty", "Use draft-bierman02 REST in [12].2.1 func tests" because Lighty does not currently support RFC8040, "Reinforce Lighty build in the gate", "Extract in CI tapi functional tests from test 221", where Gilles puts t-api functional test in a specific location so that t-api tests can be run independently at the beginning of the test suite, and so that we can identify in a first step, whether t-api tests fails or not (Gilles made 7.1 functional test dependent on t-api tests so that they are executed before the 7.1 functional test)

Let's note that the tests that Javier is working on for t-api, shall be put now in the t-api folder. For the one related to t-api but also the nbinotification shall probably be put with other tests on nbi-notification, since they require a specific docker container dedicated to the kafka broker implementation.

"Fix bug when creating SRG termination points" has been pushed by Jonas, to correct an issue we had in the mapping handling SRGs. Gilles added a specific Junit test to check this corrections.

- o "Remove an irrelevant UT for PCE" & "Fix list initialization issue in Renderer" were discussed last week and have been merged.
- Discussion about other changes under review:
  - Regarding the Sulfur migration suite: "Bump upstream dependencies" needs to be updated with latests releases (odlparent, mdsal, netconf and yangtools), "Override asciidoctorj-diagram to 2.2.1" should no longer be necessary, "Adapt transportPCE code to sulfur" was blocked, but we can continue working on it now that some issues have been solved. "Quick and dirty fix to Sulfur build problems in CI" still needs further corrections in yangtools before to continue working on it.
  - o Regarding T-API changes, Javier will need to rebase all of them

Thierry is currently working on the implementation of some rpcs that are used to get, set, create and delete some PMs in Honeynode.
 This will allow to have more dynamic.

### 05/05/2022

#### **General information**

• Gilles sent a mail to the ODL community (Daniel De La Rosa) to summarize the status of transportPCE for what concerns the integration in Sulfur GA. Unfortunately, due to a number of issues (Openroadm models compilation, link augmentation in openroadm-topology, Feature odl-transportpce-swagger no longer effective, issues to run some Junit tests & possible other failures on functional tests not investigated yet), we won't be able to meet the GA timeline and to have TransportPCE latest code integrated in S-SR0. He asked whether it will be possible anyway to join SR1 when core project will have solved the highlighted issues. We are waiting for an official answer. Guillaume will raise the topic in the TSC since Gilles won't be able to attend this last today.

### **Code Review**

- Changes merged since last meeting: "Drop the service name from ODU connection name" and "Fix output response for 400GE device renderer"
  that were discussed last week have been merged and backported on P branch
- New changes have also been merged: "Fix code issues", "Add new method in PortMapping", "Clean yang modules instantiations in lighty", "Bump Lighty to P-SR2" and "Ugrade Honeynode version". They are related to the reenforcement of lighty build for Phosphorus. The code is now building but we still have some issues with some functional tests.
- Javier shall push tomorrow newer version rebased on master of his latest changes on T-API

#### A.O.B.

Christophe started to work on lighty.io Netconf simulator. He succeeded in having OpenROADM 2.2.1 ROADM and Transponder nodes running.
He is currently working on the management of the RPC, and he will also have to work on the synchronization of the 2 datastores after some
modifications have been applied to the configuration datastore. Lighty.io does not provide any RESTONF connector. The main reason for
investigating on Lighty.io is that it is a recent project which uses some of the latest ODL dependencies (Phosphorus), which makes it easier to
evolve, in comparison with Honeynode which is not maintained anymore.

## 04/28/2022

#### **General information**

- Sulfur release: All managed project are ready to release for GA of Sulfur. On TransportPCE side, we are experiencing different issues which prevent us to migrate to Sulfur.
  - Gilles progressed but there is still a rather blocking issue with the compilation of OpenROADM models. The issue was raised to the ODL community yesterday.
  - the previous model compilation issue (https://jira.opendaylight.org/browse/MDSAL-738) has been solved and integrated in MDSAL-9.0.2,
  - Gilles encounters another issue with odl-parent (bad dependencies revision in maven-site-plugin) which can be solved with an overriding of pom.xml files.
- Chlorine preparation:
  - we will have a total removal of restconf-nb-bierman. Guillaume started the migration from bierman to RFC 4080, but some work still needs to be done.
  - we will also need to migrate to java 17 (Cl is currently under migration)
- Orange had a discussion with NTT about the potential implementation of a control plane based on TransportPCE in the scope of IOWN. NTT is also in contact with UTD.
- It is probably the good time to make a decision on the status of TransportPCE and the way it shall be handled in ODL: as a managed project or as
  a self-managed project. Gilles recommendation is to move to the status of managed project. Managed project are integrated in ODL as core
  projects. On the other hand, artifacts would probably have to be delivered earlier.
  - o No objection raised, so, the decision is to move to Manage Project.

#### **Code Review**

- Only one change merged since last meeting: "Update Maven CentOS install script for tests" proposed by Guillaume to take into acount the fact that the minimum version of maven is 3.8.3 in Sulfur.
- 2 Changes under review proposed by Bala:
  - o "Fix output response for 400GE device renderer": output response provided by Renderer now indicates all interfaces that have been created, even if some of them are created simultaneously. This change is according to Gilles, ready to be merged.
  - "Drop the service name from ODU connection name": this allows limiting the string length of the connection name to something lower than 256 bytes. This change is also ready to be merged.
- · Changes in Work In Progress status:
  - "Add support for 100G OFEC": Bala still needs to develop the associated functional tests. With this change, the 100G wavelength service can now be created with OFEC and baud rate of 31.6 Gbauds. Xml configuration for honeynode will need to be upgraded to include in the capabilities the possibility to be configured according to that mode.

Gilles's series associated with Sulfur migration:

- "Fix list initialization issue in Renderer" is proposed by Gilles to avoid instantiating an ArrayList which kind of anonymous class when the use of a straight forward immutable list is sufficient enough.
- In "Fix few code issues": Gilles removed some catching of NPE
- "Bump upstream dependencies" updates dependencies for migration to Sulfur.
- "Override asciidoctorj-diagram to 2.2.1" solves a bug in odlparent. This change is provided to handle migration to Sulfur but will not be necessary after odl-parent has been updated to the next minor version.
- "Adapt transportPCE code to Sulfur" provides some needed code changes to handle the migration to Sulfur (Let's notice that
  most of them are the replacement of BigDecimal by Decimal64, RPCresultBuilder adaptation, replacement of Lists by Sets to
  handle yang leaf-lists...)
- Guillaume proposed also a workaround to temporarily resolve the model compilation issue with the migration to Sulfur through
   ("Quick and dirty fix to sulfur bug in building"). This change is not intended to be merged.

#### A.O.B.

Orange had a meeting with UTD to discuss short term Roadmap of transportPCE, and plans of UTD regarding test automation reusing the CI/CD chain developed in the scope of tpce.

#### 04/21/2022

## Meeting canceled

## 04/14/2022

### **General information**

Sulfur migration: the model compilation issue has been solved and integrated in MDSAL-9.0.2, released today. Gilles encounters another issue
with odl-parent (bad dependencies revision in maven-site-plugin) which can be solved with an overriding of pom.xml files. But, he is facing a much
more serious issue, because all TransportPCE code using the create method of InstanceIdentifier is failing at the compilation without any
reasonable raison!!. Can't understand what happen. Would it be related to model compilation?

## **Code Review**

- · No change was merged this week apart from the changes that have been backported on stable/phosphorus branch.
- No new changes were pushed during this week. Javier discovered making the tests in "Update TAPI connectivity Service on port change" that
  there was a bug in T-API implementation. The service was not created correctly for service that span across more than 2 ROADMs. This has
  been fixed in the last Patchset (24) of this change. In ConnectivityUtils a few corrections were also made handling lds. Comments received so far
  still need to be taken into acount.

#### A.O.B.

An analysis has been initiated to handle OpenConfig models in Honeynode simulator. HoneyComb project has been archived, and the version of
yang tools it is based on is now a bit obsolete. It will be very difficult to make it evolve, and an alternative would be to use lighty-netconf-simulator.
This is currently investigated. We will probably migrate to lighty for OpenConfig simulators, and when we will be at ease with it, smoothly migrate
our OpenROADM simulators to it.

### 04/07/2022

## **General information**

- TSC election nomination:
  - TSC finally decided to keep 7 seats. There are 2 Orange representatives now, including Guillaume and Cedric Ollivier.
- Sulfur migration:
  - a regression has been highlighted and fixed by Robert, but he did not have time to release the last version of the MDSAL (9.0.2) which still blocks our migration
- Sulfur Marketing Message:
  - Guillaume would prefer we detail a bit the T-API consolidation. We can give precision on T-API notification. Javier will propose an update
    of the message.

- Since the last meeting, 13 changes have been merged:
  - o all the relation chain (8 changes) associated with OpenROADM service and network models 10.1.
  - a new relation chain (4 changes) proposed by Guillaume related to minor bug fix/refactor on the previous change related to DowngradeConstraints class (changes 100380, 100381, 100383 and 100416).
  - another new change from Guillaume related to the project building on the gate, to enable the keep-going option in sphinx (change 100430)
  - all changes merged on master up to the Pylint update change have been backported on Phosphorus by Gilles to be part of P-SR3.
     Among these new merges, we aggree to backport on stable/phosphorus only changes 99379, 99380 and 100430.

- · Discussion about other changes under review:
  - Javier rebased changes associated with T-API relation chain. He proposes new additional changes to the relation chain:
    - "Refacto tapi-delete-connectivity-service" which checks the existence of lower order connections before deleting service,
    - for reminder, "Initial tapi notification implementation" allows handling subscription to notifications and "Implementation of T-API notifications rocs".
    - He also started working on the associated tests through "T-API notification JUnit test" and "T-API notification functional test". These two new changes are always under development and should be in review very soon.
  - Gilles proposed a new change "Remove Supported capability conversions from T-API" because he detected some obsolete code in T-API module during his review on Javier's change.

## A.O.B.

- Bala made a presentation on "Power settings and sanity checks in OLM" that makes a recap of what they observed during the OFC demo
  preparation and needs to be corrected.
  - 0
- Transmit power set on a transponder could be out of the specification range (as an example, higher than maximum value), provided that both the SRG and the transponder supports it (from what is announced in their capabilities).
- Bala proposed to implement several sanity checks to make sure we set a correct power at the output of transponders.
- Christophe proposed an evolution in the way we handle models in TransportPCE (OpenROADM, T-API and may be tomorrow OpenConfig). Right now the models are directly embedded with TransportPCE project and compiled systematically during the project build. It could be interesting to export the compilation of all TransportPCE models outside the project (typically in an ODL sub-project) and use a maven dependency. It should also improve significantly the performances associated with the tests.

## 03/31/2022

#### **General information**

- TSC election nomination:
  - We have received a notification from the TSC regarding the TSC election to mention that the number of seats has been reduced from 7 to 5
- · Sulfur migration:
  - we have now our upstream dependencies available. But, unfortunatelly, the all-first step of compilation fails due to a yangtools issue.
     The org-openroadm-pm-type model includes an union which is leading to this issue. Gilles raised the issue to the odl kernel-dev list since this is a nasty bug which is blocking our migration.

## **Code Review**

- Since the last meeting, Guillaume merged is relation chain related to the migration of OLM functional tests towards RFC 8040.
- Discussion about other changes under review:
  - o relation chain related to migration of service and network models to 10.1: waiting for migrating to sulfur, Gilles rebased yesterday on current state of master. All changes failed due to an issue associated with a new Pylint version available and used by the gate that detected new issues. Gilles pushed a new change "Fix Pylint issue in pce functional tests" to fix them. Guillaume made some new comments that may need to be addressed.
    - "Refactor style b/c of service models 10.1 updates" => We will need to rediscuss the code style proposal to agree on what shall be done, and what should not be considered. The trailing space issue associated with OpenROADM yang files will be solved in OpenROADM side. Guillaume will raise a ticket to keep trace of it and will propose a new change on TransportPCE to correct them.
    - In "Rewrite the whole downgradeConstraints Test class", Guillaume also made some comments and made a modification proposal using nested ternary operators. However Gilles feels that it is unreadable, and probably not a so good practice. Majority of opinions raised during the meeting is in favor to not abuse of ternary operator, all the more they are nested.
  - ° "Fix the mc-width precision for OLM power value" will need to be abandoned by Bala
- Priority is to finish the service and network model 10.1 and then migrate to Sulfur.

#### A.O.B.

- Bala will need a time slot of 15' next week to present and discuss a new subject. Indeed, in the OLM there is no sanity checking which sometimes leads to value a bit out of range of the optical specification (based on equipment capabilities)
- · Olivier will share inside the TransportPCE team the marketing message for Sulfur. It will be approved next week.

## 03/24/2022

## **General information**

- TSC election nomination:
  - The time slot to submit self-nomination has been extended one week. Today is last day to submit!
- Sulfur migration:

- It shall have been issued last week. We will have at least several weeks of delay. All MRI projects have not been released.
- Writen exchanges between Bala and Guillaume on the weak cipher algorithm used in ODL SSH.

#### Code Review

- Since the last meeting, Guillaume merged on change related to functional tests ("Fix a RFC8040 test utils method naming") and the relation suite from Christophe on the PCE bug.
  - "Update service handler checks"=> removal of checks that were not aligned with OpenROADM models (optional attributes). The configuration of XPDR-C has also been adjusted.
- Discussion about other changes under review => most of the ongoing change have already been discussed.
  - For network and service models, Gilles is waiting for dependencies bump prior to rebase these changes.
  - "Fix the mc-width precision for OLM power value" => other changes of the same relation chain have been merged. Bala did not have time to look at all comments made by Guillaume. If the change shall be abandoned, Bala will do it.
- Next step will be to release Sulfur. The target is to include OpenROADM Model 10.1, T-API connectivity service and T-API notification.

#### 03/17/2022

#### **General information**

- TSC election nomination:
  - Today is the last day to submit self-nomination to the TSC election. Community members (committeurs, contributors) interested in joining the TSC must self-nominate before the nomination period closes.
- Sulfur migration:
  - Code freeze for all managed project was supposed to be on the 10<sup>th</sup> of February and formal release was planned on the 17<sup>th</sup> of March. But this release will be late.
  - We are still waiting for the availability of some dependencies (mdsal, NETCONF). The bump shall happen next week. Let's merge eveything aiming at being backported for P-SR3 before.

#### **Code Review**

- Since the last meeting, 4 changes have been merged. All of them were discussed last week. (Fix power value precision bug, Reintroduce netmod dependency, Fix notification subscription issue, Update karaf cache nc-notifications YANG schema)
- Discussion about other changes under review:
  - o 4 changes related to PCE bug: Christophe has split his last big change "Manages 100GE on XPDR with a list of xponders" into multiple changes as this was handling many things:
    - "Bug correction for the ethernet loop test" => this change is also associated to some improvement reducing the number of loop. OC service was tested several times, but not Ethernet service.
    - "Update Servicehandler checks" => when a service is checked, the leaves of the service create request are checked. Most of these leaves are not mandatory. The checks for non-mandatory leaves have been removed to comply with OR MSA.
    - "Add a list of xponder for XPDR-C1" =>the configuration will be used to check the path computation when there is no transponder list present (Solves an issue raised by Bala during OFC demonstration preparation)
    - "Manage 100GE on XPDR with a list of xponder" => management of the path computation request when there are multiple xponder in a list. One more use case is still not handle: when we don't have a Xponder list but a port is specified. Then the PCE will select the first available port, which is not tested in the test suite
  - "Refactor PCE networkanalyser PceCAlculation" => Guillaume performed some check factorization. Cherry-picked by Christophe above his changes
  - o 7 changes on 10.1 openroadm model migration => on network models, and added a new one
    - "Upgrade openoadm service model to 10.1" => Gilles rebased them
    - "Upgrade openoadm network model to 10.1" => Gilles rebased also the change from Christophe (rather difficult due to lots of modifications in PCE, GNPy, renderer)
    - "Refactor SupportedIfCapability usage" => this is a new change proposed by Gilles. The supported interface capability were associated to 3 different name-spaces, and a lot of conversion method were used which was not optimal. During PortMapping, we now apply the latest version of supported interface capability. MappingUtilsImpl gathers all the functions associated to conversions. This allows homogenizing the handling of supported interface capability on the rest of the code.
  - o few changes on OLM RFC8040 migration from Guillaume:
    - "Migrate OLM functional tests to RFC8040 step 2" => always in WIP...
    - "Migrate OLM functional tests to RFC 8040 step1" => Guillaume solved some issues associated with discrepancies between config and operational data stores. Ready. "Fix a RFC 8040 test utils method naming" =>just a change in the name of a method.
  - o Status on T-API changes: Javier was planning to release some code for T-API connectivity and notification, but will do it next week. He also needs to rebase everything on top of Sulfur.
  - "Refator style b/c of service model 10.1 update" => several suggestions for code style guidelines were proposed by Guillaume and Gilles. This could be discussed next week, when Bala will be available.

## A.O.B.

Next DDF and ONES events will be collocated in November

### 03/10/2022

#### **General information**

- · Sulfur release
  - code freeze on managed project next Monday. All our upstream dependencies should be available to start our master branch migration to Sulfur. We will then have 1 month to release transportPCE.
  - o Sulfur will include OpenROADM service and network model migration to release 10.1.
  - Let's note already that from the moment we have migrated, Maven 3.8.3 will be necessary to build the project.

### **Code Review**

- Since the last meeting, 9 changes have been merged.
  - "Bump Kafka clien to 3.0 ?.0" and "Fix a bug in a Junit nbiNotifications test" are related to a better version of our kafka-client dependency in nbinotifications module which not provide an incompatible version of Jackson transitive dependency.
  - Also the 2 last tstep of PCE OTN Node refactoring
  - the group of 5 changes pushed by Gilles that are related to the preparation of the Sulfur migration. ("Remove usage of schemaPath from converters", "Clean dependency declaration in common module", "Remove usage of deprecated InitMock methods", "Remove usage of DOMnotification Router. Create method", "Cleanup Junit test"). They replace object marked as deprecated for removal.
- · Discussion about other changes under review:
  - "Adding Kafka messages for OFC22" => change pushed by UTD. This is the code they are using to make the OFC'22 demonstration, as
    they were missing some notification messages and also some elements related to alarms. Gilles proposed to put this change in progress
    and private to limit the visibility since device configuration are embedded. As it stands, this change could not be merge.
  - o 3 changes related to netmod notifications
    - "Update karaf cache nc-notification Yang schema" was initially inside a change proposed by Shweta a moment ago and reintroduced here by Guillaume.
    - "Fix notification subscription issue" was already discussed.
    - "Reintroduce netmod dependency" is proposed Guillaume to solve some issues introduced by preceding change. Changes are now in the right order, and they can be merged
  - 2 changes related to the power value precision inside OLM module
    - "Fix power value precision bug" is a proposal from Bala. Guillaume splited the change to separate the rounding associated with power value and the one associated with MC width which is now handled in the following change. This change is merged in session.
    - "Fix the mc-precision for OLM Power value". We should wait before merging this change.
  - o 5 changes related to the service models migration to 10.1
    - "Refactor transportpce-routing constraint model" => preliminary step to finally remove the transportpce-routing-constraint that was redundant with the official openroadm model for routing constraint.
    - "Remove transportpce-routing-constraint model" => allows an interesting code dusting, removing now unnecessary classes that was dedicated to convert offical openroadm-routing-constraints to transportpce-routing-constraints.
    - "Upgrade openRoadm service model to 10.1" => has been also rebased.
    - On top of this Guillaume pushed a change "refactor b/c of services models 10.1 update" which focuses on a proposal of a new code style for TransportPCE. Gilles think the principle of having a clear code style inside TransportPCE is a very good thing, but on the other hand, does not totally agree with Guillaume's proposal, especially the fact that systematically put everything on a new line. Gilles suggests every coder could have a look at this code so that they could have an idea of what is suggested by Guillaume, and we can decide later which coding style rules we could agree on and generalize on the project. In the rebase, Gilles modified tow classes (PceTestData and PathComputationServiceImpl) with Gilles's suggestion for the new code style. The advantage of Gilles proposal, is that we save indentation spaces when we have long namespaces, and above all, we can automate much more adjustements directly with eclipse IDE.
    - In "Rewrite the whole DowngradeConstraints test class", Gilles also took advantage of the rebase to also appy his code style proposal. Result is esay to see.
  - o 1 change related to PCE bug:
    - "Manage 100GE on XPDR with a list of xponder" has been pushed by Christophe to handle 100GE use case when port or device-name are precised in the service-create request.
  - Always the 4 changes from Nokia on T-API connectivity service and notifications. Gilles proposes that we integrate these T-API changes in the Sulfur distribution.
  - Javier is working on integrating OpenConfig models and translating them to T-API. Honeynode using Generic OpenConfig configurations
    could be used. Currently, Nokia equipment implement specific Nokia models. To see how the code/node configuration may be adapted
    without nokia specific models.

#### A.O.B.

• Gilles would like to discuss about the status change of transportPCE. Currently TransportPCE is a self-managed project. Guillaume, as the TSC chair reported that it could be the right time to move from this mode to an MSI mode (Managed Snapshot Integrated project). Some tasks would be done by other committers of the ODL community (typically, when major API change on core MRI projects), and our release process could be simplified (as being integrated in ODL processes). The drawback for us could be the fact that we would have to follow more stricly the release schedule, especially regarding the code freeze deadline. So this project decision needs to be discussed more deeply during our next meetings before we make the decision. At first sight, that could be applied for Chlorine release train.

## 03/03/2022

- · Since the last meeting, 6 changes have been merged.
  - "New API for GNPy" has been released in time for OFC demo.
  - o "Refactor common JsonStringConverterTest"=> new change proposed by Guillaume that improves code style and intermediate variable removal, mainly related with test of the Json Serializer.
  - "Refactor PCE network analyzer PceOtnNode step 6 + step 7"
  - o 2 changes from Gilles:
    - "Clean up pom files of Maven project"=>every pom files have been revised to update dependencies, and remove unused ones
    - "Remove overriding version for lighty pom"=> fix a dependency version overriding
- · Discussion about other changes under review:
  - The change provided by UTD has been solved by Gilles and is now ready for the OFC'22 demo. This change does not aim at being directly integrated aand merged because it does not follow the approach we use in nbi-notification. However, it is very interesting and provides the right level of information for service creation. So, it will serves as example to provides relevant guideline to do corresponding modifications in nbi-notification after we make some refactoring of this module.
  - Another change "Bump Karaf client to 3.0.0" has been provided by Gilles to update the Kafka dependency used in nbinotifications module, following the issue solved with the UTD change. The old dependency version used in TransportPCE was providing a different version of Jackson already available with odlparent. The new version of kafka-client does not provide jackson dependency and prevent from conflits in karaf. This new version pointed out a bug that as been fixed with the change "Fix bug in a Junit nbiNotification test".
  - ° "Refactor PCE network analyzer PceOtnNodes step ..." includes several changes made step by step. These changes focus on reducing cyclomatic and cognitive complexity

    "Fix issue in PCE with multiple xpdr" => Christophe is working now on modifying E2E functional tests which shall be ready tomorrow
  - morning. This change addresses inputs provided in the service-create on the port and modules to be used
  - o "Power value precision bug" has been pushed by Bala. A lot of comment made by Guillaume about the rounding of intermediate computations. Bala will add some comments to explain why this is needed.
  - "Reintroduce netmod dependency" is introduced because some devices do not advert their capabilities correctly which causes error for subscription. The previous fix removed netmod dependency. It is reintroduced handling this failure case in a better and different way
  - A new serie of changes is proposed by Gilles to prepare the migration to Sulfur. "Remove usage of SchemaPath from converters", "Remove usage of deprecated initmock method", "remove usage in DomNotificationRoute create meth" solve warnings during the compilation, and are in the scope of removing deprecated object, providing workarounds to address changes planned with yang tools.

## 02/24/2022

#### **General information**

- · P-SR2 has been released at the beginning of the week.
- Gilles has updated the wiki page since some links were obsolete (meeting minutes). Release notes section seems also a bit obsolete since release notes are now integrated in the docs. We shall update the link to point to this official docs.

## **Code Review**

- Since the last meeting, 22 changes have been merged. All these changes have been already reviewed and discussed yesteraday during the
  - Keep available frequency maps when Netconf sessions restores has been merged today.
  - o All changes merged on master have been backported to stable/phosphorus. Unfortunatelly, there is a serious issue on that branch. Some functional tests of the renderer for device 2.2.1 systematically fails on the gate (Test 27 & 41) (Missing ODUCN interface in the portMapping). This is an error Bala tried to fix, and it was working on his side locally, but it seems it still does not work on the gate. Bala will continue to analyse the issue.
- · Discussion about other changes under review:
  - o "New API for GNPY" => Ahmed still had some issue with tox and the python version, but it seems it is solved thanks to Guillaume recommendation. Ahmed solved an issue that came from the fact that for nodes that do not have IP address, such as amplifiers, were no more filtered (because we don't use anymore IP address), and they were included is the path that returns GNPy in some specific cases. So the functional test that failed now passes.
  - "Fix issue in PCE with multiple XPDR" => Christophe continued to work on the use case to handle multiple XPDR. The creation of service is successful but he still needs to solve an issue with the deleting phase. We will need to refine the use cases we need to address. Some of the security checks performed in the Renderer probably don't need to be performed anymore.
  - o During the meeting, we have visibility on a private change puhsed one week ago by UTD: "adding UTD kafka messages for OFC22".

    - The change proposes a simplified log reporting towards a kafka broker when we create/delete a service by TransportPCE. Currently, this implementation makes failing installation of any additional transportpce features (odl-transportpce-swagger, odltransportpce-nbinotifications, etc). Christophe and Gilles will try to look at it, to see if they can propose something that does the same but aligned with what was defined in nbiNotification; because what UTD tries to do can be done in a different way leveraging existing features. UTD sent an email which was dropped in undesirable mailbox.... because of the attachment
- AOB:
- ONES summit will be from 12 to 14<sup>th</sup> of April. It will be virtual

## 02/17/2022

### Meeting canceled

#### 02/10/2022

### **General information**

- Si-SR4 Release => Guillaume released last week TransportPCE for Si-SR4 and updated the release note in the afterwards.
- P-SR2 => We are still waiting for the release of upstream managed projects (especially NETCONF). This should happen next week, and we should release our artifacts at the end of next week. Our stable/phosphorus branch is up to date, aligned with status of master branch.

#### **Code Review**

- Since the last meeting, 10 changes have been merged. Let's mention the following:
  - 3 changes associated with the intermediate rates, including:
    - "Update power target mask for mixed line rate",
    - "Update 7.1 port mapping after inf delete" =>allows to delete ODUCn and OTUCn interfaces in the portMapping when a service is deleted and corresponding interfaces are deleted on Devices. The functional test shall be updated to test the portMapping. Bala will add corresponding Jira ticket.
    - "Correct width for 200G and 300G".
  - 6 refactoring-related changes from Guillaume. He made some refactoring on OpenROADM OTN topology, using maps instead of lists and switch-cases in place of if/else. He initiated the same work on PceOtnNode.
  - 1 change from Robert Varga related to the way we were using the Json parser to avoid using deprecated methods.
  - 1 change from Jonas, "PortMapping for SRGs with multiple circuit packs"
- Discussion about other changes under review:
  - o "Fix Bug in PCE picking wrong client port":
    - initially, solved a blocking issue identified by ATT during the OFC demo preparation, regarding a bad client port selection at the PCE level. After that, Bala has also discovered other issue concerning this time the Network port selection.
    - Gilles solved the initial PCE issue, but discoverd another Bug on the T-API connectivity side.
    - Shweta also proposed to include a check on A and Z end to select only port that have the correct tails, which is consistent with the jira ticket description mentionned in this change.
    - This change solves at least the initial blocking issues, passes the gate... but Guillaume proposes to split it through different changes.
    - However Gilles think that such change solving blocking issue that also blocks some activities should be merged as soon as
      nossible
    - Finally, Guillaume will apply its proposed code optimization and will merge the change.
  - "Distinguish available SRGs for uni/bi-direction": as for the previous change, Guillaume will address its proposed code optimization and will merge it.
  - "Getter for port-capabilities in PortMapping":
    - solves an issue discovered during the OFC demo preparation. There are 2 ways of advertising port capabilities and there is no restriction to use one or the other. Bala complemented the way we handle it to address both use cases.
    - Guillaume made a refactoring suggestion but Bala experiences some issues implementing the patch addressing this. He needs help to handle it. Guillaume will help him.
    - Moreover, Gilles mentions we will need to update Honeynode sim configurations and develop the corresponding functional test.
    - This modification should also be applied for device in release 1.2.1.
  - "Remove maintenance state-signal": could be merged
  - "Bug in interface delete 400-G-Ethernet": solves an issue introduced when we added the support of ODUFlex interfaces, which
    concerns the order to respect to delete interfaces and their supporting ones.
  - Jonas proposed a new change to solve the issue he reported last week about the node creation inside PortMapping and topologies after a loss of the NETCONF session (not a voluntary disconnection of the controller from the device).
    - when the device is connected again to the controller, the AvailFreqMaps should be the same as just before the disconnection.
    - This correction will be of high interest for AT&T. Bala will test it on ATT lab with its devices.
  - "Upgrade OpenROADM Network model 10.1": big change from Christophe that does not pass the gate but should... This is probably just an issue with the gate.
  - "Upgrade OpenROADM Service model 10.1": Gilles reworked the series, taking into acount most of comments received from Guillaume, Shweta. Gilles also pushed a new one regarding the rewrite of the unitary test about downgrading routing constraints.
  - ONPy interconnection: a new branch was created on Github. We will have the latest version of GNPy ready next week. (Docker and PyPi). Ahmed made all the modification needed in the code of tpce to communicate with the new version of GNPy. In GNPy, they have replaced the IP address that identified nodes by names which is a good thing. Ahmed is currently working in tpce on new code to provide the correct rate in the request.

## 02/03/2022

### **General information**

- · Si-SR4 Release:
  - We need to release Si SR4 now. A few changes have been backported by Guillaume last week. We can let the branch as it is. Managed project seem to be ready. Guillaume volunteered to stage this release
  - Si-SR4 released during the meeting by Guillaume
- P-SR2:
  - Our stable/phosphorus branch is no longer up to date, but Gilles is ready to backport all the changes that have been merged this week.
     Managed projects should be ready to release very soon.

- Since the last meeting, lots of changes have been merged. Let's mention the following:
  - o "Fix the GNPy version used for tests to 1.2.1" => to fix the version of GNPy used for TPCE functional tests
  - O Bala's series related to intermediate rates
  - "Unrecognized if-supported-capabilities" =>One of the devices was reporting some missing functionalities in the portMapping which was causing some NPE. This change is solving the issue.
  - Ouillaume focused on the functional test aspects and the migration to RFC 8040 (OTN renderer, OTN SH Renderer): functions rationalization, migration. He has achieved url migration to RFC 8040. Sometimes, get a 500 message. He has raised a Jira ticket to get this fixed, even if the cause is not that well identified. In "refactor networkmodel util OpenROADMOtnTopology", Guillaume identified some potentially missing code to handle ODUC2/3 and added some TO DO statements to be checked by reviewer to identify whether the code is really missing or not.
- Other changes under review:
  - "Update power target mask for mixed line-rate" => this change proposed by Bala could be merged, but we shall wait a bit to check that Jonas is fine with the answer provided.
  - ° "Fix bug in PCE picking wrong client port" => this change could be merged even if it does not solve completely the bug highlighted by Bala. The correction only applies to OTN mux/switch-ponders. It does not apply to transponders, for which only the first port available is selected. In this change, Gilles added some parameters passed from the SH to the PCE to handle constraints on the port to be used, but the code to handle this on transponder still needs to be written. Shweta added a comment: AT&T has already written some code to also check that the port are connected through an existing link before selecting them. Shweta will provide a patch to add this feature.
  - "Correct width from 200 and 300G" => is ready to be merged.
  - o "PortMapping for SRGs with multiple circuit packs" => Jonas provided this change to fix an issue on portmapping. It could be merged.
  - Gilles pushed a series of changes related to the upgrade of the service model. There are under review for a while. They could be ready to be merged now.
- · Other maters discussed:
  - Jonas raised a bug (594) to highlight the fact that at node reconnection (after a Netconf connection failure), the frequency map is reset.
     In fact this issue is a more general issue associated with the way we build PortMapping that shall be reconsidered but will be a huge work (interfaces, roadm network connections, odu-connections shall probably be uploaded from equipment after a NETCONF disconnection)
  - O Good practices regarding change review:
    - A change shall not be merged if some comments are still unresolved (except if they are solved in another change, (but this shall be stated)
    - Only the person that made the comment shall decide to change its status to solved unless it is obvious that comment has been fully addressed (like typo, trailing spaces....)
    - Should wait at least 24 hours before merging a change that has been submitted to let enough time to other committers to agree or not on the merge.

## 01/27/2022

## **General information**

- · Next Phosphorus Release:
  - Managed projects should release P-SR2 soon. We are still waiting for Netconf artifacts availability.
- Bala created 2 branches for OFC demo which are aligned on the master branch: OFC22 & OFC22-Demo (One of them should has been deleted, but not the LFN rights to delete it)
- Si-SR4: Gilles has bumped upstream dependencies for Si SR4. Christophe suggests that we backport the change related to the OLM timer
  management by environment variables in Silicon SR4. Guillaume will take care of it.

- Guillaume made a few changes associated with the migration towards RFC 8040. This includes Flexgrid tests. Next step will be to look at the
  renderer functional tests.
  - "Migrate renderer functional test to RFC 8040" => Some refactoring is however needed
  - "Update GNPy functional tests" => change removes the dependency to the docker hosting the GNPy Server and change it to a Python Package.
  - Device change notification support was forgotten in lighty.io build. Guillaume has created a user story related to it.
- Gilles pushed a change to address a bug detected by Shweta and experienced again by Bala in the labs: "Fix bug in PCE picking wrong client
  port". As we did not consider the port mentioned in service create rpc and client port selected by the SH is the first available port, this led to wrong
  behavior in some cases. So this has been corrected. However solving this through a fix highlighted another bug in T-API implementation with a
  wrong conversion from a client to a network port, which has also been corrected.
- Bala pushed a number of changes associated with intermediate rates handling :
  - "Change in interface Naming convention (B100G)": solves an issue with the OLM. Uses different interface names according to the rate for OTUCN ODUCN and OTSiG
  - o "Device Renderer support for intermediate rates": In this change a dedicated method is deducing the rate from the modulation format.
  - o "Update TransportPCE topology enums" : adds OTUCN and ODUCN links in the topology after they have been created.
  - Some changes in the SH and the PCE have also been pushed to allow end to end service creation at intermediate rates: "Update SH and PCE to support intermediate rates". This change was highly simplified by the last refactoring introducing service types. One thing still needs to be corrected: creation of OTUC4 and ODUC4 links in place of OTUC2 and ODUC2 after a 200G service creation.
  - "Update MW-MW power Mask for mixed line rate": Update the power for 400G/100G mixed line rate to follow the new OR specification (V4.0 and higher)
  - "Correct width for 200G and 300G" change corrects the signal width associated with 200 and 300G services to 75 GHz to make it fit with the specifications.
- Gilles is still working on the migration of models from service 7.1 to 10.1. He is still experiencing some issues with some of the functional tests
  associated with GNPy.

## 01/20/2022

#### **General information**

- Next Phosphorus Release:
  - Our stable/phosphorus branch is still not locked, but it should happen in a short time. We will probably have one week of delay.
- · Next Si-SR4 Release:
  - we will need to bump to upsteram dependencies, but there is not so many things to backport since this release will focus on solving security issues with Log4Shell.

#### **Code Review**

- No change merded on master branch this week. Only few backport changes on P and Si.
- 7 changes from Bala, under review, related to intermediate high rates handling on renderer:
  - "Add missing ODUFlex interface" => Bala noticed working on intermediate rates that this odu-flex interface was missing. This change solves this issue, and added the corresponding test on the functional test suite. Discussion to explain Guillaume's CR-1. A priori, solved by change 99399, so ready to be merged after closin Guillaume's comment
  - "Generalize supporting interface (B100G) in portMapping" => generalizes the handling of supporting OTUCN interfaces. Ready to be merged.
  - o "Change in interface naming convention" => this change is necessary to differentiate 200/300 and 400G interfaces. Ready to be merged.
  - "Device Renderer support for intermediate rates" => this change complements the Renderer to handle the creation of intermediate rate services (200/300/400G). Type of interfaces are derived from the modulation format. Gilles thinks that the 3 first changes could be merged as they are. The 4<sup>th</sup> probably need to be refactored a bit considering the comments that were made.
  - "Device renderer functional tests intermediate rates" =>provides the new functional tests associated with intermediate rate interface creation by the renderer. Still some open comments.
  - "Add support for 200G with 31.6 Gbaud" => 200G QAM-16 has been added to the specifications so that we need to handle 200G with
    potentially 2 options. The right option is selected from the modulation format and the width (QAM16 + Spacing/spectral-width = 50GHz à
    200Gbit interfaces).
  - "Device renderer support for 100G on 7.1 models" => this change currently fails, but the reason for this has been identified. AT&T has some equipment in its labs supporting this rate with 7.1 model.
- 1 change from Guillaume on functional tests migration to RFC8040: Guillaume would like the team to review its change. Gilles has just started it before the meeting
- 2 changes from Gilles related to Service model migration to 10.1. Gilles noticed that between OpenROADM models 10.0 and 10.1, there are some huge modifications in the way routing constraints are handled. TransportPCE internal model describing routing constraints was based on the OR Model R1.2.
  - "Refactor transportpce-routing-constraint model" =>Gilles has started working on removing specific TransportPCE things from TransportPCE models for items that are somewhat duplicated.
  - "Remove transportpce-routing-constraint model" => remove also specific code that was writen to convert OpenROADM constraints to TransportPCE ones. This has a rather strong impact, since routing constraint are used by GNPy.

### 01/13/2022

#### **General information**

- Next Phosphorus Release:
  - Our stable/phosphorus branch shall be locked next Monday (code freeze). Release of our artifacts should be after the 27<sup>th</sup> of January.
     Shall be straight forward since our branch is up to date.
  - As intermediate rate are part of P release train, everything that is related to it will be merged to the P branch, which shall be the
    reference branch to prepare the OFC demo.
- Next Si Release:
  - an unscheduled Si-SR4 service release will come after the P-SR2 release to solve the Log4Shell security issue. Wait for next TSC meeting.

- Since the last meeting, 3 changes have been merged:
  - o 99195: Removing the maint-testsignal container => already backported on stable/phosphorus branch by Bala, but not merged yet
  - o 99244: Use lighty-core build rather than package dep =>it allows compilation of the latest phosphorus snapshot release of lighty.io-core
- 99247: Update maven download URL & fix gate => allows a correct install of maven on the gate
   The following changes are under review:
  - 99196: ODUFlex is missing => does not pass the gate (failling at building controller). It shall be rebased to include latest Guillaume change on maven install
  - 99293: Add org-openroadm-port-types yang (unoffical) to schema => proposed by Bala directly on P branch. Actually, with change "97599: Unofficial regenerator capability support in YANG", we introduced a deviation to the original model that is needed to handle regens at high rates (not every device support regeneration). Devices that support regen capability have a deviation with an added if-OTUCn-ODUCn-regen interface. To handle this issue, Bala is proposing to put in the karaf cache the model to allow mounting of both kind of devices.
- Other activities under progress

 Gilles has started working on the integration of R10.1 service model. He noticed some modifications on the org-openroadm-routingconstraints.yang model associated with constraints. Part of the Service Handler code will need to be modified. The migration from service models 10.0 to 10.1 could not be straigth-forward.

#### Q&A

• DDF: Gilles and Christophe made a general presentation of transportPCE, and Javier presented the development made by Nokia on the T-API feature. Highstreet will also make a presentation this afternoon on their work in ONAP based on tyce for optical domain control.

### 01/06/2022

#### **Code Review**

- Since the last meeting, 6 changes have been merged:
  - 96193: Power control support for 87.5GHz spectrum width => Last modification was a rebase and a Pylint issue that was solved.
  - o 98688: TapiLink creation refactoring
  - 98669: Enforce pylint in CI via tox => Guillaume enforced Pylint in CI via tox
  - 99050: Fix few NPE in TAPI implementation => a small correction on tapi implementation to avoid NPE
  - 98958: Add and fix Phosphorus lighty.io support => allows to prepare things for future lighty.io support. However the bug providing logs in Hexadecimal is still present. This means things have been adjusted on tpce side, but we still needs some things to be solved on lighty side (NETCONF dependency)
  - 98991: Use environment variables for OLM timers => allows to set the timers for the OLM through specific environment variables so that
    the timers can be set according to the context (simulators/real equipment). By default, the highest value of the timer is set. When using
    Honeynode, the correct values then need to be exported, without having to re-compile the project.
- The following changes are still under review:
  - 99195: Removing the maint-testsignal container => the container is only needed if we set the equipment to the maintenance state. So as
    we don't need it now, the proposed solution was just to remove it.
  - 99196: ODUFlex is missing => does not pass the gate (there is a compilation issue because the indentation is not good). This changes
    allows for service relying on Flexo Interfaces to create the ODUFlex interface that was missing (400G).
  - TAPI changes concerning notifications => we will study the interest of merging them after the functional test have been provided

### Q&A

Next DDF is next week with several contributions: Orange will present TransportPCE features with a life demo (Tuesday 11). Guillaume will lead a
discussion about release process and tox job parallelization. Nokia will present the TAPI features of tpce.