2022 meeting minutes

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

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:
  - “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 discovered 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 mentioned 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 possible.
    - 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” a 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 account most of comments received from Guillaume, Shweta. Gilles also pushed a new one regarding the rewrite of the unitary test about downgrading routing constraints.
• GNPy 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 tpc 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 tpc 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.

Code Review

• Since the last meeting, lots of changes have been merged. Let’s mention the following:
  • "Fix the GNPy version used for tests to 1.2.1" => to fix the version of GNPy used for TPCE functional tests
  • 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.
  • Guillaume 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 ODU2C/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.
  • "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 matters 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)

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.

Code Review

• 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.
  - “Device Renderer support for intermediate rates” : In this change a dedicated method is deducing the rate from the modulation format.
  - “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 upstream 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 merged 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.
  - “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 4th 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 & 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 written 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 27th 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.

**Code Review**

- Since the last meeting, 3 changes have been merged:
  - 99195: Removing the maint-testsignal container => already backported on stable/phosphorus branch by Bala, but not merged yet
  - 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 (failing at building controller). It shall be rebased to include latest Guillaume change on maven install
  - 99293: Add org-openroadm-port-types yang (unofficial) 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-routing-constraints.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 straight-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 tpce for optical domain control.

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**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.
  - 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)
  - 98891: 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 (simulatore/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.