<table>
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Focus on Guilin Non functional requirements (Security, OOM, Legal, Documenting ONAP APIs, Integration)
Service Mesh POC for Guilin
List of Guilin Non functional requirements - TSC MUST HAVE

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td>REQ-323</td>
<td>Each project will update the vulnerable direct dependencies in their code base</td>
</tr>
<tr>
<td>REQ-349</td>
<td>Each ONAP project shall define code coverage improvements and achieve at least 55% code coverage</td>
</tr>
<tr>
<td>REQ-373</td>
<td>ONAP must complete update of the Python language (from 2.7 -&gt; 3.8)</td>
</tr>
<tr>
<td>REQ-362</td>
<td>All containers must run as non-root user</td>
</tr>
<tr>
<td>REQ-380</td>
<td>ONAP container repository (nexus) must not contain upstream docker images</td>
</tr>
<tr>
<td>REQ-379</td>
<td>ONAP projects must use only approved and verified base images for their containers</td>
</tr>
<tr>
<td>REQ-351</td>
<td>ONAP must complete update of the java language (from v8 -&gt; v11)</td>
</tr>
<tr>
<td>REQ-382</td>
<td>Support Pylog repository used by VF-C, Modeling, MultiCloud and OOF</td>
</tr>
<tr>
<td>REQ-361</td>
<td>Continue hardcoded passwords removal</td>
</tr>
</tbody>
</table>

9 non functional requirements have been prioritize d up to now by the ONAP TSC for Guilin, requestin g support from companies who are submittin g usecase /functional reqs. How can we impleme nt additional non functional requirements?

- Partial solution will also been discusse d as a Cross-Community topic at 2.30 pm UTC on Monday June 22nd, 2020- Help Recruit more Develop ers to LFN Projects!
- Architecture Compon ent Views in Readthe docs planned on Wednesday June 24th, 2020 at 3pm UTC to align with swagger work

Details regarding Non functional requirements REQ-379, REQ-380 - https://wiki.onap.org/display/DW/License+compliance

The list of "Base Image statistics" can be enhanced as long as the ONAP Community will maintain it.
Track: License compliance & how to deal with it?

Presenter/Moderator: Krzysztof Opasiak / Catherine Lefevre

Organize a TS vote on the list of licenses that can be used with ONAP containers i.e. approved licenses which we agree to comply with, in terms of license terms for distribution in docker containers.
PTL's to confirm the comments in Green regarding "Upstream dockers in ONAP Nexus Server" section

Define a list of approved base images

Do the license compliance process for all approved base images

Make sure that all components use only approved base images
<table>
<thead>
<tr>
<th>Track: Integration</th>
<th>Status update: what's planned internally</th>
<th>Presenter/Moderator: Morgan Richomme</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>- Bring back your functional tests in your project repo</td>
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<td></td>
<td>- Integrate automated CSIT/Pair-Wise tests as part of OOM Gating</td>
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<td>- Refactor component's healthcheck</td>
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<td>- Use reference images to build your dockers - also discussed in the previous session &quot;License compliance &amp; how to deal with it?&quot;</td>
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<td>- Additional sessions are being held by the Integration team this week to discuss their Guilin requirements</td>
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<table>
<thead>
<tr>
<th>Track: Modeling Subcommittee Meeting</th>
<th>Reviewed current modeling activities and candidate modeling requirements for Guilin.</th>
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<tbody>
<tr>
<td></td>
<td>The following topics were also presented:</td>
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<tr>
<td></td>
<td>1 Modeling process</td>
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<td>2 Policy model</td>
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<td></td>
<td>3 Slicing model</td>
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<tr>
<td></td>
<td>4 CNF Inventory Modeling</td>
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<tr>
<td></td>
<td>5 CNF ETSI modeling overview</td>
</tr>
<tr>
<td></td>
<td>6 Modeling of Geolocation information</td>
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<tr>
<td></td>
<td>Recording may be found at: LNF_June_vDTF-ONAP_Modeling_Subcommittee.mp4</td>
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<tr>
<td></td>
<td>invite to join those discussions</td>
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<table>
<thead>
<tr>
<th>Track: Policy Framework</th>
<th>Guilin Prioritization</th>
<th>Presenter/Moderator: Pamela Dragosh</th>
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<tbody>
<tr>
<td></td>
<td>- The former Policy architecture will be deprecated in order to embrace the new Self-Serve Policy Architecture developed from Dublin to Frankfurt.</td>
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<td></td>
<td>- Presentation of the major Policy Guilin requirements including E2E Network Slicing, 5G OOF SON and improvements</td>
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<td></td>
<td>- Policy team is in the process of creating Tutorials for the ONAP community to view to understand how to use the Policy Platform</td>
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<td></td>
<td><a href="https://wiki.onap.org/display/DW/2020+Frankfurt+Tutorials">https://wiki.onap.org/display/DW/2020+Frankfurt+Tutorials</a></td>
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</tbody>
</table>
### Track: Help Recruit more Developers to LFN Projects!

**Presenters/Moderators:**
- Jason Hunt, Abhijit Kumbhare, Al Morton, Catherine Lefevre, Morgan Richomme, Ranny Haby

**Overall 3 topics:**
- Recruiting “casual developer”
- Building pipeline via academics, students, interns
- Encouraging more corporate contributions

**Badging/Certification to recognize Developers/Testers for their contribution**

**Help Recruit more Developers to LFN Projects! 2020-06-22**

**COTT/OPNFV Track**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>OPNFV Kick-off, and Round-Robin Project Reviews</td>
<td>So far, so good!</td>
<td>Need to use this Wiki Page for Day two and beyond, for notes etc.</td>
</tr>
</tbody>
</table>

**CNTT Kickoff with Baraque Release**

- Feature set for Baraque release explained and work item focus.

**COTT | Baraque Release Featureset**

**Cross Community Track**

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**June 23rd, 2020 - Day 2**
Track: Shift to Release Train
Presenters /Moderators: Catherine Lefevre

- The Challenges from LFN Projects
- Release Cadence in Other Open Source projects
- Shift to Release Train & Brainstorming

Wiki notes: Shift to Release Train 2020-06-23

- How can we release more frequently, smaller scope without impacting the SW quality?
- How can we change the waterfall-ish development model?
- How can we get enough details about candidates requirements prior the release?
- How to manage the release in case of people turn-over?
- How to handle the scope and maintain a balance between Usecase/Functional reqs (attractive) and Non functional reqs (less sexy)?

Identify a set of projects that could prototype the Release Train approach
“Release cadence transition proposal” on June 25th, 2020 @ 11am UTC

Track: XGVela
Presenters /Moderators: Qihui Zhao

- Alignment with CNTT /CNCF TUG and O-RAN /ONAP in order to define their role as part of XGVela and identify what can be leveraged from the existing projects
- Introduction of XGVela to the TAC team

Track: Cloud Native in Telecom Cloud
Presenters /Moderators: Qihui Zhao, Ying Li

- Alignment with CNTT /CNCF TUG and O-RAN /ONAP in order to define their role as part of XGVela and identify what can be leveraged from the existing projects
- Introduction of XGVela to the TAC team

ONAP Track

Key Points

- Plan to align with CNTT RA-2 (Kubernetes)
| Best practices for updating software components | Reviewed mandatory upgrades to Java 11 and Python 3 for all projects |
| Presenters: Pawel Pawlak, Amy Zwarico | Migration of ONAP to standard infrastructure versions: Docker, Kubernetes, OS images, databases, etc (see Database, Java, Python, Docker, Kubernetes, and Image Versions) |
| | Updating vulnerable direct dependencies: |
| | • SECCOM repo specific recommendations on the Security Vulnerabilities protected wiki space |
| | • Must be complete by M2 |
| | Resources to do the non-functional work |
| | Potential dependencies that conflict with new versions |
| | SECCOM will have representative at the weekly PTL call to answer questions |
| | PTLS and others are always welcome to attend the SECCOM weekly on Tuesdays to raise issues |
| | PTLs secure resources and plan to identify show stoppers as soon as possible (M1) |

| EUAG Operator Survey & In-Depth Analysis On Consumption Model | Presented End User Advisory Group’s survey on various ONAP consumption models, which led to creation of EUAG white paper |
| Presenters: Atul Purohit | Key topics covered - |
| | • Introduction – EUAG |
| | • What Survey & Why |
| | • Survey Questions, Deductions |
| | • Recommendations |
| | • Paper & Wrap - Up |

| None | EUAG should create an action plan out of survey inference, what it means for various committees and how can the feedback be provided back to CSPs |
| | Survey sample was about 50% of overall members and 75% of active members, to make similar activities more impactful in future perhaps the survey can be done with larger sample size |

| OOM Status update: what’s planned internally | Review of the planned OOM changes: |
| Presenters /Moderators: Sylvain Desbureaux, Krzysztof Opasiak | Support of Helm V3 |
| | Kubernetes V1.17 (or 1.18) |
| | Migrate to Seccom recommended Versions |
| | Update defaults (use Ingress, Storage Class, Hardened OS) |
| | Might be breaking gating during changes, impact deployments |
| | check if Helm V3 requires Kubernetes v1.17+ |

| OOM Status update: consequences on other components | Review of the required changes on components helm charts VS requirements presentation of changes, use of templates, adding appenders to Logback to support STDOUT as additional output |
| Presenters /Moderators: Sylvain Desbureaux, Krzysztof Opasiak | Container that do not contain ONAP code should not be hosted on Nexus |
| | No Root access to DB |
| | Application config should be fully prepared before starting the container |
| | Containers must crash properly when a failure occurs |
| | No more Nodeports |
| | AAF optional (component should work without AAF even in degraded mode) |
| | HTTPS is mandatory but should be configurable (disable in case of Service Mesh as this will be offloaded to Service Mesh) |
| | Container RootFS should be mounted as ReadOnly |
| | Commit message rules for OOM |
| | AAF removal or optional / POC SMesh |
| | SecCom to follow up and define what disabling AAF means |
### Requirements Traceability: Initial Request through TSC Approval

**Presenters**
/ **Moderators**: Alla Goldner, Chaker Al-Hakim, Pawel Pawlak, Pamela Dragosh, David McBride, Catherine Lefevre

- Brainstorming and discussion on aligning the ONAP requirements pipeline
- **Consensus**:
  - any requirements - regardless of source - should go through the requirements subcommittee.
  - and euag submits requirements to req. sub where they are vetted
  - committee consolidates backlog
  - committee should make prioritization recommendations to the TSC

- Consensus:
  - any requirements - regardless of source - should go through the requirements subcommittee.
  - and euag submits requirements to req. sub where they are vetted
  - committee consolidates backlog
  - committee should make prioritization recommendations to the TSC

- **How can we streamline the requirements coming from different sources inside and outside from the ONAP Community?**
- As an example, EUAG Req Subcommittee prioritised (Architecture Review) TSC

- **Enhance the mission of the Requirements Subcommittee**:
  - Act as the ONAP Product Owners
  - Recommend Prioritization to the TSC
  - Create the consolidated ONAP Backlog

### vFW CNF use case evolution

**Presenters**
/ **Moderators**: Konrad Baka Samuli Silvius Lukasz Rajewski

The presentation covers Frankfurt CNF instantiation improvements on vFW use case example
- Changed modelling of the vFW CNF - split into 4 helm packages to benefit from CDS resource assignment
- Change from a’la Carte VNF-API instantiation flow into Macro GR-API with CDS
- Utilization of CDS for automatic assignment of Helm package overrides
- CDS uploads optionally profile which allows for further helm enrichment like extra k8s resources


**Notes**: 2020 June vDTF ONAP vFW CNF use case evolution

### Orchestration of 5G CNFs using Multicloud K8s plugin

**Presenter**: Sandeep Sharma

- Walkthrough of how ONAP was used to instantiate a 5G Core CNF.
- More details & a demo are available in the Webinar that this team did

**Cloud Native 5G Network +ONAP Software Stack**

- Did use SDC and MultiCloud KBS plugin, but did not use SO. Did have one manual step.
- Container image was in a local KBS repository, not bundled in the service package

- vFW CNF Use case automation with robot scripts and use of modern VID UI
- Support of Close Loop
- [https://jira.onap.org/browse/REQ-341](https://jira.onap.org/browse/REQ-341) - CNF SO orchestration Enhancements
- Potentially new use case: VNF + CNF Heterogeneous service and/or pure CNF (without a need of specific k8s cluster setup)
### Python ONAP SDK
**Presenter:** Michal Jagiello

Version 1.0 of the SDK was released and will be available using `pip`.

Presentation provided an overview of the project capabilities:
- Communication and handling with ONAP services using HTTP/S APIs
- High level of abstraction
- Easy to use, even if you don't know what is possible "underneath"

SDK requires Python 3.7 or higher and was tested with ONAP Frankfurt.

### Frankfurt Post Mortem
**Presenter:** David McBride

- **Review Frankfurt Schedule changes & pain points**
  - number of shifts in schedule (not so much the total delay) raised concerns
  - scope (do we take in too much?)
  - very late avail of final dockers
  - use case not clear if they are leveraging or need more ONAP dev - cannot know until actually running it
  - self release is painful, takes time for multi sub projects
  - Lots of remaining open bugs at M4
  - Observations on certificates, exceptions to milestones

### 5G & PNF Use Case Overview
**Presenters:** Benjamin Cheung, Vimal Begwani

Presentations given on the 5G & PNF Use Cases
https://wiki.onap.org/display/DW/Guilin+%28R7%29+-+Use+Cases

(Presentation Slides are there also)

There are many dedicated 5G/PNF Use Case deep dives in the DDF

The U/C Realization call will engage PTLs: https://wiki.onap.org/display/DW/R7+Use+Case+Realization+Meetings+MoM


Andy Mayer gave an overview of the Generic Information Template: https://wiki.onap.org/display/DW/Generic+Information+Element+Template
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</table>
| Performance (Joint with OPNFV) | • Great Discussion around performance and its relation to CNTT.  
• Discussion to be continued with Al Morton, Trevor Cooper, and Mark Beierl during CVC using Al proposed 4-tier structure (described below):  
• Functional tests lead to Performance tests of the functions. A subset of the most important performance tests are elevated to Benchmark status (with more precise specifications of methods, etc.). Acceptance thresholds could be established for "Performance Conformance"; if agreed. | • Continue discussion in CVC.  
• Map 4-tier structure to CNTT. | |
| Traceability Test Cases (Joint with OPNFV) | • Great progress demonstrated by Cedric Ollivier to cover RA-1/RC-1 Requirements | | |
| Use cases of SDN solution | • Interesting and detailed presentation by Ying Li and Shasha Guo of SDN implementations for several use cases like Traffic Mirroring and Routing Configuration, showing code snippets, network diagrams and parameter mappings | | |
| Field Trial Status (Joint with OPNFV) | • Presentation by Cedric Ollivier - update on the CNTT Field Trial. CNTT RC changelog from Baldy presented (9 out of 2000 single tests removed) - good outcome. Orange IAAS: 10 remaining single test failures, targeting mid-July to complete. RC is ready to use by vendors and operators. | | |
| Next CNTT OpenStack Release & Cyborg Acceleration Mgmt | • Presentation on CNTT OpenStack Release selection by Pankaj Goyal et al, and second half by Shasha Guo on Cyborg Acceleration Mgmt.  
• OSTK Pike was selected in Paris, but the next version was selected by a formal process and against defined criteria, the process started at Baldy vF2F in April 2020. Train met the selection criteria and is recommended as the next CNTT OSTK version. Recommendation: utilize Ussuri OSTK release for Cyborg API v2.0 service (as it is incompatible with Train).  
Upstream: Cyborg should fix their API in Train release as per OpenStack policy.  
• Discussion whether CNTT should jump straight to Ussuri to avoid backporting problems for Cyborg. An option for consideration for TSC (the only criterion not met by Ussuri is 6+ month requirement)  
• Shasha Guo and Ying Li on Cyborg acceleration: presented scenarios why we need to use Cyborg, and Cyborg enhancement requirements for CNTT. | As a result of the discussion, the next step will be to present an option of moving straight to Ussuri. Action on Pankaj Goyal | |

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<tr>
<td>&lt;Many CNTT meetings were joint with OPNFV Today!&gt;</td>
<td>See above - Scheduling was a non-challenge again today!</td>
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OPNFV TSC Meeting

**Agenda**

- 2020-2021 Community Elections proceeding, TSC members are elected. Leadership position elections are the next steps.
- New Project Review on RI-2 in OPNFV, Wiki vote will proceed this week.
- TSC Roles and Responsibilities reviewed with the Community.
- OPNFV Internal Project Periodic Reviews continue (Project life-cycle assessment is also an outcome of TSC oversight)
- Key meetings/sessions on OPNFV Release Process and CIRV Software Demo later this week (Wednesday)
- Next Week: Review of feedback from the June Governing Board meeting.

Let’s play Twister!

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### OpenDaylight Track

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<tbody>
<tr>
<td>ODL Micro Status &amp; Next Steps</td>
<td>Slide Deck here - <a href="https://docs.google.com/presentation/d/1hqN9NcFzm2kz1CP5gcE7wZFB-fPaWHvKOBlcEINUZy/edit?usp=sharing">https://docs.google.com/presentation/d/1hqN9NcFzm2kz1CP5gcE7wZFB-fPaWHvKOBlcEINUZy/edit?usp=sharing</a></td>
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<td>Need performance tests that show the improvement by ODL-Micro v/s OSGi/karaf</td>
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<td>Need performance data about how much percent improvement ODL-Micro gives when testing with a device</td>
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<tr>
<td></td>
<td><a href="mailto:tejas.nevrekar@gmail.com">Tejas Nevrekar</a> to share performance reports once available. Further elaboration in TWS once code is uploaded</td>
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| ODL Platform API Changes and impact to downstream consumers | | |

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### June 24th, 2020 - Day 3

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Track: E2E Network Slicing
Session 1

Presenters /Moderators: LIN MENG
Zhang Min
Swaminathan Seetharaman

Content: Slides are available here and here.

- E2E Network Slicing overview
- Work done in Frankfurt, ONAP component impacts
- Demo of Frankfurt scenarios
- Overview of Guilin content

**Workflow of slice ordering**

- 5G Network Slicing Demo

**5G Network Slicing Demo Steps**

1. Give service creation request from UI (ONAP Portal)
2. Observe NSSSelection
3. Show NSI Selection (NSMF output)
4. Confirm NSSSelection in UI (ONAP Portal)
5. Show NSSI creation trigger of External Core NSMF
6. Show NSSI and S-NSSAI creation in UI (inventory update), and AIM

Presentation Slides are available here and here.
Recording is available here.

Comments/Feedback

1. Transport NSSMF interface on Southbound to be shown to avoid confusion. Currently the slides only shows RAN and Core NF Simulators. Transport NSSMF will interact with a Optical Domain Controller (or simulator) on SB.
2. Stretch goals to be indicated - for e.g., Control Loop using CLAMP, etc.
3. For Core, Closed Loop part to be discussed offline due to introduction of CNFs.

Track: E2E Network Slicing
Session 2

Moderators: LIN MENG
Swaminathan Seetharaman

Presenters:
Swaminathan Seetharaman
Milind Jalwadi

- Session covering Core, RAN and Transport Slicing functionality to be realized in Guilin (due to time constraint, Transport Slicing part moved to Session 3 - see below)

**Impact overview: Guilin**

Presentation Slides are available here (Core), here (RAN) and here (Transport).
Recording is available here.
Session covering KPI Monitoring, Closed Loop and Intelligent Slicing. The session started with Transport Slicing which was carried over from Session 2.

Presentation Slides are available [here](KPI Monitoring), [here](Closed Loop) and [here](Intelligent Slicing).

Recording is available [here].

Session providing a brief overview of 5G OOF SON use case followed by a demo which provided the highlights of the use case, and the work done in Frankfurt release.

Presentation Slides are available [here].

Recording is available [here].

Discussions about deprecating the submodules in the docs repo

Discussion Slides are available [here].

Recording is available [here].
Testing and Documentation - Goals

- Goals of the project:
  - Reorganize (by creating appropriate links) in the documents based on personas/usage
  - ONAP Architecture (Existing document)
  - ONAP Admin Guide (Setting Up ONAP)
  - ONAP User Guide — Design Time
  - ONAP User Guide — Run Time
  - ONAP Developer Guide (Existing document)
  - Add additional Tutorials for easier usage (in case if doesn’t exist)
  - We will validate and incorporate the missing steps/items to make the Documentation easy to use and accurate.
- Target release: Guilin

Great improvements from moving content from Confluence (onap wiki) to ReadTheDocs

Agreement that the content of the release note will be limited to the scope of what we are delivering. Content of the previous release note will remain available.

A journey of building an LTE core (GW tester) Network function as a CNF. It serves as a good reference because it uses several, segregated networks.

- Required steps include preparing the Docker image, using KBS to orchestrate, creating overlay networks using Flannel (many challenges related to multiple interfaces) and packaging using Helm
- Two solutions for CNI plugins - DANM and Multus
- Helm charts are available in the CNCF TUG Testbed

Follow-up with the ONAP CNF Modeling/Inventory task force
Cloud Software Validation - Part of OPNFV CIRV project Sridhar Rao

- Work moving fast since June - 2 Interns Joined! Ashwin and Parth.
- Demo shows how validation works, run on Intel Pod 10.

Form of UI and exposure of results: many possibilities (REST, cache in X-testing, others)

PDF is a "big" PDF, includes many aspects beyond OPNFV PDF.

Today, checking Airship deployment and debug with logs (find root cause).
Other deployments ??

Security Checks:
- Some tools in Functest, Ansible Security Hardening has possibilities, Cedric will have a look in Openstack.

By early August, should have Airship Manifest complete.
Results API will expand storage beyond current local storage, to X-testing, Test-API, etc.

K8s: Multi-Interface Container Network Benchmarking in VSPERF Sridhar Rao

Background information in Slides from April Event (links in the slides), Thanks to K8s Networking Experts! This is Mostly a Hands-on DEMO!

- Automated Cluster Setup complete, Using Intel Pod 12, Multus, Centos (dpdk-app-centos), T-rex Traffic Generator. Autoamtion handles the deployment of the cluster and CNI, AND the tooling can be used on existing clusters.
- VSPERF tool provides the basic configuration capability, starting with OVS-DPDK, on Worker Node (DUT).
- A second instance of VSPERF runs the Traffic Generator-Only, for Benchmarking search control and Results collection.
- Results for OVS-DPDK show very low Throughput, we can see the bottleneck is a virtual port.
- Next, test with SR-IOV: one virtual function (VF) per vNIC
- Finally, test with VPP: Issue with support of vhost-user, had to use memif (interface or bridge modes are OK). Problem with xconnect mode, I2iwd works ok.

Pod must be running DPDK, or other performance enhancing technology.

Still exploring CPU configurations (optimization).
Currently need to add flows in vSwitch manually.

Need Expert Help! Queue configuration on Virtual Ports! Also Hugepage configuration.

Using Ixia HW Traffic generator in very near future.
Will be running more comparision tests when satisfied with configurati ons.

Jeff Hartley offered to help!
Moderator: Marc Price

- Very Interactive panel Q&A: The **Recording** is the Canonical Source of Information!
- Need CNTT specifications for infrastructure to line-up with CN workload needs: Integration tools to manage operate and maintain are needed
- Opinion: CNF deployment is highly dependent on success in 2 areas: performance and operations.
- CNF Testbed is a showcase for how different CN elements can work together and offer services.
- Different levels of Services: Examples include Self-Healing, OAM: CNF Conformance requires construction according to Cloud-Native Principles. Quality of Service should be included.
- What value can OVP 2.0 provide to Operators? And what can we learn from previous OVP efforts?
  - Need to certify that Operator’s Infrastructure is **good enough** to run CN functions/workloads. Need to understand the demarcation between Infrastructure, Operations, and CNFs. Reduce Integration testing and the time involved.
  - Need more than a “standard”, only a piece of paper! Also, CN-principles emphasize automation of operations so that systems don’t have to be watched 24x7 (babysitting).
  - Can OVP reduce Integration and Conformance testing by 10%? - then that is sufficient value to use it. Operators have turned into integrators to use multiple vendor products.
- How does OVP 2.0 align with other projects?
  - CNTT for requirements, Also ETSI NFV
  - OPNFV for benchmarking/performance
  - CNCF for workload cloud-native-ness
  - ONAP for alignment on service creation with CNFs
  - TIP using CNTT specifications for deployment
- It’s more and more difficult to find the right forum - too many! Fragmentation will slow us down.
- Value of OVP is the Meaning of the Badge! UL (Underwriter’s Laboratories) is a an example - you won’t get shocked when you plug an electrical appliance into the wall.
- Most CNCF projects are about Rigorous Testing, also Project Graduation provides assurance. Long legacy of best practices for application development. May use other Communities: FD.io does it all day, for VPP... Others have a wider view (See previous OPNFV K8s Benchmarking Session).
- Look into more for the badging program
- We get out of it what we put into it, and recognize that each operator will still need to do their own testing! Cover LCF and common functions and let operators do the rest.
- Are there use cases that badging is NOT covering? Bring them in!

**Joint Topic: OPNFV and CNTT: OPNFV Release Process 2.0 JOINT with CNTT David McBride**

- Integration-Test is a community role, ask community projects to implement verification tests for CI, then it is done.
- Integration-Test is covered by the CI and Jenkins -
- Leverage current gating
- Integration Test is different from normal CI and Jenkins checks, This form of Gating is a dependent on CNTT requirements
- CNTT must put developers into the process now, to implement the requirements, there may be difficulties when dealing with a single requirement at a time.
- Some feel that the Requirements Sub-committee is too much overhead.
- Others feel the Requirements SC provides the necessary Triage to reduce overhead on the Project teams.
- Need more CNTT input, if possible.

**Requirements Vetting Process**

![Requirements Vetting Process Diagram](image)

**Additional Notes/Questions:**
- Finding more time to close on this discussion: Proposal is to re-allocate time from Thursday’s Agenda, Joint Topic Right after the 30 minute Break!
- What Artifacts are we Releasing?
  - Tool Documentation (always)
  - Integrated test automation for Conformance, Functional and other Requirements
<table>
<thead>
<tr>
<th>OpenDaylight Track</th>
<th>Key Points</th>
<th>Challenges</th>
<th>Next Steps /Action Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODL transportPCE Magnesium Retrospective</td>
<td>This retrospective presented a quick overview of TransportPCE new functionalities introduced in Magnesium. It was followed by a status on the developments done and some feedbacks on the features introduced by OpenROADM and the community (OpenROADM OTN support, SpotBugs / checkstyle enforcement and doppelgangers, netconf notifications)</td>
<td>OTN support hardened for Aluminium Contributors growth</td>
<td>involve more reviewers and committers rationalization of project features for OTN</td>
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<tr>
<td>ODL BGPCEP</td>
<td>Reliability &amp; Scale</td>
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<tr>
<td>Presentation here - <a href="https://docs.google.com/presentation/d/1bWTCixNBrWVEsOdbYFXEeQrfLswG-AgzpyP110d/edi?usp=sharing">https://docs.google.com/presentation/d/1bWTCixNBrWVEsOdbYFXEeQrfLswG-AgzpyP110d/edi...sharing</a></td>
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<td>Robert suggested having bugs filed for these issues so that the project will take a look.</td>
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<tr>
<td>Olivier also mentioned similar issues observed by his team as the PCEP failures and the only recover being restart controller.</td>
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<td>Lumina will upload the missing bugs and patches</td>
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<td>Config only replication shards are already supported</td>
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<tr>
<th>ODL Usability Review</th>
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<td>A quick usability review of the OpenDaylight Usability was covered in this session including what works well, what does not (development &amp; deployment challenges). This was followed up with suggestions for improvements - from a low hanging fruit to bigger architecture improvements like a more loosely coupled platform.</td>
</tr>
</tbody>
</table>
ODL Project Status

The discussion concentrated around how to get more developers on boarded. There were many suggestions including having a dedicated public face for helping new developers. A key point that was made was:

- Need more clear messaging to the users (companies) that if you are consuming ODL, to please contribute upstream X hours per day or week to help resolve the technical debt.

CNTT Track

| Key Points |
| Challenge |
| Next Steps/Action Items |

Edge Deep Dive

- Ahmed El Sawaf Beth Cohen Petar Torre presented the session.

Networking Focus Group

- Walter Kozlowski Tomas Fredberg presented Reference Model and Networking relation to it.

OVP Phase 2.0 Panel

- Marc Price moderated OVP session and there has been many discussions around it's relation to CNTT.

June 25th, 2020 - Day 4

ONAP Track

| Key Points |
| Challenge |

Track: Release Cadence Transition Proposal

- https://wiki.onap.org/display/DW/Release+Cadence+Proposal

Presenters/Moderators:

Krzysztof Opasiak
Candidate for the Guilin Release

Executive Summary - Provide CNF orchestration support through integration of K8s adapter in ONAP SO
- Support for provisioning CNFs using an external K8s Manager
- Support the Helm based orchestration
- Leverage the existing functionality of Multi cloud in SO
- Bring in the advantages of the K8s orchestrator
- Set stage for the Cloud Native scenarios

Owners: Łukasz Rajewski (Orange), Seshu Kumar M (Huawei), Srini Addepalli (Intel)

Business Impact - Enables operators and service providers to orchestrate CNFs based services along with the VNFs and PNFs

Business Markets - All operators and service providers that are intended to use the CNFs along with PNFs / VNFs

Funding/Financial Impacts - Reduction in the footprint of the ONAP for CNF support.

Organization Mgmt, Sales Strategies - There is no additional organizational management or sales strategies for this requirement outside of a service provider's "normal" ONAP deployment and its attendant organizational resources from a service provider.

IBN was presented by Dong Wang - there were many questions that will be asked via Control Loop subcommittee mailing list. Would like to schedule a more in-depth review of this use case on 7/1 or 7/8?

TOSCA presented by Michela Bevilacqua and Liam Fallon
- Vijay noted that DCAE-MOD for Guilin scope has been changed to include the pushing of a new catalogue. May affect this POC
- Discussion on future work for Control Loop subcommittee

Modelling of the CNF data
So far VNF model will be used with slight modifications required to track status of instantiated k8s resources

7 components impacted, required coordination effort
Scott Blandford: We've put together a model for simplistic control loops. How do we deal with CL's that are straining multiple DC AE together? Or have multiple interactions? How to monitor?
Pa mel a Dra go sh:
Mo nit o ring tool s ma y not be eno ugh?
G erv ais-
Mar tial Ng uoko
CL AM P mo nit o ring is onl y cap turing Dm aap eve nts.
Ne ed mu ch mor e dev elo pm ent to sup port De vO ps
Big thanks to all the Requirement Owners for their submission!

Dear ONAP Community - Continue to support our project teams through your engagement; They have a lot to accomplish prior our next milestone (July 9th, 2020) !!!

Heartily Thank You

Requirements Summary

52 Requirement Candidates:
  ✓ 4 Use Cases
  ✓ 23 Functional Requirements
  ✓ 25 Non-Functional Requirements

Major Use case/Functional requirements impacting >5 components:
  • E2E Network Slicing (11)
  • CCVPN-Transport Slicing (7)
  • CNF Orchestrator Enhancements (7)

Top Impacted Components (incl. Non Functional Requirements):
  • SO (9)
  • DCAE SDNC (incl. SDN-R, CIPPS) (8)
  • AAI, CCSDX (incl. CDS), SD6 (6)

Wiki Links:
  • Guilin Requirements
  • Guilin Impact View per Component

TSC Prioritization – Summary

41 Requirements Approved by TSC
  • 11x TSC Must Have (Non Functional Requirements)
  • 12x Continuity (2x Use Cases, 7x Functional Requirements, 3 Non Functional Requirements)
  • 9x Special GO (Functionals Requirements)
  • 9x PTL GO/NO (1x Use Case, 1 Functional Requirement, 7 Non Functional Requirements)

11 Requirements Not Approved by TSC
  • 4 NO GO for this release
  • 7 Currently NO GO and Require Follow-Up with the TSC
Introduction, best practices and hints on writing tests with Robot Framework

During this presentation I tried to familiarize participants with Robot Framework, show some shortcuts that can be taken and show the Robot wrapper for Python ONAP SDK in action.

- Grouping and consistency
- Reusable abstraction
- Separation of values
- Setup and teardown
- Simple presentation of Robot Framework wrapper for python onap-sdk project

Presentation: LFN_June_vDTF_Robot.pdf

Video: GMT20200625-143701_vDTF-ONAP-_2560x1440.mp4
Service Mesh PoC will require just few changes on the component:

- add an option to disable AAF integration on user management part if any
- add an option to disable HTTPS
- retrieve header and pass them if they are doing subrequest

Configuration & Persistency Service (C&PS)

C&PS Project Page at: https://wiki.onap.org/pages/viewpage.action?pageId=81406119
C&PS DDF Presentations at: https://wiki.onap.org/pages/viewpage.action?pageId=81406119
Weekly Meetings at: https://wiki.onap.org/pages/viewpage.action?pageId=84644224
Overview of C&PS and Model Driven C&PS PoC
Model Driven Configuration and Persistency Service PoC Deep Dive

Presenter: Tony Finnerty

YANG is Primary input and native language of the CPS
Model driven safe access to data
POC Target: Read/write persisted Configuration Management data

Main interfaces and modules

- Sample deployment view
- Core functionality and REST interface are separate modules
- DBMS access via a Service Provider Interface
- Model handling will depend on interfaces and type safety – does not need to be in POD
- yF State reader is for information only and not likely to be part of POD
- DBMS is in own POD

OpenDaylight Track

<table>
<thead>
<tr>
<th>Key Points</th>
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<tbody>
<tr>
<td>Sync OpenDaylight releases and LFN infra migrations</td>
<td>Open discussion on how we can improve the LFN infra migration and ODL release cycles. Those migrations affect the overall efficiency of the community but not only.</td>
</tr>
<tr>
<td>migrations not at all synchronized with the release schedules</td>
<td>more transparency on LFN infra migrations can be achieved with more non-LFN contributors</td>
</tr>
<tr>
<td>migrations mis-execution affects every project</td>
<td>TSC should be able to block LFN migrations</td>
</tr>
<tr>
<td>python version forced to 3.5 obsoleted after only 2 months during the Sodium SR2 release. When possible, lfn-tools must support several versions of python and not impose it.</td>
<td>control-loop between users / TSC and TAC /LFN</td>
</tr>
<tr>
<td>migrations are not automated. This also results in unexpected referencing problems for potential new contributors</td>
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ODL BGPCEP Magnesium Retrospective and Roadmap for Aluminium

This retrospective presented a quick overview of Graph & Algo features introduce in BGPCEP project for compliance to RFC 5440. A short demo highlighted the new functionalities. The presentation also covered the roadmap for Aluminium release and reviewed new features that will be introduced to provide a Path Manager service.

RFC 5440 support
Growth the community
Next challenge for the project

De PT adx rev / cor
### ODL Service Automation Framework (SAF)

Service Automation Framework is a new project in OpenDaylight that leverages Workflow concepts to simplify Service provisioning. This session presented an overview of SAF project and have a discussion around roadmap items.

### ODL Platform Aluminum updates and Silicon lookahead

This talk provided details on what platform updates will be part of the Aluminum release. Also covered were potential platform updates in the next release, effectively doing some planning for Silicon.

### CNTT Track

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### RI-2 DeepDive

- **Georg Kunz Rihab Banday** presented the scope of RI-2, the plan for Baraque.
- Presented OPNFV - Kuberef project proposal. The proposal will be edited (one sentence to address the point in the Challenge column) and OPNFV TSC Wiki-vote for Project Creation started today!

- How to make sure requirements in the newly created project are taken from CNTT.
<table>
<thead>
<tr>
<th>RC-2 DeepDive</th>
<th>Bill Mulligan led the session on RC-2 Deep Dive</th>
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<tbody>
<tr>
<td></td>
<td>• Cedric Ollivier presented the common RC framework.</td>
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<td>• Taylor Carpenter presented the traceability matrix.<a href="https://wiki.lfnetworking.org/">https://wiki.lfnetworking.org/</a></td>
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<td></td>
<td>• Align all efforts to a single outcome and agree on one way of doing it.</td>
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<p>| CNTT/OPNFV Release Sync | • CNTT/OPNFV Releases Sync |</p>
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- Karine Sevilla led a discussion on Security

- Status on RA-1 security
- Evolution planned for Baraque release
- For security testing, tests and tools available
### OPNFV INFRA Work Group Update

Trevor Bramwell
Sawyer Bergeron

- Need quotes for new machines at UNH - IOL and Oregon
- INFRA is working with various projects to transition to Lab As A Service, rather than Static assignments.
- CI/CD Evolution Options - OPNFV is different from other LFN projects (but needs update?)
  - Migration plan includes a Proof of Concept phase
  - Lab As A Service review - booking for various LFN projects. Look around at site: labs.lfnetworking.org
  - LaaS New Features - PTLs can define complete HW configuration, network configuration, merge configuration
  - LaaS Quick booking Improvements
  - Plus CNTT-ready! additional requirements for networking: greater uplinks, and additional storage
  - Anyone with LFID can use
  - New features planned: booking transfers between users, analytics dashboard, Jenkins integration

Lab folks are seeking HW quotes, but this has stalled (for many reasons that seem to be related to COVID-19). Need to figure out a way to get quotes before the funding goes away!

### Second Session of Joint Topic:

OPNFV and CNTT: OPNFV Release Process 2.0 JOINT with CNTT

David McBride

- Project Release Plans Template - Each project will describe and document their Artifacts/Deliverables
  - OPNFV's project plans have varied in degree of detail
  - OPNFV TSC has the responsibility to establish the Release Process
  - Requirements Vetting is still a sticking point
  - Release requirements are part of OPNFV Release process. Full Stop
  - Requirements will come from CNTT, AND Openstack, ETSI NFV, and OPNFV participants.
  - There are already LOTS of requirements to vet that intend to be part of OPNFV's next release.

Testers who won't experiment...

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<th>Tungsten Fabric Track</th>
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<td>Making TF Cloud Native</td>
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<td>Move Upstream DPDK for TF</td>
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