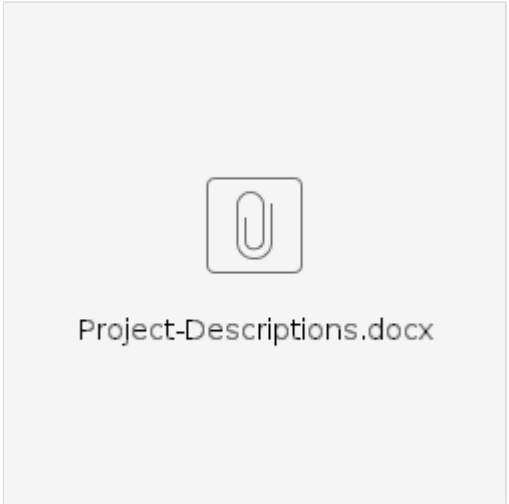# 2022-09-21 Agenda and Minutes

New Time: 6AM Pacific Wednesday. 3PM CEST, 1PM GMT, 0630 India time

## Attendees

Al Morton Sridhar Rao Federica?  Intern Shivank Chaudhary

| It em | Desc | who | Notes/minutes |
|---|---|---|---|
| | Nile Progress <br><br> Schedule <br><br> M1 Release Plan Due 16 Aug 2022 <br><br> M2 due 21 Sept 2022 <br> • Jira issues updated | all | Review Sridhar Rao input // <br><br> Started Release Plan for ViNePerf Nile <br><br> Reviewed the VinePerf Release Plan above.  Several Moselle JIRA tickets need to move to Nile. (edit fix version) <br><br> 1, 2, 5, Shivank will look at these, 3, 4, 6 Sridhar will look at. Shivank and Sridhar will meet separately to discuss. <br><br> We concluded that our JIRA tickets are in good shape for M2, but Dave will probably let us know for sure... |
| | Next week, Sridhar will present at the Tech Discuss! | | eBPF  -VinePerf will move to Tech discuss. |
| | Update INFO.yaml | Sridhar Rao | Al Morton reviewed, suggested a change, removed that change, suggested the revised meeting link and time. |
| | eBPF | Sridhar Rao | Sridhar presented slides, which he will use to familiarize Anuket with XDP and eBPF <br><br>  <br><br> eBPF-Anuket.pptx <br><br> L3AF project in LFN - life cycle management on eBPF programs <br><br> Cillium project has done some of their own benchmarking - but uses some unknown TCP: https://docs.cilium.io/en/stable/operations/performance/benchmark/ <br><br> Not much uptake in telco - still many operations issues. The Cillium community agrees that they have not made a good case for telco usage (in conversations with Sridhar). |
| | Shivank's Intern update | | 21 Sept 2022 <br><br> Shivank's CPU not supported by DPDK .  Need this for most of our benchmarking tools <br><br> New T-rex traffic Gen have been added and a new DPDK folder. <br><br> Sirdhar shared https://github.com/intel/afxdp-plugins-for-kubernetes  it is a possible option to use  Shivank will investigate. <br><br> Mail to Casey Cain about Intern compensation and feedback. <br><br><br> Shivank's report for last week:  14 Sept 2022 <br><br> https://github.com/Alt-Shivam/eBPF-CNI <br><br> Pod 18 connectivity not working for several days, impacting Shivank's work. Tim G says working... Need Pod 12 working as well. There is an active JIRA ticket and comment stream. <br><br> Shivank testing with a VM and K8s cluster - can try out locally <br><br> Need to review mid-term Mentoring report - Al and Sridhar completed in last half of the meeting. <br><br> ACTION  Al Morton invite Maryam meeting to discuss performance (when we agree it's the right time). |

| | | Federica | Review Thesis proposal |
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| | Post review of Daniele's work 13 Jul 2022<br><br>closure to Daniele's work and see if there is anything worth publishing, may consider less-selective conferences if novelty is less | Sridhar | Some issues we dig into now<br><br>**No reply from** simonartxavier@gmail.com and Luc? Al and Sridhar sent new messages.<br><br>Once we containerize prox, and we assign multiple cores to single interface, it crashes.  how can we run Prox with multiple cores in a container?? |
| | Tasks and Action Plan for Shivank | | 1. Get access to the Testbed (Pod18 now)<br>2. Demonstrate how to use Prox and T-Rex on Node-5<br>3. Start with Baremetal and eBPF: Node-5 and Node-4<br>4. Kubernetes Cluster Setup - Node-1 and Node-2: Install Necessary Components. |
| | Open Programmable Interface Project (Linux OPI)<br><br>Change CPU NIC architecture, more autonomy and CPU power goes to NIC in OPI, more than smart NIC now. New Trust boundary between Autonomous NIC and CPU. | Sridhar | New project, governing board formed and TSC meeting set.<br><br>Opportunity for Benchmarking: work with us.<br><br>Need to know planned NIC speeds, Need NIC HW to benchmark.<br><br>20 Jul 2022 There will be a test bed discussion, UNH and Keysight collaboration - using Keysight tools.  We want to join the collaboration. Maybe UNH would welcome our help to some degree. Need some time to understand how the DUT HW will be obtained and installed. Also Remote access (for us, like Intel labs). |
| | Testbed - IXIA support | Sridhar /Al | 2nd ACTION: Do we have support from Ancuta or other IXIA person?  Al Morton sent e-mail<br><br>ACTION: License for IXIA HW - Check with Trevor<br><br>Trevor Cooper says connected and powered on, but we still might have a license issue. Need Pierre's help.<br><br>11 May 2022 this activity seems to have stalled ...<br><br>Pod 19 also not accessible - Dan Xu.<br><br>ACTION:      Al: can you add a comment in the Jira issue.. INFRA-7 ?   As a PTL you can mention the dev is stuck with nodes being inaccessible.   https://jira.anuket.io/browse/INFRA-7 |
| | Additional Mentoring input | Sridhar /Federi ca | 13 Jul 2022  Federica<br><br>Past meeting: python scripts.  Possible combine 1 and 3<br><br>@Sridhar will expand on the proposal descriptions and Federica will begin to ask students about their interests.<br><br>python scripting with K8s is possible for some students in 3rd year. Projects must have resume value, add skill set or new experience.<br><br>Sridhar Rao created some projects.<br><br>ACTION: See proposals & review<br><br>https://wiki.anuket.io/display/HOME/Potential+Projects+for+Student+Volunteers<br><br>Project-Descriptions.docx |

| | Intern (background info) | Sridhar /Al /Federi ca /Shiva nk | XDP performance Studies for Cloud-Native NFV Use Cases<br><br>"Maryam Tahhan joins the crew to talk XDP, AF_XDP, and fast networking"<br><br>Operations support seems to be a big issue, and performance is currently about 0.7 of VPP and DPDK |
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| | K8s on Pod 12 | Sridhar | will look into it |

## Not DONE YET??? - Progress for Moselle (summary: items 5,6,and 7 lack the necessary automated address discovery feature, defer)

6/14 moved to 6/21 but no Moselle page update?  Patches have been submitted to Releng, but have not been committed yet. Release manager must give go ahead after TSC approval.

20 Jul 2022  Patches still open. 02 Aug 2022 possibly earlier, VinePerf Patches have been merged.

see Moselle Release

| 1 | Epic-VINEPERF-672:Create Tools as part of moselle release | 1. Done (Yet to submit the patch)<br>2. Another - Will not implement - Idea is already stale. | CCLA for Moselle release (LF as C)<br><br>CCLA issue resolved 27 Apr 2022<br><br>Patch is submitted - Done. | | |
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| 2 | Epic-VINEPERF-671:Add support for newer software versions | Completed testing. | Done | | |
| 3 | Epic-VINEPERF-670:Create clean workflows for Baremetal, Openstack and Kubernetes Usecases | Workflows are drawn-up. Implementation may need few more days. Request for 1 week more. | Minor work needed for K8s Workflow<br><br>**DONE???  I think so.** | | |
| 4 | Epic-VINEPERF-669:Improve Stability for moselle Release | 1. Bug Fixes (2 patches) | Done | | |
| 5 | Epic-VINEPERF-652:Enhance XTesting-ViNePerf Integration | Moved to Next Release | depends on 7 | | |
| 6 | Task-VINEPERF-658:Enhance framework for XTesting-K8s Usecase | Partially done (reading results from output), Deployment tool. | 1 task remains | | |
| 7 | Task-VINEPERF-654:XTesting-ViNePerf Integration Enhancement - Kubernetes | Will not implement due to limitations with CNIs.<br>Moved to Next release - if CNIs support this. | Need CNI to add  flows automatically in Switches (Userspace-CNI, supports DPDK, OVS, VPP). Major impediment to integrate with X-Testing<br><br>Sridhar will check with Xavier if ARP resolution is supported in Prox as a switch<br><br>TBD | | |
| 8 | Task-VINEPERF-653:XTesting-ViNePerf Enhancement - Openstack [OLD] | Done | | | |
| 9 | Epic-VINEPERF-638:Dataplane performance testing for various internal (within cloud) scenarios | Completed - Yet to submit the patches - Done | Danielle will submit patches after Thesis on Friday, Monday  04/25<br><br>27 Apr 2022 After review tomorrow, Daniele will submit the patch.<br><br>Al Morton will need to review (big patch with documentation) - Done 11 May 2022 | | |
| 10 | Task-VINEPERF-643:Pod-Pod Communication | | | | |

## ACTION ITEMS