



2022-09-07 Agenda and Minutes

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

Attendees

Al Morton Sridhar Rao Federica? Intern Shivank Chaudhary

Item	Desc	who	Notes/minutes
	<p>Nile Progress</p> <p>Schedule</p> <p>M1 Release Plan Due 16 Aug 2022</p> <p>M2 due 13 Sept 2022</p> <ul style="list-style-type: none">Jira issues assigned to release for each participating project (should reflect work described in project release plan)High level issues identified by specification team and appear on dashboard. Not for us!	all	<p>Review Sridhar Rao input</p> <p>Started Release Plan for ViNePerf Nile</p> <p>Reviewed the VinePerf Release Plan above. Several Moselle JIRA tickets need to move to Nile. (edit fix version)</p> <p>1, 2, 5, Shivank will look at these, 3, 4, 6 Sridhar will look at. Shivank and Sridhar will meet separately to discuss.</p> <p>We concluded that our JIRA tickets are in good shape for M2, but Dave will probably let us know for sure...</p>
	Update INFO.yaml	Sridhar Rao	<p>Al Morton reviewed, suggested a change, removed that change, suggested the revised meeting link and time.</p>
	eBPF	Sridhar Rao	<p>Sridhar presented slides, which he will use to familiarize Anuket with XDP and eBPF</p> <div data-bbox="688 894 993 1199"></div> <p>L3AF project in LFN - life cycle management on eBPF programs</p> <p>Cillium project has done some of their own benchmarking - but uses some unknown TCP: https://docs.cilium.io/en/stable/operations/performance/benchmark/</p> <p>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).</p>
	Shivank's Intern update		<p>07 Sept 2022</p> <p>Shivank's report for last week:</p> <p>https://github.com/Alt-Shivam/eBPF-CNI</p> <p>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.</p> <p>Shivank testing with a VM and K8s cluster - can try out locally</p> <p>Need to review mid-term Mentoring report - Al and Sridhar completed in last half of the meeting.</p> <p>ACTION Al Morton invite Maryam meeting to discuss performance (when we agree it's the right time).</p>
	<p>Post review of Daniele's work 13 Jul 2022</p> <p>closure to Daniele's work and see if there is anything worth publishing, may consider less-selective conferences if novelty is less</p>	Sridhar	<p>Some issues we dig into now</p> <p>No reply from simonartxavier@gmail.com and Luc? Al and Sridhar sent new messages.</p> <p>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??</p>

Tasks and Action Plan for Shivank		<ol style="list-style-type: none"> 1. Get access to the Testbed (Pod18 now) 2. Demonstrate how to use Prox and T-Rex on Node-5 3. Start with Baremetal and eBPF: Node-5 and Node-4 4. Kubernetes Cluster Setup - Node-1 and Node-2: Install Necessary Components.
<p>Open Programmable Interface Project (Linux OPI)</p> <p>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.</p>	Sridhar	<p>New project, governing board formed and TSC meeting set.</p> <p>Opportunity for Benchmarking: work with us.</p> <p>Need to know planned NIC speeds, Need NIC HW to benchmark.</p> <p>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).</p>
Testbed - IXIA support	Sridhar /AI	<p>2nd ACTION: Do we have support from Ancuta or other IXIA person? Al Morton sent e-mail</p> <p>ACTION: License for IXIA HW - Check with Trevor</p> <p>Trevor Cooper says connected and powered on, but we still might have a license issue. Need Pierre's help.</p> <p>11 May 2022 this seems to have stalled ...</p>
Additional Mentoring input	Sridhar /Federica	<p>13 Jul 2022 Federica</p> <p>Past meeting: python scripts. Possible combine 1 and 3</p> <p>@Sridhar will expand on the proposal descriptions and Federica will begin to ask students about their interests.</p> <p>python scripting with K8s is possible for some students in 3rd year. Projects must have resume value, add skill set or new experience.</p> <p>Sridhar Rao created some projects.</p> <p>ACTION: See proposals & review</p> <p>https://wiki.anuket.io/display/HOME/Potential+Projects+for+Student+Volunteers</p> <div data-bbox="690 1056 1193 1560">  </div>
Intern (background info)	Sridhar /AI /Federica /Shivank	<p>XDP performance Studies for Cloud-Native NFV Use Cases</p> <p>"Maryam Tahhan joins the crew to talk XDP, AF_XDP, and fast networking"</p> <p>Operations support seems to be a big issue, and performance is currently about 0.7 of VPP and DPDK</p>
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) 2. Another - Will not implement - Idea is already stale.	CCLA for Moselle release (LF as C) CCLA issue resolved 27 Apr 2022 Patch is submitted - Done.		
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 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. 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 Sridhar will check with Xavier if ARP resolution is supported in Prox as a switch 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 27 Apr 2022 After review tomorrow, Daniele will submit the patch. Al Morton will need to review (big patch with documentation) - Done 11 May 2022		
10	Task-VINEPERF-643:Pod-Pod Communication				

ACTION ITEMS