

# 2021-07-16 AI/ML for NFV Meeting Minutes

## Attendees


Sridhar Rao

Rohit Singh Rathaur

Girish L

Emma Foley

Sl. No.	Topic	Presenter	Notes
1	Thoth as formal project in Anuket		<p>Will be presented in next TSC meeting - for project creation request. Mainly to capture all the works done here.</p> <p>Mail has been sent for any Interest in leading this project.</p> <p>It is OK in Anuket for a person to be PTL in more than one project.</p>
2	EUAG White-Paper		<p><a href="https://wiki.lfnetworking.org/pages/viewpage.action?pageId=56067017">https://wiki.lfnetworking.org/pages/viewpage.action?pageId=56067017</a></p> <ol style="list-style-type: none"><li>1. Key Takeaways: Emphasis is too much on Data - Data First. I have these data, what can I do, approach. <b>We should come up the "Decisions" that Telcos are interested.</b></li><li>2. Problem Statement section include assumption<ol style="list-style-type: none"><li>a. "it is not a competitive advantage to have access to better AI tools" - Tools are not important, its the models, and Models definitely can give competitive advantage.</li></ol></li><li>3. Need to be careful about how to share data and results across competing companies - Sharing with Opensource projects may be easier than "competing companies"<ol style="list-style-type: none"><li>a. "Opensource Licensing Model" for Data - Ex: Whatever model built using(learning) the data, that should be OPEN tool.</li></ol></li></ol> <p>Where Thoth can contribute to EUAG:</p> <ol style="list-style-type: none"><li>1. Data Model - For each of the problem statement ("Decision"), we can propose a data model.</li></ol>
3	Summary of "Gaps" in Existing Failure prediction works	<p>Rohit Singh Rathaur</p> <p>Girish L</p>	<p><a href="https://drive.google.com/file/d/1FdHT4d8QHQR7OqfXhx3UqviGDYw5nfBQ/view?usp=sharing">https://drive.google.com/file/d/1FdHT4d8QHQR7OqfXhx3UqviGDYw5nfBQ/view?usp=sharing</a></p> <p>Summarize and share your comments here: <a href="#">Failure Prediction using AI/ML in NFV Environments</a></p>
4	Model Enhancement - Options	<p>Rohit Singh Rathaur</p> <p>Girish L</p>	<p>Both girish and rohit have shared the proposals.</p> <p>Action: Sridhar to review.</p> <p>Ex: VM Prediction:</p> <ol style="list-style-type: none"><li>1. VM's Failure Event + Infrastructure (platform) + VM-specific (virtual-Infrastructure) metrics that external to VM. - Sources are different.</li><li>2. VM's Failure Event + Resource-Consumption (Application) metrics that is internal to VM - Sources are same.</li></ol> <p><b>Hypothesis:</b> Cadvisor (CMN) metrics = Collectd (CMN) metrics from Container.</p>
5	Data Status		<ol style="list-style-type: none"><li>1. EUAG Meeting is yet to happen</li><li>2. Request to <b>LF-IT</b> is sent - waiting for response.</li><li>3. Work with Pod18 - not yet started. Barometer include Ansible playbooks to deploy collectd+ on K8S.<ol style="list-style-type: none"><li>a. <a href="https://github.com/opnfv/barometer/blob/master/docs/release/userguide/installguide.docker.rst">https://github.com/opnfv/barometer/blob/master/docs/release/userguide/installguide.docker.rst</a></li><li>b. <a href="https://github.com/opnfv/barometer/blob/master/docs/release/userguide/installguide.oneclick.rst">https://github.com/opnfv/barometer/blob/master/docs/release/userguide/installguide.oneclick.rst</a></li></ol></li></ol>
6	Project-1 (AlgoSelector)		<p>Still looking for contributors.</p>

7	Project-2 (FailureGen)		<p>Found a contributor. Already started the work.</p> <ol style="list-style-type: none"> <li>1. Time-Varying, Load-Varying Stressng *</li> <li>2. Enlisting actions in Linux System that can cause failures</li> </ol> <div>  <p>StressNg.pptx</p> </div>
8	<p>Failure Prediction Definition - Status</p> <p>(mapping Failures to Data)</p>	<p><a href="#">Rohit Singh Rathaur</a></p> <p><a href="#">Girish L</a></p>	<p><input checked="" type="checkbox"/> Rohit: Node and VM</p> <p><input checked="" type="checkbox"/> Girish: Container and app</p> <p><a href="https://docs.google.com/spreadsheets/d/1N9LKZjx117zQHJSLcCFK8dwiOpswWyhZECaNNs6NKHo/edit?usp=sharing">https://docs.google.com/spreadsheets/d/1N9LKZjx117zQHJSLcCFK8dwiOpswWyhZECaNNs6NKHo/edit?usp=sharing</a></p> <p>Update this page, if any change is required for the data model: <a href="#">Failure Prediction using AI/ML in NFV Environments</a></p>