2020-10-14 - CNTT - Opening discussion on CNTT/OPNFV - ODIM Collaboration around Hardware Infrastructure Management

Topic Leader(s)

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- Alex Vul (ODIM)
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Topic Overview

In this session we want to present the current status of the Hardware Infrastructure Management within the CNTT/OPFNV specifications and implementations, the current status of ODIM (Open Distributed Infrastructure Management) project in LFN. The goal is to identify opportunities for collaboration and trigger the discussion in the community on the next steps.

Slides & Recording

https://zoom.us/rec/share/xYR8ml6bX7TCswp8vcZio2BLV9wl-6mY_8eZaFz0H69gwmlBJYUQYoJ0KevsgdlF.lc7k-8YFImZQvU3x



@Bob Monkman Gave a brief Intro of the background of how ODIM and CNTT interaction came to be and the goals are to kick off collaboration and coordination between ODIM (Open Distributed Infrastructure Management), the latter of which is a new unfunded LF Technical project that is ramping up with 7 active companies meeting weekly in TSC meetings and seed code dropped, in review and training, CI/CD being put in place and working through the proposals for project focus areas to ramp up.

Walter Kozlowski opened with a review of the latest Baraque RM and the new concept of Hardware Infrastructure Manager (HIM) added. More of the background provided.

Alexander Vul took over to go over the Problem Statement and overview of what ODIM solves for the industry.

Tomas Fredberg Comes back to the CNTT RM architecture and how HIM fits into and feeds the virtual infrastructure.

CNTT/ODIM Alignment/ Collaboration slide was then discussed as the proposals for where the 2 communities could coordinate and collaborate.

- DMTF Redfish as the potential realization of CNTT reference between HIM and VIM/CISM
- The concept of CNTT Application Profiles & DMTF Redfish discovery of physical infra resource capabilities
- we can create CNTT HW Profiles that align with the concepts of profiles there with Redfish API/Model
- SDNu model & Redfish Fabric Model
- Building a CNTT reference architecture

Question: Does this overlap with Ironic?

Answer: No. Ironic and Metal3 can consume ODIM interfaces in a more consistent way than what they need to do today. ODIM in discussions with Airship project, which uses both of these layers and seeking to use this as a use case example of how ODIM can add value.

For example: ODIM's aggregation service can enable Ironic to act on defined groups of HW resources.

Tomas commented that the SDN underlay needs an abstracted way to address the network fabric for switches and SmartNICs for example.

Question: Is there already a language defined for Data Model in ODIM?

Answer: ODIM follows Redfish and so JSON is a good option, which is what they expose.

Question: In lieu of having something like ODIM to define and incubate reference architecture details and implementations as to how real working solutions access, manage, discover and consum HW resources, how is this going to be done in CNTT?

Answer: We will see the vendor specific implemntations with lots of shims and adapters today, which is exactly the problem ODIM seeks to solve.

The meeting was wrapped at the 0600 PDT scheduled end with a proposal for ODIM folks to join RM and RA meetings to further the conversation about how ODIM community can help bring some clarity, flesh out HW profiles etc and ultimately incubate ideas and architectures in RI projects.

A link to www.odim.io was provided for more info on ODIM with access to mailing lists and the wiki, as well as the github for seed code under developement.

Action Items