VOLTHA

(Virtual OLT hardware abstraction)

Introduction

Flexible and agile service adaptation at the cost of commodity servers and whitebox switches VOLTHA introduces the next-generation optical access system architecture, based on SDN/NFV technologies. Disaggregating PON functions to functional modules with open interfaces supports the CORD vision for open source reference implementations to service "Access-as-a-Service" use cases. VOLTHA is a virtual OLT hardware abstraction component that supports the CORD Project objective of multi-vendor, multi-domain "any broadband access as a service" reference implementation for the Central Office. VOLTHA provides isolation between an abstract (vendor agnostic) PON management system, and a set of vendor-specific and white-box PON hardware devices. On its north-bound interface, VOLTHA provides a set of abstract APIs which north-bound systems can interact with the PON networks. On its south-bound side, VOLTHA communicates with PON hardware devices using vendor-specific protocols and protocol extensions through adapters.

The documentation of VOLTHA is located here: docs.voltha.org

Key People and Communication Channels

Technical Steering Team (TST)

The Technical Steering Team is the group of people responsible for the technical direction of the project. As of April 2022, the VOLTHA TST consists of the following members:

- David Bainbridge (dbainbri@ciena.com)
- Andrea Campanella (andrea.campanella@intel.com)
- Amit Ghosh (aghosh@radisys.com)
- Mahir Gunyel (mahir.gunyel@netsia.com)
- Khen Nursimu (knursimu@ciena.com)

Mailing Lists

The mailing lists are the preferred way to get in touch with the project members with any questions, suggestions, or concerns.

- vOLTHA Discussions: https://groups.google.com/a/opennetworking.org/g/voltha-discuss

Slack

- Slack channel: #voltha-dev https://onf-community.slack.com/archives/C01D229FP2A
  - To join, please click here: https://join.slack.com/t/onf-community/shared_invite/zt-g2ed9rid-t9mAGa4Y2RrKBWbY665iA

TST Meetings

- VOLTHA TST Meetings - Tuesdays at 8am PT.
  - Rolling agenda: https://docs.google.com/document/d/1mNqronCip_iDjF1-ZoudNteC3AnOcYONPHz7HuWB8e/edit#heading=h.3dngcg4k69jl
  - Join Zoom Meeting https://onf.zoom.us/j/978447356?pwd=dS9WajNLam9ZeFExOHV3SXBNk1VZz09

NOTE: these meetings are PUBLIC and often RECORDED. The recordings can be found on YouTube:

- vOLTHA: https://www.youtube.com/playlist?list=PLCnPGaNt7C5d10ZtpY_TK4hg_ky--X75p

Jira

- VOLTHA JIRA Project - Project here