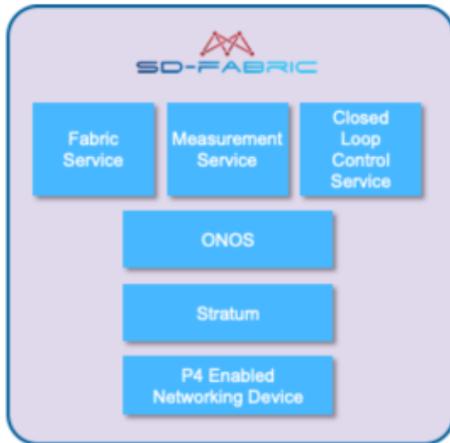# SD-Fabric

Introduction

SD-Fabric is a complete P4 programmable networking fabric. The stack enables programmers to execute custom forwarding logic in performant networking hardware, making it possible to implement features that would otherwise consume expensive compute resources.

SD-Fabric creates an Ethernet fabric optimized for edge application out of a collection of switches. SD-Fabric uses SDN control to convert a spine-leaf assembly of switches into what appears to be a single routing instance to all hosts and routers connected to the fabric. SD-Fabric also enables fine-grained measurement through the use of INT services, and is iteratively integrating network verification and closed-loop control capabilities coming from project Pronto research.

Learn more about SD-Fabric here: https://opennetworking.org/sd-fabric/

Read the recent press release: https://opennetworking.org/news-and-events/press-releases/onf-announces-new-sd-fabric-project-an-open-source-full-stack-programmable-network-fabric-for-hybrid-cloud-edge-cloud-5g-and-industrial-iot/

Key People & 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 SD-Fabric TST consists of the following members:

- Carmelo Cascone (carmelo.cascone@intel.com)
- Jordan Halterman (jordan.halterman@intel.com)
- Brian O'Connor (brian.oconnor@intel.com)
- Max Pudelko (max@opennetworking.org)
- Yi Tseng (yi.tseng@intel.com)
- Thomas Vachuska (thomas.vachuska@intel.com)
- Pier Ventre (pier.ventre@intel.com)

Mailing Lists

For technical questions and discussion, we highly recommend posting to the mailing lists, where the entire community can benefit from the answer.

- SD-Fabric announcements (sdfabric-announce@opennetworking.org) https://groups.google.com/a/opennetworking.org/g/sdfabric-announce - Public SD-Fabric related announcements
- SD-Fabric developers (sdfabric-dev@opennetworking.org) https://groups.google.com/a/opennetworking.org/g/sdfabric-dev - ONF member-only developer mailing list (**NOTE**: you will need to request to be added with your valid ONF member company email alias. Approval may take up to 24 hours)

Slack

- Slack channel: #sdfabric-dev https://onf-community.slack.com/archives/C098ZTYLT

Community/Project Meetings

- There are currently no community/project meetings scheduled. Please join the above mailing lists and slack channels to carry on the conversation.

Additional Resources

To receive access to any of the below resources that are currently ONF member-only, please email membership@opennetworking.org to request access (**NOTE**: please refer to the Licensing Notice above first)

Google Drive (Public folder)

- No public drive yet

CLA

To contribute to SD-Fabric, both individuals and companies are required to submit a Contributor License Agreement (CLA).

Jira Board

- https://jira.opennetworking.org/secure/Dashboard.jspa?selectPageId=11103

Project Documentation

For up-to-date documentation on the architecture, capabilities, and instructions to deploy and use SD-Fabric, please refer to the official documentation:

https://docs.sd-fabric.org/

Repositories

The code repos can be found at :

- Trellis/ONOS
    - https://gerrit.onosproject.org/plugins/gitiles/onos
    - https://gerrit.onosproject.org/plugins/gitiles/sdfabric-onos
    - https://gerrit.onosproject.org/plugins/gitiles/trellis-control
    - https://gerrit.onosproject.org/plugins/gitiles/trellis-t3
    - https://github.com/onosproject/onos-helm-charts
- Stratum
    - https://github.com/stratum/stratum
    - https://github.com/stratum/stratum-helm-charts
- P4 Pipeline for Tofino (TNA architecture)
    - https://github.com/stratum/fabric-tna
- Apps
    - https://github.com/omec-project/up4
- Utils:
    - https://github.com/opennetworkinglab/sdfabric-utils
- Documentation:
    - https://gerrit.opencord.org/plugins/gitiles/sdfabric-docs (published to https://docs.sd-fabric.org)

We expect all ONF employees, member companies, and participants to abide by our Code of Conduct. If you have any questions or concerns, please notify a member of the ONF team or email conduct@opennetworking.org.