OPENFABRICS ALLIANCE

Re-Introduction & Organizational Overview

[ September 2021 ]
Networks have been crucial to the explosive growth in performance and scalability of modern High Performance Computing (HPC) systems.

Beginning in 2004, the OFA’s charter was to facilitate the rapid adoption of the InfiniBand Architecture, which has become the interconnect of choice for the industry’s most demanding HPC platforms.

Building on that foundation, the OFA is expanding its mission in anticipation of emerging networks and applications they will enable, including:

- Machine Learning
- Artificial Intelligence
- Cloud Computing
- Enterprise Data Centers

So what does the OFA do now, and how does it do it?
“The mission of the OpenFabrics Alliance (OFA) is to accelerate the development and adoption of advanced fabrics for the benefit of the advanced networks ecosystem.

The mission is accomplished by; creating opportunities for collaboration among those who develop and deploy such fabrics, incubating and evolving vendor independent open source software for fabrics, and supporting and promoting the use of such fabric technology software.”
Advanced Networks Software (ANS) is an umbrella concept that contains two families of high performance APIs and associated software for current and future HPC, Cloud and Enterprise Data Center deployments. It is focused on applications requiring more efficient networking, faster storage connectivity, and scalable parallel computing.

- OpenFabrics Software (verbs)
- OpenFabrics Interfaces (libfabrics)

Beginning in 2004, ANS has enabled the explosive growth in scalability and performance for modern HPC systems. It is poised to do the same for commercial systems.
ABOUT THE ALLIANCE

The OFA advances the development of open source software for networking and supports and maintains existing fabric technologies

- Enables the development of software for fabrics
- Provides a forum for collaboration, communication and education to support fabric technologies
- Promotes fabric technologies, including emerging usages for such technologies
- Provides programs to support fabric technology such as training, testing, validation
- Facilitates partnerships with related organizations and communities such as SNIA, Linux kernel communities, and others
MEMBERSHIP BENEFITS

The OFA facilitates working relationships among the developers, testers and end users in the open source fabrics community to accelerate the development and adoption of fabric technologies.

Membership in the OFA provides:

• Members are key influencers in the development of open source software for fabrics, OpenFabrics interoperability testing and OFA promotional activities.
• Networking opportunities with fellow members and access to a larger community of industry organizations and thought leaders through the OFA Partner Alliance Program.
• Publicity and marketing opportunities in conjunction with OFA activities at tradeshows, conferences and workshops.
MEMBERSHIP LEVELS

JOIN NOW and become part of ongoing RDMA development with the OpenFabrics Alliance.

- **Promoter**
  - Strongly influence the outreach, programs, partnerships, conferences and marketing of the OFA
  - Individuals from Promoter Member organizations are allowed to be nominated for Board Officer and Working Group Chair/Co-Chair positions.
  - All the benefits of Adopter and Supporter levels are included in this level.

- **Adopter**
  - Participate in the testing programs offered by the OFIWGA.
  - Voting member of any Working Group they participate in.
  - All the benefits of the Supporter level are included in this level.

- **Supporter**
  - Kept informed of the outreach, programs, partnerships, conferences and marketing efforts as they are being implemented.
  - Listed on our website and promoted at the annual OpenFabrics Workshop.
  - One free pass to the annual Workshop speaker.
Instructions on how to join an OFA Working Group can be found here.

- **Fabric Software Development Platform Working Group (FSDPWG)**
  - The FSDP delivers on the OFA’s mission to accelerate the development and adoption of advanced fabrics for the benefit of the advanced network ecosystems.

- **Marketing Working Group (MWG)**
  - The MWG ensures OFA’s strategy is carried out by promoting the advancement in fabrics accomplished by the innovation of our members, partners and OpenFabrics community. MWG also fosters collaboration among the community by driving OFA annual workshop, training sessions and increasing OFA awareness at partner events.

- **OpenFabrics Interfaces Working Group (OFIWG)**
  - The OFIWG is committed to (1) developing, testing, and distributing and extensible, open source framework that provides access to high-performance fabric interfaces and services; and (2) extensible, open source interfaces aligned with ULP and application needs for high-performance fabric services.

- **OpenFabrics Management Framework Working Group (OFMFWG)**
  - The OFMFWG’s charter is to create an OpenFabrics Management Framework to develop, test, and distribute an extensible, open source management framework and interfaces.
A premier means of fostering collaboration among those who develop fabrics, deploy fabrics, and create applications that rely on fabrics

Only event of its kind where fabric developers and users discuss emerging fabric technologies, collaborate on future industry requirements, and address problems that exist today

Workshop participants include:
- Application developers and end users
- Communications middleware developers
- Network and storage vendors and researchers
- OS solutions developers
- Enterprise data center managers and architects
- System & network administrators
- System OEMs, architects & integrators
- Kernel developers and maintainers
OFA INDUSTRY ALLIANCE PROGRAM

- **Objective:**
  - OFA’s Industry Alliance Program enables greater industry collaboration with OFA experts and Working Groups to jointly advance fabric technologies

- **Alliance Benefits:**
  - Provides a platform to incubate and evolve vendor independent open source software for fabrics
  - Drives technical deliverables to the benefit of both organizations and the industry as a whole
  - Offers joint marketing programs to support technical deliverables
    - OFA Workshop participation
    - Inclusion in OFA member communications
    - Educational sessions to promote industry awareness
    - Promote adoption of the innovative technologies and applications
THANK YOU