

OpenFabrics Alliance Workshop

March 27-31, 2017

Hyatt Regency Austin Austin, TX, U.S.A.

IMPORTANT DATES

Submissions Due February 3, 2017

Acceptance Notice February 17, 2017

TECHNICAL PROGRAM COMMITTEE

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CALL FOR SESSIONS

The annual OpenFabrics Alliance (OFA) Workshop is a premier event focused on driving and enabling developments in network technology. It is the place to learn about emerging technologies, to collaborate with others, and to participate in driving network technology forward.

The workshop brings together network developers, consumers of network solutions and vendors.

SESSION TOPICS •

Proposals may cover various topics, such as:

RDMA in Commercial Environments

- Virtualized hosts, storage devices, networks, & network interfaces
- Convergence of bare-metal/barewire & virtualized cloud & container architectures

Distributed Applications & Services

- Parallel & shared memory apps
- Data analytics
- Pub/sub applications
- Message queueing libraries & services
- File systems, software-defined storage, fabric-attached storage
- · Software-defined networks

Data Intensive Computing & Analytics

- Hadoop, MapReduce
- Graph analytics
- Key value stores

Communications Middleware

- OpenSHMEM
- MPI
- UPC++
- GasNet
- Chapel
- Legion, OCR, event-driven tasking runtimes

Network APIs, Libraries & Software

- OpenFabrics Interfaces (OFI)
- Verbs API Extensions
- APIs for data storage, data access
- Open UCX
- Divergence of kernel & user APIs
- User space IP networking

Persistent (Non-Volatile) Memory

- APIs for application
- Using RDMA fabrics
- Programming models

RDMA in the Kernel

- New drivers & upper layer protocols
- Open source repositories
- Security & Containers
- RDMA core code
- Kernel / User ABIs

Accelerators, FPGAs, GPUs

- Coherent user space access
- Direct access to accelerator memory
- Plumbing inside the kernel
- Direct attached and fabric attached accelerators
- The programmer's perspective

Deploying RDMA

- Cloud-based deployments
- RDMA in commercial enterprises
- Government, academic, scientific HPC
- Virtualized data centers
- Wide-area distributed computing & storage
- Deploying RDMA technologies

Management, Monitoring & Configuration

- Adaptive routing, routing between disjoint fabrics, subnet configuration, topologies
- Congestion control QoS
- Fabric performance
- Partitioned networks, security

New & Advanced Network Technologies

- Hardware Platforms (x86, ARM, SoCs, embedded)
- Atomics, Multicast & Collectives
- Scalable fabrics
- User-level protocols over RDMA

Future Directions in Networking

- Evolution of OpenFabrics Software
- Networking beyond RDMA

SESSION FORMATS

Single-speaker sessions are generally 30 minutes.

Panel sessions are 60 minutes and are often the best way to stimulate debate.

Lightning Talks are designed to encourage fast-paced, free-form discussion. No advanced sign-ups are needed.

Town Hall Meetings are an opportunity for bringing forward topics needing attention from the community at large.

Birds of a Feather sessions or unscripted panel discussions may be included depending on interest.

SUBMISSION INSTRUCTIONS

Submissions should include a topical abstract defining the subject and its networking relevance (max. 200 words); target audience profile; a brief speaker biography; and the proposed session format.

Visit our website at www.openfabrics.org for submission details. Proposals must be received by **February 3, 2017, 5:00 PM PST**. The Technical Program Committee will respond to proposals by **February 17, 2017**.

Contact <u>press@openfabrics.org</u> with questions.