



OFA Workshop Goals and Logistics

Jim Ryan, Chairman, OFA
April 4, 2011

Workshop Logistics

- WiFi arrangements
- Break-out rooms
- Meal locations
- Introduce key people: Bill, Tom, Cheri and Diane
- Inside HPC will be recording and posting some sessions online – with speaker approval



2011 International Monterey Workshop Agenda*

*Schedule subject to change
Registration will open at 5:00 PM on Sunday, April 3, 2011



Opening Keynote on April 3 at 7:30 PM			
"The Challenges and Opportunities of OpenFabrics in the Cloud" Mike Marty, Google			
Chelsio & Oracle to host reception in hotel bar following the keynote from 8:30-9:30 PM			
	Monday, April 4 "Onward to Exascale"	Tuesday, April 5 "Cloudy Data Center Fabric"	Wednesday, April 6 "Network Efficient Computing"
7:00 AM	Breakfast	Breakfast	Breakfast
7:30 AM			
8:00 AM	Workshop Goals, OFA Update, Survey Jim Ryan (OFA Chairman)	OFED Adoption Inhibitors in the EDC Stewart Tate (IBM)	OFED in HPC and Beyond Addison Snell (Intersect360)
8:30 AM	IB Scalability Roadblocks Stephen Poole (ORNL)	Scaling out the Data Center Wim Coekaerts (Oracle)	RDMA in Embedded Systems Ken Cain (Mercury)
9:00 AM	I/O Requirements for Exascale Jason Hick (LBL)	HPC, Enterprise, Cloud: Converging Concerns Josh Simons (VMware)	TBD GPU Topic TBD (AMD) --Scot
9:30 AM	Pleiades: Field Experience on a 10,000+ Node Subnet Bob Ciotti (NASA)	Cloud Services with VMware Dave Durkee (ENKI)	"MIC" Architecture TBD (Intel)
10:00 AM	Break	Break	Break
10:30 AM	Technical Advisory Group Update Lloyd Dickman (OFA TAG)	System Vendors: What do you need from OFED? <small>Moderator: Bill Boas (System Fabric Works) Appro. Cray, Dell, HP (Cristianovic), IBM, Oracle (Tonudbakken)</small>	GPUs as Better MPI Citizens Dale Southard (NVIDIA)
11:00 AM	Trent (LLNL) -- BILL	Large Layer 2 Networks Ronald Luitjen (IBM)	Panel: Impact of Alternate Compute Architectures <small>Moderator: Addison Snell (Intersect360) Panelists: AMD, Nvidia, Intel, SFW (Gruel)</small>
11:30 AM	OFED on Cost-scalable Networks Bernard Metzler (IBM)	Foundations of Virtualization and Futures Paul Grun (System Fabric Works)	Monitoring Topic -- BILL Ira Weiny (LLNL)
12:00 PM	Congestion Control Dr. Reinemo (Simula Research Lab)	Cloud Computing Vision Jake Smith (Intel)	Panel: Open Subnet Manager <small>Moderator: Susan Couter (LLNL) Panelists: NASA, PNNL, Sandia</small>
12:30 PM	Lunch	Lunch	Lunch
1:00 PM			
1:30 PM	Unified runtime for PGAS and MPI over OFED D. K. Panda (Ohio State University)	PCIe Gen3 Availability and Gen4 Plans Debendra Das Sharma (Intel)	TBD
2:00 PM	PSM/Tag Matching API Todd Rimmer (QLogic)	Exadata and the EDC Sumanta Chatterjee (Oracle)	
2:30 PM	Offload Collectives in OFED Gilad Shainer (Mellanox), Arlin Davis (Intel)	DB2 pureScale - High Performance with High-Speed Fabrics Steve Rees (IBM)	
3:00 PM	Accelerating PGAS and OpenSHMEM on InfiniBand Jeff Kuehn (ORNL)	Can HPC Interconnects Benefit MemCached and Hadoop? D. K. Panda (Ohio State University)	
3:30 PM	Break	Break	
4:00 PM	Porting PORTALS to OFED Bob Pearson (System Fabric Works)	Python-RDMA Management & Diagnostics Jason Gunthorpe (Obsidian Strategics)	
4:30 PM	MPI Optimizations over Verbs Gilad Shainer (Mellanox)	iWARP Update Felix Marti (Chelsio), Terry Hulett (Intel)	
5:00 PM	Panel: Next Gen OFED APIs <small>Moderator: Stephen Poole Panelists TBD</small>	RoCE TBD Topic Paul Grun (System Fabric Works)	
5:30 PM	Windows & Linux Enterprise Workgroup Status E. Lantz / U. Habusha, T. Koren / B. Woodruff	Panel: Making OFED a Fit for Cloud/Virtualization <small>Moderator: Tom Stachura (Intel) Panelists TBD</small>	
6:00 PM	OpenFabrics Alliance Annual Meeting Jim Ryan (OFA Chairman)		

Many thanks and much appreciation to our sponsors:
AMD, Chelsio, Mellanox, Oracle, InsideHPC, HPCwire

Workshop Goals

- Free exchange of information – technical, not marketing
- No product pitches
- Questions/interaction encouraged
- Support remote dial-in when needed to secure quality speakers
- Be as forthcoming as possible, realizing this not under NDA

We'll be starting a survey, explained today at lunch

What We Learned from Last Year



- Technical Content: we worked to provide more by working with a panel of experts
- Panels: more interaction within the panel, not just a series of individual opinions
- Internet service: expected to be better
- Lanyards
- Technology Advisory Counsel: has been active for a year – we'll have a report later today

OFA 2010 Accomplishments



- Began outreach into the **Enterprise Data Center** while continuing to support and protect OFED HPC installed base
- Launched **training initiative** to enable software engineers to take advantage of RDMA benefits
- Significantly **increased marketing efforts** (tripled marketing budget!)
 - Added agency of record, developed new marketing materials, raised visibility at HPC Financial Markets, joint booth with IBTA planned for SC10
- Formed **Technical Advisory Group** to focus on OFED and emerging data center requirements: virtualization, cloud, energy efficiency
- Increased Alliance management through **Executive Director** leadership; Board committed to expanding the position in 2011
- Developed **new Web site** with easier navigation and expanded resources
- Continued support for IB and iWARP through feature enhancement and demanding interop tests; announced **OFED support for RoCE**
- Enhanced efforts of the Windows WG through **code contributions from Microsoft**

*2010 was a transition year;
OFA broadened its target market and leadership*

OFA 2011 Goals & Deliverables



- **Protect member investment** in OFED; promote RDMA as an enabling technology in growth areas such as cloud computing, virtualization, FSI, oil & gas
- Continue to evolve RDMA for use in petascale and **exascale computing**; develop a technology strategy to ensure that OFED remains competitive and meets the increasing demands of scaling
- Launch advocacy program to investigate the potential of **RDMA in storage**
- **Expand training**: deliver “Programming with OFED,” Jan 19-20, additional programs to follow
- Serve as a compliment to other standards organizations
- Outreach to other geos – **Europe, China, Japan** – through workshops, events, new WG
- Dramatically improve **end user tracking** over the course of 2011
 - Identify the people downloading OFED, understand OFA usage base and expand outreach
 - Enhance mailing lists and methods for subscribing
- Improve **end user outreach**: revitalize end user WG, potential for end user membership level, develop content and materials targeted to this audience, enhance communications
- **Step up recruiting and marketing efforts**: online/print collateral, press engagement, growing/evolving web pages, events presence (Monterey, ISC’11, SC11)

In 2011, OFA will increase end user engagement and expand technical and marketing programs

OFA Membership



- Join OFA
 - Reduced for first-rate RDMA training; discounts for OFA members
 - Certify your product's interoperability with OFED; discounts for OFA members
 - Influence OFED capabilities and features
 - Affect the future direction of OFA in HPC, EDC, cloud
 - Access publicity and marketing opportunities: tradeshow, press briefings, analyst data, collateral; discounts for OFA members
- Become active in OFA
 - Marketing activities (MWG), OFED components (EWG), Windows stack (WWG), interop (IWG)

New Classes of OFA Membership



- Academic: intended for academic and research organizations wishing to participate in OFA WGs and to use and contribute to OFED. \$2,000/year
- Individual: intended for end users evaluating or working with RDMA. \$200/year
 - Maintain contact with RDMA experts and the development community
 - Get help with deploying or maintaining clusters
 - Get access to prerelease versions of OFED and get details on daily builds

OFILG Program

- Join OFILG to gain access to the most advanced RDMA test beds supporting IB and iWARP products from all leading vendors
- Securely pretest and debug on the OFILG cluster at UNH-IOL remotely from your office
- Test your solutions per the test plan available in advance for download
- Ultimate goal: promote your interoperable RDMA product via the OFA Logo List and OFILG Logo – only available to OFA members

OFA RDMA Training

- OFA sponsored the development
- Teaches sockets programmers how to take advantage of RDMA
- Developed by SourceForge and UNH
- One general class delivered at UNH and one “private” class in Paris
- Next general class.....
- More classes are planned

Thank You Sponsors:

