



OFA TAC: Technology Advisory Council Updates & Direction

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Agenda

- TAC History
- TAC Charter
- Key Topics/Directions
- Feedback?

TAC History

- 2008?
 - TAC formed under Lloyd Dickman in response to IB/OFED not capable of scaling to Exascale
- 2011
 - TAC disbanded after Lloyd left QLogic
 - TAC findings reported out @ OFA Workshop
- 2012
 - TAC reconstituted with a new look at scope...

TAC Charter

- OFA Charter:
 - Develop, test, license and distribute Open Fabrics Enterprise Edition (OFED) to deliver RMDA, kernel bypass and low latency fabric technologies
 - Promote industry awareness and acceptance of the above capabilities for a robust ecosystem of development and delivery
- TAC Charter
 - Investigate technology trends that could provide opportunities or roadblocks to the adoption of OFED technology
 - Review needs of end user markets/applications/new technology transitions focusing on impacts and opportunities for OFED
 - Maintain close relationships to IBTA TWG and other specification bodies, as well as end users

Current Structure

- Co-Chairs
 - Diego Crupnicoff – Mellanox
 - Tom Stachura – Intel
- Monthly Meetings
- Technical representatives from Intel, Mellanox, LANL, LLNL, SFW
- Welcome new members as long as they are committed to active technical discussion and group leadership
 - Ping me if interested – tom.l.stachura@intel.com

TAC Focus Mindset

- Per Market
 - Trends:
 - End-use (e.g. Model/Simulation Needs)
 - Performance (e.g. 1 ExaFLOP)
 - Applications (e.g. Hadoop)
 - Hardware evolution (e.g. PCIe 4.0, Memory Bus)
 - Disruptors/Opportunities:
 - Alternate protocols (e.g. SHMEM)
 - New technologies (e.g. NVM)
 - New standards (e.g. OpenFlow)
 - New usages (e.g. FSI UDP/TCP Verbs)
 - Hear from industry experts
 - Invite experts inside **AND OUTSIDE THE OFA**

Near-term TAC Focus Areas

- Focused Goals for TAC:
 - Ensure OFED viability for Exascale
 - Identify OFED adoption targets in EDC/Cloud
 - Incorporate FSI workloads/APIs into OFED
- Markets in scope
 - HPC
 - EDC/Cloud
 - FSI
 - Database
 - Storage

List of Initial Topics

- HPC Protocols*
 - PGAS/SHMEM*, Portals, CCI*, Rapid I/O
- EDC/Cloud Focus Areas
 - Virtualized RDMA use, DCB & RDMA, ONF
 - Software enabling: SoftRoCE, SoftiWARP
- Exascale Focus Areas
 - Address previous TAC bottlenecks identified
 - Memory I/F as I/O I/F*
- FSI Focus Areas
 - Market Data Systems Architecture, UDP/TCP Verbs
- Storage
 - NVMe Environment and Opportunities**

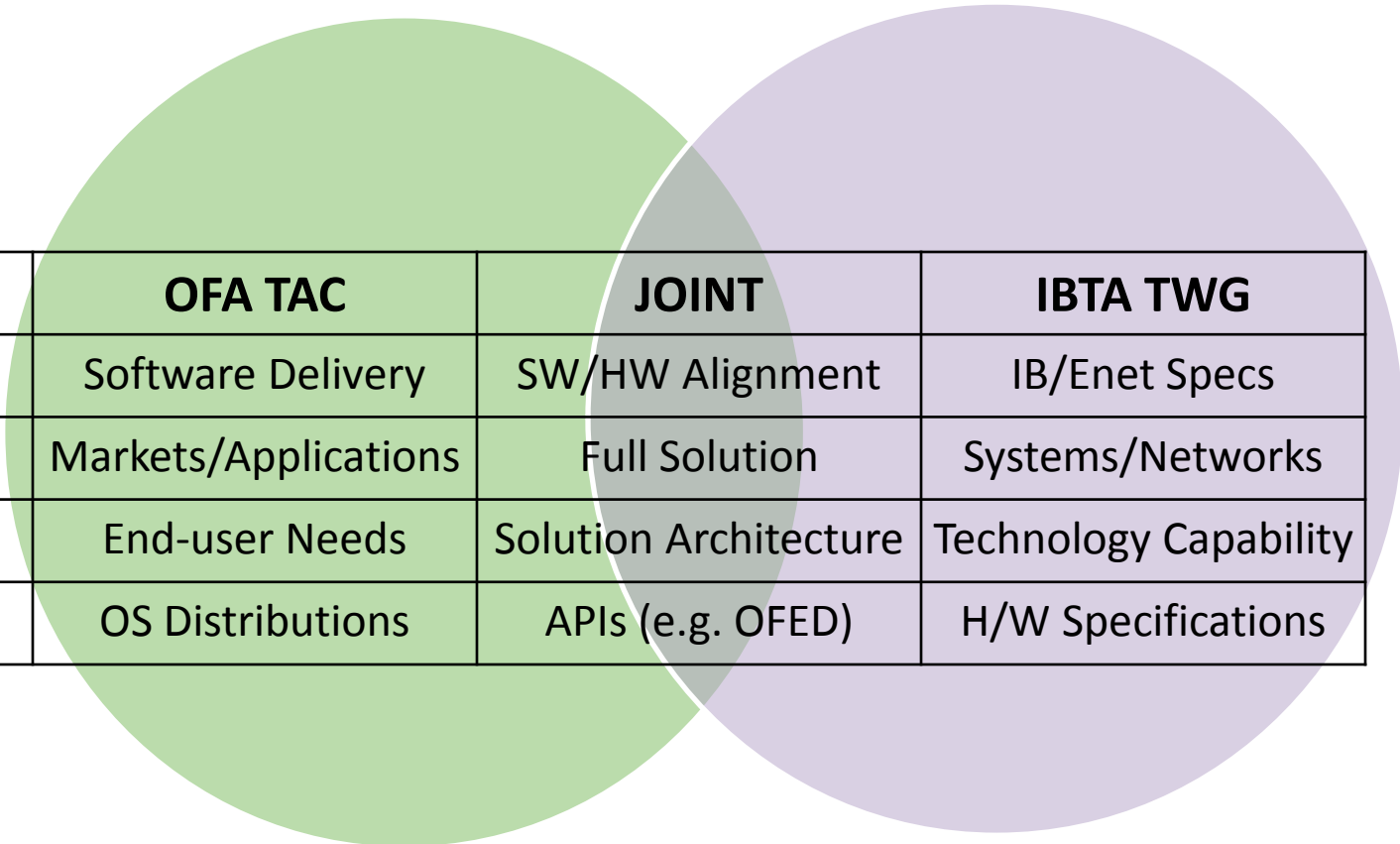
Feedback?

- Any volunteers for key topics we have identified?
- What are we missing?
- Any other feedback?



BACKUP

OFA TAC/ IBTA TWG Interaction



	OFA TAC	JOINT	IBTA TWG
KEY FOCUS	Software Delivery	SW/HW Alignment	IB/Enet Specs
SCOPE	Markets/Applications	Full Solution	Systems/Networks
REQUIREMENTS	End-user Needs	Solution Architecture	Technology Capability
ENABLING	OS Distributions	APIs (e.g. OFED)	H/W Specifications