

2007 INCITS TC Officers Symposium

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INCITS Fibre Channel (T11) Technical Committee
(FC-TC)

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FC-TC Scope

- FC-TC standardizes Fibre Channel Interfaces.
 - Fibre Channel implements Storage Area Networks
 - Most server, storage, and SAN vendors and their suppliers.
- FC-TC is 46 members + 11 advisory; more in TGs:
 - Physical layer (TG T11.2)
 - Protocol layer, framing, switching, routing, etc. (TG T11.3)
 - Management definitions and APIs (TG T11.5)
- Also HIPPI, IPI, SBCON, SAN Management
- Standards developed in FC-TC
 - Forwarded to ISO/IEC JTC1 SC25 WG4

Significant Accomplishments

- Activities:
 - Extend present technology, improve data rate and cost of physical layer, provide for remote access, improve security, support alternate link technologies and protocols, and provide management interfaces.
- Standards published: 8
- New projects: 7
- Projects in development about 14
- Projects in approval phase 10
- Documents developed >1000(>183 MB)

Significant Challenges

- Fibre Channel commercial importance places heavy emphasis on near-term extensions, raising work load and in rare cases creating a politically charged atmosphere which must be treated rigorously and sensitively.
- Continued consolidation of industry reduces membership, changes focus of development.
- Registries need to be provided by INCITS.
- ISO IP requirements inconsistent with INCITS

Expected Challenges

- Success of Fibre Channel drives bottom-line focus on standards.
 - In some cases, increased contention.
 - Incremental improvements focus participation.
- Fragmentation of storage standards venues.
 - Less effect than I expected. Increased liaison.
- INCITS participation policies and business model.
 - FC-TC open participation policy.
 - Support of FC-TC web-site and e-mail requirements.

Liaison Activities

- Technical Advisory Group, ISO/IEC JTC1 SC25 WG4
 - Most active liaisons, some formal. See IN060744
 - INCITS T10
 - IETF (imss, ips, and pwe3)
 - FCIA
 - SNIA
 - SFF Committee
 - IEEE 802.3
 - DMTF
 - INCITS CS1
 - IEEE 1619
- | |
|------------------------|
| FCP |
| MIBS and remote access |
| Industry Roadmap |
| SMI-S management |
| Physical Layer |
| 10GFC, technologies |
| SMI-S management |
| Security |
| Security |

Future Trends and Related Technical Activities

- Enterprise Storage Area Networks use Fibre Channel for high performance, storage consolidation, increased security, data protection. Needs are increasing.
- Bandwidth increases, Ethernet compatible clustering solutions, Management, Low-cost extensions all in development.
- INCITS becoming standards venue of choice for a certain class of storage solutions. Effective liaison exists with most other relevant standards venues.

How Can We Help? (well, you asked...)

- And the answers have not changed much...
 - INCITS policies should continue to support open participation. Any change would be detrimental to success of T10, T11, T13 activities.
 - INCITS should pick up web-hosting, data-base services, and e-mail reflectors. Business model change.
 - ANSI/INCITS should harmonize IP disclosure mechanisms with ISO/IEC requirements. Single form.
 - INCITS parameter registry required (OID, T10 Company ID, INCITS Auto-negotiation selector field for 802.3, OUI)