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# DMTF Overview

November 2009  
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DMTF VP of Technology

# Disclaimer

- The information in this presentation represents a snapshot of work in progress within the DMTF.
- This information is subject to change. The Standard Specifications remain the normative reference for all information.
- For additional information, see the Distributed Management Task Force (DMTF) Web site.



# Agenda

- DMTF Background
  - Who is the DMTF?
  - DMTF Alliance Partners
- DMTF Technology as a whole
  - Management Initiatives
- DMTF Technical Committee
  - Organizational Chart
  - Process Changes
  - Current Technical Work
  - Opportunities for Involvement
- DMTF Interoperability Committee
  - CDM, SMF, VMF, CSC
- DMTF Marketing Committee
- Process & Incubator Committee
- Working with the DMTF

# Who is the DMTF?

## DMTF Board Companies



## DMTF Leadership Companies

BMC Software  
 Brocade Communications  
 Cisco  
 ETRI  
 Lenovo  
 Rackspace  
 Red Hat  
 Savvis  
 SunGard  
 WBEM Solutions  
 Yahoo!

*More than 3,500 active participants from over 200 organizations*

# DMTF Alliance Partners

- Blade Systems Alliance
- CompTIA
- IT Service Management Forum (IT SMF)
- National Institute of Standards and Technology (MIST)
- Object Management Group (OMG)
- Open Grid Forum (OGF)
- Printer Working Group (PWG)
- Service Availability Forum (SAF)
- Storage Networking Industry Association (SMIA)
- TeleManagement Forum (TMF)
- The Green Grid
- The Open Group (TOG)
- Trusted Computing Group (TCG)
- Unified Extensible Firmware Interface (UEFI)



# DMTF Background

## Distributed Management Task Force

- Formed in 1992 with a focus on desktop management.
- DMI (1994)

## Evolved from desktop management to web based enterprise management

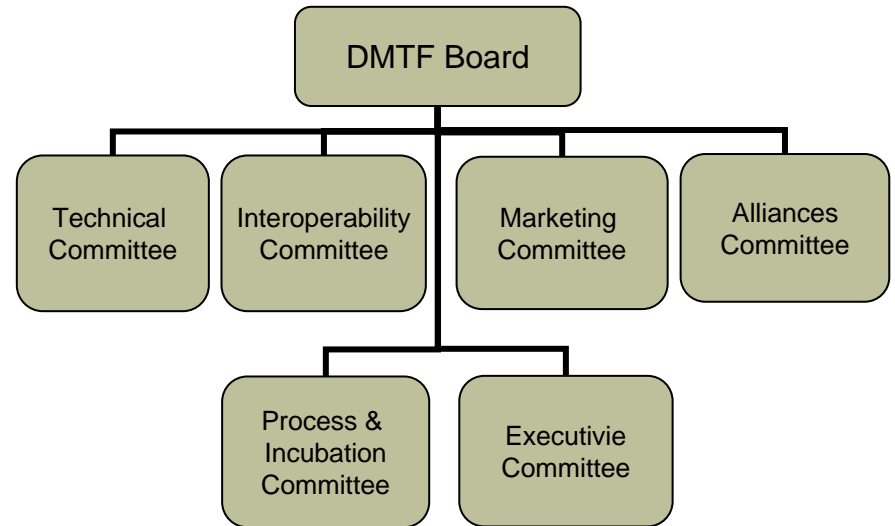
- CIM (1996)
- DEN (1997)
- WBEM (1998)
- SMBIOS (1999)
- ASF (2001)
- CDM (2005)
- SMASH (2005)
- DASH (2006)
- PMCI & NC-SI (2007)
- OVF & VMan (2008)
- CMDBf & Cloud (2009)

## Evolving work includes

- DMTF Management Initiatives, Protocols (Web Services), Profile Development, Schema Evolution, Internal Interfaces, Operations, Messages, Registries, Federation & more.

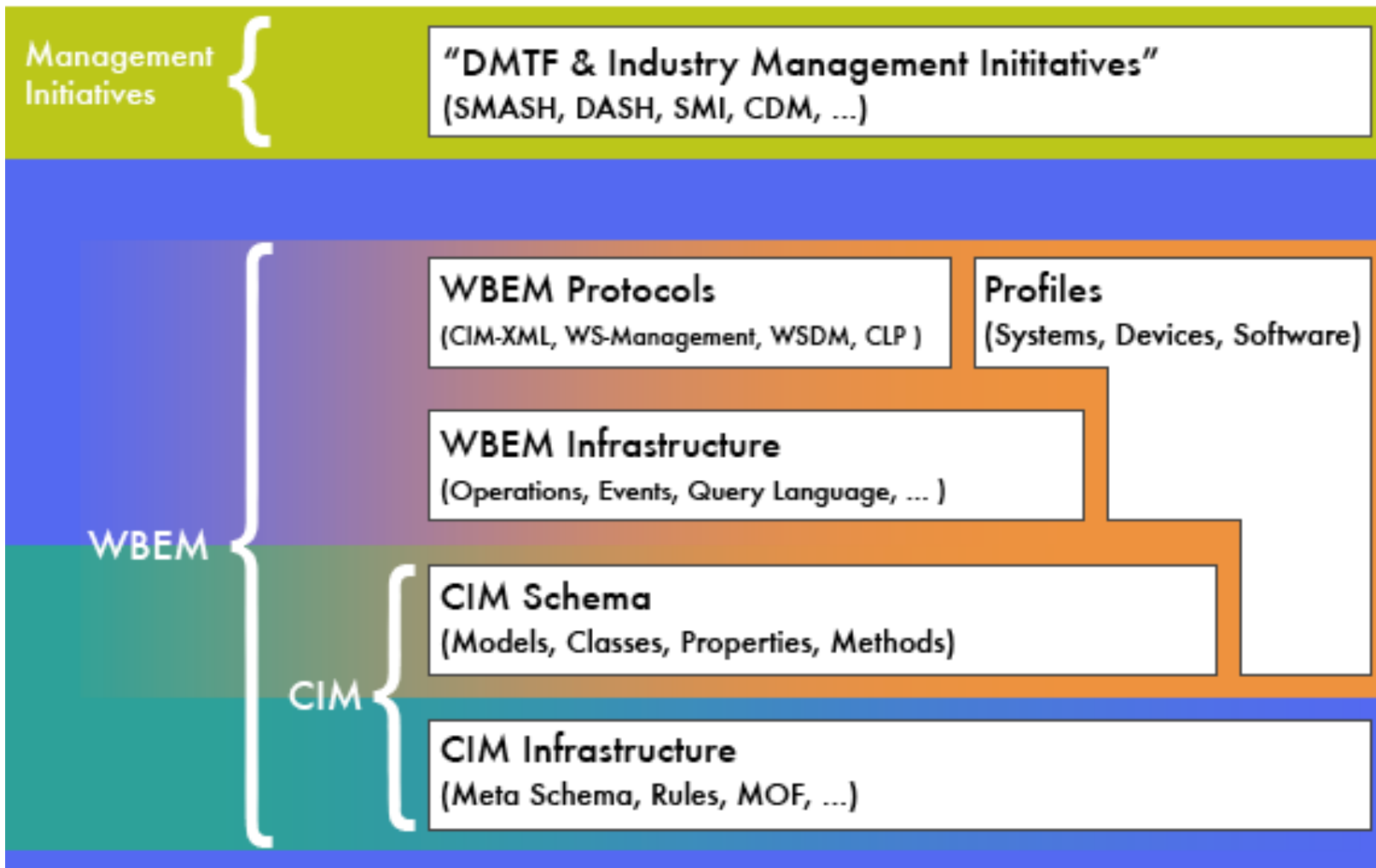
# Who is the DMTF?

- Board approves specifications, defines direction, oversees activities and coordinates with other industry organizations
- Technical Committee reviews and approves specifications, white papers and other materials developed in Working Groups under the Technical Committee
- Interoperability Committee ensures interoperability through plugfests, test tool development and conformance certification programs which are managed by Forums
- Marketing Committee coordinates press releases, conferences and events, web site content



- Alliance Committee coordinates alliance partner & academic alliance activities
- Process & Incubator Committee manages DMTF Policies and Incubator
- Executive Committee manages day to day operations of the DMTF

# DMTF Technology Diagram



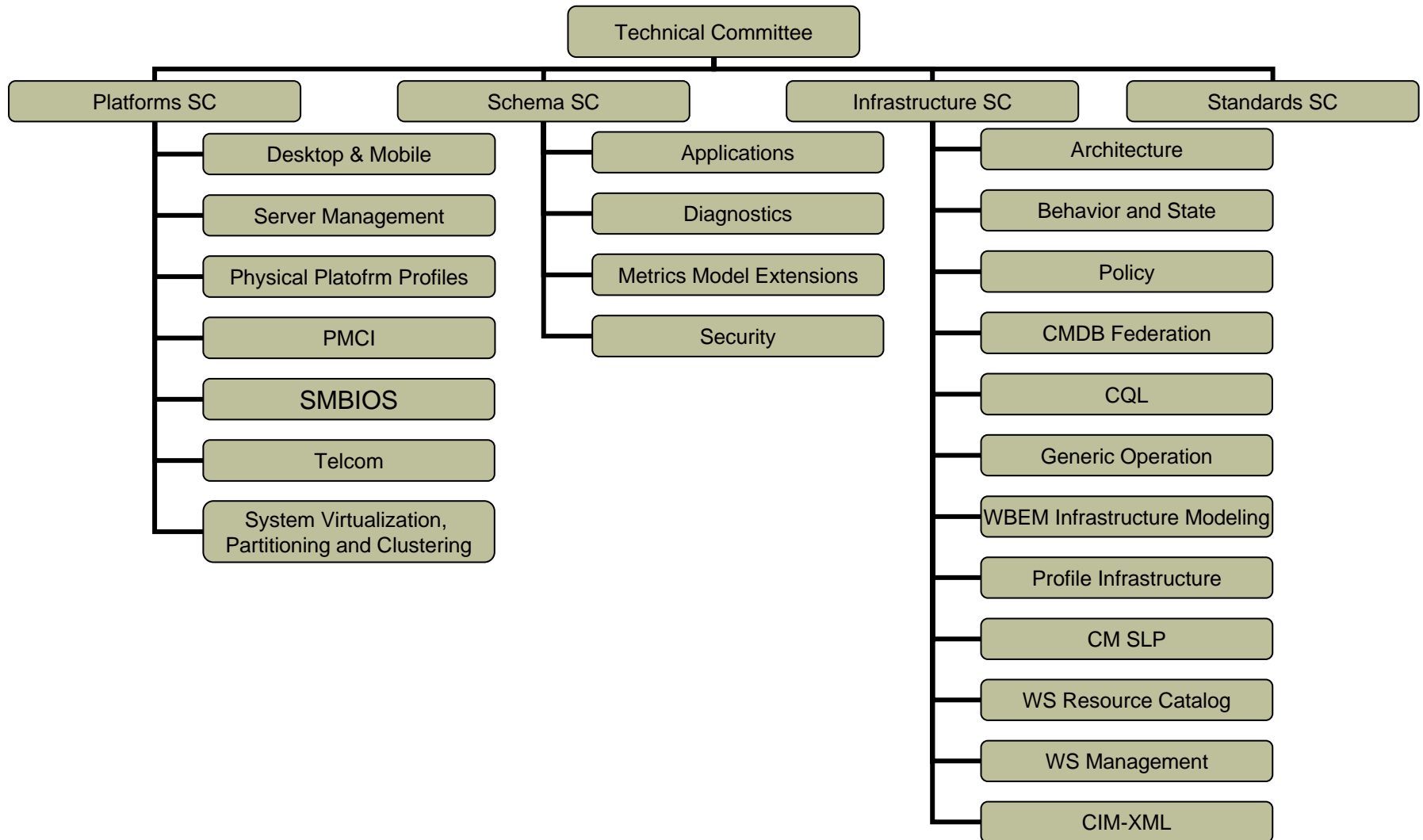


# DMTF Management Initiatives

- SMASH – Systems Management Architecture for Server Hardware
  - Vertical Manageability standard focused on Server Management
  - Defined by the SMASH Implementation Requirements Specification
  - Developed by the SMWG, Interoperability enforced by SMForum
- DASH – Desktop and Mobile Architecture for System Hardware
  - Vertical Manageability standard focused on Desktop & Mobile Computer Management
  - Defined by the DASH Implementation Requirements Specification
  - Developed by the DMWG, Interoperability enforced by SMForum
- CDM – Common Diagnostics Model
  - Defined by CDM Profile developed by Diagnostics WG
  - Interoperability enforced by CDM Forum
- VMan – Virtualization Management
  - Defined in OVF and Virtualization Profiles
  - Developed in the System Virtualization, Partitioning and Clustering WG
  - Interoperability enforced by VMF

# TC Organizational Chart

- VP of Technology - Jeff Hilland, HP



# Ongoing Technical Work

- Schema SC
  - All DMTF Schema changes and additions going through this subcommittee
  - Schema continues to go on a 3-4 month release cycle
    - Schedule kept going 1 year out to help Alliance Partner planning
    - New Release Process allows CR verification and Build automation
    - New CR Editing Tool being worked on to make this even easier
  - CIM 2.23 just released
  - CIM 2.24 development in progress
  - Common abstract profile definitions (ELE)
  - Initial View Class base classes are now in the Schema
  - WGs working on Diagnostics, Security, Applications, etc
  - New CR Tool!!!
    - CRs will be in XML for 2.25. Changes to Kavi Workspace 5 to ballot rendered XML.
    - A tool to fill out the CR template that will improve our automated builds
    - Available to Alliance Partners once the DMTF has kicked the tires...

# Ongoing Technical Work

- Infrastructure Subcommittee
  - Architecture WG Active on updating DSP0004
  - PUG 1.0 final
    - Working on PUG 1.1
  - Generic Operations released!
  - Machine readable profile definition
    - Work in Progress released
    - Working on how to document indications in profiles
  - Web Services development
    - WS-Man, WS-CIM, WS-CIM bindings
  - SM CLP maintenance
  - CMDB Federation
  - WBEM Infrastructure Modeling
  - Standard Message definition

# Ongoing Technical Work

- Platforms Subcommittee
  - PMCI embedded solution
    - In the home stretch
  - SMBIOS continued maintenance
  - SMASH & DASH
    - Working to combine SMWG & DMWG
    - No plans to combine SMASH & DASH implementation requirements documents
    - Working on Discovery and Correlation
  - SVPC
    - OVF (Open Virtualization Format) Specification planned
    - Working on Profiles and wrapper spec
      - Focus is run time management and migration of virtual systems
      - Hypervisors, Virtual Resources, Virtual Systems (including Partitions), Clustering
  - Telco
    - CIM/CID harmonization work with TMF
  - PPP WG
    - Working on Platform Profiles
    - Big focus is Indications.
    - Also working on new profiles

# Interoperability Committee

- **Interoperability Committee**
  - VP of Interoperability - Sharon L Smith, Intel
- **Three Independent Forums**
  - Common Diagnostics Forum (CDM)
    - Chaired by Kevin Kuelbs, HP
  - Systems Management Forum (SMF)
    - Chaired by Fred Maciel, Hitachi, and Perry Vincent, Intel
  - Virtualization Management Forum (VMF)
    - Chaired by Larry Lamers, VMWare
- **One Sub-Committee**
  - Conformance Sub-Committee
    - Chaired by Troy Biegger (WBEM Solutions)

# CDM Forum – Common Diagnostics Model Forum

- Common Diagnostics Model Forum (CDM)
  - Mission: Foster interoperable diagnostics management for CDM Initiatives
    - CDM conformance program in development
    - Promote plug-fests to test interoperability and test conformance tools
    - Participate in marketing activities (collaterals, demos, etc.)
  - Status
    - DSP5002 *CDM 1.0 Conformance Program Policies and Procedures*: Board approved
    - DSP0255 *CDM Implementation Requirements*: Board approved
    - CTS and profile development in progress
    - Successful plugfest held this summer
    - CDM Showcase at MDC
  - Future work
    - CDM 1.0 Conformance Program launch planned for Q4 2009
    - Continue Common Diagnostics Model development
    - Industry commodity expert outreach to develop commodity specific diagnostics profiles.

# SMF – Systems Management Forum

- Systems Management Forum (SMF)
  - Mission: Foster interoperable systems management for DMTF: SMASH and DASH Initiatives
    - SMASH and DASH conformance program in development
    - Promote plug-fests to test interoperability and to validate conformance tools
    - Participate in marketing activities (collaterals, demos, etc.)
  - Status
    - DSP5001 *DASH 1.0 Conformance Program Policies and Procedures* – Board approved
    - Related WG specifications, DSP0217 and DSP0232 (*SMASH 1.0 and DASH 1.0 Implementation Requirements*) are Final Standards
    - SMASH 1.0 CLP: test ware code completed; in debug/evaluation phase
    - DASH 1.0 CTS "final version" in ballot. Member launch planned for 4Q09
    - Infrastructure: Validating Certification Registry
  - Future work
    - SMASH Conformance Program

# VMF – Virtualization Management Forum

- Virtualization Management Forum
  - Mission
    - Develops procedures and software to test the interoperability of and conformance to the system virtualization management profiles, virtual system management profiles, and the open virtualization format specifications
  - Status
    - 1<sup>st</sup> successful Forum plugfest held at Citrix in Redmond, Washington
    - MDC Showcase with 5+ companies in attendance
  - Future work
    - Developing test tools
    - Developing a conformance verification procedure
    - Holding plug fests to identify interoperability issues and validate procedures

# CSC – Conformance Sub-Committee

- Conformance Sub-Committee
  - Mission
    - Develops common conformance program requirements and infrastructure for forums, including legal agreements and support, release guideline criteria, and web site infrastructure and publishing, while taking advantage of previous efforts where possible.
  - Status
    - DSP5000 Conformance Formation Document approved by Board
    - Program application and appeals processes defined
    - Certification Registry completed
      - Wold Consulting (Cloud Four) delivered infrastructure design
      - Coordination with the stakeholders (Forums, Marketing)
  - Future work
    - Continued coordination of common forum deliverables

# Marketing Committee

- Marketing Committee
  - VP of Marketing- Valerie K. Kane, AMD
- Focused on building awareness within the industry and with IT customers
  - Promoting DMTF standards and activities
  - Manage PR and press/analyst relationships
  - Attend industry events and place speaking sessions
  - Support development & distribution of educational resources
  - Create marketing collateral and content for external DMTF website
  - Collaborate with member companies & Alliance Partners on co-marketing
- One Sub-Committee
  - Virtualization Management Initiative Subcommittee



# Process & Incubation Committee

- Run by the Vice-chair of the DMTF Board, currently Josh Cohen, Microsoft
- Process & Incubator Committee Develops DMTF procedures and oversees Incubators
  - Process documents can be found at <http://www.dmtf.org/about/policies/>
- Process Change Highlights:
  - Specification development process modified to reflect the standards development processes in the industry as a whole
    - Preliminary Standard has been eliminated
    - Documents now go out for 30 document review as Draft Standard and then go Standard
      - All dependencies must be resolved (Schema references must be Final). Schema references in a spec = implementation experience.
    - We also have Work In Progress to allow a Snapshot of work
  - Alliance Partner involvement opportunity
    - During DSP Acquisition, Alliance Partners may request an early snapshot to be released as a Work In Progress when specs near completion (0.9?) to provide feedback.
      - Feedback would still need to come in through the feedback portal.
      - DSP request notifications handled through Alliance Committee
    - DSPList is now updated by TC/SC to reflect state of our standards
    - CRs can be released as a WIP to provide external review opportunity.

# Process & Incubation Committee

- What is an Incubator?
- Incubators are a way to kick off a light weight effort to get like minded companies together
  - Process defined in DSP4008
  - Can be kicked off in just a few weeks
  - Documents produced are informational in nature, called “Informational Specifications”
  - Have light weight rules that are intended to expedite document development process
- Current Incubators
  - Cloud Management

# Alliance Committee

- VP of Alliances is Mark Carlson, Sun
- Manages Alliance Partners & Academic Alliances
  - Create Work Registers to create relationship where areas of interest and expertise intersect.
  - Facilitates work through Alliance Partner Liaison
  - Scope of work include Joint Releases, leveraging DMTF specification, feedback to/from DMTF, Joint Meetings, APTS



# Opportunities for Alliance Partner Involvement

- Greatest opportunity for involvement is where areas of interest and expertise intersect.
- Examples
  - Working needed schema changes into DMTF Schema
    - PWG, SNIA, OGF, The Green Grid
  - Working together on Profiles
    - PUG & Profiles
    - Would like to see Alliance Partners take advantage of DSP4005 opportunity to notify us that they are working on Profiles.
    - DMTF normatively referencing SMI-S profiles from SMASH Implementation Requirements Specs.
  - Working on Registries
    - DSP0228 has been modified to allow any standards organization to use it.
  - Joint Releases of specification
    - OMG
      - DSP0219 come out for DMTF Standard. It is covered by the work register between DMTF and OMG.
    - TMF
      - CIM/SID Harmonization Work – joint specification release under investigation.
  - Work together to ensure specifications enable solutions
    - UEFI
      - Working with DMWG, SMWG, PMCI & Core to see BIOS Modeling, Registries and Access Methods Specified
    - TCG
      - Working with DMWG to model TPMs

# MDC, AAC & APTS

- Management Developers Conference
  - <http://mandevcon.com/>
- Academic Alliance Conference
  - Planning under way for 2010
- Alliance Partner Technical Symposium
  - Your attendance makes this event a success
  - Planning under way for 2010



# How to Work with the DMTF

- Join the DMTF
  - Scope of the DMTF is clear: it's all about management
  - Drive specifications through TC, conformance through the Interoperability Committee, messaging through the Marketing Committee and ground breaking areas through Incubators
- Members
  - Active participation brings about standards based on best practices
  - Drive standards through participation
  - Consider bringing work into the DMTF
- Alliance Partners
  - DMTF Originated Work
    - Feedback from the DMTF
      - DSP Acquisition
      - Work In Progress Release capability
    - Feedback into the DMTF
      - Alliance Liaison
      - Joint Member (companies that are members of both organizations).
      - The DMTF Technology Adoption Policy
      - The DMTF Feedback Portal
  - Alliance Partner Originated Work
    - Similar mechanisms would speed things along if you wish DMTF input

**Enjoy the Conference!**