



# DMTF Overview

May 2011  
Jeff Hilland, HP  
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

Bechtel

Dell

Rackspace

BMC Software

Hitachi

Sunguard

Brocade Communications

Lenovo

Virtustream

Cloudsoft Corp.

Novell

WBEM Solutions

Compuware

Positivo Informatica S.A.

*More than 3,500 active participants from over 100 organizations*

## DMTF Alliance Partners

- Cloud Security Alliance (CSA)
- Computing Technology Industry Association (CompTIA)
- ECMA International (ECMA)
- Open Grid Forum (OGF)
- The Green Grid (TGG)
- The Open Group (TOG)
- Object Management Group (OMG)
- Printer Working Group (PWG)
- SNIA/DMTF CR Process Flow
- Storage Networking Industry Association (SNIA)
- TeleManagement Forum (TMF)
- Trusted Computing Group (TCG)
- Unified Extensible Firmware Interface (UEFI)
  - And the DMTF is a member of the INCITS Executive Board & has representation in ISO JTC1 SC38/INCITS DAPS38 & requesting liaison relationship with ISO/IEC JTC1 SC38

# 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 & WS-Man(2008)
- CMDbF (2009)
- Cloud (2010)

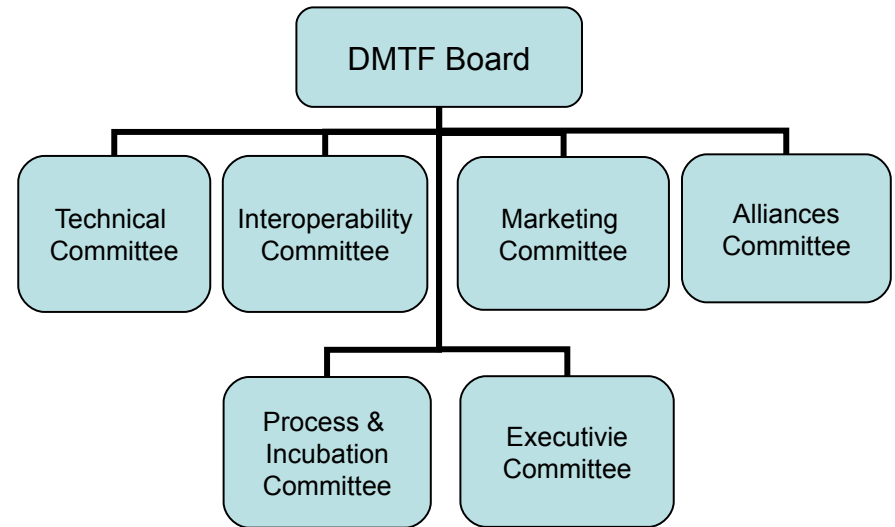
## Evolving work includes

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



## Who is the DMTF?

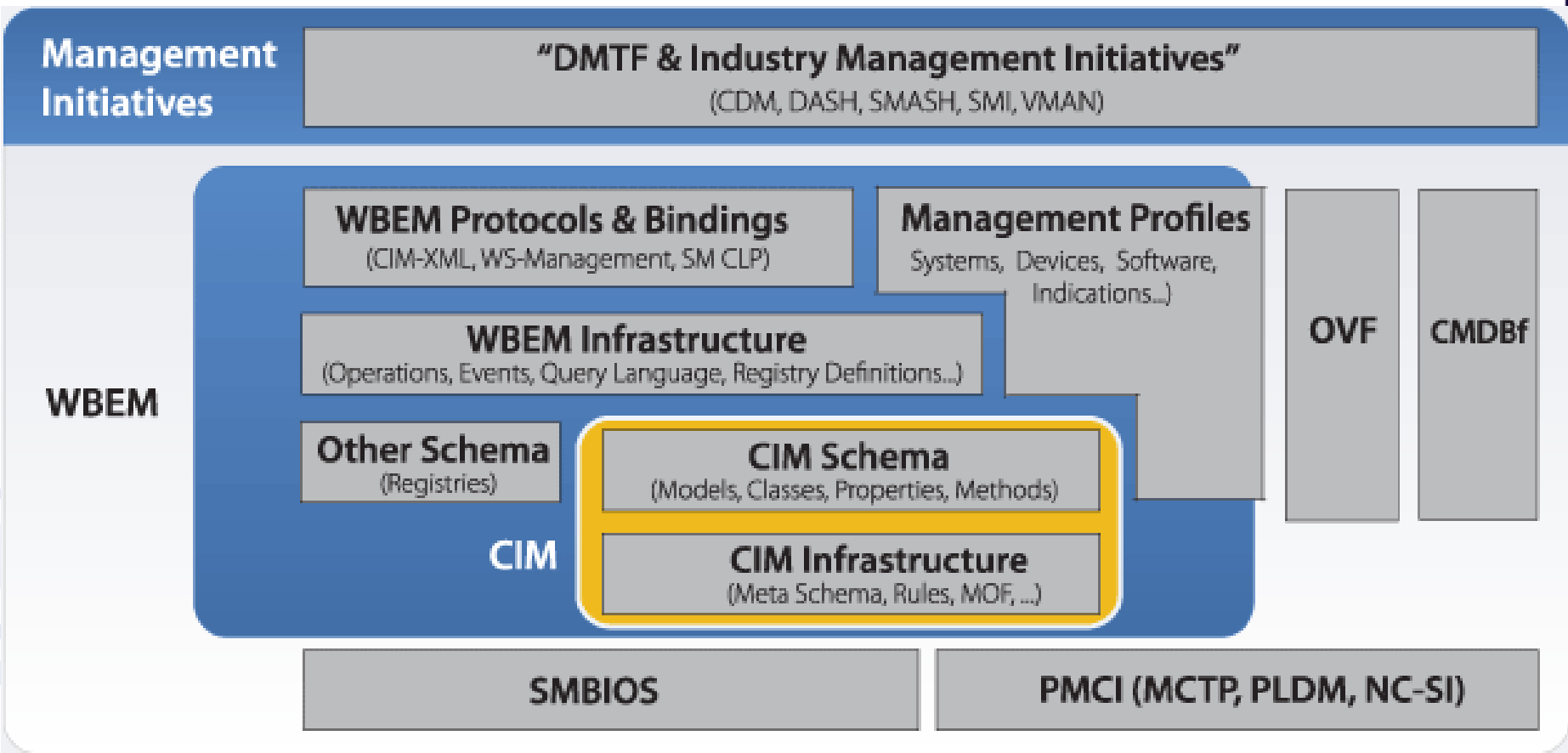
- Board approves specifications, defines direction, oversees activities and coordinates with other industry organizations
- Technical Committee reviews and approves specifications, white papers and other materials developed in Working Groups under the Technical Committee
- Interoperability Committee 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





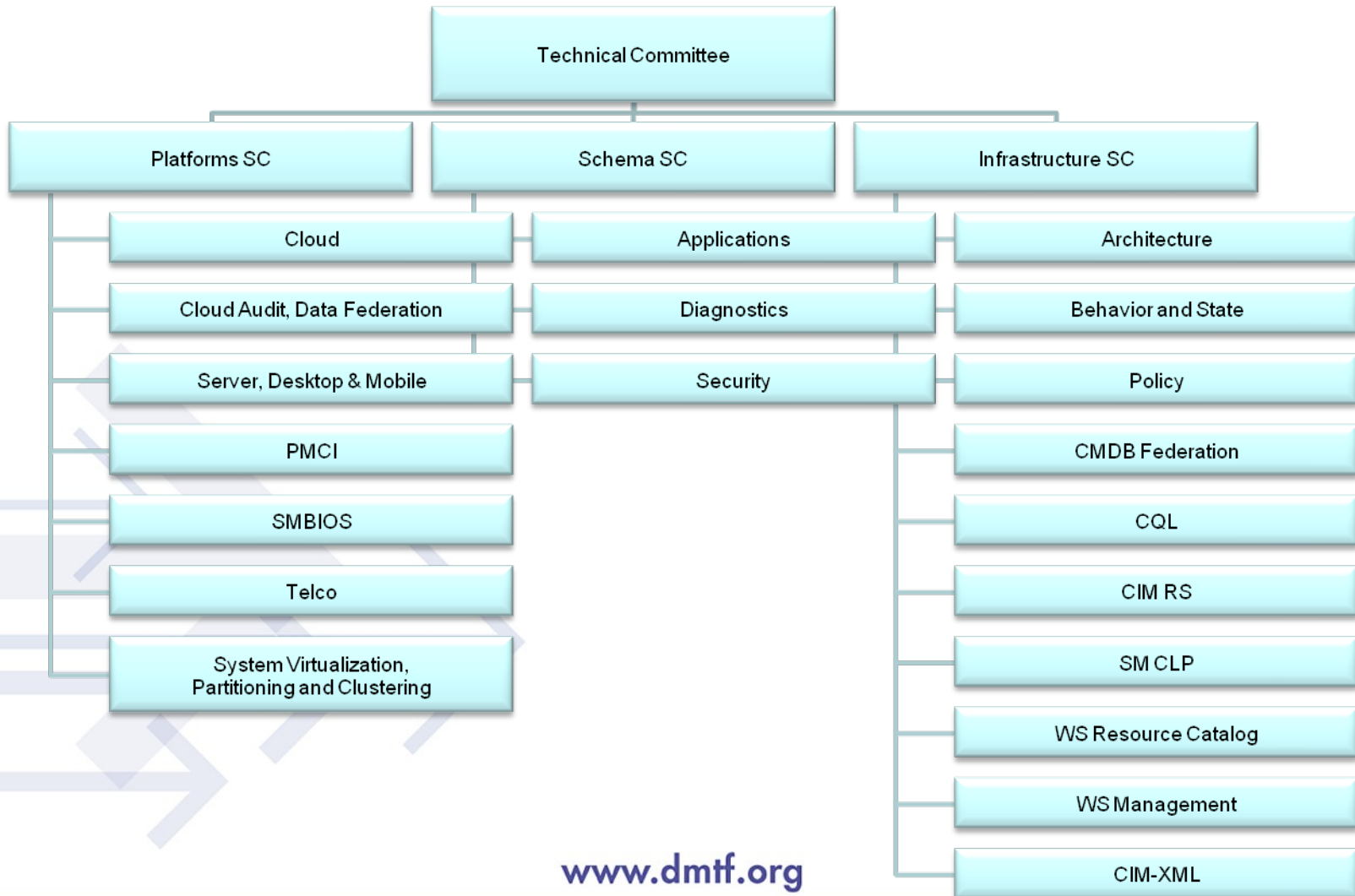
## DMTF Management Initiatives

- **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 certified 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 certified by SMForum
- **CDM – Common Diagnostics Model**
  - Defined by CDM Profile developed by Diagnostics WG
  - Interoperability certified by CDM Forum
- **VMan – Virtualization Management**
  - Defined in OVF and Virtualization Profiles
  - Developed in the System Virtualization, Partitioning and Clustering WG
  - Interoperability managed 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 2.29 just released
- CIM 2.30 development in progress
- Common abstract profile definitions (ELE)
- Initial View Class base classes are now in the Schema, with a few sub classes
- WGs working on Diagnostics, Security, Applications, etc
- New CR Tool!!!
  - CRs are being rendered in XML
  - A tool to fill out the CR template that will improve our automated builds
  - Available to Alliance Partners upon request...



## Ongoing Technical Work

- Infrastructure Subcommittee
  - Architecture WG Active on defining CIM v3 Arch.
  - PUG 1.0 final
    - Working on PUG 1.1
  - Machine readable profile definition
    - Nearing the home stretch
  - Web Services
    - 1.x released (update forthcoming), 2.x under development
  - SM CLP maintenance
  - CMDB Federation
  - WBEM Infrastructure Modeling
  - Standard Message definition
  - Standard Indications
  - Infrastructure Profiles

## Ongoing Technical Work

- Platforms Subcommittee
  - CMWG
    - Working on Use Cases, Data Model, Protocol Requirements and Scope
  - PMCI embedded solution
    - Developing more mapping specs for PLDM & MCTP plus NC-SI version next!
  - SMBIOS continued maintenance
  - SMASH & DASH
    - No plans to combine SMASH & DASH implementation requirements documents
    - Working on Discovery and Correlation for next revision
  - SVPC
    - OVF (Open Virtualization Format) Specification revision 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
      - Virtual Networks
  - Telco
    - CIM/CID harmonization work with TMF
    - Chartering to work on ROUTEd and ROUTing modeling/profiles
  - PPP WG
    - Working on Platform Profiles
    - Big focus is Indications.
    - Also working on new profiles

- **Interoperability Committee**
  - VP of Interoperability – Tom Butler, Hitachi
- **Three Independent Forums**
  - Common Diagnostics Forum (CDM)
    - Chaired by Kevin Kuelbs, HP
  - Systems Management Forum (SMF)
    - Chaired by Akash Malhotra, AMD, 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)



- **Common Diagnostics Model Forum (CDM)**
  - Mission: Foster interoperable diagnostics management for CDM Initiatives
    - CDM conformance program development continues
    - Promote plug-fests to test interoperability and test conformance tools
    - Participate in marketing activities (collaterals, demos, etc.)
  - Status
    - CDM conformance test suite in use now
    - Conformance Registry in use now.
    - Two successful plugfests held this summer
    - CDM Showcase at MDC
  - Future work
    - New versions of CDM conformance suite planned
    - Continue Common Diagnostics Model development
    - Industry commodity expert outreach to develop commodity specific diagnostics profiles.

- **Systems Management Forum (SMF)**

- Mission: Foster interoperable systems management for DMTF: SMASH and DASH Initiatives
  - SMASH and DASH conformance programs continue in development
  - Promote plug-fests to test interoperability and to validate conformance tools
  - Participate in marketing activities (collateral, demos, etc.)
- Status
  - DASH 1.0 conformance test suite in use now
  - SMASH 1.0 conformance test suite near release
  - Certification Registry is in use.
- Future work
  - Continued development of DASH and SMASH conformance test suites.





- Virtualization Management Forum (VMF)
  - 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
    - OVF has achieved wide acceptance in industry
  - Future work
    - Developing test tools



- **Conformance Sub-Committee (CSC)**
  - **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
- **Sub-Committees**
  - Virtualization Management Initiative Subcommittee
  - Japan 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/>
- Currently four incubators: CIM-RS, Virtualization Protection Profile, Software License Management, IOV
- Process Change Highlights:
  - Technology Submission Policy Updates
  - Incubator documents being revised
- 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.

## Alliance Committee

- VP of Alliances is Mark Carlson, Oracle
- 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/>
  - November 14 - 17, 2011 - Marriott San Mateo Hotel
  - Call for papers is out
- Academic Alliance Conference
  - <http://www.dmtf.org/news/events>
  - Oct 24, 2011 - Paris
  - Planning under way for 2011
  - Call for papers is out
- Alliance Partner Technical Symposium
  - Your attendance makes this event a success

## 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!**