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Introduction to the Distributed Management Task Force (DMTF) and Proposal to Fast Track the SM CLP Specification

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Agenda

- DMTF Overview
- SM CLP Specification Overview
- Proposal Overview

Distributed Management Task Force

Formed in 1992 with a focus on desktop management.

The industry organization leading the development, adoption, and interoperability of management standards and initiatives for enterprise and Internet environments.

DMTF Background

DMTF standards provide common management infrastructure components for instrumentation, control and communication in a platform-independent and technology neutral way

DMTF Initiatives

- Desktop Management Initiative (DMI, 1994)
- Common Diagnostic Model Initiative (CDM, 2005)
- Server Management Architecture Server Hardware (SMASH, 2004)
- Storage Management Initiative (in cooperation with SNIA, 2004)

DMTF Standards - Evolved from desktop management to distributed management

- Common Information Model (CIM, 1996)
- Web-Based Enterprise Management (WBEM, 1998)
- Systems Management BIOS (SMBIOS, 1999)
- Alert Standard Format (ASF, 2001)
- Server Management Command Line Protocol (SM CLP, 2004)
- Web Services Management (WS-Management, 2006)

DMTF Membership

More than 4,400 active participants from over 150 organizations

Board Members

- [Broadcom](#)
- [Dell Inc.](#)
- [Fujitsu](#)
- [Hitachi](#)
- [Intel Corporation](#)
- [Novell](#)
- [Symantec Corporation](#)
- [Cisco](#)
- [EMC](#)
- [Hewlett-Packard Company](#)
- [IBM](#)
- [Microsoft Corporation](#)
- [Sun Microsystems, Inc.](#)
- [WBEM Solutions](#)

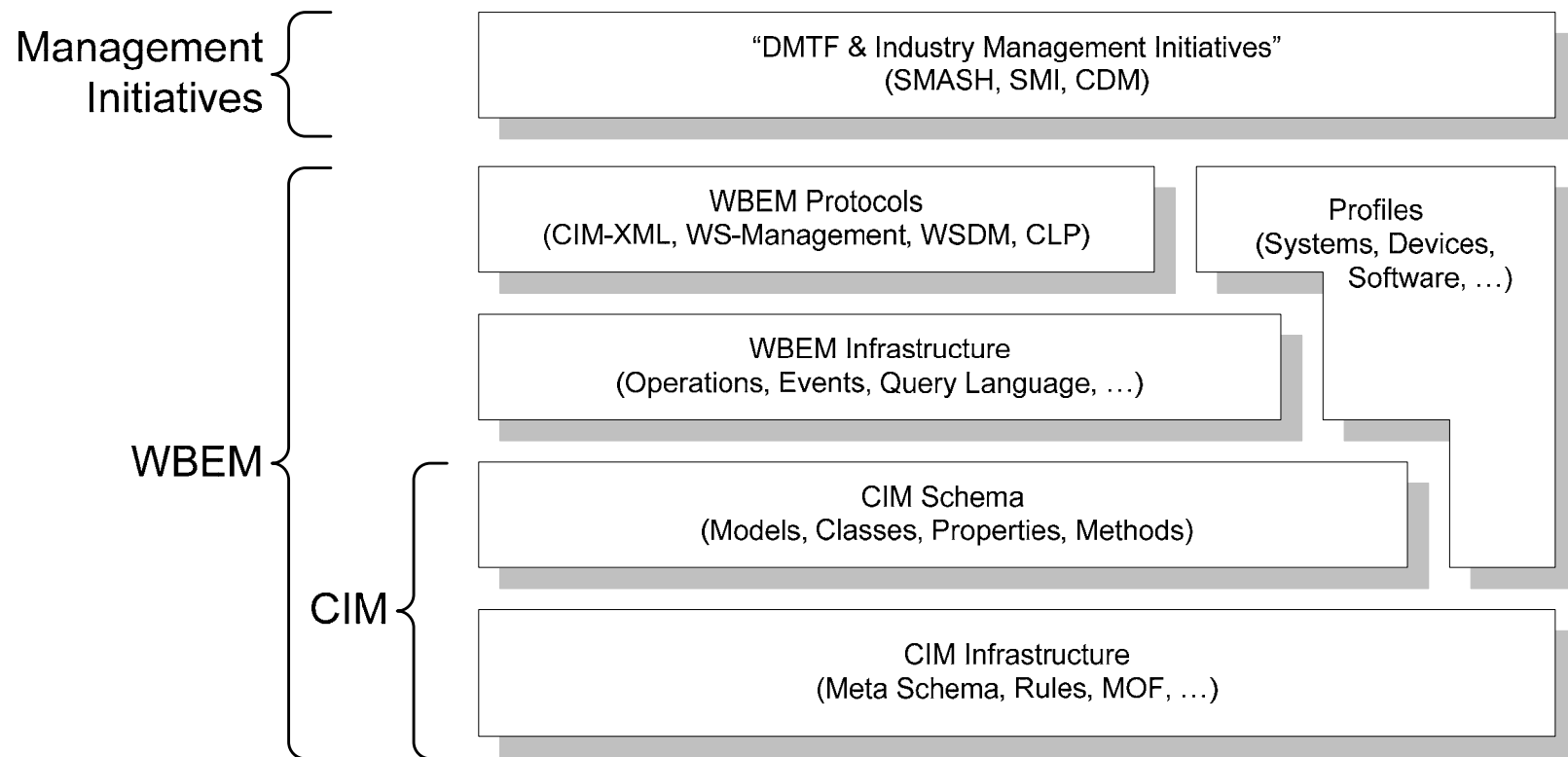
Organization and policies

- One Company, One Vote
- Board approves specifications, defines direction, coordinates with other industry organizations
- Specifications developed in Work Groups under the Technical Committee
- Interoperability Committee, Certification, interoperability events
- Marketing Committee coordinates press releases, conference, Web site

DMTF Alliance Partners

- Blade Systems Alliance
- CompTIA
- Consortium for Service Innovation
- Open Grid Forum (OGF)
- OASIS (WSDM TC)
- Object Management Group (OMG)
- Network Applications Consortium (NAC)
- Printer Working Group (PWG)
- Service Availability Forum (SAF)
- Storage Networking Industry Association (SNIA)
- TeleManagement Forum (TMF)
- Trusted Computing Group (TCG)
- The Open Group

DMTF Technologies Diagram



SM CLP Overview

SM CLP widely used and widely referenced

- Key component of the DMTF's Systems Management Architecture for Server Hardware (SMASH) Management Initiative.
- Implementations Announced by:
 - AMD, Avocent, Broadcom, Dell, Hitachi, HP, IBM, Symantec, Raritan, and Wbem Solutions. (see [DMTF Releases SMASH 1.0 Specifications](#))
- Anticipate over 80% of the worldwide servers would include SM CLP
 - The projected IDC market size, revenue wise is \$53B in 2006.
- Expected to be referenced by the ANSI INCITS 388 Storage Management Standard (e.g. SNIA SMI-S) in the future.
- Normatively referenced by the PCI Firmware 3.0 Specification
 - Specification published by the PCI SIG (<http://www.pcisig.com>) which defines PCI BIOS interfaces.

Systems Management Command Line Protocol (SM CLP)

- Specification for a Command Line Protocol transmitted over standard character oriented character streams.
- Protocol used to access a Common Information Model Object Manager (CIMOM) using a human-oriented command set.
- SM CLP commands perform a variety of different functions including:
 - Configuring systems & their components (devices, services & collections)
 - Download or upload firmware to/from systems and components
 - Start, Stop or reset systems and/or system components
 - Control property settings for system components.
 - Examine the states of systems & system components
- Server management applications will use the SM CLP to help them manage heterogeneous servers in a homogeneous fashion.
- As an “open systems” specification, the SM CLP is intended for use across a wide variety of operating systems such as Windows[®], Linux[®], Solaris[™], HP-UX, and AIX[®] as well as a variety of embedded environments.

SM CLP can lower development and end user costs, increasing ROI and lowering TCO

SM CLP will:

- **Reduce** training cost and make tools easier to use, leading to more customer acceptance of management tools and hence increase the market.
- **Reduce** development times, allowing server management application vendors to ship management applications earlier than they otherwise would.
- **Increase** interoperability of management tools should encourage IT users to more quickly adopt SM CLP-based solutions in their organizations.

Systems Management Architecture for Server Hardware

SMASH-Command Line Protocol (CLP)

```
-> show /system1
/system1
    cpu0
    cpu1
    log1
    temp3
-> cd temp3
CDT is now /system1/temp3
-> show -all temp3
Chassis temperature is 30 degrees C
-> set temp3 UpperThresholdFatal=120
->
```

Proposal Overview

The Proposal

- INCITS is the organization to fast track our specs to ANSI and ISO/JTC1
- DMTF is comprised of a set of international Key industry companies in the Systems Management and Manageability Industry
- DMTF has almost 15 years experience
- The DMTF Patent Policy is RAND based
- Plan to be around for the foreseeable future
- Our first spec for this process is an important one
- We plan to submit others

Important aspects of our Proposal

- DMTF has no special copyrights requirements
- DMTF has no special trademark requirements
- Proposed specification has no known patent claims
- Intend to forward ANSI/INCITS standard to JTC1
- Will have close liaison with T11 Technical Committee
- This is a beginning of hopefully a long-term relationship

Questions?