Management Matters

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The Distributed Management Task Force Newsletter

Management Matters this month:

FEATURES

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Management Matters is a monthly publication covering the Distributed Management Task Force and its member organizations.

FEATURES

Message from the President: Management Standards and Green IT

By: *Winston Bumpus, DMTF President*

There has been a lot of discussion in the industry lately about Green IT and how to make data centers more energy efficient. More than a year ago DMTF formed an alliance with The Green Grid to help better understand these issues, as well as to expand DMTF standards into data center management. We continue this work and are making progress toward extending our models for use in data center power monitoring and measurement.

It has always been my belief that you can't improve that which you don't measure. Therefore, it has become more important than ever for our standards to provide an approach to consistently and efficiently gather this important information and give data centers the instrumentation needed to better

manage their systems and power infrastructure. DMTF continues to work with other industry groups to help meet this need.

On May 15, 2009, the United States Environment Protection Agency(EPA) released its Tier 1 Energy Star for Server program. This program is the culmination of more than a year of work between the government, computer systems manufacturers and other interested parties. As part of this release the EPA required server manufacturers to list the mechanism they use for data collection.

From the EPA Energy Star for Servers Version 1.0: "To meet the data measurement and output requirements, Computer Servers may rely on a service processor, embedded power or thermal meter (or other out-of-band technology shipped with the Computer Server), or preinstalled operating system to collect data and make it available for collection and dissemination over a standard network to third-party management systems such as a data center management software suite. Data must be made available in a published or user accessible format so as to be readable by third-party, non-proprietary management systems."

DMTF SMASH is listed today in the supporting material as an example of a specification that meets the requirements that could be called out in the data sheet. DMTF plans to work with the EPA to propose inclusion of DMTF on their Tier 2 specification. Work is beginning now and scheduled to be implemented in October 2010. This is an opportunity for DMTF to leverage SMASH as one of a set of standards to be used for this purpose.

The Smart Grid effort is another activity relevant to DMTF. This initiative is being driven by the US Department of Energy (DOE) and the National Institute of Standards and Technology

The challenges ahead for energy efficiency and carbon footprint reduction are large. But the opportunities are even larger and will enable DMTF to use the fruits of our work to help improve the environment and economy. By driving adoption of our management standards we will enable interoperable technologies to enable Green IT.

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Introducing the New DMTF Platform: Kavi Workspace 5.0

On July 8, 2009, DMTF migrated to Kavi Workspace 5.0, an updated version of the old Kavi platform. This change provides DMTF members with access to a variety of new features and online tools.

The changes included in the new platform are designed primarily to enable members to collaborate more effectively and to make the most efficient use of available Kavi tools. The most apparent change is in the reorganized members' area of the DMTF Web site. The new members' area is now customizable and will populate information based on how you tend to use the Web site. This gives users the ability to more easily access and organize information.

There are also a number of new tools available for you to test out. The first time you sign in to the members landing page, you will see an introductory overview to learn about these new tools. There is also a new Training Center available to help answer any questions that may arise while utilizing these new features.

A key feature included in the new platform is the Outlook synchronization tool. Users will be able to populate their calendars with DMTF-related events directly from the members' area.

Kavi Workspace 5.0 offers great benefits to DMTF users and administrators. We are excited for members to begin using this new platform. [Click here](#) to learn more about the new available Web site tools.

CDM Showcase 2009

The Common Diagnostic Model ([CDM](#)) Forum is hosting its [2009 MDC Showcase](#) at the Santa Clara Marriott in Santa Clara, Calif. on Nov. 16 – 19, 2009. The showcase will allow companies to work with key original equipment manufacturers (OEMs) and third party application vendors to integrate modules into their CDM based solutions. Companies will be recognized by the industry for CDM progress and support of CDM adoption. Companies that are already among the leaders of CDM will have an opportunity to help pave the way for broad industry adoption.

The increasing interest for uniting the computer industry on a single interoperable interface to all system diagnostics makes this a perfect opportunity to learn more about CDM and be a part of future development and implementations. Sign up now and show that your company is an industry leader of CDM adoption.

The showcase registration is now open for companies. Contact cdm-forum-chair@dmtf.org now to be a part of this industry event.

New DMTF Documents Available to Members

Standards:

- **Indicator LED**
  Profile ([DSP1074](#)): The Indicator LED Profile extends the management capability of referencing profiles by adding the capability to represent indicator LEDs of managed systems. Associations with the LED's physical aspects and profile-implementation information are modeled in this profile.

- **DASH Implementation**
  Requirements ([DSP0232](#)): This document describes the requirements for implementing the Desktop and Mobile Architecture for System Hardware

version 1.1. This document does not define the implementation requirements directly.

- **CDM Implementation**
  Requirements ([DSP0255](#)): This document describes the requirements for implementing the Common Diagnostics Model (CDM) version 1.0.0. This document does not define the implementation requirements directly.

- **SSH Service**
  Profile ([DSP1017](#)): The SSH Service Profile extends the management capability of referencing profiles by adding the capability to represent an SSH service and its associated sessions.

- **Pass-Through Module**
  Profile ([DSP1020](#)): The Pass-Through Module Profile is a component profile for modeling pass-through modules of modular systems. A pass-through module acts as a conduit for network connectivity for components within a modular system without performing any higher order network protocol function.

- **Shared Device Management**
  Profile ([DSP1021](#)): The Shared Device Management Profile is a component profile for modeling shared devices of modular systems.

- **Software Update**
  Profile ([DSP1025](#)): The Software Update Profile describes the classes, associations, properties, and methods used to support the installation and update of BIOS, firmware, drivers and related software on a managed element within a managed system.

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New DMTF Documents Available to Members – continued

- **OS Status**
  Profile ([DSP1029](#)): The OS Status Profile extends the management capabilities of referencing profiles by adding the capability to perform basic management of operating systems installed on a system.

- **Base Metrics**
  Profile ([DSP1053](#)): The Base Metrics Profile is a component profile that defines the minimum object model needed to provide dynamic metrics associated to existing managed elements and related associations. This profile does not document how to model metrics for capacity planning or accounting purposes. These topics are covered by the Capacity Metrics Profile (DSP1073), which is a specialization of this profile.

- **PCI Device**
  Profile ([DSP1075](#)): The PCI Device Profile extends the management capabilities of referencing profiles by adding the capability to represent PCI devices for manageability, including PCI, PCI-X, PCI Express, bridge and switch devices. The PCI device as a logical device is modeled as referencing the physical package for physical asset information and profile versioning for the schema implementation version information.

- **KVM Redirection**
  Profile ([DSP1076](#)): The KVM Redirection Profile extends the management capabilities of referencing profiles and provides the capability to manage KVM (Keyboard, Video and Mouse) console redirections provided by the system.

- **Enabled Logical Element**
  Profile ([DSP1080](#)): The Enabled Logical Element Profile extends the management capabilities of referencing profiles by adding the capability to represent any enabled logical element. The profile describes common requirements for modeling the variety of enabled logical elements within managed systems including enabled state management, health state, and operational status.

- **WS-CIM Mapping**
  Specification ([DSP0230](#)): The goal of this specification is to produce a normative description of a protocol-independent mapping of CIM models to XML Schema, WSDL fragments, and metadata fragments. The features of CIM that are within the scope of this specification correspond to a subset of the features of CIM that are defined in the CIM Infrastructure Specification, DSP0004. Another goal of this specification is to allow the most expedient use of current Web Services (WS) infrastructure as a foundation for implementing a WS-CIM compliant system. This specification has been written to leverage the existing Web Services standards and best practices that are currently widely deployed and supported by Web Services infrastructure. As those standards and best practices evolve, future versions of this specification should evolve to include them.

- **Platform Watchdog**
  Profile ([DSP1040](#)): The Platform Watchdog Profile extends the management capabilities of referencing profiles by providing the capability to manage watchdog timers provided by the system.

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Call for Contributors

DMTF invites you to contribute to *Management Matters*. DMTF welcomes letters to the editor, topic suggestions and other contributions. If you would like to participate, email us at press@dmtf.org.

- **Media Redirection**
  Profile ([DSP1086](#)): The Media Redirection Profile extends the management capabilities of referencing profiles and provides the capability to manage Media redirections provided by the system.

- **Base Server**
  Profile ([DSP1004](#)): The Base Server Profile is the autonomous profile that defines the classes used to describe basic server hardware and its related software. The scope of this profile is limited to simple servers that are directly realized in physical components. The profiles referenced by the Base Server Profile extend the management capabilities by adding the capability to represent server configuration, boot control, provisioning, and hardware.

- **Modular System**
  Profile ([DSP1008](#)): The Modular System Profile is an autonomous profile for modeling blade systems.

- **BIOS Management**
  Profile ([DSP1061](#)): The BIOS Management Profile extends the management capabilities of referencing profiles by adding the capability to represent and configure BIOS attributes, such as a Network Controller or IDE Controller. The individual BIOS attributeÂ's relationship with a respective device is also described. Additionally, the profileÂ's registration for the schema implementation version information is described.

- **Opaque Management Data**
  Profile ([DSP1070](#)): The Opaque Management Data Profile extends the management capability of referencing profiles by adding the capability to create, manage, use, and delete opaque management data objects.

- **Alarm Device**
  Profile ([DSP1028](#)): The Alarm Device Profile extends the management capabilities of referencing profiles by adding the capability to represent alarm devices for manageability. The alarm device as a logical device is modeled as referencing the alarm device physical package for physical asset information and the profile registration for the schema implementation version information.

- **Device Tray**
  Profile ([DSP1019](#)): The Device Tray Profile is a component profile for modeling a device tray of a modular system.

- **Service Processor**
  Profile ([DSP1018](#)): The Service Processor Profile is an autonomous profile for modeling service processors.

- **BIOS Attribute Registry XML Schema**
  Specification ([DSP8022](#)): This document defines the XML schema for DMTF BIOS Attribute registries.

- **Command Line Protocol Service**
  Profile ([DSP1005](#)): The Command Line Protocol Service Profile extends the management capability of referencing profiles by adding the capability to represent a CLP service and its associated sessions. A CLP service is a logical entity that provides management access through the Server Management Command Line Profile defined in the Server Management Command Line Protocol Specification.

- **SMASH Implementation**

Requirements ([DSP0217](#)): This document specifies the requirements for implementing the System Management Architecture for Server Hardware (SMASH) version 2.0. This document specifies those requirements by defining which other DMTF specifications are required, conditional, and optional.

- **Software Inventory**
  Profile ([DSP1023](#)): The Software Inventory Profile describes the CIM schema elements required to provide an inventory of installed BIOS, firmware, drivers, and related software in a managed system. This profile also describes the CIM schema elements required to represent the software that can be installed on a managed system.

- **Simple Identity Management**
  Profile ([DSP1034](#)): The Simple Identity Management Profile is a component profile that provides the ability to manage local accounts on a system and to represent the local system's view of a principal that is authenticated through a third-party authentication service. This profile does not specify CIM-based mechanisms for performing the authentication of credentials.

- **Telnet Service**
  Profile ([DSP1016](#)): The Telnet Service Profile extends the management capability of referencing profiles by adding the capability to represent a telnet service and its associated sessions.

- **Physical Asset**
  Profile ([DSP1011](#)): The Physical Asset Profile extends the management capability of the referencing profiles by adding the capability to describe the physical aspects of logical elements that the implementation is instantiating. The profile also describes the relationship between the physical elements and the profileÂ's registration for the schema implementation and version information.

- **WS-Management CIM Binding**
  Specification ([DSP0227](#)): This clause describes the scope of this specification, including some items that are specifically out of scope.

- **DASH namespace**
  Schema ([DSP8030](#)): The DASH namespace Schema is for DASH-specific elements in WS-Man messages.

- **SMASH namespace**
  Schema ([DSP8039](#)): The SMASH namespace Schema is for SMASH-specific elements in WS-Man messages. This schema is currently limited to WS-Identify Response.

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Alliance Partner Feature: Computing Technology Industry Association (CompTIA)

The Computing Technology Industry Association (CompTIA) and DMTF have been collaborating since 2002 in the areas of diagnostics, warranty service, trouble ticketing and service incident management, utilizing DMTF's Common Information Model (CIM) to provide standards and automated diagnostic processes to troubleshoot computer systems.

The purpose of this alliance is to provide a channel for DMTF to receive requirements and design input, as well as implementation feedback from CompTIA regarding managing and invoking diagnostics, exchanging help desk information, and processing service incidents.

Representing more than 18,000 member companies within the international technology community, CompTIA's goal is to provide a unified voice, global advocacy and leadership for its members, and to advance industry growth through standards, professional competence, education and business solutions. The mission of CompTIA's services and service section is to help its members stay competitive and profitable by providing vendor-neutral standards in certification, ecommerce, customer service and workforce development to meet industry wide challenges.

For more information on CompTIA, click here.

EVENTS

Register Now for the 2009 Next Generation Data Center Conference

DMTF is happy to be returning to the Next Generation Data Center Conference™ (NGDC™) this year. This year's conference will take place August 12 – 13, 2009, at the Moscone Center in San Francisco, Calif.

Stop by the DMTF booth for updates on the organization's latest activities. Additionally, don't miss DMTF President Winston Bumpus' presentation, "Simplifying Virtualization Management Using New Industry Standards," on Thursday, August 13, 2009 at 10:15 a.m.

NGDC is the only strategic IT event focused on the complete end-to-end solution for the 21st century data center and the new technologies from which these data centers are being built. NGDC will feature exclusive presentations by industry insiders and executives addressing ever-increasing needs for flexibility, scalability and performance in the data center. Topics include virtualization, data center applications, enterprise storage, and efficient, resilient and sustainable facilities.

This year, NGDC will co-locate with OpenSource World™ (formerly LinuxWorld®) and CloudWorld™. The co-location of these three events, focused on integrated enterprise technologies aimed at increasing data center efficiency and reducing costs, provides a unique value proposition that will maximize learning while reducing IT professionals' time away from the office. Each of these three conferences offers a different learning opportunity and experience, making this an ideal event for DMTF members to attend.

Register now for NGDC 2009 to participate in this great industry event.

EVENTS

Tell Your Story at Management Developers Conference 2009

Management Developers Conference (MDC) 2009 wants you to share your story about adopting DMTF standards with the development community.

It can be challenging for any company to embrace industry standards. Whether you are a customer, console vendor or provider of standard interfaces, unforeseen challenges will come up along the way that need to be surmounted. If your company has successfully overcome such a challenge, we encourage you to consider sharing your story with us at MDC 2009.

Often referred to as "war stories from pioneers," there was significant feedback from last year's MDC attendees suggesting that developers, managers and industry thought leaders alike wanted to hear about overcoming challenges encountered when implementing DMTF standards. These challenges can come in a number of varieties – how a company implemented a standard (either on the server or console side), use cases, integration issues, or any of a number of other sources.

If your company has such a story, we would love for you to share it by presenting at MDC 2009. To submit your idea for consideration in the upcoming agenda, please write a one paragraph abstract, come up with a title and send it to presentations@mandevcon.com.

We hope you consider sharing your story with the industry colleagues at MDC 2009.

REGULARS

2009 Survey Results: How do you use the published version of the CIM Schema?

In this series, DMTF continues to report findings from its annual member survey conducted in January 2009. One hundred twenty–five members responded at length to our survey.

We asked members how they use the published version of the CIM Schema. Here's what they said:

Answer Options	Response Frequency	Response Count
Use of CIM Class definition in Integrated Development Environments	36.8%	46
Generation of implementations – providers	56.8%	71
Generation of implementations – client frameworks	29.6%	37
Generation of documentation	37.6%	47
Other (please specify)	8.0%	10