## News from DMTF

### December 2024

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## **Year-in-Review**

### From the Desk of DMTF President Jeff Hilland

As this year ends, we look back with gratitude and pride on the achievements and milestones that organization has achieved. Our supporters, volunteers, and partners have been instrumental in advancing our mission, allowing us to reach new heights. Each step has been fueled by a commitment of meaningful impact on the industry and, ultimately, the end user. Together, we have much to be proud of. Here's a look back at the highlights, successes, and invaluable contributions that have shaped this year.

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### **Technical Milestones**

<u>Redfish</u>

The <u>Redfish Forum</u> made significant progress this year, including:

- We kicked off 2024 with the Redfish Release <u>2023.3</u> in January. This release included 1 new schema and 26 schema updates including a NEW ResolutionStep for providing a recommended step to resolve a condition (fault, error, etc.). To improve developer access to and synchronization with the latest Redfish releases, a new <u>public GitHub repository</u> was created to host copies of the published Redfish schemas and standard message registries.
- Redfish version <u>2024.1</u> was released in May and included four new schemas, 29 schema updates, and additional developer resources.
- Continuing its aggressive development of the standard, Redfish version <u>2024.2</u> was released in July. This release included 6 schema updates, additional support for NVM Express® (NVMe®) devices, and developer resources. This release was driven by industry needs to synchronize support for NVM Configuration Lock functionality.
- In September, Redfish <u>2024.3</u> was released and included the addition of Time-based One-Time Password secret key handling and 18 schema updates.
- To check out all of the accompanying Redfish release webinars, visit the <u>Redfish School</u> <u>playlist</u> on our <u>YouTube channel</u>.
- Redfish 2024.4 is slated for release in January.

### PMCI Efforts

The <u>PMCI Working Group</u> has been busy this year. Following are the notable technical milestones for 2024:

- In February, PMCI announced the availability of its Platform Level Data Model (PLDM) for File Transfer Specification (DSP0242) Work in Progress (WIP). This document enhances the existing PLDM suite of specifications by providing an ability to discover and transfer files within a PLDM Subsystem and defines the messages and data structures to enable this new capability using well known PLDM semantics.
- In May, the Working Group released its new MCTP Host Interface Work in Progress and additional Binding Specifications. It announced the availability of its Management Component Transport Protocol (MCTP) Host Interface Specification version 2.0.0 Work In Progress (WIP) (DSP0256), Management Component Transport Protocol (MCTP) Platform Communications Channel (PCC) Transport Binding Specification version 1.0.0 Work In Progress (WIP) (DSP0292).
- In addition, the previously released Memory-Mapped BMC Interface (MMBI) Specification version 1.0.0 (<u>DSP0282</u>), and Management Component Transport Protocol (MCTP) Memory-Mapped BMC Interface (MMBI) Transport Binding Specification (<u>DSP0284</u>) were also updated.
- The August, PMCI announced the availability of its Platform Level Data Model (PLDM) for File Transfer Specification 1.0.0 (<u>DSP0242</u>). This specification enhances the existing PLDM suite of specifications by providing an ability to discover and transfer files within a PLDM Subsystem. The specification defines messages and data structures to enable this new capability using well known PLDM semantics.
- Also in August, PMCI announced that the Network Controller Sideband Interface (NC-SI) standard has been adopted and published by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) as <u>ISO/IEC</u> <u>24079:2024</u>. In addition to NC-SI, DMTF has a wide breadth of standards that have achieved important international accreditation status. To view the full list, please visit the <u>DMTF ANSI and ISO Adoptions and Alliance Activities</u> page.
- In October, the Working Group published a presentation, which shares its goals and approach to a common and extensible format for the Field Replaceable Unit (FRU) Data Model Specification. The presentation is a proposal for a minimum common FRU format and access. The FRU Data Format specification (DSP0220) defines a new layout of FRU data at rest (in storage), along with the support of a simple file directory to support multiple aggregate sections of FRU data. To enable wide industry adoption, the new specification will support a variety of data formats for the FRU File and enables compatibility with the legacy IPMI Platform Management FRU Information Storage Definition.

PMCI plans to be just as busy in 2025 and has several more releases planned for its suite of specifications.

### <u>SPDM</u>

The <u>SPDM Working Group</u> is responsible for the SPDM standard. This standard enables authentication, attestation and key exchange to assist in providing infrastructure security enablement. The notable milestones for SPDM are:

- In June, SPDM requested industry feedback on a proposal regarding support of the <u>National Institute for Standards and Technology (NIST</u>) selection of Post Quantum Cryptography (PQC) algorithms in future SPDM specification versions. View the WIP presentation <u>here</u>.
- Also in June, the organization announced the released an Authorization Work-in-Progress (WIP) presentation that previews a new Authorization Specification (DSP0289) slated for future release. This WIP presentation aims to help address authorization uniformly across SPDM and PMCI standards, DMTF alliance partners, and the industry. Click <u>here</u> to view the presentation.
- In July, the SPDM Code Task Force announces its latest open source release of libspdm, version 3.4, and is conformant with DSP0274 1.0, 1.1, 1.2 and part of 1.3. There were three notable changes - addition of MEL (GET\_MEASUREMENT\_EXTENSION\_LOG), support for Secured Messages using SPDM

Specification DSP0277 1.2, MbedTLS 3.0. The 3.X version of MbedTLS is not compatible with the older 2.X versions; this will help with future versions and represents a considerable amount of work. <u>Click here</u> to learn more.

- In September, the Working Group released the SPDM to Storage Binding Specification Work-in-Progress (<u>DSP0286 1.0.0WIP90</u>), which defines the format of SPDM messages over storage protocols. This specification will bind SPDM messages (DSP0274) and SPDM Secured Messages (DSP0277) to storage protocols.
- Also, in September, SPDM released the <u>SPDM Binding over Transmission Control Protocol</u> (<u>TCP</u>) <u>1.0.0</u> (<u>DSP0287</u>), which specifies binding SPDM messages to TCP. The scope of this specification binds Out-of-Session SPDM messages and In-Session SPDM messages to TCP and further defines the transport specific details.
- Kicking off the fall, the SPDM Code Task Force announced the release of <u>libspdm, version</u> <u>3.5</u> in October. It is conformant with DSP0274 1.0, 1.1, 1.2 and part of 1.3. There were notable changes. To read about the changes <u>click here</u>.

SPDM has several more releases planned for 2025. Stay tuned!

The Security Response Task Force (SRTF)

 <u>SRTF</u> is hard at work within the organization's Technical Committee. The Task Force, under the direction of the TC, the SRTF is responsible for the coordination and management of reported security issues or vulnerabilities related to DMTF standards or DMTF open-source sample implementations.

To stay updated on any security announcements about DMTF standards, make sure that you have at least one representative from your company signed up through Git Hub and following the announcements <u>here</u>.

### <u>SMBIOS</u>

<u>SMBIOS</u> is one of the most widely used IT standards in the world, simplifying the management of more than two billion client and server systems since its release in 1995.

 In August, the SMBIOS Working Group released <u>Version 3.8 of the SMBIOS</u> Reference Specification. SMBIOS <u>3.8</u> adds support or updates for current technologies.

### CIM Forum

- In March, <u>CIM 2.55</u> was released. The fifty-fifth update to <u>CIM</u> since the launch of 2.0, this widely used standard provides a common definition of management information for systems, networks, applications, and services. DMTF continues to regularly update the CIM schema, helping ensure the standard remains up-to-date to address the latest industry needs.
- In July, DMTF released a of <u>the latest versions of the Conformance Test Suite (CTS)</u> for its <u>Desktop and mobile Architecture for System Hardware (DASH) standard</u>. DASH CTS 2024 (Java versions 8 and 9) is available, and the <u>DMTF Certification Registry</u> is accepting submissions.

#### <u>Alliances</u>

Our <u>Alliance Partner</u> program continues to benefit the industry overall.

 In March, DMTF held its annual event, the <u>2024 Alliance Partner Technical Symposium</u> (<u>APTS</u>). The sixteenth annual APTS was held on Monday, March 11 through Thursday, March 24, 2024. It was a hybrid event, with the option to attend in person in Manitou Springs, Colorado or to attend virtually. Led by DMTF's VP of Alliances John Leung, the event featured collaborative working group meetings and keynote speakers.

### Education and Events

- DMTF continued its dedication to industry outreach and education with updated educational materials, YouTube videos, and attendance at several industry events.
- The organization's <u>"Redfish School" YouTube series</u> continues to be popular with viewers. In May, we published a new tutorial video focused on the <u>Conformance Testing with</u> <u>Redfish</u>. Stay tuned for more videos in 2025!
- Have you attended a Redfish release webinar? Ongoing support to implementors of the Redfish standard, the Redfish Forum webinar series is timed with each release of the standard. Attendees are invited to join a live webinar, hosted via Zoom, where the Forum chairs present the contents of the latest release followed by a Q&A session. Each webinar is then added to our <u>Redfish School playlist</u> on the <u>DMTF YouTube channel</u>.
- DMTF specifications can be found in millions of products, but most people have no idea which products support our standards. We have created a <u>webpage</u> where companies can showcase which standards they have adopted or implemented.
- DMTF executives, technology representatives and standards were highlighted in several events:
  - SNIA SDC
  - OCP Global Summit
  - Manageability Workshop presented by DMTF at the OCP Global Summit
     SC24
- New this year, DMTF hosted a <u>Manageability Workshop</u> at this year's OCP Global Summit. The workshop featured the latest updates on infrastructure management and security from DMTF member companies, many of which are also active in OCP projects around hardware management, security, and open-source development. Attendees learned about the latest information as well as unpublished developments that affect the OCP manageability and security community from industry experts at DMTF and the industry. There were updates on Redfish Telemetry and Tools, OpenBMC, GPU management, SPDM, as well as the latest information on MCTP, PLDM and FRU enhancements. Many of these updates affect the control plane as well as the data plane in
- products in the industry.
- Did you know DMTF's <u>Education</u> area offer visitors direct navigation and access to new materials? Did you know it also highlights the <u>latest educational information and featured</u> resources and provides visitors with a broad collection of information and most recent materials? The <u>Education</u> landing page showcases key resources, which changes on a regular basis, and visitors will also find pages for <u>Presentations</u>, <u>White</u>
   <u>Papers</u> and <u>Webinars</u> all of which update automatically when DMTF shares new content.
- In addition, there are pages for <u>Open Source</u> information and <u>Newsletter</u> sign-up.
  We would be remiss if we didn't mention the retirement of two integral volunteers, Kimon Berlin and Mike Walker.
  - Kimon retired from HP (after 30 years with the company!) and worked tirelessly on several releases of the <u>SMBIOS specification</u> and SMBIOS related CIM Schema development. He also co-chaired the SMBIOS working group for numerous years.
  - Mike, who has been retired from the corporate world for several years, leaves behind a legacy at DMTF. As a fellow since 2015, Mike has been a dedicated member and worked on countless specifications that have significantly impacted the industry, most notably <u>CIM</u>. His leadership as chair of the CIM Schema Task Force

We can't thank them enough for their dedication and commitment to the organization.

for many years is a testament to his commitment.

### **Final Thoughts**

Together, we have achieved significant milestones in creating meaningful standards that address industry needs and solve challenges for the end user. We are proud of our valued volunteers and their achievements. Without their hard work, none of this would be possible. We would also like to extend our gratitude to our alliance partners. Our close collaboration with SNIA, OCP, PICMG, TCG, CXL Consortium, and others has been instrumental in creating standards within the platform (MCTP, PLDM, SMBIOS, SPDM) and facilitating communication between the platform and management clients (Redfish, CIM). We value all our industry and organizational relationships.

As we look ahead to 2025, we want to express our deep gratitude to our member companies, volunteers, as well as our alliance and industry partners. Your ongoing commitment to the organization is invaluable, and we are excited about the potential for future collaboration. We look forward to continuing our work together. As always, thank you for the continued hard work and dedication.

# It's Not Too Early to Think About DMTF Membership

As our new fiscal year approaches, the membership renewal period is right around the corner please take steps today to ensure your organization is prepared to renew! Your company's billing contact will receive the invoice in early January so be sure to give them the heads up! The upcoming membership year runs April 1 to March 31.

DMTF membership offers front-line access to our standards along with the opportunity to participate in the process of defining standards and programs. This important work is funded through membership dues that are among the most cost-effective in the industry. DMTF remains the ideal forum for industry-leading companies to come together in a neutral, non-competitive environment to collaborate on interoperable management standards.

To learn more about the benefits of membership, or to join or renew, please visit the DMTF website at <u>www.dmtf.org/join</u>. Have questions? Get answers from the DMTF membership team at <u>admin@dmtf.org</u>.

Thank you for your ongoing contributions and support of DMTF - our success depends on you! Renew your membership today!

# In Case You Missed It

## Congratulations to our 2024 Star Awards Recipients!

Each year, our Star <u>Awards program</u> recognizes members who have demonstrated great value to the organization through the dedication of their time and efforts to advance DMTF standards and initiatives.

To see the full list of recipients, click <u>here</u>.

We are proud to acknowledge these members for going above and beyond and contributing to the success of the organization. Our thanks and congratulations to all!

# SPDM announces the release of libspdm 3.5

The Security Protocols and Data Models (SPDM) Code Task Force announces its latest open source release of libspdm, version 3.5. It is conformant with DSP0274 1.0, 1.1, 1.2 and 1.3. It is now

## Fall Events

Continuing our industry outreach and education, DMTF participated in two events this fall – the Open Compute Project (OCP) Global Summit and SC24.

### OCP Global Summit

The <u>Open Compute Project (OCP) Global</u> <u>Summit</u> was October 15-17, 2024, at the San Jose Convention Center! In addition to our booth on the Expo floor, DMTF hosted a <u>Manageability Workshop</u> on Tuesday, October 15.

The workshop featured the latest updates on infrastructure management and security from DMTF member companies, many of which are also active in OCP projects around hardware management, security, and opensource development.

Attendees learned about the latest information as well as unpublished developments that affect the OCP manageability and security community from industry experts at DMTF and the industry. There will be updates on Redfish Telemetry and Tools, OpenBMC, GPU management, SPDM, as well as the latest information on MCTP, PLDM and FRU enhancements. Many of these updates will affect the control plane as well as the data plane in products in the industry.

available for <u>download</u>. <u>Click here</u> to read the full news flash.

# DMTF Releases Field Replaceable Unit (FRU) Format and Access Proposal - Seeks Industry Feedback

The <u>PMCI Working Group</u> recently published a presentation, which shares its goals and approach to a common and extensible format for the Field Replaceable Unit (FRU) Data Model Specification. The <u>presentation</u>, now available for download, is a proposal for a minimum common FRU format and access. Designed to be referenced by other standards organizations and developers, DMTF is seeking public comment before finalization.

To read the full announcement click here.

## Need a DMTF Logo for your Marketing Materials?

We've got you covered!

Email <u>press@dmtf.org</u> for the DMTF and/or Redfish logo files as well as the most current Logo Usage Guidelines and Graphic Standards. We've recently updated the usage guidelines to include the use of the Redfish logo on a dark background.

## **DMTF on YouTube**

Check out our latest videos and be sure to subscribe to the <u>DMTF YouTube Channel</u> to stay up-to-date with our current and upcoming webinars.

Click Here to Get All the Latest News Delivered to Your Inbox!

### Information about DMTF's leadership, technologies, and how to participate can be found at <u>www.dmtf.org</u>. Contact us online or reach us at <u>http://www.dmtf.org/contact</u>.

In addition, DMTF standards were highlighted and represented in several sessions. Click <u>here</u> to view the presentations from the Summit.

### <u>SC24</u>

The <u>Redfish</u> Forum participated in <u>SC24</u>, November 17-22, 2024, at the Georgia World Conference Center in Atlanta. Redfish was part of the Open Standards Pavilion along with other industry standards organizations including <u>Fibre Channel Industry Association</u> (FCIA), OpenFabrics Alliance (OFA), <u>Ultra</u> Accelerator Link<sup>™</sup> (UALink<sup>™</sup>), <u>Ultra Ethernet</u> Consortium (UEC), <u>UCIe<sup>™</sup></u> (Universal Chiplet Express<sup>™</sup>), and <u>SNIA®</u>.

Representatives of the Forum spoke with attendees and participated in a BoF as well as a panel session on, "Industry Standards Working Together to Accelerate Innovation in AI and HPC."

To read about our fall events participation (and more!) visit our news page <u>here.</u>

# Personalize your DMTF Meeting Schedule

Log into the members portal <u>here</u> where you can see your specific work group meetings.

Please note you will need to be logged in to the member portal in order to access this feature.

## **New Members**

Acer America Toshiba Software India Private Limited

## Recent DMTF Specifications

DSP0284\_1.0.1 - Management Component Transport Protocol (MCTP) Memory-Mapped Buffer Interface (MMBI) Transport Binding Specification

DSP0282\_1.0.1 - Memory-Mapped Buffer Interface (MMBI) Specification

### **Newsletter Feedback**

We welcome your input on what you'd like to see included here – just <u>Contact Us</u> online and share your suggestions!

# About DMTF

DMTF creates open manageability standards spanning diverse emerging and traditional IT infrastructures including cloud, virtualization, network, servers and storage. Member companies and alliance partners worldwide collaborate on standards to improve the interoperable management of information technologies. The organization is led by a diverse board of directors from Broadcom Inc.; Cisco; Dell Technologies; Hewlett Packard Enterprise; Intel Corporation; Lenovo; Positivo Tecnologia S.A; and Verizon.



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