News from the DMTF

View this email in your browser

DMTF Newsletter

December 2020

Issue Highlights
2020 Year-in-Review from the Desk of President Jeff Hilland
Start Planning Now for Membership Renewal
In Case You Missed It • YouTube • More!

2020 Year-in-Review

From the desk of DMTF President Jeff Hilland

Each December, we take the opportunity to pause and reflect on the last twelve months. As another year comes to a close, one with many trials and tribulations, I'm proud to once again highlight the significant accomplishments the organization has achieved.

Technical Milestones

Redfish

Technical work on the Redfish® standard takes place in the Redfish Forum. The Forum has made significant progress this year, including:

- Kicking off 2020, Redfish Release 2019.4 was available in February. This release of the Redfish standard included 15 new schemas, 23 schema updates and additional developer resources. The release also featured support for management of port-based Gen-Z fabrics (*Initiators/Targets*) and fabric-attached resources, and extended *Endpoint*, *Fabric*, and *Port*. In addition, it gave users the ability to monitor and control Power Distribution Units and *Transfer Switches* via Redfish.
- Redfish version 2020.1 was released in May. The new release featured support for the Network Device Registry to provide Network Interface Card/networking adapter-specific events or status changes, Secure Boot Key Management, and Signatures. It also included two new schemas. 17 schema updates and additional developer resources.
- Continuing its aggressive development of Redfish, DMTF released 2020.2 in June. This release featured support for StorageDevice Message Registry, which provides storage-specific events or status changes, and support for *Aggregate*, *AggregationService*, *AggregationSource*, *ConnectionMethod* and *OperatingConfig*.
- In July, Redfish created a white paper, "Redfish Certificate Management," designed to help implementers and clients understand the Redfish certificate data model as well as the common workflows clients might require to manage certificates.
- **Redfish turned five years old in August!** In this short timeframe, the standard - with 50 contributors and 14,000 updates, improvements and extensions - continues to grow in completeness and effectiveness resulting in Redfish implementations shipping in approximately 30 million servers.
- Driving industry collaboration, DMTF announced its Redfish Interoperability Lab in August. Hosted at the SNIA Technology Center in Colorado Springs, Colorado, the Lab allows the Redfish Forum to see how different implementations are interpreting the specification and receive immediate feedback into the Redfish standard and tools thus helping to address interoperability concerns before end users are affected. To read the announcement click here.
- In September, Redfish version 2020.3 was released. This version featured the additions of *Connection* and *StorageController* schemas, support for *NVMe-over-Fabrics*™, collecting and retrieving *DiagnosticData* ("crash dumps"), per-system remote console and virtual media instances, expanded details of serial console, *InfiniBand* and a *LocationIndicatorActive* property to address interop challenges with *IndicatorLED*. The release included two new schemas, 37 schema updates and additional developer resources.
- Redfish version 2020.4 is slated to be released in the coming weeks. Stay tuned!

PMCI Working Group Standards

The Platform Management Communications Infrastructure (PMCI) Working Group defines standards to address "inside the box" communication interfaces between the components of the platform management subsystem. Among the notable technical milestones in 2020:

- PMCI kicked off 2020 with the release of its Security Protocol and Data Model (SPDM) Specification 1.0, as well as the SPDM over MCTP Binding Specification 1.0, as DMTF standards. These releases incorporated the input of the organization's Alliance Partners to help align component authentication and integrity objects across the industry.
- In March, the PMCI Security Task Force announced the public release of its SPDM Specification 1.1.0b, as a Work in Progress (WIP).
- In July, the working group formed a new PMCI Tools Task Force. The group is focused on developing a set of test tools to determine conformance of a vendor's implementation of the management software stack that implements the Upper (data model) Layer protocols (DSP0210) such as NC-SI, PLDM, SPDM, as well as future protocols at Work in Progress.
- PMCI released its Security Protocol and Data Model (SPDM) Specification 1.1.0 in August. Building on SPDM 1.0 standard protocols for device authentication, SPDM 1.1 adds mutual authentication and session key exchange protocols to enable confidentiality, authentication and integrity for data communication. In addition, this specification incorporates the input of the organization's Alliance Partners thus helping align component authentication, confidentiality, and integrity objects across the industry.
- In October, the working group developed two new pieces of educational material – a white paper, "Security Protocol and Data Model (SPDM) Architecture White Paper" and a presentation focused on, "Platform Security: Infrastructure Protection with DMTF's Security Protocol & Data Model (SPDM)."
- The Secured Messages using SPDM over MCTP Binding Specification (DSP0276) and the Secured Messages using the SPDM Specification (DSP0277) are slated to be released in the coming weeks. Stay tuned!

SMBIOS

System Management BIOS (SMBIOS) 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 July, the SMBIOS Working Group released Version 3.4 of the SMBIOS Reference Specification. SMBIOS 3.4 added support for current technologies, including: updates to PCI Express support to address surprise removal (joint work with PCI SIG) and Gen 5; updates to ARM processor reporting; support for Open Compute Project network interface cards; improved support for Compute Express Link (CXL) slots; support for Enterprise & Data Center SSD Form Factor (EDSFF) slots; and support for DDR5.

CIM

- DMTF continues to provide a steady cadence of updates to the Common Information Model (CIM).
- Two releases to the CIM Schema were published – CIM Schema: version 2.53 was released in March followed by CIM Schema: version 2.54 (the fifty-fourth release since the launch of 2.0) in October. As part of CIM 2.53 and 2.54, a number of enhancements and additions were introduced throughout the Schema, including ongoing improvements to support products, alliance partners and DMTF Profiles and Management Initiatives.

DASH

- A new version of the Desktop and Mobile Architecture for System Hardware (DASH) standard is scheduled for the end of this year or early 2021, so be on the lookout! DASH CTS offers significant speed and performance improvements, and the tool has been expanded to include more extensive testing of optional DASH features.

Alliances

Our Alliance Partner program continues to benefit the industry overall.

- DMTF and the Compute Express Link™ (CXL™) Consortium agreed to a new work register in April, outlining areas of technical collaboration between the two organizations.
- In July, DMTF held its annual summer event, the 2020 Alliance Partner Technical Symposium (APTS), virtually via Zoom! While we certainly missed the face-to-face interaction that APTS affords us, the virtual event was deemed a success. Led by DMTF's Vice President of Alliances John Leung, the annual event featured collaborative working group meetings and focused on technical topics of interest to DMTF's Alliance Partners, as well as keynote addresses from the CXL Consortium, Storage Networking Industry Alliance (SNIA), and The Open Group - Open Process Automation™ Forum. As successful as it was, we certainly hope to be back in person in 2021.
- In September, the Storage Networking Industry Association (SNIA), NVM Express™ and DMTF announced the newly released versions of Redfish 2020.3 and SNIA's Swordfish™ storage management specification version 1.2.1 include NVMe™ and NVMe-oF™ specification enhancements. Click here to read the press release.
- In November, the CXL Consortium announced the release of its 2.0 specification. DMTF provided a supporting quote. To read the full announcement click here.

Education and Events

DMTF continued its dedication to industry outreach and education.

- DMTF executives, technology representatives and standards were highlighted in several events:
  - Open Compute Project Virtual Summit
  - 2020 Virtual Storage Developer Conference
  - OCP Tech Week.
- The organization's "Redfish School" YouTube series continues to be popular with viewers. In March, we published a new mini-tutorial video focused on BIOS Configuration in Redfish. Stay tuned for more videos in 2021!

International Activity

As part of its global outreach and standardization work, DMTF provides resources and information for users and developers worldwide.

- Our Regional Task Force in Japan offers a website where visitors can access translated DMTF documents and specifications, and for our Chinese visitors, information can be found here. Both sites are currently being updated.

Final Thoughts

Even with the challenges wrought by 2020, together we are pressing forward as we have for decades to create meaningful standards that address industry needs and solve challenges for the end user. One of the many reasons we were able to press forward in spite of the circumstances (COVID) was due to the fact that we had already adopted a new working model. We have the tools, infrastructure and staff to make these things happen, thus the transition presented less of a challenge for us as an organization. We've been doing remote work and virtual face-to-face meetings for years, so while inconvenient it didn't impact the pace of our standards development. This is something we should be proud of.

We are proud of our valued volunteers and hope each of them take a moment to reflect on what we've accomplished and share our sense of pride for these collaborative efforts. Without their hard work, none of it would be possible. Looking ahead to 2021, we want to thank our member companies, volunteers, as well as our alliance and industry partners for their ongoing commitment to the organization. I look forward to the projects we will tackle together. As always, thank you for the continued hard work and dedication.

Start Planning Now for Membership Renewal

As the DMTF's new fiscal year approaches, our 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 DMTF 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 www.dmtf.org/join. Have questions? Get answers from the DMTF membership team at admin@dmtf.org.

In Case You Missed It

Congratulations to the 2020 Star Award Recipients!

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

The 2020 Star Awards recipients include Jeff Autor (Hewlett Packard Enterprise), Patrick Boyd (Dell Technologies), Brett Henning (Broadcom Inc.), Justin King (IBM), Theo Koulouris (Hewlett Packard Enterprise), John Mayfield (Hewlett Packard Enterprise), Gunnar Mills (IBM), Scott Phuong (Cisco Systems, Inc.), Michael Raineri (Dell Technologies), Xiaoyu Ruan (Intel Corporation), Bill Scherer (Hewlett Packard Enterprise), Bob Stevens (Dell Technologies), and Linda Wu (NVIDIA Corporation).

In addition, we are pleased to recognize Patrick Caporale (Lenovo) as our 2020 Super Star Award recipient – DMTF's equivalent of a lifetime achievement award. To read about Patrick's contributions to the organization, please click here.

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

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

Need a DMTF Logo for your Marketing Materials?

We've got you covered!
Email press@dmtf.org 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.

New Members

Alibaba (China) Co, Ltd

Upcoming DMTF Meetings

12/17 Board Meeting
1/21 Board Meeting
2/18 Board Meeting

Newsletter Feedback

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

DMTF on YouTube

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

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

About DMTF

The 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; Hitachi, Ltd.; Intel Corporation; Lenovo; and NetApp.

1050 SW 6th Avenue, #1100
Portland, OR 97204