

# Virtualization Management Working Group Charter

2013-06-05

The information provided below is subject to change and reflects the current knowledge of the working group.

## Management Problem(s) and Environment

Vendors in the computer industry have provided clusters of compute platforms to provide for high availability services and computational scaling. Vendors have also embraced the need to provide flexibility in the utilization of a single computer's resources by virtualizing these resources for use across multiple virtual system images on one or more compute platforms, or by partitioning the set of resources into subsets assigned to a logical machine.

The industry needs a resource allocation model and a scalable management model for virtual resources, virtual systems, and collections of virtual systems. A standard-based management model and methods enables a more integrated and cost effective management solution.

## Charter

The Distributed Management Task Force (DMTF) has chartered the Virtualization Management working group with the following objectives:

- Develop a resource allocation model for use in management domains.
- Develop a model for management of virtual systems (aka virtual machines running on a hypervisor).
- Develop a model for management of collection of virtual systems running multiple virtualization platforms (aka a virtual data center).
- Produce white papers in support of the above objectives to explain the models and their use.
- Work with DMTF Interoperability committee, VCM Forum, and System Management Forum to support interoperability.

## Business Justification

Providing the industry with a common information model and methods for management of virtual systems and collections of virtual systems solves a critical business need for software vendors and data center operators. Virtualization Management 1 is being adopted to meet this need; however, the need for additional features and management profiles is apparent.

## Alliance Partnerships

- INCITS DAPS38
- JTC 1 SC 38
- SNIA: Storage Networking Industry Association
- Open Group
- Other entities that have an alliance partner relationship with DMTF

## Reliance/Coordination with other Working Group Models

- Platform Management Subcommittee and its working groups
- Cloud Management Subcommittee and its working groups
- Infrastructure Subcommittee and its working groups
- Schema Subcommittee and its working groups

## Prior Work

The following table lists the specifications that the working group has submitted for approval as de jure standards. The document date is the date on the title page of the document.

### De Jure Standards

Collection	Title	Version	State	Technical Editor	Document Name	Document Date
13	Virtualization Management		Published	Larry Lamers	ANSI/INCITS 483-2012	2012-05-29
13	Virtualization Management		ER in process	Larry Lamers	ISO/IEC	

The following table lists the specifications that have been adopted and published by the DMTF. The document date is the date of the published document.

### DMTF Standards

DSP#	Title	DMTF Version	State	Technical Editor	Document Name	Document Date
DSP1041	Resource Allocation Profile	1.1.0	Adopted	Larry Lamers	DSP1041_1.1.0.pdf	2009-06-25
DSP1042	System Virtualization Profile	1.0.0	Adopted	Michael Johanssen	DSP1042_1.0.0.pdf	2009-09-08
DSP1043	Allocation Capabilities Profile	1.0.0	Adopted	John Parchem	DSP1043_1.0.0.pdf	2009-06-22
DSP1044	Processor Resource Virtualization Profile	1.0.0	Adopted	Larry Lamers	DSP1044_1.0.0.pdf	2010-03-29
DSP1045	Memory Resource Virtualization Profile	1.0.0	Adopted	Larry Lamers	DSP1045_1.0.0.pdf	2009-07-14
DSP1047	Storage Resource Virtualization Profile	1.0.0	Adopted	Michael Johanssen	DSP1047_1.0.0.pdf	2009-09-29
DSP1050	Ethernet Port Resource Virtualization Profile	1.0.0	Adopted	John Parchem	DSP1050_1.0.0.pdf	2010-10-14
DSP1050	Ethernet Port Resource Virtualization Profile	1.1.0	Adopted	John Parchem	DSP1050_1.1.0.pdf	2012-06-21
DSP1057	Virtual System Profile	1.0.0	Adopted	Michael Johanssen	DSP1057_1.0.0.pdf	2009-09-08
DSP1059	Generic Device Resource Virtualization Profile	1.0.0	Adopted	Larry Lamers	DSP1059_1.0.0.pdf	2009-07-15

DSP#	Title	DMTF Version	State	Technical Editor	Document Name	Document Date
DSP1081	System Virtualization Migration Profile	1.0.0	Adopted	Michael Johanssen	DSP1081_1.0.0.pdf	2012-08-21
DSP1097	Virtual System Ethernet Switch Profile	1.0.0	Adopted	John Parchem	DSP1097_1.0.0.pdf	2010-10-14
DSP1097	Virtual System Ethernet Switch Profile	1.1.0	Adopted	John Parchem	DSP1097_1.1.0.pdf	2012-06-21
DSP2013	Virtualization White Paper	1.0.0	Adopted	Michael Johanssen	DSP2013_1.00.00.pdf	2007-11-11
DSP2025	Virtual Networking White Paper	1.0.0	Adopted	Hemal Shah	DSP2025_1.0.0.pdf	2012-02-14
DSP8026	SVPC Message Registry	1.0.0	Adopted	Michael Johanssen	dsp8026_1.0.0.xsd	2012-08-21

## Current Work – Overview, Deliverables, and Timeline

The following table lists the specifications in development within the working group. The document date is an estimate of the completion of technical work within the working group. Due to process requirements beyond the control of the working group, availability of specifications as DMTF Standards is not known.

### In Development

DSP#	Title	DMTF Version	State	Technical Editor	Document Name	Document Date
DSP1041	Resource Allocation Profile	2.0.0	draft	Ed Reed		2013Q4
DSP1042	System Virtualization Profile	2.0.0	draft	Ed Reed		2014Q3
DSP8026	System Virtualization Message Registry	2.0.0	draft	Ed Reed		2014Q3
DSP1044	System Virtualization Processor Resource Profile	2.0.0	draft	Larry Lamers		2014Q3
DSP1045	System Virtualization Memory Resource Profile	2.0.0	draft	Ed Reed		2014Q3
DSP1050	System Virtualization Ethernet Port Resource Profile	2.0.0	draft	Ed Reed		2014Q3
DSP1081	System Virtualization Migration Profile	2.0.0	draft	Ed Reed		2014Q3
DSP1047	System Virtualization Storage Resource Profile	2.0.0	draft	Ed Reed		2014Q3
DSP1097	Virtual System Ethernet Switch Profile	2.0.0	draft	John Parchem		2014Q3
DSP2013	System Virtualization White Paper	2.0.0	draft	Larry Lamers		2014Q3
DSP8048	System Virtualization Metrics Registry	1.0.0	draft	Andreas Maier		2014Q3

## Future Work

The following table lists the specifications under consideration for development within the working group. The document date is an estimate of the start of technical work.

### Future Work

DSP#	Title	DMTF Version	State	Technical Editor	Document Name	Document Date
DSP1093	Multi-System Virtualization Profile					
DSP1049	Storage Adapter Resource Virtualization Profile					

### Out of Scope

- Work related to management of virtual networks
- Work related to the management of libraries or repositories

### Participation

To join the DMTF, see <http://www.dmtf.org/join/>.

To join the working group, see <http://members.dmtf.org/apps/org/workgroup/vmwg/>.