# Infrastructure Subcommittee Charter
# Dated 2014-03-28

## The information provided below is subject to change and reflects the current state of the Subcommittee charter within the DMTF.

## Management Problem(s) and Environment

Management of Information Technology requires interaction with a large number of systems from a variety of vendors and suppliers as well as systems customized in a particular environment. While these IT systems are frequently connected using standard communication protocols, such as the protocols for Internet communication, these protocols alone do not provide an integrated set of management standards. An integrated set of systems management standards facilitates managing these systems effectively.

DMTF provides the Common Information Model (CIM) for describing the configuration and other properties of these systems. The DMTF also provides standards that define interfaces, formats, and protocols used by components of the management infrastructure to interoperate in distributed computing environments using the CIM and other information models.

## Subcommittee Scope

The Infrastructure Subcommittee of the Technical Committee, together with its child working groups, develops and maintains standards used by management components to interoperate with each other and with resources being managed (which collectively make up the management infrastructure). These standards are not generally limited to use with particular languages or operating environments. The scope includes the principal components, each of their required and provided interfaces, and the required or allowed message sequences between those interfaces. Specific responsibilities include:

1.  Profiles for the management of the defined components and their interfaces.

2.  Discovery and cataloging of management infrastructure implementations and their attributes in support of a distributed management environment.

3.  Protocols utilized to send messages, including bindings between those protocols, and interfaces defined by the management infrastructure.

4.  A meta-model that specifies the behavior of the common elements utilized across the various languages.

5.  Techniques required to federate information from disparate data schemas.

6.  Specification of the various languages utilized, including for example:

- Managed Object Format (MOF),

- CIM Query Language (CQL),

- CIM Simplified Policy Language (CIM-SPL),

- CIMN Extensible Markup Language (CIM-XML),

- Web Services in CIM (WS-CIM), and

- Call Processing Language (CPL).

  Such specifications may include recommendations for the use of externally developed languages, as, for instance, the recommendation that various qualifiers utilize Object Constraint Language, (OCL, http://www.omg.org/technology/documents/modeling_spec_catalog.htm#OCL)

7. Language transformations, such as specified by DSP0219.

8. Specification of various message registry infrastructure and schemas and ownership of all message registries not specifically delegated to other groups.

9. Representation of CIM Schema and management profiles in standards based modeling and constraint languages, such as Unified Modeling Language or UML (http://www.uml.org) and OCL.

10. Means to express behavior and state within CIM.

11. Means to express the policies implemented by management resources and a means to manage those policies.

The subcommittee works with the Schema Subcommittee to define schema required for management of the defined components and their interfaces. Schema developed as part of this activity must be approved by the Schema Subcommittee before it can become part of a standard developed by this subcommittee.

Within its scope, the subcommittee also:

1. Gathers requirements affecting its work output.

2. Provides consultation and advice, including recommending best practices, to other organizations within the DMTF.

3. Identifies and establishes relationships with other organizations to accelerate the adoption of DMTF specifications and technology in the marketplace and enhance the DMTF work to avoid duplication of efforts and to create a coherent management interface for the consumer. These two-way alliances are used to align DMTF specifications with standards defined in those groups, and to provide feedback or receive guidance on the use of those standards. The current relationships with other organizations are listed below in the section titled "Reliance/Coordination with other DMTF Groups".

## Justification

The Infrastructure Subcommittee provides the organizational focus point for the development and coordination of standards for interfaces and protocols that provide common building blocks for the development of standards for systems management.

## Reliance/Coordination with other DMTF Groups

The subcommittee coordinates its work with the Platform Management Subcommittee and the Schema Subcommittee.

The subcommittee coordinates its work with its child working groups, and with other DMTF working groups, as required.

## DMTF Contacts

Infrastructure Subcommittee chairs can be contacted at:

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The following Infrastructure Subcommittee working group chairs can be contacted at:

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**To join the DMTF and/or the Infrastructure Subcommittee, see http://www.dmtf.org/join/ and http://www.dmtf.org/apps/org/workgroup/infrastructure-sc/index.php.**