WS-Management Working Group
Dated 2014-02-24

The information provided below is subject to change and reflects the current knowledge of the Working Group.

Management Problem(s) and Environment

The system management domain has a need for a general SOAP-based protocol for managing computers systems (e.g., personal computers, workstations, servers, smart devices). This system management protocol needs to support web services and allow constellations of computer systems and network-based services to collaborate seamlessly.

The need is to provide interoperability between management applications and managed resources; identify a core set of web service specifications and usage requirements that expose a common set of operations central to all systems management. Management clients need to be able to execute specific management methods with strongly typed input and output parameters.

Management based on Common Information Model (CIM) in a web services environment requires that the CIM Schema (classes, properties, and methods) be rendered in XML (Extensible Markup Language) structures that support XML instance documents, XML Schema, and WSDL (Web Services Description Language). To achieve this, CIM's definitive MOF (Managed Object Format) must be mapped to XML structures via an explicit algorithm that can be programmed for automatic translation.

Working Group Charter

The Distributed Management Task Force (DMTF) has chartered the WS-Management Working Group (WG) with the following objectives:

1. Develop a set of DMTF standards that meets the needs of system management for a web services protocol to access managed resources.
    a. Provide web service access to the Common Information Model.
    b. Preserve compatibility with existing implementations.
    c. Where web services standards or industry initiatives exist, the group will investigate those with a goal of re-using or profiling those in its work.
2. Develop and maintain the algorithmic mapping of CIM MOF to XML structures in a manner that supports using CIM modeled resources in web services environments and under web services protocols.

The goal is to provide a solution for CIM resources; however, the solution shall not be limited to CIM resources. The WS-Management Protocol specifications

should not preclude the creation of alternative mappings for resources that are not modeled with CIM.

Reliance/Coordination with other DMTF Groups

The WS-Management Working Group works closely with all of the Working Groups and subcommittees under the Technical Committee, including Schema Subcommittee, Architecture Working Group, System Virtualization, Partitioning, and Clustering Working Group Working Group, and Infrastructure Subcommittee.

The WS-Management Working Group also works with the System Management Forum.

DMTF Contacts

Chair email: wsman-chair@dmtf.org

To join the DMTF and/or the WG, see http://www.dmtf.org/join/ and http://dmtf.org/standards/wsman.