Common Information Model for REST Services (CIM-RS)
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
A number of companies and organizations desire to use Representational State Transfer (REST) web services for systems management. In this environment, interoperability with implementations that utilize Distributed Management Task Force (DMTF) Common Information Model (CIM) technologies requires that the interfaces of these implementations be exposed as RESTful services in a consistent and standardized manner.

Working Group Charter
The primary goal of the CIM-RS Working Group (WG) of the Infrastructure Subcommittee is to deliver standard specifications defining RESTful protocols for requests and replies between CIM servers, CIM clients, and CIM listeners.

There are two primary areas of development:
1. RESTful Protocol
   • Definition of RESTful operations for accessing and managing resources using the CIM metamodel.
     Note: Since most non-CIM models can be transformed into an equivalent model based on the CIM metamodel, this approach enables wide usage. Such transformations are an architectural consideration only. It is a goal to not require models to be actually transformed to utilize the protocol.

2. Payload Representations:
   • Definition of payload representations for use with RESTful operations. This initially includes specifications for the use of Web Services with Common Information Model (WS-CIM), and JavaScript Object Notation (JSON) encodings.

Reliance/Coordination with other DMTF Groups
This WG will coordinate with other DMTF WGs that are also producing RESTful protocols to promote a consistent standard. No additional reliance or coordination is required with the models produced by other WGs since CIM-RS is intended to be model agnostic.
Any requirements on underlying DMTF standards will be coordinated with the Working Groups owning those standards. WS-CIM owned by the Web Services for Management (WS-Management) WG is an example.

Results of the REST related work of the DMTF CIM-RS Incubator will be input to this Working Group.

**DMTF Contacts**

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