

DMTF CIM-RS Working Group Initial Charter Dated 2011-06-28

The information provided below is subject to change and reflects the current state of the Charter of the *RESTful Services for CIM Working Group* (CIM-RS WG) within the DMTF.

Management Problem(s) and Environment

A number of companies and organizations desire to use RESTful web services for systems management. In this environment, interoperability with implementations that utilize DMTF CIM technologies requires that the interfaces of these implementations be exposed as RESTful services in a consistent and standardized manner.

Charter

The primary goal of the CIM-RS Working Group 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 WS-CIM, and JSON encodings

Alliance Partnerships

None

Reliance/Coordination with other WG Models

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 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.

Prior Works

- REST work of the DMTF CIM-RS Incubator, including DSP-IS0201 and DSP-IS0202
- DSP0004, DSP0223
- IETF draft RFC4627 that defines the JSON schema
- ECMA defines the ECMAScript standard (ECMA-262), which defines JSON (one payload encoding that is commonly used with RESTful services). Changes to JSON are not anticipated.

Current Work – Overview, Deliverables and Timeline

- Deliverables:
 - Specification defining RESTful protocol operations for CIM metamodel conformant resources
 - Specification defining JSON representations for use with RESTful operations
 - Specification defining WS-CIM representations for use with RESTful operations
 - Optionally, specifications defining other payload representations, such as ODATA, GDATA, and ATOMPUB
- Timeline:
 - 2011Q3: Work in progress release of specifications for RESTful protocol operations, JSON representations, and WS-CIM representations
 - 2011Q4: Draft specifications for RESTful protocol operations, JSON representations, and WS-CIM representations

Link to Subteam Charter(s)

None

DMTF Contacts

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

To join the CIM-RS Working Group, see <http://www.dmtf.org/apps/org/workgroup/CIM-RS-WG/join.php>.