

OCF 2.3 – OneM2M Translation – BTG CR 2561

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***** **Change #1** *****

2. Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AllJoyn About Interface Specification, *About Feature Interface Definitions*, Version 14.12
<https://allseenalliance.org/framework/documentation/learn/core/about-announcement/interface>

AllJoyn Configuration Interface Specification, *Configuration Interface Definition*, Version 14.12
<https://allseenalliance.org/framework/documentation/learn/core/configuration/interface>

D-Bus Specification, *D-Bus Specification*
<https://dbus.freedesktop.org/doc/dbus-specification.html>

IEEE 754, *IEEE Standard for Floating-Point Arithmetic*, August 2008
<http://ieeexplore.ieee.org/servlet/opac?punumber=4610933>

IETF RFC 4122, *A Universally Unique Identifier (UUID) URN Namespace*, July 2005
<https://www.rfc-editor.org/info/rfc4122>

IETF RFC 4648, *The Base16, Base32 and Base64 Data Encodings*, October 2006
<https://www.rfc-editor.org/info/rfc4648>

IETF RFC 6973, *Privacy Considerations for Internet Protocols*, July 2013
<https://www.rfc-editor.org/info/rfc6973>

IETF RFC 7049, *Concise Binary Object Representation (CBOR)*, October 2013
<https://www.rfc-editor.org/info/rfc7049>

IETF RFC 7159, *The JavaScript Object Notation (JSON) Data Interchange Format*, March 2014
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JSON Schema Core, *JSON Schema: core definitions and terminology*, January 2013
<http://json-schema.org/latest/json-schema-core.html>

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<http://json-schema.org/latest/json-schema-validation.html>

JSON Hyper-Schema, *JSON Hyper-Schema: A Vocabulary for Hypermedia Annotation of JSON*, October 2016
<http://json-schema.org/latest/json-schema-hypermedia.html>

OCF Core Specification, *Open Connectivity Foundation Core Specification*, Version 1.3
https://openconnectivity.org/specs/OCF_Core_Specification_v1.3.0.pdf

OCF Security Specification, *Open Connectivity Foundation Security Specification*, Version 1.3
https://openconnectivity.org/specs/OCF_Security_Specification_v1.3.0.pdf

OCF Resource to AllJoyn Interface Mapping Specification, *Open Connectivity Foundation Resource to AllJoyn Interface Mapping Specification*, Version 1.3
https://openconnectivity.org/specs/OCF_Resource_to_AllJoyn_Interface_Mapping_v1.3.0.pdf

OIC Core Specification, *Open Interconnect Consortium Core Specification*, Version 1.1
https://openconnectivity.org/specs/OIC_Core_Specification_v1.1.2.pdf

RAML Specification, *RESTful API Modeling Language*, Version 0.8
<https://github.com/raml-org/raml-spec/blob/master/versions/raml-08/raml-08.md>

OpenAPI Specification, Version 2.0
<https://github.com/OAI/OpenAPI-Specification/blob/master/versions/2.0.md>

oneM2M Release 3 Specifications
<http://www.onem2m.org/technical/published-drafts>

***** **Change #2** *****

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

3.1.29 oneM2M Application

In an OCF-oneM2M asymmetric bridge environment, the oneM2M application represents the oneM2M control point (i.e. client) being mapped to a virtual OCF client.

***** **Change #3** *****

7 oneM2M Translation

7.1 Operational Scenarios

The purpose of the oneM2M Bridge Platform is to enable access by the oneM2M ecosystem to select OCF Servers. This is accomplished by creating Virtual OCF Clients to represent the necessary access levels to the OCF servers that are exposed to the oneM2M ecosystem. The oneM2M Bridge Platform then exposes native oneM2M entities that map to those Virtual OCF Clients.

The oneM2M Bridge Platform is an Asymmetric Client Bridge.

The mapping between the OCF data models and the oneM2M data models is specified in the OCF-oneM2M Data Model Mapping Specification. Programmatic (i.e. On-the-fly) data model translation is not supported.

7.2 Enabling oneM2M Application access to OCF Servers

Each level of oneM2M application access for OCF servers is modelled as a Virtual OCF Client. In this way, oneM2M application access can be appropriately restricted and enforced by the OCF security capabilities.

7.3 Enabling OCF Client access to oneM2M Devices

This capability is not supported.

7.4 On-the-fly Translation

All devices and resources have been aligned between the OCF and oneM2M ecosystems, so on-the-fly translation is not required.

If new OCF devices are not reflected into the oneM2M ecosystem by updates to the oneM2M specifications, the bridge will not provide a successful translation of those devices.

***** **End of Changes** *****

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