
**Information technology — Open
Connectivity Foundation (OCF)
Specification —**

**Part 6:
Resource to AllJoyn interface mapping
specification**

*Technologies de l'information — Spécification de la Fondation pour la
connectivité ouverte (Fondation OCF) —*

*Partie 6: Spécification du mapping entre les ressources et
l'interface AllJoyn*

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This document was prepared by the Open Connectivity Foundation (OCF) (as the OCF Resource to AllJoyn Interface Mapping, Version 1.0.0) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

A list of all parts in the ISO/IEC 30118 series can be found on the ISO website.

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1 Scope

The OCF Resource to AllJoyn Interface Mapping specification ("this specification") provides detailed mapping information to provide equivalency between AllJoyn defined Interfaces and OCF defined Resources,

This specification provides mapping for Device Types (AllJoyn to/from OCF), identifies equivalent OCF Resources for both mandatory and optional AllJoyn interfaces and for each interface defines the detailed Property by Property mapping using OCF defined extensions to JSON schema to programmatically define the mappings.

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.

OCF Core Specification, *Open Interconnect Consortium Core Specification*, Version 1.0.

OCF Resource Type Specification, *Open Interconnect Consortium Resource Type Specification*, Version 1.0

OCF Smart Home Device Specification, *Open Interconnect Consortium Smart Home Device Specification*, Version 1.0

Derived Models for Interoperability between IoT Ecosystems, Stevens & Merriam, March 2016

https://www.iab.org/wp-content/IAB-uploads/2016/03/OCF-Derived-Models-for-Interoperability-Between-IoT-Ecosystems_v2-examples.pdf

IETF RFC 7159, *The JavaScript Object Notation (JSON) Data Interchange Format*, March 2014
<http://www.ietf.org/rfc/rfc7159.txt>

RAML, *Restful API modelling language*, Version 0.8.

<https://github.com/raml-org/raml-spec/blob/master/versions/raml-08/raml-08.md>

AllJoyn Common Data Model Interface Definitions

<https://wiki.alljoyn.org/cdm>

Swagger2.0, *Swagger RESTful API Documentation Specification*, Version 2.0

<http://swagger.io/specification/>

OCF Resource Type Definitions, *API Definition Language for OCF Resource Type Definitions*, Release OCF-v1.0.0

<https://github.com/openconnectivityfoundation/derivedmodels>

3 Terms, definitions symbols and abbreviations

3.1 Terms and definitions

3.2 Symbols and abbreviations

3.2.1

OCF

Open Connectivity Foundation

The organization that created these specifications

3.2.2

RAML

RESTful API Modelling Language

RAML is a simple and succinct way of describing practically-RESTful APIs. See RAML.

3.3 Conventions

In this specification a number of terms, conditions, mechanisms, sequences, parameters, events, states, or similar terms are printed with the first letter of each word in uppercase and the rest lowercase (e.g., Network Architecture). Any lowercase uses of these words have the normal technical English meaning.

4 Document conventions and organization

For the purposes of this document, the terms and definitions given in OCF Core Specification and OCF Resource Type Specification apply.

4.1 Notation

In this document, features are described as required, recommended, allowed or DEPRECATED as follows:

Required (or shall or mandatory).

These basic features shall be implemented to comply with the Mapping Specification. The phrases "shall not", and "PROHIBITED" indicate behavior that is prohibited, i.e. that if performed means the implementation is not in compliance.

Recommended (or should).

These features add functionality supported by the Mapping Specification and should be implemented. Recommended features take advantage of the capabilities the Mapping Specification, usually without imposing major increase of complexity. Notice that for compliance testing, if a recommended feature is implemented, it shall meet the specified requirements to be in compliance with these guidelines. Some recommended features could become requirements in the future. The phrase "should not" indicates behavior that is permitted but not recommended.

Allowed (or allowed).

These features are neither required nor recommended by the Mapping Specification, but if the feature is implemented, it shall meet the specified requirements to be in compliance with these guidelines.

Conditionally allowed (CA)

The definition or behaviour depends on a condition. If the specified condition is met, then the definition or behaviour is allowed, otherwise it is not allowed.

Conditionally required (CR)