OData Common Schema Definition Language (CSDL) JSON Representation Version 4.02

Committee Specification Draft 01

14 July 2023

This stage:

https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/csd01/odata-csdl-json-v4.02-csd01.md (Authoritative)
https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/csd01/odata-csdl-json-v4.02-csd01.html
https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/csd01/odata-csdl-json-v4.02-csd01.pdf

Previous stage:

N/A

Latest stage:

https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/odata-csdl-json-v4.02.md (Authoritative)
https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/odata-csdl-json-v4.02.html
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Technical Committee:

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Additional artifacts:

This prose specification is one component of a Work Product that also includes:

- XML schemas: (list file names or directory name)
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Related work:

This specification replaces or supersedes:

- *OData Common Schema Definition Language (CSDL) JSON Representation Version 4.01*. Edited by Michael Pizzo, Ralf Handl, and Martin Zurmuehl. OASIS Standard. Latest stage: https://docs.oasis-open.org/odata/odata-csdl-json/v4.01/odata-csdl-json-v4.01.html.

This specification is related to:

- *OData Version 4.02*. Edited by Michael Pizzo, Ralf Handl, and Heiko Theißen. A multi-part Work Product that includes:
  - *OData Version 4.02 Part 1: Protocol*. Latest stage. https://docs.oasis-open.org/odata/odata/v4.02/odata-v4.02-part1-protocol.html
  - *OData Version 4.02 Part 2: URL Conventions*. Latest stage. https://docs.oasis-open.org/odata/odata/v4.02/odata-v4.02-part2-url-conventions.html

Abstract:

OData services are described by an Entity Model (EDM). The Common Schema Definition Language (CSDL) defines specific representations of the entity data model exposed by an OData service, using XML, JSON, and other formats. This document (OData CSDL JSON Representation) specifically defines the JSON representation of CSDL.

Status:

This document was last revised or approved by the OASIS Open Data Protocol (OData) TC on the above date. The level of approval is also listed above. Check the "Latest stage" location noted above for possible later revisions of this document. Any other numbered Versions and other technical work produced by the Technical Committee (TC) are listed at https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=odata#technical.

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Note that any machine-readable content (Computer Language Definitions) declared Normative for this Work Product is provided in separate plain text files. In the event of a discrepancy between any such plain text file and display content in the Work Product's prose narrative document(s), the content in the separate plain text file prevails.

Key words:

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14 [RFC2119] and [RFC8174] when, and only when, they appear in all capitals, as shown here.

Citation format:

When referencing this specification the following citation format should be used:

[OData-CSDL-JSON-v4.02]

OData Common Schema Definition Language (CSDL) JSON Representation Version 4.02. Edited by Ralf Handl, Michael Pizzo, and Heiko Theißen. 14 July 2023. OASIS Committee Specification Draft 01. https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/csd01/odata-csdl-json-v4.02-csd01.html. Latest stage: https://docs.oasis-open.org/odata/odata-csdl-json/v4.02/odata-csdl-json-v4.02.html.

Notices

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1 Introduction

1.1 Changes from earlier Versions

1.2 Glossary

1.2.1 Definitions of terms

TODO: find out why we need a $dummy$ formula to get `monospace` look as we want it.

1.2.2 Acronyms and abbreviations

1.2.3 Document conventions

Keywords defined by this specification use **`this monospaced font`**.

Some sections of this specification are illustrated with non-normative examples.

Example 1: text describing an example uses this paragraph style

```
Non-normative examples use this paragraph style.
```

All examples in this document are non-normative and informative only. Examples labeled with ⚠ contain advanced concepts or make use of keywords that are defined only later in the text, they can be skipped at first reading.

All other text is normative unless otherwise labeled.

Here is a customized command line which will generate HTML from this markdown file (named `odata-csdl-json-v4.02-csd01.md`). Line breaks are added for readability only:

```
pandoc -f gfm+tex_math_dollars+fenced_divs
       -t html
       -o odata-csdl-json-v4.02-csd01.html
       -c styles/markdown-styles-v1.7.3b.css
       -c styles/odata.css
       -s
       --mathjax
       --eol=lf
       --wrap=none
       --metadata pagetitle="OData Common Schema Definition Language (CSDL) JSON
Representation Version 4.02"
       odata-csdl-json-v4.02-csd01.md
```

This uses pandoc 3.1.2 from https://github.com/jgm/pandoc/releases/tag/3.1.2.

2 Section Heading

text.

2.1 Level 2 Heading

text.

2.1.1 Level 3 Heading

text.

2.1.1.1 Level 4 Heading

text.

2.1.1.1.1 Level 5 Heading

This is the deepest level, because six # gets transformed into a Reference tag.

2.2 Next Heading

text.

3 Conformance

(Note: The [OASIS TC Process](https://www.oasis-open.org/policies-guidelines/tc-process-2017-05-26/#wpComponentsConfClause) requires that a specification approved by the TC at the Committee Specification Public Review Draft, Committee Specification or OASIS Standard level must include a separate section, listing a set of numbered conformance clauses, to which any implementation of the specification must adhere in order to claim conformance to the specification (or any optional portion thereof). This is done by listing the conformance clauses here. For the definition of "conformance clause," see [OASIS Defined Terms](https://www.oasis-open.org/policies-guidelines/oasis-defined-terms-2018-05-22/#dConformanceClause).

See "Guidelines to Writing Conformance Clauses": https://docs.oasis-open.org/templates/TCHandbook/ConformanceGuidelines.html.

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Appendix A. References

This appendix contains the normative and informative references that are used in this document.

While any hyperlinks included in this appendix were valid at the time of publication, OASIS cannot guarantee their long-term validity.

A.1 Normative References

The following documents are referenced in such a way that some or all of their content constitutes requirements of this document.

(Reference sources: For references to IETF RFCs, use the approved citation formats at: https://docs.oasis-open.org/templates/ietf-rfc-list/ietf-rfc-list.html. For references to W3C Recommendations, use the approved citation formats at: https://docs.oasis-open.org/templates/w3c-recommendations-list/w3c-recommendations-list.html. Remove this note before submitting for publication.)

[OData-v4.02]

- *OData Version 4.02*. Edited by Michael Pizzo, Ralf Handl, and Heiko Theißen. A multi-part Work Product that includes:
  - *OData Version 4.02 Part 1: Protocol*. Latest stage. https://docs.oasis-open.org/odata/odata/v4.02/odata-v4.02-part1-protocol.html
  - *OData Version 4.02 Part 2: URL Conventions*. Latest stage. https://docs.oasis-open.org/odata/odata/v4.02/odata-v4.02-part2-url-conventions.html

[RFC2119]

Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997 http://www.rfc-editor.org/info/rfc2119.

[RFC8174]

Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017 http://www.rfc-editor.org/info/rfc8174.

A.2 Informative References

[RFC3552]

Rescorla, E. and B. Korver, "Guidelines for Writing RFC Text on Security Considerations", BCP 72, RFC 3552, DOI 10.17487/RFC3552, July 2003 https://www.rfc-editor.org/info/rfc3552.

Appendix B. Safety, Security and Privacy Considerations

(Note: OASIS strongly recommends that Technical Committees consider issues that might affect safety, security, privacy, and/or data protection in implementations of their specification and document them for implementers and adopters. For some purposes, you may find it required, e.g. if you apply for IANA registration.

While it may not be immediately obvious how your specification might make systems vulnerable to attack, most specifications, because they involve communications between systems, message formats, or system settings, open potential channels for exploit. For example, IETF [[RFC3552](#rfc3552)] lists “eavesdropping, replay, message insertion, deletion, modification, and man-in-the-middle” as well as potential denial of service attacks as threats that must be considered and, if appropriate, addressed in IETF RFCs.

In addition to considering and describing foreseeable risks, this section should include guidance on how implementers and adopters can protect against these risks.

We encourage editors and TC members concerned with this subject to read _Guidelines for Writing RFC Text on Security Considerations_, IETF [[RFC3552](#rfc3552)], for more information.

Remove this note before submitting for publication.)

Appendix C. Acknowledgments

Note: A Work Product approved by the TC must include a list of people who participated in the development of the Work Product. This is generally done by collecting the list of names in this appendix. This list shall be initially compiled by the Chair, and any Member of the TC may add or remove their names from the list by request. Remove this note before submitting for publication.

C.1 Special Thanks

Substantial contributions to this document from the following individuals are gratefully acknowledged:

Participant Name, Affiliation or "Individual Member"

C.2 Participants

The following individuals have participated in the creation of this specification and are gratefully acknowledged:

OpenC2 TC Members:

First Name	Last Name	Company
Philippe	Alman	Something Networks
Alex	Amirnovman	Company B
Kris	Anderman	Mini Micro
Darren	Anstman	Big Networks

Appendix D. Revision History

Revision	Date	Editor	Changes Made
specname-v1.0-wd01	yyyy-mm-dd	Editor Name	Initial working draft

Appendix E. Example Appendix with subsections

E.1 Subsection title

E.1.1 Sub-subsection

Appendix F. Notices

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