TOSCA Simple Profile in YAML Version 3.0

Working Draft 01

12 March 2019

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[OASIS Topology and Orchestration Specification for Cloud Applications (TOSCA) TC](https://www.oasis-open.org/committees/tosca/)

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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)
* Other parts (list titles and/or file names)
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Related work:

This specification replaces or supersedes:

* *TOSCA Simple Profile in YAML Version ?.?*. Edited by ...
* *TOSCA Simple Profile in YAML Version 1.2*. Edited by Matt Rutkowski, Luc Boutier, and Chris Lauwers. Latest version: <https://docs.oasis-open.org/tosca/TOSCA-Simple-Profile-YAML/v1.2/TOSCA-Simple-Profile-YAML-v1.2.html>.
* *TOSCA Simple Profile in YAML Version 1.1*. Edited by Matt Rutkowski and Luc Boutier. Latest version: <http://docs.oasis-open.org/tosca/TOSCA-Simple-Profile-YAML/v1.1/TOSCA-Simple-Profile-YAML-v1.1.html>.
* *TOSCA Simple Profile in YAML Version 1.0.* Edited by Derek Palma, Matt Rutkowski, and Thomas Spatzier. Latest version: <http://docs.oasis-open.org/tosca/TOSCA-Simple-Profile-YAML/v1.0/TOSCA-Simple-Profile-YAML-v1.0.html>.

This specification is related to:

* *Topology and Orchestration Specification for Cloud Applications Version 1.0*. Edited by Derek Palma and Thomas Spatzier. 25 November 2013. OASIS Standard. <http://docs.oasis-open.org/tosca/TOSCA/v1.0/os/TOSCA-v1.0-os.html>.

Declared XML namespaces:

* list namespaces declared within this specification (hyperlink if HTTP-based)

Abstract:

This document defines a simplified profile of the TOSCA version 1.0 specification in a YAML rendering which is intended to simplify the authoring of TOSCA service templates. This profile defines a less verbose and more human-readable YAML rendering, reduced level of indirection between different modeling artifacts as well as the assumption of a base type system.

The OASIS TOSCA TC works to enhance the portability of cloud applications and services across their entire lifecycle. TOSCA will enable the interoperable description of application and infrastructure cloud services, the relationships between parts of the service, and the operational behavior of these services (e.g., deploy, patch, shutdown) independent of the supplier creating the service or of any particular cloud provider or hosting technology. TOSCA will also make it possible for higher-level operational behavior to be associated with cloud infrastructure management.

By increasing service and application portability in a vendor-neutral ecosystem, TOSCA will enable:

* Portable deployment to any compliant cloud
* Smoother migration of existing applications to the cloud
* Flexible bursting (consumer choice)
* Dynamic, multi-cloud provider applications

Status:

This [Working Draft](https://www.oasis-open.org/policies-guidelines/oasis-defined-terms-2017-05-26#dWorkingDraft) (WD) has been produced by one or more TC Members; it has not yet been voted on by the TC or [approved](https://www.oasis-open.org/policies-guidelines/tc-process#committeeDraft) as a Committee Draft (Committee Specification Draft or a Committee Note Draft). The OASIS document [Approval Process](https://www.oasis-open.org/policies-guidelines/tc-process#standApprovProcess) begins officially with a TC vote to approve a WD as a Committee Draft. A TC may approve a Working Draft, revise it, and re-approve it any number of times as a Committee Draft.

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URI patterns:

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# Introduction

[All text is normative unless otherwise labeled]

## IPR Policy

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## Terminology

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

## Normative References

[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>>.

[Reference] [Full reference citation]

## Non-Normative 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>>.

[Reference] [Full reference citation]

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*For all References – Normative and Non-Normative:*

Recommended approach: Set up [Reference] label elements as "Bookmarks", then create hyperlinks to them within the document. (**Here's how:** Insert hyperlink🡪Place in this document🡪scroll down to Bookmarks, select appropriate one.)

Use the "Ref" paragraph style to format references.

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For example:

**[OpenDoc-1.2]** *Open Document Format for Office Applications (OpenDocument) Version 1.2*. Edited by Patrick Durusau and Michael Brauer. 19 January 2011. OASIS Committee Specification Draft 07. <http://docs.oasis-open.org/office/v1.2/csd07/OpenDocument-v1.2-csd07.html>. Latest version: <http://docs.oasis-open.org/office/v1.2/OpenDocument-v1.2.html>.

*Reference sources:*

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For references to **W3C Recommendations**, use the approved citation formats at:  
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# Section Title

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## Level 2 section title

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#### Level 4 section title

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##### Level 5

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###### Level 6

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# Security Considerations

(**Note:** OASIS strongly recommends that Technical Committees consider issues that could affect security when implementing 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.)

# Conformance

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For the definition of "conformance clause," see [OASIS Defined Terms](https://www.oasis-open.org/policies-guidelines/oasis-defined-terms-2017-05-26#dConformanceClause).

See "Guidelines to Writing Conformance Clauses":   
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1. 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.

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

Participants:

[Participant Name, Affiliation | Individual Member]

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1. Example Title

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* 1. Subsidiary section

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1. Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision** | **Date** | **Editor** | **Changes Made** |
| [Rev number] | [Rev Date] | [Modified By] | [Summary of Changes] |