

Topology and Orchestration Specification for Cloud Applications Version 1.0 Errata 01

Committee Specification Draft 02

14 August 2014

Specification URIs

This version:

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd02/TOSCA-v1.0-errata01-csd02.pdf>

(Authoritative)

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd02/TOSCA-v1.0-errata01-csd02.html>

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd02/TOSCA-v1.0-errata01-csd02.doc>

Previous version:

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd01/TOSCA-v1.0-errata01-csd01.pdf>

(Authoritative)

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd01/TOSCA-v1.0-errata01-csd01.html>

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd01/TOSCA-v1.0-errata01-csd01.doc>

Latest version:

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/TOSCA-v1.0-errata01.pdf> (Authoritative)

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/TOSCA-v1.0-errata01.html>

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/TOSCA-v1.0-errata01.doc>

Technical Committee:

OASIS Topology and Orchestration Specification for Cloud Applications (TOSCA) TC

Chairs:

Paul Lipton (paul.lipton@ca.com), CA Technologies

Simon Moser (smoser@de.ibm.com), IBM

Editors:

Derek Palma (dpalma@vnomi.com), Vnomic

Thomas Spatzier (thomas.spatzier@de.ibm.com), IBM

Additional artifacts:

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

- *Topology and Orchestration Specification for Cloud Applications Version 1.0 Plus Errata 01*. Edited by Derek Palma and Thomas Spatzier. 24 April 2014. OASIS Standard incorporating Draft 02 of Errata 01. <http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd02/TOSCA-v1.0-errata01-csd02-complete.html>. Latest version: <http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/TOSCA-v1.0-errata01-complete.html>.
- XML schemas: <http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd02/schemas/>.

Related work:

This specification lists errata for:

- *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:

- <http://docs.oasis-open.org/tosca/ns/2011/12>

Abstract:

This document lists errata to the TOSCA Version 1.0 OASIS Standard.

Status:

This document was last revised or approved by the OASIS Topology and Orchestration Specification for Cloud Applications (TOSCA) TC on the above date. The level of approval is also listed above. Check the “Latest version” 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=tosca#technical.

TC members should send comments on this specification to the TC’s email list. Others should send comments to the TC’s public comment list, after subscribing to it by following the instructions at the “[Send A Comment](#)” button on the TC’s web page at <https://www.oasis-open.org/committees/tosca/>.

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the Technical Committee web page (<https://www.oasis-open.org/committees/tosca/ipr.php>).

Citation format:

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

[TOSCA-v1.0-errata01]

Topology and Orchestration Specification for Cloud Applications Version 1.0 Errata 01. Edited by Derek Palma and Thomas Spatzier. 14 August 2014. Committee Specification Draft 02.

<http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/csd02/TOSCA-v1.0-errata01-csd02.html>.

Latest version: <http://docs.oasis-open.org/tosca/TOSCA/v1.0/errata01/TOSCA-v1.0-errata01.html>.

Notices

Copyright © OASIS Open 2014. All Rights Reserved.

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full [Policy](#) may be found at the OASIS website.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Committee Specification or OASIS Standard, to notify OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification.

OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this specification by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification. OASIS may include such claims on its website, but disclaims any obligation to do so.

OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Committee Specification or OASIS Standard, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.

The name "OASIS" is a trademark of [OASIS](#), the owner and developer of this specification, and should be used only to refer to the organization and its official outputs. OASIS welcomes reference to, and implementation and use of, specifications, while reserving the right to enforce its marks against misleading uses. Please see <https://www.oasis-open.org/policies-guidelines/trademark> for above guidance.

Table of Contents

1	Introduction	5
1.1	Normative References	5
2	Approved Errata	6
2.1	TOSCA-124-1: Normative Reference [RFC2119]	6
2.2	TOSCA-124-2: Normative Reference [RFC 2396]	6
2.3	TOSCA-124-3: Normative Reference [XML Base]	6
2.4	TOSCA-124-4: Normative Reference [XML Infoset]	6
2.5	TOSCA-124-5: Normative Reference [XML Namespaces]	7
2.6	TOSCA-124-6: Normative Reference [XML Schema Part 1]	7
2.7	TOSCA-124-7: Normative Reference [XML Schema Part 2]	7
2.8	TOSCA-124-8: Normative Reference [XMLSpec]	7
2.9	TOSCA-124-9: Security Considerations	8
2.10	TOSCA-124-14: Non-Normative Reference [XPath 1.0]	8
2.11	TOSCA-171-1: Missing Quote	8
2.12	TOSCA-171-2: Missing Quote	8
2.13	TOSCA-171-3: Superfluous Bracket	9
2.14	TOSCA-171-4: Missing Character 'e' in Example	9
2.15	TOSCA-171-5: Invalid Tag RelationshipTypeProperties	9
2.16	TOSCA-171-6: Inconsistent Example Description	9
2.17	TOSCA-171-7: Missing closing Backslash	9
2.18	TOSCA-171-8: Wrong Term "Service Template document"	10
2.19	TOSCA-171-9: Description of a non-existing Attribute	10
Appendix A.	Acknowledgements	11
Appendix B.	Revision History	13

1 Introduction

2 This document lists the approved errata to the TOSCA v1.0 OASIS Standard. Each one has a number
3 that refers to the issue that triggered the erratum. In particular, the issue numbers consist of the JIRA
4 issue number that have been used for tracking found errata, followed by a sub-item number as described
5 in these JIRA issues.

6 As required by the OASIS Technical Committee Process, the approved errata represent changes that are
7 not “substantive”. The changes focus on clarifications to ambiguous or conflicting specification text, where
8 different compliant implementations might have reasonably chosen different interpretations. The intent of
9 the TOSCA TC has been to resolve such issues in service of improved interoperability based on
10 implementation and deployment experience.

11 All cited line numbers refer to the Word document of the original OASIS Standard specifications in
12 question, not to line numbers in this document or in the errata composite documents.

13 1.1 Normative References

14 [TOSCA-v1.0] *Topology and Orchestration Specification for Cloud Applications Version 1.0*. 25
15 November 2013. OASIS Standard. [http://docs.oasis-](http://docs.oasis-open.org/tosca/TOSCA/v1.0/os/TOSCA-v1.0-os.html)
16 [open.org/tosca/TOSCA/v1.0/os/TOSCA-v1.0-os.html](http://docs.oasis-open.org/tosca/TOSCA/v1.0/os/TOSCA-v1.0-os.html).

17 2 Approved Errata

18 2.1 TOSCA-124-1: Normative Reference [RFC2119]

19 Section 2.3 "Normative References", lines 29-30.

20 Original:

21 **[RFC2119]** S. Bradner, *Key words for use in RFCs to Indicate Requirement Levels*,
22 <http://www.ietf.org/rfc/rfc2119.txt>, IETF RFC 2119, March 1997.

23 New:

24 **[RFC2119]** Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP
25 14, RFC 2119, March 1997.
26 <http://www.ietf.org/rfc/rfc2119.txt>

27 2.2 TOSCA-124-2: Normative Reference [RFC 2396]

28 Section 2.3 "Normative References", lines 31-32.

29 Original:

30 **[RFC 2396]** T. Berners-Lee, R. Fielding, L. Masinter, *Uniform Resource Identifiers (URI):*
31 *Generic Syntax*, <http://www.ietf.org/rfc/rfc2396.txt>, RFC 2396, August 1988.

32 New:

33 **[RFC 2396]** Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifiers
34 (URI): Generic Syntax", RFC 2396, August 1998.
35 <http://www.ietf.org/rfc/rfc2396.txt>

36 2.3 TOSCA-124-3: Normative Reference [XML Base]

37 Section 2.3 "Normative References", lines 33-34.

38 Original:

39 **[XML Base]** XML Base (Second Edition), W3C Recommendation,
40 <http://www.w3.org/TR/xmlbase/>

41 New:

42 **[XML Base]** XML Base (Second Edition), J. Marsh, R. Tobin, eds. World Wide Web Consortium, 28
43 January 2009. This edition of XML Base is:
44 <http://www.w3.org/TR/2009/REC-xmlbase-20090128/>.
45 The latest edition of XML Base is available at:
46 <http://www.w3.org/TR/xmlbase/>.

47 2.4 TOSCA-124-4: Normative Reference [XML Infoset]

48 Section 2.3 "Normative References", lines 35-36.

49 Original:

50 **[XML Infoset]** XML Information Set, W3C Recommendation, [http://www.w3.org/TR/2001/REC-](http://www.w3.org/TR/2001/REC-xml-infoset-20011024/)
51 [xml-infoset-20011024/](http://www.w3.org/TR/2001/REC-xml-infoset-20011024/)

52 New:

53 **[XML Infoset]** XML Information Set , J. Cowan, R. Tobin, Editors, W3C Recommendation, 24
54 October 2001. This edition of XML Infoset is:
55 <http://www.w3.org/TR/2001/REC-xml-infoset-20011024/>.

56 The latest edition of XML Infoset is available at:
57 <http://www.w3.org/TR/xml-infoset>
58

59 **2.5 TOSCA-124-5: Normative Reference [XML Namespaces]**

60 Section 2.3 “Normative References”, lines 37-38.

61 Original:

62 **[XML Namespaces]** Namespaces in XML 1.0 (Second Edition), W3C Recommendation,
63 <http://www.w3.org/TR/REC-xml-names/>

64 New:

65 **[XML Namespaces]** Namespaces in XML 1.0 (Third Edition), T. Bray, D. Hollander, A.
66 Layman, R. Tobin, H. Thompson, eds. World Wide Web Consortium, 8
67 December 2009. This edition of Namespaces in XML is:
68 <http://www.w3.org/TR/2009/REC-xml-names-20091208/>.
69 The latest edition of Namespaces in XML is available at:
70 <http://www.w3.org/TR/xml-names/>.

71 **2.6 TOSCA-124-6: Normative Reference [XML Schema Part 1]**

72 Section 2.3 “Normative References”, lines 39-40.

73 Original:

74 **[XML Schema Part 1]** XML Schema Part 1: Structures, W3C Recommendation, October 2004,
75 <http://www.w3.org/TR/xmlschema-1/>

76 New:

77 **[XML Schema Part 1]** XML Schema Part 1: Structures Second Edition. H.S. Thompson, D.
78 Beech, M. Maloney, N. Mendelsohn, eds. World Wide Web Consortium, 28
79 October 2004. This edition of XML Schema Part 1 is:
80 <http://www.w3.org/TR/2004/REC-xmlschema-1-20041028/>.
81 The latest edition of XML Schema Part 1 is available at:
82 <http://www.w3.org/TR/xmlschema-1/>.

83 **2.7 TOSCA-124-7: Normative Reference [XML Schema Part 2]**

84 Section 2.3 “Normative References”, lines 41-42.

85 Original:

86 **[XML Schema Part 2]** XML Schema Part 2: Datatypes, W3C Recommendation, October 2004,
87 <http://www.w3.org/TR/xmlschema-2/>

88 New:

89 **[XML Schema Part 2]** XML Schema Part 2: Datatypes Second Edition. P. Biron, A. Malhotra,
90 eds. World Wide Web Consortium, 28 October 2004.
91 This edition of XML Schema Part 2 is:
92 <http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/>.
93 The latest edition of XML Schema Part 2 is available at:
94 <http://www.w3.org/TR/xmlschema-2/>.

95 **2.8 TOSCA-124-8: Normative Reference [XMLSpec]**

96 Section 2.3 “Normative References”, lines 43-44.

97 Original:

98 **[XMLSpec]** XML Specification, W3C Recommendation, February 1998,
99 <http://www.w3.org/TR/1998/REC-xml-19980210>

100 New:

101 **[XMLSpec]** Extensible Markup Language (XML) 1.0 (Fifth Edition), T. Bray, J.
102 Paoli, C. M. Sperberg-McQueen, E. Maler, F. Yergeau, eds. World Wide Web
103 Consortium, 26 November 2008.
104 This edition of XML 1.0 is:
105 <http://www.w3.org/TR/2008/REC-xml-20081126/>.
106 The latest edition of XML 1.0 is available at:
107 <http://www.w3.org/TR/xml/>.

108 **2.9 TOSCA-124-9: Security Considerations**

109 Section 17 “Security Considerations”, lines 3124-3125.
110 Original:
111 TOSCA does not mandate the use of any specific mechanism or technology for client authentication.
112 However, a client **MUST** provide a principal or the principal **MUST** be obtainable by the infrastructure.
113 New:
114 TOSCA does not mandate the use of any specific security mechanism or technology.

115 **2.10 TOSCA-124-14: Non-Normative Reference [XPath 1.0]**

116 Section 2.4 “Non-Normative References”, lines 53-54.
117 Original:
118 **[XPath 1.0]** XML Path Language (XPath) Version 1.0, W3C Recommendation, November
119 1999, <http://www.w3.org/TR/1999/REC-xpath-19991116>

120 New:
121 **[XPath 1.0]** XML Path Language (XPath) Version 1.0 , J. Clark, S. J. DeRose,
122 Editors, W3C Recommendation, 16 November 1999,
123 <http://www.w3.org/TR/1999/REC-xpath-19991116>.
124 Latest version available at:
125 <http://www.w3.org/TR/xpath>.

126 **2.11 TOSCA-171-1: Missing Quote**

127 Section 11.4 “Example”, line 2443.
128 Original:
129 04 xmlns:mcp="http://www.example.com/SampleCapabilityProperties>

130 New:
131 04 xmlns:mcp="http://www.example.com/SampleCapabilityProperties">

132 **2.12 TOSCA-171-2: Missing Quote**

133 Section 10.4 “Example”, line 2333.
134 Original:
135 04 xmlns:mrp="http://www.example.com/SampleRequirementProperties>

136 New:
137 04 xmlns:mrp="http://www.example.com/SampleRequirementProperties">

138

139 2.13 TOSCA-171-3: Superflous Bracket

140 Section 14.4 "Example", line 2807.

141 Original:

```
142 03 xmlns:bnt="http://www.example.com/BaseNodeTypes">
```

143 New:

```
144 03 xmlns:bnt="http://www.example.com/BaseNodeTypes"
```

145 2.14 TOSCA-171-4: Missing Character 'e' in Example

146 Section 6.4 "Example", lines 1580, 1582, 1584.

147 Original:

```
148 22 <InputParamter name="ProjectName"  
149 23 type="xs:string"/>  
150 24 <InputParamter name="Owner"  
151 25 type="xs:string"/>  
152 26 <InputParamter name="AccountID"  
153 27 type="xs:string"/>
```

154 New:

```
155 22 <InputParameter name="ProjectName"  
156 23 type="xs:string"/>  
157 24 <InputParameter name="Owner"  
158 25 type="xs:string"/>  
159 26 <InputParameter name="AccountID"  
160 27 type="xs:string"/>
```

161 2.15 TOSCA-171-5: Invalid Tag RelationshipTypeProperties

162 Section 8.4 "Example", line 2025.

163 Original:

```
164 03 <RelationshipTypeProperties element="ProcessDeployedOnProperties"/>
```

165 New:

```
166 03 <PropertiesDefinition element="ProcessDeployedOnProperties"/>
```

167 2.16 TOSCA-171-6: Inconsistent Example Description

168 Section 9.4 "Example", lines 2195-2196.

169 Original:

170 The following example defines the Node Type Implementation "MyDBMSImplementation". This is an
171 implementation of a Node Type "DBMS".

172 New:

173 The following example defines the Relationship Type Implementation "MyDBConnectImplementation".
174 This is an implementation of a Relationship Type "DBConnection".

175 2.17 TOSCA-171-7: Missing closing Backslash

176 Section 9.4 "Example", line 2220.

177 Original:

```
178 24 <ImplementationArtifact>
```

179 New:

180 24 </ImplementationArtifact>

181 **2.18 TOSCA-171-8: Wrong Term “Service Template document”**

182 Section 4.2 “Properties”, line 433.

183 Original:

184 open.org/tosca/ns/2011/12 when importing Service Template documents, to

185 New:

186 open.org/tosca/ns/2011/12 when importing TOSCA Definitions documents, to

187 **2.19 TOSCA-171-9: Description of a non-existing Attribute**

188 Section 7.2 “Properties”, lines 1710-1711.

189 Original:

- 190
- 191 ▪ name: This attribute specifies the name of the artifact, which SHOULD be unique within the scope of the encompassing Node Type Implementation.

192 New:

- 193
- 194 ~~▪ name: This attribute specifies the name of the artifact, which SHOULD be unique within the scope of the encompassing Node Type Implementation.~~

195

196

Appendix A. Acknowledgements

197 The following individuals have participated in the creation of this specification and are gratefully
198 acknowledged.

199 **Participants:**

Aaron Zhang	Huawei Technologies Co., Ltd.
Adolf Hohl	NetApp
Afkham Azeez	WSO2
Al DeLucca	IBM
Alex Heneveld	Cloudsoft Corporation Limited
Allen Bannon	SAP AG
Anthony Rutkowski	Yaana Technologies, LLC
Arvind Srinivasan	IBM
Bryan Haynie	VCE
Bryan Murray	Hewlett-Packard
Chandrasekhar Sundaresh	CA Technologies
Charith Wickramarachchi	WSO2
Colin Hopkinson	3M HIS
Dale Moberg	Axway Software
Debojyoti Dutta	Cisco Systems
Dee Schur	OASIS
Denis Nothern	CenturyLink
Denis Weerasiri	WSO2
Derek Palma	Vnomic
Dhiraj Pathak	PricewaterhouseCoopers LLP:
Diane Mueller	ActiveState Software, Inc.
Doug Davis	IBM
Douglas Neuse	CA Technologies
Duncan Johnston-Watt	Cloudsoft Corporation Limited
Efraim Moscovich	CA Technologies
Frank Leymann	IBM
Gerd Breiter	IBM
James Thomason	Gale Technologies
Jan Ignatius	Nokia Siemens Networks GmbH & Co. KG
Jie Zhu	Huawei Technologies Co., Ltd.
John Wilmes	Individual
Joseph Malek	VCE
Ken Zink	CA Technologies
Kevin Poulter	SAP AG
Kevin Wilson	Hewlett-Packard
Koert Struijk	CA Technologies
Lee Thompson	Morphlabs, Inc.
li peng	Huawei Technologies Co., Ltd.
Marvin Waschke	CA Technologies
Mascot Yu	Huawei Technologies Co., Ltd.
Matthew Dovey	JISC Executive, University of Bristol
Matthew Rutkowski	IBM
Michael Schuster	SAP AG
Mike Edwards	IBM

Naveen Joy	Cisco Systems
Nikki Heron	rPath, Inc.
Paul Fremantle	WSO2
Paul Lipton	CA Technologies
Paul Zhang	Huawei Technologies Co., Ltd.
Rachid Sijelmassi	CA Technologies
Ravi Akireddy	Cisco Systems
Richard Bill	Jericho Systems
Richard Probst	SAP AG
Robert Evans	Zenoss, Inc.
Roland Wartenberg	Citrix Systems
Satoshi Konno	Morphlabs, Inc.
Sean Shen	China Internet Network Information Center(CNNIC)
Selvaratnam Uthaiyashankar	WSO2
Senaka Fernando	WSO2
Sherry Yu	Red Hat
Shumin Cheng	Huawei Technologies Co., Ltd.
Simon Moser	IBM
Srinath Perera	WSO2
Stephen Tyler	CA Technologies
Steve Fanshier	Software AG, Inc.
Steve Jones	Capgemini
Steve Winkler	SAP AG
Tad Deffler	CA Technologies
Ted Streete	VCE
Thilina Buddhika	WSO2
Thomas Spatzier	IBM
Tobias Kunze	Red Hat
Wang Xuan	Primeton Technologies, Inc.
wayne adams	EMC
Wenbo Zhu	Google Inc.
Xiaonan Song	Primeton Technologies, Inc.
YanJiong WANG	Primeton Technologies, Inc.
Zhexuan Song	Huawei Technologies Co., Ltd.

201

Appendix B. Revision History

Revision	Date	Editor	Changes Made
errata01	2014-03-21	Thomas Spatzier	Changes for JIRA Issues TOSCA-124 and TOSCA-171: First draft of errata.

203