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3 Web Services Security: 4 SOAP Message Security 1.1 5 (WS-Security 2004)

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11 Technical Committee:

12 Web Service Security (WSS)

13 Chairs:

14 Kelvin Lawrence, IBM

15 Chris Kaler, Microsoft

16 Editors:

17 Anthony Nadalin, IBM

18 Abstract:

19 This specification describes enhancements to SOAP messaging to provide message
20 integrity and confidentiality. The specified mechanisms can be used to accommodate a
21 wide variety of security models and encryption technologies.

22
23 This specification also provides a general-purpose mechanism for associating security
24 tokens with message content. No specific type of security token is required, the
25 specification is designed to be extensible (i.e.. support multiple security token formats).
26 For example, a client might provide one format for proof of identity and provide another
27 format for proof that they have a particular business certification.

28
29 Additionally, this specification describes how to encode binary security tokens, a
30 framework for XML-based tokens, and how to include opaque encrypted keys. It also
31 includes extensibility mechanisms that can be used to further describe the characteristics
32 of the tokens that are included with a message.

33 Status:

34 This is an **OASIS Draft** listing errata for the **OASIS Standard** produced by the Web
35 Services Security Technical Committee. The standard was approved by the OASIS
36 membership on 1 February 2006.

37

38 Technical Committee members should send comments on this specification to the
39 technical Committee's email list. Others should send comments to the Technical
40 Committee by using the "Send A Comment" button on the Technical Committee's web
41 page at **www.oasisopen.org/committees/wss**.
42

43 For patent disclosure information that may be essential to the implementation of this
44 specification, and any offers of licensing terms, refer to the Intellectual Property Rights
45 section of the OASIS Web Services Security Technical Committee (WSS TC) web page
46 at <http://www.oasis-open.org/committees/wss/ipr.php>. General OASIS IPR information
47 can be found at <http://www.oasis-open.org/who/intellectualproperty.shtml>.

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103 **1 Issues Addressed**

104 The following issues related to the Web Web Services Security: SOAP Message Security 1.1
105 (WS-Security 2004) listed in the Web Services Committee Issues List [[WSS-Issues](#)] have been
106 addressed in this document:
107

Issue	Description
455	Remove the #x509v3 table entry
459	Fix Typographical Errors
463	Fix Typographical Errors

108

109 2 Typographical/Editorial Errors

110 2.1 Section 7.2 Direct References

111 Added brackets to element names `wsse:SecurityTokenReference`, `wsse:Embedded`
112 `<wsse:Reference` and `wsse:KeyIdentifier` on lines 938 and 939

113 2.2 Section 7.3 Key Identifiers

114 Line 980 changed:
115 The `<wsse:KeyIdentifier>` element SHALL is placed in the
116 to
117 The `<wsse:KeyIdentifier>` element SHALL be placed in the

118 2.3 Section 8.6 Example

119 Changed line 1514 from:
120 `...#X509v3`
121 to
122 `http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3`

123 2.4 Section 9.4.4

124 Changed line 1776 from:
125 `<wsse11:EncryptedHeader>` then process as per section 9.5.2 Decryption and stop
126 to
127 `<wsse11:EncryptedHeader>` then process as per section 9.4.2 Decryption and stop
128
129 Changed line 1770 from:
130 Decrypt the contents of the `<xenc:EncryptedData>` element as per section 9.5.2
131 to
132 Decrypt the contents of the `<xenc:EncryptedData>` element as per section 9.4.2

133 2.5 Section 11 Extended Example

134 Changed line 1916 from:
135 `...#X509v3`
136 to
137 `http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3`
138
139 Changed line 1929 from:
140 `...#X509v3`
141 to
142 `http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3`

143

3 Normative Errors

144

3.1 Section 8.3 Signing Tokens

145

Removed the #x509v3 table entry at line 1399 and then change the example in same document at lines 1514, 1915 and 1927 to <http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3>.

146

147

148

3.2 Section 7.3 Key Identifiers

149

Changed table entry on line 1014 from

<http://docs.oasis-open.org/wss/oasis-wss-soap-message-security-1.1#ThumbPrintSHA1>

If the security token type that the Security Token Reference refers to already contains a representation for the thumbprint, the value obtained from the token MAY be used. If the token does not contain a representation of a thumbprint, then the value of the `KeyIdentifier` MUST be the SHA1 of the raw octets which would be encoded within the security token element were it to be included. A thumbprint reference MUST occur in combination with a required to be supported (by the applicable profile) reference form unless a thumbprint reference is among the reference forms required to be supported by the applicable profile, or the parties to the communication have agreed to accept thumbprint only references.

150

to

<http://docs.oasis-open.org/wss/oasis-wss-soap-message-security-1.1#ThumbprintSHA1>

If the security token type that the Security Token Reference refers to already contains a representation for the thumbprint, the value obtained from the token MAY be used. If the token does not contain a representation of a thumbprint, then the value of the `KeyIdentifier` MUST be the SHA1 of the raw octets which would be encoded within the security token element were it to be included. A thumbprint reference MUST occur in combination with a required to be supported (by the applicable profile) reference form unless a thumbprint reference is among the reference forms required to be supported by the applicable profile, or the parties to the communication have agreed to accept thumbprint only references.

151

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211

212 **Appendix B: Revision History**

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01	08-25-2006	Anthony Nadalin	Issue 455, 459, 463

213

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