



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

OASIS Approved Errata, 01 November 2006

OASIS identifier:

wss-v1.1-errata-os-SOAPMessageSecurity

Location:

<http://docs.oasis-open.org/wss/v1.1/>

Technical Committee:

Web Service Security (WSS)

Chairs:

Kelvin Lawrence, IBM

Chris Kaler, Microsoft

Editors:

Anthony Nadalin, IBM

Abstract:

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

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

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

Status:

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

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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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87 This section is non-normative.

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1 Issues Addressed

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

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

2 Typographical/Editorial Errors

2.1 Section 7.2 Direct References

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

2.2 Section 7.3 Key Identifiers

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

2.3 Section 8.6 Example

Changed line 1514 from:
...#X509v3
to
<http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3>

2.4 Section 9.4.4

Changed line 1776 from:
`<wsse11:EncryptedHeader>` then process as per section 9.5.2 Decryption and stop
to
`<wsse11:EncryptedHeader>` then process as per section 9.4.2 Decryption and stop
Changed line 1770 from:
Decrypt the contents of the `<xenc:EncryptedData>` element as per section 9.5.2
to
Decrypt the contents of the `<xenc:EncryptedData>` element as per section 9.4.2

2.5 Section 11 Extended Example

Changed line 1916 from:
...#X509v3
to
<http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3>
Changed line 1929 from:
...#X509v3
to
<http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3>

3 Normative Errors

3.1 Section 8.3 Signing Tokens

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>.

3.2 Section 7.3 Key Identifiers

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.

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.

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194		30 January 2003
195	[WSS-X509]	OASIS, "Web Services Security X.509 Certificate Token Profile", 19
196		January 2004, http://www.docs.oasis-open.org/wss/2004/01/oasis-
197		200401-wss-x509-token-profile-1.0
198	[WSSKERBEROS]	OASIS Working Draft 03, "Web Services Security Kerberos Profile", 30
199		January 2003
200	[WSSUSERNAME]	OASIS, "Web Services Security UsernameToken Profile" 19 January
201		2004, http://www.docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
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204		30 March 2003
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Appendix A: Acknowledgements

Current Contributors:

Michael	Hu	Actional
Maneesh	Sahu	Actional
Duane	Nickull	Adobe Systems
Gene	Thurston	AmberPoint
Frank	Siebenlist	Argonne National Laboratory
Hal	Lockhart	BEA Systems
Denis	Pilipchuk	BEA Systems
Corinna	Witt	BEA Systems
Steve	Anderson	BMC Software
Rich	Levinson	Computer Associates
Thomas	DeMartini	ContentGuard
Merlin	Hughes	Cybertrust
Dale	Moberg	Cyclone Commerce
Rich	Salz	Datapower
Sam	Wei	EMC
Dana S.	Kaufman	Forum Systems
Toshihiro	Nishimura	Fujitsu
Kefeng	Chen	GeoTrust
Irving	Reid	Hewlett-Packard
Kojiro	Nakayama	Hitachi
Paula	Austel	IBM
Derek	Fu	IBM
Maryann	Hondo	IBM
Kelvin	Lawrence	IBM
Michael	McIntosh	IBM
Anthony	Nadalin	IBM
Nataraj	Nagaratnam	IBM
Bruce	Rich	IBM
Ron	Williams	IBM
Don	Flinn	Individual
Kate	Cherry	Lockheed Martin
Paul	Cotton	Microsoft
Vijay	Gajjala	Microsoft
Martin	Gudgin	Microsoft
Chris	Kaler	Microsoft
Frederick	Hirsch	Nokia
Abbie	Barbir	Nortel
Prateek	Mishra	Oracle
Vamsi	Motukuru	Oracle
Ramana	Turlapi	Oracle
Ben	Hammond	RSA Security
Rob	Philpott	RSA Security
Blake	Dournaee	Sarvega
Sundeeep	Peechu	Sarvega
Coumara	Radja	Sarvega
Pete	Wenzel	SeeBeyond
Manveen	Kaur	Sun Microsystems
Ronald	Monzillo	Sun Microsystems

Jan	Alexander	Systinet
Symon	Chang	TIBCO Software
John	Weiland	US Navy
Hans	Granqvist	VeriSign
Phillip	Hallam-Baker	VeriSign
Hemma	Prafullchandra	VeriSign

210 Previous Contributors:

Peter	Dapkus	BEA
Guillermo	Lao	ContentGuard
TJ	Pannu	ContentGuard
Xin	Wang	ContentGuard
Shawn	Sharp	Cyclone Commerce
Ganesh	Vaideeswaran	Documentum
Tim	Moses	Entrust
Carolina	Canales-Valenzuela	Ericsson
Tom	Rutt	Fujitsu
Yutaka	Kudo	Hitachi
Jason	Rouault	HP
Bob	Blakley	IBM
Joel	Farrell	IBM
Satoshi	Hada	IBM
Hiroshi	Maruyama	IBM
David	Melgar	IBM
Kent	Tamura	IBM
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Eric	Gravengaard	Reactivity
Andrew	Nash	Reactivity
Stuart	King	Reed Elsevier
Martijn	de Boer	SAP
Jonathan	Tourzan	Sony
Yassir	Elley	Sun
Michael	Nguyen	The IDA of Singapore
Don	Adams	TIBCO
Morten	Jorgensen	Vordel

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Appendix B: Revision History

Rev	Date	By Whom	What
01	08-25-2006	Anthony Nadalin	Issue 455, 459, 463

This section is non-normative.