

# [MS-ASWBXML]: Exchange ActiveSync: WAP Binary XML (WBXML) Algorithm

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## Revision Summary

Date	Revision History	Revision Class	Comments
12/03/2008	1.0.0	Major	Initial Release.
04/10/2009	2.0.0	Major	Updated technical content and applicable product releases.
07/15/2009	3.0.0	Major	Revised and edited for technical content.
11/04/2009	4.0.0	Major	Updated and revised the technical content.
02/10/2010	5.0.0	Major	Updated and revised the technical content.
05/05/2010	6.0.0	Major	Updated and revised the technical content.
08/04/2010	7.0	Major	Significantly changed the technical content.
11/03/2010	8.0	Major	Significantly changed the technical content.
03/18/2011	8.1	Minor	Clarified the meaning of the technical content.
08/05/2011	9.0	Major	Significantly changed the technical content.
10/07/2011	10.0	Major	Significantly changed the technical content.
01/20/2012	11.0	Major	Significantly changed the technical content.
04/27/2012	11.1	Minor	Clarified the meaning of the technical content.
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10/08/2012	12.1	Minor	Clarified the meaning of the technical content.
02/11/2013	12.1	No change	No changes to the meaning, language, or formatting of the technical content.
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11/18/2013	13.0	No change	No changes to the meaning, language, or formatting of the technical content.

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# 1 Introduction

The Exchange ActiveSync: WAP Binary XML (WBXML) Algorithm incorporates **Wireless Application Protocol (WAP) Binary XML (WBXML)** functionality into the ActiveSync protocols by mapping ActiveSync **XML schema** elements to numeric code page values. This enables ActiveSync clients to encode **XML** requests into WBXML for transmission to an ActiveSync server.

Section 2 of this specification is normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Section 1.6 is also normative but cannot contain those terms. All other sections and examples in this specification are informative.

## 1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

**Hypertext Transfer Protocol (HTTP)**  
**Secure Sockets Layer (SSL)**  
**XML**  
**XML namespace**

The following terms are defined in [\[MS-OXGLOS\]](#):

**contact**  
**WBXML code page**  
**Wireless Application Protocol (WAP) Binary XML (WBXML)**  
**XML schema**

The following terms are specific to this document:

**WBXML token:** A single-byte code that represents a specific XML tag.

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as described in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the documents, which are updated frequently. References to other documents include a publishing year when one is available.

### 1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MS-ASCMD] Microsoft Corporation, "[Exchange ActiveSync: Command Reference Protocol](#)".

[MS-ASHTTP] Microsoft Corporation, "[Exchange ActiveSync: HTTP Protocol](#)".

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

[WBXML1.2] Martin, B., and Jano, B., Eds., "WAP Binary XML Content Format", W3C Note, June 1999, <http://www.w3.org/1999/06/NOTE-wbxml-19990624>

## 1.2.2 Informative References

[MS-ASAIRS] Microsoft Corporation, "[Exchange ActiveSync: AirSyncBase Namespace Protocol](#)".

[MS-ASCAL] Microsoft Corporation, "[Exchange ActiveSync: Calendar Class Protocol](#)".

[MS-ASCNTC] Microsoft Corporation, "[Exchange ActiveSync: Contact Class Protocol](#)".

[MS-ASEMAIL] Microsoft Corporation, "[Exchange ActiveSync: Email Class Protocol](#)".

[MS-ASNOTE] Microsoft Corporation, "[Exchange ActiveSync: Notes Class Protocol](#)".

[MS-ASPROV] Microsoft Corporation, "[Exchange ActiveSync: Provisioning Protocol](#)".

[MS-ASRM] Microsoft Corporation, "[Exchange ActiveSync: Rights Management Protocol](#)".

[MS-ASTASK] Microsoft Corporation, "[Exchange ActiveSync: Tasks Class Protocol](#)".

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)".

[MS-OXGLOS] Microsoft Corporation, "[Exchange Server Protocols Master Glossary](#)".

[MS-OXPROTO] Microsoft Corporation, "[Exchange Server Protocols System Overview](#)".

## 1.3 Overview

This algorithm maps ActiveSync XML schema elements to numeric code page values for use by the ActiveSync protocols, enabling ActiveSync clients to encode WBXML requests for transmission to an ActiveSync server.

This algorithm provides **WBXML tokens** and **WBXML code pages** that allow clients and servers to compress the XML tags in request and response messages. WBXML code pages are hard-coded on the server and cannot be changed by the client. The WBXML code pages correspond to **XML namespaces**.

## 1.4 Relationship to Protocols and Other Algorithms

The XML namespaces that are used by this algorithm are described in the ActiveSync protocol specifications, as shown in the following table.

The WBXML code page numbers in the table are listed in decimal format.

WBXML code page	Specification
WBXML code page 0: AirSync	<a href="#">[MS-ASCMD]</a> section 2.2.2.19
WBXML code page 1: Contacts	<a href="#">[MS-ASCNTC]</a>
WBXML code page 2: Email	<a href="#">[MS-ASEMAIL]</a>
WBXML code page 3: AirNotify	(no longer used)
WBXML code page 4: Calendar	<a href="#">[MS-ASCAL]</a>

WBXML code page	Specification
WBXML code page 5: Move	<a href="#">[MS-ASCMD]</a> section 2.2.2.10
WBXML code page 6: GetItemEstimate	<a href="#">[MS-ASCMD]</a> section 2.2.2.7
WBXML code page 7: FolderHierarchy	[MS-ASCMD] sections <a href="#">2.2.2.2</a> , <a href="#">2.2.2.3</a> , <a href="#">2.2.2.4</a> , and <a href="#">2.2.2.5</a>
WBXML code page 8: MeetingResponse	<a href="#">[MS-ASCMD]</a> section 2.2.2.9
WBXML code page 9: Tasks	<a href="#">[MS-ASTASK]</a>
WBXML code page 10: ResolveRecipients	<a href="#">[MS-ASCMD]</a> section 2.2.2.13
WBXML code page 11: ValidateCert	<a href="#">[MS-ASCMD]</a> section 2.2.2.20
WBXML code page 12: Contacts2	[MS-ASCNTC]
WBXML code page 13: Ping	<a href="#">[MS-ASCMD]</a> section 2.2.2.11
WBXML code page 14: Provision	<a href="#">[MS-ASPROV]</a>
WBXML code page 15: Search	<a href="#">[MS-ASCMD]</a> section 2.2.2.14
WBXML code page 16: GAL	[MS-ASCMD] sections <a href="#">2.2.2.13</a> and <a href="#">2.2.2.14</a>
WBXML code page 17: AirSyncBase	<a href="#">[MS-ASAIRS]</a>
WBXML code page 18: Settings	<a href="#">[MS-ASCMD]</a> section 2.2.2.16
WBXML code page 19: DocumentLibrary	[MS-ASCMD] sections <a href="#">2.2.2.8</a> and <a href="#">2.2.2.14</a>
WBXML code page 20: ItemOperations	[MS-ASCMD] sections <a href="#">2.2.2.8</a>
WBXML code page 21: ComposeMail	[MS-ASCMD] sections <a href="#">2.2.2.15</a> , <a href="#">2.2.2.17</a> , and <a href="#">2.2.2.18</a>
WBXML code page 22: Email2	[MS-AEMAIL]
WBXML code page 23: Notes	<a href="#">[MS-ASNOTE]</a>
WBXML code page 24: Rights Management	<a href="#">[MS-ASRM]</a>

For conceptual background information and overviews of the relationships and interactions between this and other protocols, see [\[MS-OXPROTO\]](#).

## 1.5 Applicability Statement

WBXML is used as a compact transmission format for mobile clients, which typically have little memory and bandwidth. WBXML encoding of XML tags is appropriate for all messages sent and received by using the ActiveSync protocols.

## 1.6 Standards Assignments

This algorithm uses the global WBXML tokens listed in the following table.

Token name	Token	Reference
SWITCH_PAGE	0	<a href="#">[WBXML1.2]</a>

Token name	Token	Reference
END	1	<a href="#">[WBXML1.2]</a>
ENTITY	2	<a href="#">[WBXML1.2]</a>
STR_I	3	<a href="#">[WBXML1.2]</a>
LITERAL	4	<a href="#">[WBXML1.2]</a>
EXT_I_0	40	<a href="#">[WBXML1.2]</a>
EXT_I_1	41	<a href="#">[WBXML1.2]</a>
EXT_I_2	42	<a href="#">[WBXML1.2]</a>
PI	43	<a href="#">[WBXML1.2]</a>
LITERAL_C	44	<a href="#">[WBXML1.2]</a>
EXT_T_0	80	<a href="#">[WBXML1.2]</a>
EXT_T_1	81	<a href="#">[WBXML1.2]</a>
EXT_T_2	82	<a href="#">[WBXML1.2]</a>
STR_T	83	<a href="#">[WBXML1.2]</a>
LITERAL_A	84	<a href="#">[WBXML1.2]</a>
EXT_0	C0	<a href="#">[WBXML1.2]</a>
EXT_1	C1	<a href="#">[WBXML1.2]</a>
EXT_2	C2	<a href="#">[WBXML1.2]</a>
OPAQUE	C3	<a href="#">[WBXML1.2]</a>
LITERAL_AC	C4	<a href="#">[WBXML1.2]</a>



## 2 Algorithm Details

### 2.1 ActiveSync WBXML Algorithm Details

ActiveSync messages are transported as HTTP **POST** messages, as specified in [\[MS-ASHTTP\]](#), where the body of the message contains WBXML formatted data. The WBXML data encodes the XML required by the command being communicated in the message. The ActiveSync commands are specified in [\[MS-ASCMD\]](#).

This section specifies the algorithm to encode XML request and response messages into WBXML format and to decode WBXML data into XML request and response messages. This algorithm is used by clients and servers.

#### 2.1.1 Abstract Data Model

None.

#### 2.1.2 Initialization

The XML tags in both request and response messages are encoded by using WBXML tokenization, as specified in [\[WBXML1.2\]](#). WBXML uses WBXML code pages to map XML tags to WBXML tokens. WBXML parsers **MUST** use the WBXML code pages specified in the following sections.

##### 2.1.2.1 Code Pages

This algorithm supports the following WBXML code pages.

Code page	XML namespace
0	AirSync
1	Contacts
2	Email
3	AirNotify
4	Calendar
5	Move
6	GetItemEstimate
7	FolderHierarchy
8	MeetingResponse
9	Tasks
10	ResolveRecipients
11	ValidateCert
12	Contacts2
13	Ping

Code page	XML namespace
14	Provision
15	Search
16	Gal
17	AirSyncBase
18	Settings
19	DocumentLibrary
20	ItemOperations
21	ComposeMail
22	Email2
23	Notes
24	RightsManagement

#### 2.1.2.1.1 Code Page 0: AirSync

The tags and tokens in WBXML code page 0 are listed in the following table.

Tag name	Token
<b>Sync</b>	0x05
<b>Responses</b>	0x06
<b>Add</b>	0x07
<b>Change</b>	0x08
<b>Delete</b>	0x09
<b>Fetch</b>	0x0A
<b>SyncKey</b>	0x0B
<b>ClientId</b>	0x0C
<b>ServerId</b>	0x0D
<b>Status</b>	0x0E
<b>Collection</b>	0x0F
<b>Class</b>	0x10
<b>CollectionId</b>	0x12
<b>GetChanges</b>	0x13
<b>MoreAvailable</b>	0x14

Tag name	Token
<b>WindowSize</b>	0x15
<b>Commands</b>	0x16
<b>Options</b>	0x17
<b>FilterType</b>	0x18
<b>Conflict</b>	0x1B
<b>Collections</b>	0x1C
<b>ApplicationData</b>	0x1D
<b>DeletesAsMoves</b>	0x1E
<b>Supported</b>	0x20
<b>SoftDelete</b>	0x21
<b>MIMESupport</b>	0x22
<b>MIMETruncation</b>	0x23
<b>Wait</b>	0x24
<b>Limit</b>	0x25
<b>Partial</b>	0x26
<b>ConversationMode</b> <a href="#">&lt;1&gt;</a>	0x27
<b>MaxItems</b> <a href="#">&lt;2&gt;</a>	0x28
<b>HeartbeatInterval</b> <a href="#">&lt;3&gt;</a>	0x29

#### 2.1.2.1.2 Code Page 1: Contacts

The tags and tokens in WBXML code page 1 are listed in the following table.

Tag name	Token
<b>Anniversary</b>	0x05
<b>AssistantName</b>	0x06
<b>AssistantPhoneNumber</b>	0x07
<b>Birthday</b>	0x08
<b>Business2PhoneNumber</b>	0x0C
<b>BusinessAddressCity</b>	0x0D
<b>BusinessAddressCountry</b>	0x0E
<b>BusinessAddressPostalCode</b>	0x0F

Tag name	Token
<b>BusinessAddressState</b>	0x10
<b>BusinessAddressStreet</b>	0x11
<b>BusinessFaxNumber</b>	0x12
<b>BusinessPhoneNumber</b>	0x13
<b>CarPhoneNumber</b>	0x14
<b>Categories</b>	0x15
<b>Category</b>	0x16
<b>Children</b>	0x17
<b>Child</b>	0x18
<b>CompanyName</b>	0x19
<b>Department</b>	0x1A
<b>Email1Address</b>	0x1B
<b>Email2Address</b>	0x1C
<b>Email3Address</b>	0x1D
<b>FileAs</b>	0x1E
<b>FirstName</b>	0x1F
<b>Home2PhoneNumber</b>	0x20
<b>HomeAddressCity</b>	0x21
<b>HomeAddressCountry</b>	0x22
<b>HomeAddressPostalCode</b>	0x23
<b>HomeAddressState</b>	0x24
<b>HomeAddressStreet</b>	0x25
<b>HomeFaxNumber</b>	0x26
<b>HomePhoneNumber</b>	0x27
<b>JobTitle</b>	0x28
<b>LastName</b>	0x29
<b>MiddleName</b>	0x2A
<b>MobilePhoneNumber</b>	0x2B
<b>OfficeLocation</b>	0x2C
<b>OtherAddressCity</b>	0x2D

Tag name	Token
<b>OtherAddressCountry</b>	0x2E
<b>OtherAddressPostalCode</b>	0x2F
<b>OtherAddressState</b>	0x30
<b>OtherAddressStreet</b>	0x31
<b>PagerNumber</b>	0x32
<b>RadioPhoneNumber</b>	0x33
<b>Spouse</b>	0x34
<b>Suffix</b>	0x35
<b>Title</b>	0x36
<b>WebPage</b>	0x37
<b>YomiCompanyName</b>	0x38
<b>YomiFirstName</b>	0x39
<b>YomiLastName</b>	0x3A
<b>Picture</b>	0x3C
<b>Alias</b> <4>	0x3D
<b>WeightedRank</b> <5>	0x3E

#### 2.1.2.1.3 Code Page 2: Email

The tags and tokens in WBXML code page 2 are listed in the following table.

Tag name	Token
<b>DateReceived</b>	0x0F
<b>DisplayTo</b>	0x11
<b>Importance</b>	0x12
<b>MessageClass</b>	0x13
<b>Subject</b>	0x14
<b>Read</b>	0x15
<b>To</b>	0x16
<b>Cc</b>	0x17
<b>From</b>	0x18
<b>ReplyTo</b>	0x19

Tag name	Token
<b>AllDayEvent</b>	0x1A
<b>Categories</b> <6>	0x1B
<b>Category</b> <7>	0x1C
<b>DtStamp</b>	0x1D
<b>EndTime</b>	0x1E
<b>InstanceType</b>	0x1F
<b>BusyStatus</b>	0x20
<b>Location</b>	0x21
<b>MeetingRequest</b>	0x22
<b>Organizer</b>	0x23
<b>RecurrenceId</b>	0x24
<b>Reminder</b>	0x25
<b>ResponseRequested</b>	0x26
<b>Recurrences</b>	0x27
<b>Recurrence</b>	0x28
<b>Type</b>	0x29
<b>Until</b>	0x2A
<b>Occurrences</b>	0x2B
<b>Interval</b>	0x2C
<b>DayOfWeek</b>	0x2D
<b>DayOfMonth</b>	0x2E
<b>WeekOfMonth</b>	0x2F
<b>MonthOfYear</b>	0x30
<b>StartTime</b>	0x31
<b>Sensitivity</b>	0x32
<b>TimeZone</b>	0x33
<b>GlobalObjId</b>	0x34
<b>ThreadTopic</b>	0x35
<b>InternetCPID</b>	0x39
<b>Flag</b>	0x3A

Tag name	Token
<b>Status</b>	0x3B
<b>ContentClass</b>	0x3C
<b>FlagType</b>	0x3D
<b>CompleteTime</b>	0x3E
<b>DisallowNewTimeProposal</b> <a href="#">&lt;8&gt;</a>	0x3F

#### 2.1.2.1.4 Code Page 3: AirNotify

WBXML code page 3 is no longer in use.

#### 2.1.2.1.5 Code Page 4: Calendar

The tags and tokens in WBXML code page 4 are listed in the following table.

Tag name	Token
<b>Timezone</b>	0x05
<b>AllDayEvent</b>	0x06
<b>Attendees</b>	0x07
<b>Attendee</b>	0x08
<b>Email</b>	0x09
<b>Name</b>	0x0A
<b>BusyStatus</b>	0x0D
<b>Categories</b>	0x0E
<b>Category</b>	0x0F
<b>DtStamp</b>	0x11
<b>EndTime</b>	0x12
<b>Exception</b>	0x13
<b>Exceptions</b>	0x14
<b>Deleted</b>	0x15
<b>ExceptionStartTime</b>	0x16
<b>Location</b>	0x17
<b>MeetingStatus</b>	0x18
<b>OrganizerEmail</b>	0x19
<b>OrganizerName</b>	0x1A

Tag name	Token
Recurrence	0x1B
Type	0x1C
Until	0x1D
Occurrences	0x1E
Interval	0x1F
DayOfWeek	0x20
DayOfMonth	0x21
WeekOfMonth	0x22
MonthOfYear	0x23
Reminder	0x24
Sensitivity	0x25
Subject	0x26
StartTime	0x27
UID	0x28
AttendeeStatus	0x29
AttendeeType	0x2A
DisallowNewTimeProposal<9>	0x33
ResponseRequested<10>	0x34
AppointmentReplyTime<11>	0x35
ResponseType<12>	0x36
CalendarType<13>	0x37
IsLeapMonth<14>	0x38
FirstDayOfWeek<15>	0x39
OnlineMeetingConfLink<16>	0x3A
OnlineMeetingExternalLink<17>	0x3B

#### 2.1.2.1.6 Code Page 5: Move

The tags and tokens in WBXML code page 5 are listed in the following table.

Tag name	Token
MoveItems	0x05



Tag name	Token
<b>Move</b>	0x06
<b>SrcMsgId</b>	0x07
<b>SrcFldId</b>	0x08
<b>DstFldId</b>	0x09
<b>Response</b>	0x0A
<b>Status</b>	0x0B
<b>DstMsgId</b>	0x0C

#### 2.1.2.1.7 Code Page 6: GetItemEstimate

The tags and tokens in WBXML code page 6 are listed in the following table.

Tag name	Token
<b>GetItemEstimate</b>	0x05
<b>Version</b> <a href="#">&lt;18&gt;</a>	0x06
<b>Collections</b>	0x07
<b>Collection</b>	0x08
<b>Class</b> <a href="#">&lt;19&gt;</a>	0x09
<b>CollectionId</b>	0x0A
<b>DateTime</b> <a href="#">&lt;20&gt;</a>	0x0B
<b>Estimate</b>	0x0C
<b>Response</b>	0x0D
<b>Status</b>	0x0E

#### 2.1.2.1.8 Code Page 7: FolderHierarchy

The tags and tokens in WBXML code page 7 are listed in the following table.

Tag name	Token
<b>DisplayName</b>	0x07
<b>ServerId</b>	0x08
<b>ParentId</b>	0x09
<b>Type</b>	0x0A
<b>Status</b>	0x0C

Tag name	Token
<b>Changes</b>	0x0E
<b>Add</b>	0x0F
<b>Delete</b>	0x10
<b>Update</b>	0x11
<b>SyncKey</b>	0x12
<b>FolderCreate</b>	0x13
<b>FolderDelete</b>	0x14
<b>FolderUpdate</b>	0x15
<b>FolderSync</b>	0x16
<b>Count</b>	0x17

#### 2.1.2.1.9 Code Page 8: MeetingResponse

The tags and tokens in WBXML code page 8 are listed in the following table.

Tag name	Token
<b>CalendarId</b>	0x05
<b>CollectionId</b>	0x06
<b>MeetingResponse</b>	0x07
<b>RequestId</b>	0x08
<b>Request</b>	0x09
<b>Result</b>	0x0A
<b>Status</b>	0x0B
<b>UserResponse</b>	0x0C
<b>InstanceId</b>	0x0E

#### 2.1.2.1.10 Code Page 9: Tasks

The tags and tokens in WBXML code page 9 are listed in the following table.

Tag name	Token
<b>Categories</b>	0x08
<b>Category</b>	0x09
<b>Complete</b>	0x0A

Tag name	Token
<b>DateCompleted</b>	0x0B
<b>DueDate</b>	0x0C
<b>UtcDueDate</b>	0x0D
<b>Importance</b>	0x0E
<b>Recurrence</b>	0x0F
<b>Type</b>	0x10
<b>Start</b>	0x11
<b>Until</b>	0x12
<b>Occurrences</b>	0x13
<b>Interval</b>	0x14
<b>DayOfMonth</b>	0x15
<b>DayOfWeek</b>	0x16
<b>WeekOfMonth</b>	0x17
<b>MonthOfYear</b>	0x18
<b>Regenerate</b>	0x19
<b>DeadOccur</b>	0x1A
<b>ReminderSet</b>	0x1B
<b>ReminderTime</b>	0x1C
<b>Sensitivity</b>	0x1D
<b>StartDate</b>	0x1E
<b>UtcStartDate</b>	0x1F
<b>Subject</b>	0x20
<b>OrdinalDate</b>	0x22
<b>SubOrdinalDate</b>	0x23
<b>CalendarType</b> <a href="#">&lt;21&gt;</a>	0x24
<b>IsLeapMonth</b> <a href="#">&lt;22&gt;</a>	0x25
<b>FirstDayOfWeek</b> <a href="#">&lt;23&gt;</a>	0x26

#### 2.1.2.1.11 Code Page 10: ResolveRecipients

The tags and tokens in WBXML code page 10 are listed in the following table.

Tag name	Token
<b>ResolveRecipients</b>	0x05
<b>Response</b>	0x06
<b>Status</b>	0x07
<b>Type</b>	0x08
<b>Recipient</b>	0x09
<b>DisplayName</b>	0x0A
<b>EmailAddress</b>	0x0B
<b>Certificates</b>	0x0C
<b>Certificate</b>	0x0D
<b>MiniCertificate</b>	0x0E
<b>Options</b>	0x0F
<b>To</b>	0x10
<b>CertificateRetrieval</b>	0x11
<b>RecipientCount</b>	0x12
<b>MaxCertificates</b>	0x13
<b>MaxAmbiguousRecipients</b>	0x14
<b>CertificateCount</b>	0x15
<b>Availability</b> <24>	0x16
<b>StartTime</b> <25>	0x17
<b>EndTime</b> <26>	0x18
<b>MergedFreeBusy</b> <27>	0x19
<b>Picture</b> <28>	0x1A
<b>MaxSize</b> <29>	0x1B
<b>Data</b> <30>	0x1C
<b>MaxPictures</b> <31>	0x1D

#### 2.1.2.1.12 Code Page 11: ValidateCert

The tags and tokens in WBXML code page 11 are listed in the following table.

Tag name	Token
<b>ValidateCert</b>	0x05

Tag name	Token
<b>Certificates</b>	0x06
<b>Certificate</b>	0x07
<b>CertificateChain</b>	0x08
<b>CheckCRL</b>	0x09
<b>Status</b>	0x0A

### 2.1.2.1.13 Code Page 12: Contacts2

The tags and tokens in WBXML code page 12 are listed in the following table.

Tag name	Token
<b>CustomerId</b>	0x05
<b>GovernmentId</b>	0x06
<b>IMAddress</b>	0x07
<b>IMAddress2</b>	0x08
<b>IMAddress3</b>	0x09
<b>ManagerName</b>	0x0A
<b>CompanyMainPhone</b>	0x0B
<b>AccountName</b>	0x0C
<b>NickName</b>	0x0D
<b>MMS</b>	0x0E

### 2.1.2.1.14 Code Page 13: Ping

The tags and tokens in WBXML code page 13 are listed in the following table.

Tag name	Token
<b>Ping</b>	0x05
<b>AutdState</b> (Not used)	0x06
<b>Status</b>	0x07
<b>HeartbeatInterval</b>	0x08
<b>Folders</b>	0x09
<b>Folder</b>	0x0A
<b>Id</b>	0x0B

Tag name	Token
<b>Class</b>	0x0C
<b>MaxFolders</b>	0x0D

#### 2.1.2.1.15 Code Page 14: Provision

The tags and tokens in WBXML code page 14 are listed in the following table.

Tag name	Token
<b>Provision</b>	0x05
<b>Policies</b>	0x06
<b>Policy</b>	0x07
<b>PolicyType</b>	0x08
<b>PolicyKey</b>	0x09
<b>Data</b>	0x0A
<b>Status</b>	0x0B
<b>RemoteWipe</b>	0x0C
<b>EASProvisionDoc</b>	0x0D
<b>DevicePasswordEnabled</b>	0x0E
<b>AlphanumericDevicePasswordRequired</b>	0x0F
<b>DeviceEncryptionEnabled</b>	0x10
<b>RequireStorageCardEncryption</b> (equivalent to <b>DeviceEncryptionEnabled</b> )	0x10
<b>PasswordRecoveryEnabled</b>	0x11
<b>AttachmentsEnabled</b>	0x13
<b>MinDevicePasswordLength</b>	0x14
<b>MaxInactivityTimeDeviceLock</b>	0x15
<b>MaxDevicePasswordFailedAttempts</b>	0x16
<b>MaxAttachmentSize</b>	0x17
<b>AllowSimpleDevicePassword</b>	0x18
<b>DevicePasswordExpiration</b>	0x19
<b>DevicePasswordHistory</b>	0x1A
<b>AllowStorageCard</b>	0x1B
<b>AllowCamera</b>	0x1C

Tag name	Token
<b>RequireDeviceEncryption</b>	0x1D
<b>AllowUnsignedApplications</b>	0x1E
<b>AllowUnsignedInstallationPackages</b>	0x1F
<b>MinDevicePasswordComplexCharacters</b>	0x20
<b>AllowWiFi</b>	0x21
<b>AllowTextMessaging</b>	0x22
<b>AllowPOPIMAPEmail</b>	0x23
<b>AllowBluetooth</b>	0x24
<b>AllowIrDA</b>	0x25
<b>RequireManualSyncWhenRoaming</b>	0x26
<b>AllowDesktopSync</b>	0x27
<b>MaxCalendarAgeFilter</b>	0x28
<b>AllowHTMLEmail</b>	0x29
<b>MaxEmailAgeFilter</b>	0x2A
<b>MaxEmailBodyTruncationSize</b>	0x2B
<b>MaxEmailHTMLBodyTruncationSize</b>	0x2C
<b>RequireSignedSMIMEMessages</b>	0x2D
<b>RequireEncryptedSMIMEMessages</b>	0x2E
<b>RequireSignedSMIMEAlgorithm</b>	0x2F
<b>RequireEncryptionSMIMEAlgorithm</b>	0x30
<b>AllowSMIMEEncryptionAlgorithmNegotiation</b>	0x31
<b>AllowSMIMESoftCerts</b>	0x32
<b>AllowBrowser</b>	0x33
<b>AllowConsumerEmail</b>	0x34
<b>AllowRemoteDesktop</b>	0x35
<b>AllowInternetSharing</b>	0x36
<b>UnapprovedInROMApplicationList</b>	0x37
<b>ApplicationName</b>	0x38
<b>ApprovedApplicationList</b>	0x39
<b>Hash</b>	0x3A

### 2.1.2.1.16 Code Page 15: Search

The tags and tokens in WBXML code page 15 are listed in the following table.

Tag name	Token
<b>Search</b>	0x05
<b>Store</b>	0x07
<b>Name</b>	0x08
<b>Query</b>	0x09
<b>Options</b>	0x0A
<b>Range</b>	0x0B
<b>Status</b>	0x0C
<b>Response</b>	0x0D
<b>Result</b>	0x0E
<b>Properties</b>	0x0F
<b>Total</b>	0x10
<b>EqualTo</b>	0x11
<b>Value</b>	0x12
<b>And</b>	0x13
<b>Or</b> <a href="#">&lt;32&gt;</a>	0x14
<b>FreeText</b>	0x15
<b>DeepTraversal</b>	0x17
<b>LongId</b>	0x18
<b>RebuildResults</b>	0x19
<b>LessThan</b>	0x1A
<b>GreaterThan</b>	0x1B
<b>UserName</b>	0x1E
<b>Password</b>	0x1F
<b>ConversationId</b>	0x20
<b>Picture</b> <a href="#">&lt;33&gt;</a>	0x21
<b>MaxSize</b> <a href="#">&lt;34&gt;</a>	0x22
<b>MaxPictures</b> <a href="#">&lt;35&gt;</a>	0x23

Note that WBXML tokens 0x06 and 0x16 are not used.



### 2.1.2.1.17 Code Page 16: GAL

The tags and tokens in WBXML code page 16 are listed in the following table.

Tag name	Token
<b>DisplayName</b>	0x05
<b>Phone</b>	0x06
<b>Office</b>	0x07
<b>Title</b>	0x08
<b>Company</b>	0x09
<b>Alias</b>	0x0A
<b>FirstName</b>	0x0B
<b>LastName</b>	0x0C
<b>HomePhone</b>	0x0D
<b>MobilePhone</b>	0x0E
<b>EmailAddress</b>	0x0F
<b>Picture</b> <a href="#">&lt;36&gt;</a>	0x10
<b>Status</b> <a href="#">&lt;37&gt;</a>	0x11
<b>Data</b> <a href="#">&lt;38&gt;</a>	0x12

### 2.1.2.1.18 Code Page 17: AirSyncBase

The tags and tokens in WBXML code page 17 are listed in the following table.

Tag name	Token
<b>BodyPreference</b>	0x05
<b>Type</b>	0x06
<b>TruncationSize</b>	0x07
<b>AllOrNone</b>	0x08
<b>Body</b>	0x0A
<b>Data</b>	0x0B
<b>EstimatedDataSize</b>	0x0C
<b>Truncated</b>	0x0D
<b>Attachments</b>	0x0E
<b>Attachment</b>	0x0F

Tag name	Token
<b>DisplayName</b>	0x10
<b>FileReference</b>	0x11
<b>Method</b>	0x12
<b>ContentId</b>	0x13
<b>ContentLocation</b>	0x14 (not used)
<b>IsInline</b>	0x15
<b>NativeBodyType</b>	0x16
<b>ContentType</b>	0x17
<b>Preview</b> <a href="#">&lt;39&gt;</a>	0x18
<b>BodyPartPreference</b> <a href="#">&lt;40&gt;</a>	0x19
<b>BodyPart</b> <a href="#">&lt;41&gt;</a>	0x1A
<b>Status</b> <a href="#">&lt;42&gt;</a>	0x1B

#### 2.1.2.1.19 Code Page 18: Settings

The tags and tokens in WBXML code page 18 are listed in the following table.

Tag name	Token
<b>Settings</b>	0x05
<b>Status</b>	0x06
<b>Get</b>	0x07
<b>Set</b>	0x08
<b>Oof</b>	0x09
<b>OofState</b>	0x0A
<b>StartTime</b>	0x0B
<b>EndTime</b>	0x0C
<b>OofMessage</b>	0x0D
<b>AppliesToInternal</b>	0x0E
<b>AppliesToExternalKnown</b>	0x0F
<b>AppliesToExternalUnknown</b>	0x10
<b>Enabled</b>	0x11
<b>ReplyMessage</b>	0x12

Tag name	Token
<b>BodyType</b>	0x13
<b>DevicePassword</b>	0x14
<b>Password</b>	0x15
<b>DeviceInformation</b>	0x16
<b>Model</b>	0x17
<b>IMEI</b>	0x18
<b>FriendlyName</b>	0x19
<b>OS</b>	0x1A
<b>OSLanguage</b>	0x1B
<b>PhoneNumber</b>	0x1C
<b>UserInformation</b>	0x1D
<b>EmailAddresses</b>	0x1E
<b>SMTPAddress</b>	0x1F
<b>UserAgent</b>	0x20
<b>EnableOutboundSMS</b> <a href="#">&lt;43&gt;</a>	0x21
<b>MobileOperator</b> <a href="#">&lt;44&gt;</a>	0x22
<b>PrimarySmtptAddress</b> <a href="#">&lt;45&gt;</a>	0x23
<b>Accounts</b> <a href="#">&lt;46&gt;</a>	0x24
<b>Account</b> <a href="#">&lt;47&gt;</a>	0x25
<b>AccountId</b> <a href="#">&lt;48&gt;</a>	0x26
<b>AccountName</b> <a href="#">&lt;49&gt;</a>	0x27
<b>UserDisplayName</b> <a href="#">&lt;50&gt;</a>	0x28
<b>SendDisabled</b> <a href="#">&lt;51&gt;</a>	0x29
<b>RightsManagementInformation</b> <a href="#">&lt;52&gt;</a>	0x2B

#### 2.1.2.1.20 Code Page 19: DocumentLibrary

The tags and tokens in WBXML code page 19 are listed in the following table.

Tag name	Token
<b>LinkId</b>	0x05
<b>DisplayName</b>	0x06

Tag name	Token
<b>IsFolder</b>	0x07
<b>CreationDate</b>	0x08
<b>LastModifiedDate</b>	0x09
<b>IsHidden</b>	0x0A
<b>ContentLength</b>	0x0B
<b>ContentType</b>	0x0C

#### 2.1.2.1.21 Code Page 20: ItemOperations

The tags and tokens in WBXML code page 20 are listed in the following table.

Tag name	Token
<b>ItemOperations</b>	0x05
<b>Fetch</b>	0x06
<b>Store</b>	0x07
<b>Options</b>	0x08
<b>Range</b>	0x09
<b>Total</b>	0x0A
<b>Properties</b>	0x0B
<b>Data</b>	0x0C
<b>Status</b>	0x0D
<b>Response</b>	0x0E
<b>Version</b>	0x0F
<b>Schema</b>	0x10
<b>Part</b>	0x11
<b>EmptyFolderContents</b>	0x12
<b>DeleteSubFolders</b>	0x13
<b>UserName</b>	0x14
<b>Password</b>	0x15
<b>Move</b> <a href="#">&lt;53&gt;</a>	0x16
<b>DstFldId</b> <a href="#">&lt;54&gt;</a>	0x17
<b>ConversationId</b> <a href="#">&lt;55&gt;</a>	0x18

Tag name	Token
<b>MoveAlways</b> <56>	0x19

#### 2.1.2.1.22 Code Page 21: ComposeMail

The tags and tokens in WBXML code page 21<57> are listed in the following table.

Tag name	Token
<b>SendMail</b>	0x05
<b>SmartForward</b>	0x06
<b>SmartReply</b>	0x07
<b>SaveInSentItems</b>	0x08
<b>ReplaceMime</b>	0x09
<b>Source</b>	0x0B
<b>FolderId</b>	0x0C
<b>ItemId</b>	0x0D
<b>LongId</b>	0x0E
<b>InstanceId</b>	0x0F
<b>Mime</b>	0x10
<b>ClientId</b>	0x11
<b>Status</b>	0x12
<b>AccountId</b> <58>	0x13

#### 2.1.2.1.23 Code Page 22: Email2

The tags and tokens in WBXML code page 22<59> are listed in the following table.

Tag name	Token
<b>UmCallerID</b>	0x05
<b>UmUserNotes</b>	0x06
<b>UmAttDuration</b>	0x07
<b>UmAttOrder</b>	0x08
<b>ConversationId</b>	0x09
<b>ConversationIndex</b>	0x0A
<b>LastVerbExecuted</b>	0x0B

Tag name	Token
<b>LastVerbExecutionTime</b>	0x0C
<b>ReceivedAsBcc</b>	0x0D
<b>Sender</b>	0x0E
<b>CalendarType</b>	0x0F
<b>IsLeapMonth</b>	0x10
<b>AccountId</b> <a href="#">&lt;60&gt;</a>	0x11
<b>FirstDayOfWeek</b> <a href="#">&lt;61&gt;</a>	0x12
<b>MeetingMessageType</b> <a href="#">&lt;62&gt;</a>	0x13

#### 2.1.2.1.24 Code Page 23: Notes

The tags and tokens in WBXML code page 23 [<63>](#) are listed in the following table.

Tag name	Token
<b>Subject</b>	0x05
<b>MessageClass</b>	0x06
<b>LastModifiedDate</b>	0x07
<b>Categories</b>	0x08
<b>Category</b>	0x09

#### 2.1.2.1.25 Code Page 24: RightsManagement

The tags and tokens in WBXML code page 24 [<64>](#) are listed in the following table.

Tag name	Token
<b>RightsManagementSupport</b>	0x05
<b>RightsManagementTemplates</b>	0x06
<b>RightsManagementTemplate</b>	0x07
<b>RightsManagementLicense</b>	0x08
<b>EditAllowed</b>	0x09
<b>ReplyAllowed</b>	0x0A
<b>ReplyAllAllowed</b>	0x0B
<b>ForwardAllowed</b>	0x0C
<b>ModifyRecipientsAllowed</b>	0x0D

Tag name	Token
<b>ExtractAllowed</b>	0x0E
<b>PrintAllowed</b>	0x0F
<b>ExportAllowed</b>	0x10
<b>ProgrammaticAccessAllowed</b>	0x11
<b>Owner</b>	0x12
<b>ContentExpiryDate</b>	0x13
<b>TemplateID</b>	0x14
<b>TemplateName</b>	0x15
<b>TemplateDescription</b>	0x16
<b>ContentOwner</b>	0x17
<b>RemoveRightsManagementDistribution</b>	0x18

### 2.1.3 Processing Rules

The processing rules for this algorithm are specified in [\[WBXML1.2\]](#).

This algorithm uses the following features that are specified in [\[WBXML1.2\]](#):

- WBXML tokens to encode XML tags
- WBXML code pages to support multiple XML namespaces
- Inline strings
- Opaque data

This algorithm does not use the following features that are specified in [\[WBXML1.2\]](#):

- String tables
- Entities
- Processing instructions
- Attribute encoding

### 3 Algorithm Examples

The following example shows the WBXML encoding of a server response that contains a new **contact (3)** and provides a byte-by-byte description of the encoding.

The following XML represents a server response to a request to create a new contact.

```
<?xml version="1.0" encoding="utf-8"?>
<Sync xmlns="AirSync" xmlns:airsyncbase="AirSyncBase" xmlns:contacts="Contacts">
  <Collections>
    <Collection>
      <Class>Contacts</Class>
      <SyncKey>2</SyncKey>
      <CollectionId>2</CollectionId>
      <Status>1</Status>
      <Commands>
        <Add>
          <ServerId>2:1</ServerId>
          <ApplicationData>
            <airsyncbase:Body>
              <airsyncbase:Type>1</airsyncbase:Type>
              <airsyncbase:EstimatedDataSize>0</airsyncbase:EstimatedDataSize>
              <airsyncbase:Truncated>1</airsyncbase:Truncated>
            </airsyncbase:Body>
            <contacts:FileAs>Funk, Don</contacts:FileAs>
            <contacts:FirstName>Don</contacts:FirstName>
            <contacts:LastName>Funk</contacts:LastName>
            <airsyncbase:NativeBodyType>1</airsyncbase:NativeBodyType>
          </ApplicationData>
        </Add>
      </Commands>
    </Collection>
  </Collections>
</Sync>
```

The Exchange ActiveSync: WAP Binary XML (WBXML) Algorithm encodes this XML as the following WBXML encoding.

```
03 01 6A 00 45 5C 4F 50 03 43 6F 6E 74 61 63 74 73 00 01 4B 03 32 00 01 52 03 32 00 01 4E 03
31 00 01 56 47 4D 03 32 3A 31 00 01 5D 00 11 4A 46 03 31 00 01 4C 03 30 00 01 4D 03 31 00 01
01 00 01 5E 03 46 75 6E 6B 2C 20 44 6F 6E 00 01 5F 03 44 6F 6E 00 01 69 03 46 75 6E 6B 00 01
00 11 56 03 31 00 01 01 01 01 01 01 01
```

The following table explains each byte in the WBXML encoding.

Bytes	Description
03	Version number – WBXML version 1.3
01	Unknown public identifier
6A	Charset = UTF-8
00	String table length
45	<airsync:Sync>, with content (0x05 + 0x40)



Bytes	Description
5C	<airsync:Collections>, with content
4F	<airsync:Collection>, with content
50	<airsync:Class>, with content
03	Inline string follows
43 6F 6E 74 61 63 74 73 00	"contacts" (the 00 is the end of the string)
01	</airsync:Class>
4B	<airsync:SyncKey>, with content
03	Inline string follows
32 00	"2"
01	</airsync:SyncKey>
52	<airsync:CollectionID>, with content
03	Inline string follows
32 00	"2"
01	</airsync:CollectionID>
4E	<airsync:Status>, with content
03	Inline string follows
31 00	"1"
01	</airsync:Status>
56	<airsync:Commands>, with content
47	<airsync:Add>, with content
4D	<airsync:ServerId>, with content
03	Inline string follows
32 3A 31 00	"2:1"
01	</airsync:ServerId>
5D	<airsync:ApplicationData>, with content
00 11	Select WBXML code page 17 (AirSyncBase)
4A	<airsyncbase:Body>, with content
46	<airsyncbase:Type>, with content
03	Inline string follows
31 00	"1"

Bytes	Description
01	</airsynibase:Type>
4C	<airsynibase:EstimatedDataSize>, with content
03	Inline string follows
30 00	"0"
01	</airsynibase:EstimatedDataSize>
4D	<airsynibase:Truncated>, with content
03	Inline string follows
31 00	"1"
01	</airsynibase:Truncated>
01	</airsynibase:Body>
00 01	Select WBXML code page 1 (Contacts)
5E	<contacts:FileAs>, with content
03	Inline string follows
46 75 6E 6B 2C 20 44 6F 6E 00	"Funk, Don"
01	</contacts:FileAs>
5F	<contacts:FirstName>, with content
03	Inline string follows
44 6F 6E 00	"Don"
01	</contacts:FirstName>
69	<contacts:LastName>, with content
03	Inline string follows
46 75 6E 6B 00	"Funk"
01	</contacts:LastName>
00 11	Select WBXML code page 17 (AirSyncBase)
56	<airsynibase:NativeBodyType>, with content
03	Inline string follows
31 00	"1"
01	</airsynibase:NativeBodyType>
01	</airsync:ApplicationData>
01	</airsync:Add>

Bytes	Description
01	</airsync:Commands>
01	</airsync:Collection>
01	</airsync:Collections>
01	</airsync:Sync>

## 4 Security

### 4.1 Security Considerations for Implementers

In most cases, all communication between the client and server happens across an **HTTP** connection secured by the **Secure Sockets Layer (SSL)** protocol. The SSL connection is assumed to be secure enough to transmit confidential data, such as user credentials and sensitive e-mail. The SSL certificate on the server is assumed to be trusted by the client application.

### 4.2 Index of Security Parameters

None.

## 5 Appendix A: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

- Microsoft Exchange Server 2007 Service Pack 1 (SP1)
- Microsoft Exchange Server 2010
- Microsoft Exchange Server 2013
- Windows 8.1
- Windows Communication Apps

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms SHOULD or SHOULD NOT implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that the product does not follow the prescription.

[<1> Section 2.1.2.1.1:](#) The **ConversationMode** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<2> Section 2.1.2.1.1:](#) The **MaxItems** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<3> Section 2.1.2.1.1:](#) The **HeartbeatInterval** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<4> Section 2.1.2.1.2:](#) The **Alias** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<5> Section 2.1.2.1.2:](#) The **WeightedRank** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<6> Section 2.1.2.1.3:](#) The **Categories** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<7> Section 2.1.2.1.3:](#) The **Category** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<8> Section 2.1.2.1.3:](#) The **DisallowNewTimeProposal** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<9> Section 2.1.2.1.5:](#) The **DisallowNewTimeProposal** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<10> Section 2.1.2.1.5:](#) The **ResponseRequested** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<11> Section 2.1.2.1.5:](#) The **AppointmentReplyTime** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<12> Section 2.1.2.1.5:](#) The **ResponseType** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<13> Section 2.1.2.1.5:](#) The **CalendarType** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<14> Section 2.1.2.1.5:](#) The **IsLeapMonth** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<15> Section 2.1.2.1.5:](#) The **FirstDayOfWeek** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<16> Section 2.1.2.1.5:](#) The **OnlineMeetingConfLink** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<17> Section 2.1.2.1.5:](#) The **OnlineMeetingExternalLink** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<18> Section 2.1.2.1.7:](#) The **Version** tag is supported only when the MS-ASProtocolVersion header is set to 12.1.

[<19> Section 2.1.2.1.7:](#) The **Class** tag is supported only when the MS-ASProtocolVersion header is set to 12.1. When the MS-ASProtocolVersion header is set to 14.0 or 14.1, the **Class** tag defined in WBXML code page 0 is used.

[<20> Section 2.1.2.1.7:](#) The **DateTime** tag is supported only when the MS-ASProtocolVersion header is set to 12.1.

[<21> Section 2.1.2.1.10:](#) The **CalendarType** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<22> Section 2.1.2.1.10:](#) The **IsLeapMonth** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<23> Section 2.1.2.1.10:](#) The **FirstDayOfWeek** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<24> Section 2.1.2.1.11:](#) The **Availability** tag is not supported if the MS-ASProtocolVersion header is set to 12.1.

[<25> Section 2.1.2.1.11:](#) The **StartTime** tag is not supported if the MS-ASProtocolVersion header is set to 12.1.

[<26> Section 2.1.2.1.11:](#) The **EndTime** tag is not supported if the MS-ASProtocolVersion header is set to 12.1.

[<27> Section 2.1.2.1.11:](#) The **MergedFreeBusy** tag is not supported if the MS-ASProtocolVersion header is set to 12.1.

[<28> Section 2.1.2.1.11:](#) The **Picture** tag is not supported if the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<29> Section 2.1.2.1.11:](#) The **MaxSize** tag is not supported if the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<30> Section 2.1.2.1.11:](#) The **Data** tag is not supported if the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<31> Section 2.1.2.1.11:](#) The **MaxPictures** tag is not supported if the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<32> Section 2.1.2.1.16:](#) The **Or** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<33> Section 2.1.2.1.16:](#) The **Picture** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<34> Section 2.1.2.1.16:](#) The **MaxSize** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<35> Section 2.1.2.1.16:](#) The **MaxPictures** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<36> Section 2.1.2.1.17:](#) The **Picture** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<37> Section 2.1.2.1.17:](#) The **Status** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<38> Section 2.1.2.1.17:](#) The **Data** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<39> Section 2.1.2.1.18:](#) The **Preview** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<40> Section 2.1.2.1.18:](#) The **BodyPartPreference** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<41> Section 2.1.2.1.18:](#) The **BodyPart** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<42> Section 2.1.2.1.18:](#) The **Status** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<43> Section 2.1.2.1.19:](#) The **EnableOutboundSMS** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<44> Section 2.1.2.1.19:](#) The **MobileOperator** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<45> Section 2.1.2.1.19:](#) The **PrimarySmtpAddress** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<46> Section 2.1.2.1.19:](#) The **Accounts** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<47> Section 2.1.2.1.19:](#) The **Account** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<48> Section 2.1.2.1.19:](#) The **AccountId** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<49> Section 2.1.2.1.19:](#) The **AccountName** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<50> Section 2.1.2.1.19:](#) The **UserDisplayName** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<51> Section 2.1.2.1.19:](#) The **SendDisabled** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<52> Section 2.1.2.1.19:](#) The **RightsManagementInformation** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<53> Section 2.1.2.1.21:](#) The **Move** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<54> Section 2.1.2.1.21:](#) The **DstFldId** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<55> Section 2.1.2.1.21:](#) The **ConversationId** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<56> Section 2.1.2.1.21:](#) The **MoveAlways** tag is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<57> Section 2.1.2.1.22:](#) WBXML code page 21 is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<58> Section 2.1.2.1.22:](#) The **AccountId** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<59> Section 2.1.2.1.23:](#) WBXML code page 22 is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<60> Section 2.1.2.1.23:](#) The **AccountId** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<61> Section 2.1.2.1.23:](#) The **FirstDayOfWeek** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<62> Section 2.1.2.1.23:](#) The **MeetingMessageType** tag is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.

[<63> Section 2.1.2.1.24:](#) WBXML code page 23 is not supported when the MS-ASProtocolVersion header is set to 12.1.

[<64> Section 2.1.2.1.25:](#) WBXML code page 24 is not supported when the MS-ASProtocolVersion header is set to 12.1 or 14.0.



## 6 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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