[MS-OXWMT]:

Mail Tips Web Service Extensions

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Revision Summary

Date	Revision History	Revision Class	Comments
4/10/2009	.1	Major	Initial Availability.
7/15/2009	1.0	Major	Revised and edited for technical content.
11/4/2009	1.1.0	Minor	Updated the technical content.
2/10/2010	2.0.0	Major	Updated and revised the technical content.
5/5/2010	2.0.1	Editorial	Revised and edited the technical content.
8/4/2010	2.1	Minor	Clarified the meaning of the technical content.
11/3/2010	2.1	No change	No changes to the meaning, language, or formatting of the technical content.
3/18/2011	3.0	Major	Significantly changed the technical content.
8/5/2011	3.1	Minor	Clarified the meaning of the technical content.
10/7/2011	3.1	No Change	No changes to the meaning, language, or formatting of the technical content.
1/20/2012	4.0	Major	Significantly changed the technical content.
4/27/2012	4.0	No Change	No changes to the meaning, language, or formatting of the technical content.
7/16/2012	4.1	Minor	Clarified the meaning of the technical content.
10/8/2012	4.2	Minor	Clarified the meaning of the technical content.
2/11/2013	5.0	Major	Significantly changed the technical content.
7/26/2013	5.0	No Change	No changes to the meaning, language, or formatting of the technical content.
11/18/2013	5.0	No Change	No changes to the meaning, language, or formatting of the technical content.
2/10/2014	5.0	No Change	No changes to the meaning, language, or formatting of the technical content.
4/30/2014	5.1	Minor	Clarified the meaning of the technical content.
7/31/2014	5.1	No Change	No changes to the meaning, language, or formatting of the technical content.
10/30/2014	5.2	Minor	Clarified the meaning of the technical content.
3/16/2015	6.0	Major	Significantly changed the technical content.

Table of Contents

1 Introduction

The Mail Tips Web Service Extensions are used to retrieve custom information and status updates for a **mailbox** and the **recipients** of an email message.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in [RFC2119]. Sections 1.5 and 1.9 are also normative but do not contain those terms. All other sections and examples in this specification are informative.

1.1 Glossary

The following terms are specific to this document:

Active Directory: A general-purpose network directory service. **Active Directory** also refers to the Windows implementation of a directory service. **Active Directory** stores information about a variety of objects in the network. Importantly, user accounts, computer accounts, groups, and all related credential information used by the Windows implementation of Kerberos are stored in **Active Directory**. **Active Directory** is either deployed as Active Directory Domain Services (AD DS) or Active Directory Lightweight Directory Services (AD LDS). [MS-ADTS] describes both forms. For more information, see [MS-AUTHSOD] section 1.1.1.5.2, Lightweight Directory Access Protocol (LDAP) versions 2 and 3, Kerberos, and DNS.

domain: A set of users and computers sharing a common namespace and management infrastructure. At least one computer member of the set must act as a domain controller (DC) and host a member list that identifies all members of the domain, as well as optionally hosting the **Active Directory** service. The domain controller provides authentication (2) of members, creating a unit of trust for its members. Each domain has an identifier that is shared among its members. For more information, see [MS-AUTHSOD] section 1.1.1.5 and [MS-ADTS].

email address: A string that identifies a user and enables the user to receive Internet messages.

endpoint: A communication port that is exposed by an application server for a specific shared service and to which messages can be addressed.

Hypertext Transfer Protocol (HTTP): An application-level protocol for distributed, collaborative, hypermedia information systems (text, graphic images, sound, video, and other multimedia files) on the World Wide Web.

Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS): An extension of **HTTP** that securely encrypts and decrypts webpage requests.

mail tip: A note that is presented to the author of a message when the author is composing the message. A mail tip provides information about the recipients of a message and issues that might impact delivery of the message, such as moderation or delivery restrictions.

mailbox: A message store that contains email, calendar items, and other Message objects for a single recipient.

Out of Office (OOF): One of the possible values for the free/busy status on an appointment. It indicates that the user will not be in the office during the appointment.

recipient: An entity that can receive email messages.

response message: A Traversal Using Relay NAT (TURN) message that is sent from a protocol server to a protocol client in response to a request message. It is sent when the request message is handled successfully by the protocol server.

Simple Mail Transfer Protocol (SMTP): A member of the TCP/IP suite of protocols that is used to transport Internet messages, as described in [RFC5321].

SOAP: A lightweight protocol for exchanging structured information in a decentralized, distributed environment. **SOAP** uses **XML** technologies to define an extensible messaging framework, which provides a message construct that can be exchanged over a variety of underlying protocols. The framework has been designed to be independent of any particular programming model and other implementation-specific semantics. SOAP 1.2 supersedes SOAP 1.1. See [SOAP1.2-1/2003].

SOAP action: The HTTP request header field used to indicate the intent of the **SOAP** request, using a URI value. See [SOAP1.1] section 6.1.1 for more information.

SOAP body: A container for the payload data being delivered by a **SOAP message** to its recipient. See [SOAP1.2-1/2007] section 5.3 for more information.

SOAP header: A mechanism for implementing extensions to a **SOAP message** in a decentralized manner without prior agreement between the communicating parties. See [SOAP1.2-1/2007] section 5.2 for more information.

SOAP message: An **XML** document consisting of a mandatory SOAP envelope, an optional **SOAP header**, and a mandatory **SOAP body**. See [SOAP1.2-1/2007] section 5 for more information.

Uniform Resource Locator (URL): A string of characters in a standardized format that identifies a document or resource on the World Wide Web. The format is as specified in [RFC1738].

web server: A server computer that hosts websites and responds to requests from applications.

Web Services Description Language (WSDL): An XML format for describing network services as a set of endpoints that operate on messages that contain either document-oriented or procedure-oriented information. The operations and messages are described abstractly and are bound to a concrete network protocol and message format in order to define an endpoint. Related concrete endpoints are combined into abstract endpoints, which describe a network service. WSDL is extensible, which allows the description of endpoints and their messages regardless of the message formats or network protocols that are used.

WSDL message: An abstract, typed definition of the data that is communicated during a WSDL operation, as described in [WSDL].

WSDL port type: A named set of logically-related, abstract **Web Services Description Language (WSDL)** operations and messages.

XML: The Extensible Markup Language, as described in [XML1.0].

XML namespace: A collection of names that is used to identify elements, types, and attributes in XML documents identified in a URI reference [RFC3986]. A combination of XML namespace and local name allows XML documents to use elements, types, and attributes that have the same names but come from different sources. For more information, see [XMLNS-2ED].

XML namespace prefix: An abbreviated form of an **XML namespace**, as described in [XML].

XML schema: A description of a type of XML document that is typically expressed in terms of constraints on the structure and content of documents of that type, in addition to the basic syntax constraints that are imposed by **XML** itself. An XML schema provides a view of a document type at a relatively high level of abstraction.

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

1.2 References

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. We will assist you in finding the relevant information.

[MS-OXWSCDATA] Microsoft Corporation, "Common Web Service Data Types".

[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

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, http://www.rfc-editor.org/rfc/rfc2616.txt

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.rfc-editor.org/rfc/rfc2818.txt

[RFC3066] Alvestrand, H., "Tags for the Identification of Languages", BCP 47, RFC 3066, January 2001, http://www.ietf.org/rfc/rfc3066.txt

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", May 2000, http://www.w3.org/TR/2000/NOTE-SOAP-20000508/

[WSDL] Christensen, E., Curbera, F., Meredith, G., and Weerawarana, S., "Web Services Description Language (WSDL) 1.1", W3C Note, March 2001, http://www.w3.org/TR/2001/NOTE-wsdl-20010315

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, http://www.w3.org/TR/2009/REC-xml-names-20091208/

[XMLSCHEMA1] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/

1.2.2 Informative References

[MS-ADTS] Microsoft Corporation, "Active Directory Technical Specification".

[MS-AUTHSOD] Microsoft Corporation, "Authentication Services Protocols Overview".

[MS-OXDSCLI] Microsoft Corporation, "Autodiscover Publishing and Lookup Protocol".

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

[MS-OXWSADISC] Microsoft Corporation, "Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol".

[RFC1738] Berners-Lee, T., Masinter, L., and McCahill, M., Eds., "Uniform Resource Locators (URL)", RFC 1738, December 1994, http://www.ietf.org/rfc/rfc1738.txt

[RFC3986] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, January 2005, http://www.ietf.org/rfc/rfc3986.txt

[RFC5321] Klensin, J., "Simple Mail Transfer Protocol", RFC 5321, October 2008, http://rfc-editor.org/rfc/rfc5321.txt

[SOAP1.2-1/2003] Gudgin, M., Hadley, M., Mendelsohn, N., et al., "SOAP Version 1.2 Part 1: Messaging Framework", W3C Recommendation, June 2003, http://www.w3.org/TR/2003/REC-soap12-part1-20030624

[SOAP1.2-1/2007] Gudgin, M., Hadley, M., Mendelsohn, N., et al., "SOAP Version 1.2 Part 1: Messaging Framework (Second Edition)", W3C Recommendation 27, April 2007, http://www.w3.org/TR/2007/REC-soap12-part1-20070427/

[XML1.0] Bray, T., Paoli, J., Sperberg-McQueen, C.M., and Maler, E., "Extensible Markup Language (XML) 1.0 (Second Edition)", W3C Recommendation, October 2000, http://www.w3.org/TR/2000/REC-xml-20001006

[XMLNS-2ED] World Wide Web Consortium, "Namespaces in XML 1.0 (Second Edition)", August 2006, http://www.w3.org/TR/2006/REC-xml-names-20060816/

[XML] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Fourth Edition)", W3C Recommendation 16 August 2006, edited in place 29 September 2006, http://www.w3.org/TR/2006/REC-xml-20060816/

1.3 Overview

Mail tips are bits of information that are presented to the author of a message when the author is composing the message. A mail tip provides information about the **recipients** of a message and issues that might impact delivery of the message, such as moderation or delivery constraints. The Mail Tips Web Service Extensions enable email clients to request information about recipient **mailboxes** from the server by using SOAP,, as described in [SOAP1.1]. The **XML** that is returned in the response allows the client to present this information to the author.

1.4 Relationship to Other Protocols

A client that implements this protocol can use the Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol, as described in [MS-OXWSADISC], or the Autodiscover Publishing and Lookup Protocol, as described in [MS-OXDSCLI], to identify the target **endpoint** to use for each operation.

This protocol uses the SOAP Protocol, as described in [SOAP1.1], to specify the structure information that is exchanged between the client and server. This protocol uses the XML Protocol, as described in [XMLSCHEMA1] and [XMLSCHEMA2], to describe the message content sent to and from the server.

This protocol uses SOAP over **HTTP**, as described in [RFC2616], and SOAP over **HTTPS**, as described in [RFC2818], as shown in the following layering diagram.

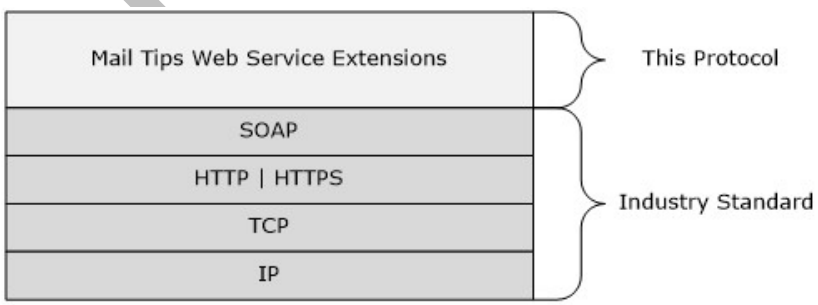

Figure 1: This protocol in relation to other protocols

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

1.5 Prerequisites/Preconditions

The endpoint **URL** that is returned by either the Autodiscover Publishing Lookup SOAP-Based Web Service Protocol, as described in [MS-OXWSADISC], or the Autodiscover Publishing and Lookup Protocol, as described in [MS-OXDSCLI], is required to form the HTTP request to the **web server** that hosts this protocol. The operations that this protocol defines cannot be accessed unless the correct endpoint is identified in the HTTP web requests that target this protocol.

1.6 Applicability Statement

The Mail Tips Web Service Extensions can be used when access to helpful mailbox information is available and when communication with the server is enabled for **SOAP** over HTTP or SOAP over HTTPS.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses SOAP 1.1, as specified in section 2.1.
- **Protocol Versions:** This protocol has only one **WSDL port type** version. The **WSDL** version of the request is identified by using the **RequestServerVersion** element, as described in [MS-OXWSCDATA] section 2.2.4.7, and the version of the server responding to the request is identified by using the **ServerVersionInfo** element, as described in [MS-OXWSCDATA] section 2.2.4.8.
- **Security and Authentication Methods:** This protocol relies on the web server that is hosting it to perform authentication.
- **Localization:** This protocol includes text strings in various messages. Localization considerations for such strings are specified in sections 2.2 and 3.1.4.
- **Capability Negotiation:** This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The WSDL in this specification provides a base description of the protocol. The schema in this specification provides a base description of the message syntax. The text that specifies the WSDL and schema might specify restrictions that reflect actual protocol behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present** but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **not null**, or **present**.

2.1 Transport

This protocol uses the Simple Object Access Protocol (SOAP) 1.1, as specified in [SOAP1.1].

This protocol relies on the web server that hosts the application to perform authentication. The protocol MUST support SOAP over HTTP, as specified in [RFC2616]. The protocol SHOULD use secure communications via HTTPS, as defined in [RFC2818].

2.2 Common Message Syntax

This section specifies common definitions that are used by this protocol. The syntax of the definitions uses XML schema, as defined in [XMLSCHEMA1] and [XMLSCHEMA2], and Web Services Description Language (WSDL), as defined in [WSDL].

2.2.1 Namespaces

This specification defines and references various **XML namespaces** by using the mechanisms specified in [XMLNS]. Although this specification associates a specific **XML namespace prefix** for each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and not significant for interoperability.

Prefix	Namespace URI	Reference
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tns	http://schemas.microsoft.com/exchange/services/2006/messages	
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1], [XMLSCHEMA2]
targetNamespace	http://schemas.microsoft.com/exchange/services/2006/messages	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
t	http://schemas.microsoft.com/exchange/services/2006/types	
m	http://schemas.microsoft.com/exchange/services/2006/messages	

2.2.2 Messages

This specification does not define any common **WSDL message** definitions.

2.2.3 Elements

This specification does not define any common **XML schema** element definitions.

2.2.4 Complex Types

This specification does not define any common XML schema complex type definitions.

2.2.5 Simple Types

This specification does not define any common XML schema simple type definitions.

2.2.6 Attributes

This specification does not define any common XML schema attribute definitions.

2.2.7 Groups

This specification does not define any common XML schema group definitions.

2.2.8 Attribute Groups

This specification does not define any common XML schema attribute group definitions.

3 Protocol Details

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls made by the higher-layer protocol or application are passed directly to the transport, and the results returned by the transport are passed directly back to the higher-layer protocol or application.

3.1 ExchangeServicePortType Server Details

The Mail Tips Web Service Extensions define a single port type with one operation. The operation enables client implementations to retrieve mail tips for an email recipient.

3.1.1 Abstract Data Model

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that specified in this document.

The Mail Tips Web Service Extensions are used to retrieve mail tips for a specified mailbox on the server. The server maintains the mail tips.

The client is not required to maintain the state of mail tips on the server and can retrieve the current set of mail tips at any time.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

This protocol includes the operation listed in the following table.

Operation name	Description
GetMailTips	Provides mail tips information for a mailbox.

3.1.4.1 GetMailTips

The **GetMailTips** operation gets the mail tips information for a mailbox.

The following is the WSDL port type specification of the operation.

```
<wsdl:operation name="GetMailTips">
    <wsdl:input message="tns:GetMailTipsSoapIn"/>
    <wsdl:output message="tns:GetMailTipsSoapOut"/>
```

```
</wsdl:operation>
```

The following is the WSDL binding specification of the operation.

```
<wsdl:operation name="GetMailTips">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetMailTips"/>
    <wsdl:input>
        <soap:body parts="request" use="literal"/>
        <soap:header message="tns:GetMailTipsSoapIn" part="RequestVersion" use="literal"/>
        <soap:header message="tns:GetMailTipsSoapIn" part="MailboxCulture" use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body parts="GetMailTipsResult" use="literal"/>
        <soap:header message="tns:GetMailTipsSoapOut" part="ServerVersion" use="literal"/>
    </wsdl:output>
</wsdl:operation>
```

3.1.4.1.1 Messages

The following table lists the WSDL message definitions that are specific to this operation.

Message name	Description
GetMailTipsSoapIn	Specifies the **SOAP message** that gets the mail tips for the mailbox.
GetMailTipsSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.1.1.1 tns:GetMailTipsSoapIn Message

The **GetMailTipsSoapIn** WSDL message specifies the **GetMailTips** operation request to get the mail tips for a mailbox.

```
<wsdl:message name="GetMailTipsSoapIn">
    <wsdl:part name="request" element="tns:GetMailTips"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
</wsdl:message>
```

The **GetMailTipsSoapIn** WSDL message is the input message for the **SOAP action** http://schemas.microsoft.com/exchange/services/2006/messages/GetMailTips.

The parts of the **GetMailTipsSoapIn** WSDL message are described in the following table.

Part name	Element/type	Description
request	**tns:GetMailTips** (section 3.1.4.1.2.1)	Specifies the **SOAP body** of the request to get mail tips for a mailbox.
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a **SOAP header** that identifies the schema version for the **GetMailTips** operation request.
MailboxCulture	**t:MailboxCulture** ([MS-	Specifies a SOAP header that identifies the language to use for accessing the mailbox.

Part name	Element/type	Description
	OXWSCDATA] section 2.2.4.5)	The languages are defined by [RFC3066].

3.1.4.1.1.2 tns:GetMailTipsSoapOut Message

The **GetMailTipsSoapOut** WSDL message specifies the server response to the **GetMailTips** operation request to get mail tips for a mailbox.

```
<wsdl:message name="GetMailTipsSoapOut">
    <wsdl:part name="GetMailTipsResult" element="tns:GetMailTipsResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

The **GetMailTipsSoapOut** WSDL message is the output message for the SOAP action http://schemas.microsoft.com/exchange/services/2006/messages/GetMailTips.

The parts of the **GetMailTipsSoapOut** message are described in the following table.

Part name	Element/type	Description
GetMailTipsResult	**tns:GetMailTipsResponse** (section 3.1.4.1.2.2)	Specifies the SOAP body of the response to a **GetMailTips** operation request.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the server version of the response.

3.1.4.1.2 Elements

The following table lists the XML schema element definitions that are specific to this operation.

Element name	Description
GetMailTips	Specifies a request to get mail tips for a mailbox.
GetMailTipsResponse	Specifies the response body content from a request to get mail tips for a mailbox.

3.1.4.1.2.1 GetMailTips Element

The **GetMailTips** element specifies the request message for a **GetMailTips** operation.

```
<xs:element name="GetMailTips" type="m:GetMailTipsType"/>
```

3.1.4.1.2.2 GetMailTipsResponse Element

The **GetMailTipsResponse** element specifies the **response message** for a **GetMailTips** operation request.

```
<xs:element name="GetMailTipsResponse" type="m:GetMailTipsResponseMessageType"/>
```

3.1.4.1.3 Complex Types

The following table lists the XML schema complex type definitions that are specific to this operation.

Complex type name	Description
ArrayOfMailTipsResponseMessageType	1. Specifies a list of mail tips response messages.
GetMailTipsResponseMessageType	Specifies the response message for the **GetMailTips** operation.
GetMailTipsType	Specifies the requested mail tips and identifies the sender or recipient actor who is making the request.
MailTips	Contains the mail tips values that are returned for a mailbox.
MailTipsResponseMessageType	Specifies mail tips settings.
OutOfOfficeMailTip	Contains the response message and a duration time for sending the response message for an **Out of Office (OOF)** message.

3.1.4.1.3.1 m:ArrayOfMailTipsResponseMessageType Complex Type

The **ArrayOfMailTipsResponseMessageType** complex type specifies an array of mail tips response messages.

```
    <xs:complexType name="ArrayOfMailTipsResponseMessageType">
        <xs:sequence>
            <xs:element name="MailTipsResponseMessageType"
type="m:MailTipsResponseMessageType" maxOccurs="unbounded"/>
        </xs:sequence>
    </xs:complexType>
```

Element name	Type	Description
MailTipsResponseMessageType	**m:MailTipsResponseMessageType** (section 3.1.4.1.3.5)	Contains a mail tips response message. This element can occur one or more times.

3.1.4.1.3.2 m:GetMailTipsResponseMessageType Complex Type

The **GetMailTipsResponseMessageType** complex type contains the response message for a **GetMailTips** operation. The **GetMailTipsResponseMessageType** complex type extends the **ResponseMessageType** complex type, as specified in [MS-OXWSCDATA] section 2.2.3.52.

```
<xs:complexType name="GetMailTipsResponseMessageType">
    <xs:complexContent>
        <xs:extension base="m:ResponseMessageType">
            <xs:sequence>
                <xs:element name="ResponseMessages"
type="m:ArrayOfMailTipsResponseMessageType" minOccurs="0"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

Element name	Type	Description
ResponseMessages	**m:ArrayOfMailTipsResponseMessageType** (section 3.1.4.1.3.1)	Contains an array of mail tips response messages. This element MUST occur if there are mail tips.

3.1.4.1.3.3 m:GetMailTipsType Complex Type

The **GetMailTipsType** complex type specifies the requested mail tips and identifies the sender or recipient actor who is making the request. The recipient actor can be different from the user who authenticated with the server. The **GetMailTipsType** complex type extends the **BaseRequestType** complex type, as specified in [MS-OXWSCDATA] section 2.2.3.14.

```
<xs:complexType name="GetMailTipsType">
    <xs:complexContent>
        <xs:extension base="m:BaseRequestType">
            <xs:sequence>
                <xs:element name="SendingAs" type="t:EmailAddressType"/>
                <xs:element name="Recipients" type="t:ArrayOfRecipientsType"/>
                <xs:element name="MailTipsRequested" type="t:MailTipTypes"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

The following table lists the child elements of the **GetMailTipsType** complex type.

Element name	Type	Description
SendingAs	**t:EmailAddressType** ([MS-OXWSCDATA] section 2.2.3.25)	Specifies an **email address** that defines who the user is trying to send as.

Element name	Type	Description
Recipients	**t:ArrayOfRecipientsType** ([MS-OXWSCDATA] section 2.2.3.8)	Contains a list of recipients to check for mail tips.
MailTipsRequested	**t:MailTipTypes** (section 3.1.4.1.4.1)	Contains the types of mail tips requested from the service.

3.1.4.1.3.4 t:MailTips Complex Type

The **MailTips** complex type contains values for the Mail Tips Web service.

```
  <xs:complexType name="MailTips">
<xs:sequence>
  <xs:element name="RecipientAddress" type="t:EmailAddressType"
    minOccurs="1" maxOccurs="1"/>
  <xs:element name="PendingMailTips" type="t:MailTipTypes"
    minOccurs="1" maxOccurs="1"/>
  <xs:element name="OutOfOffice" type="t:OutOfOfficeMailTip"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="MailboxFull" type="xs:boolean"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="CustomMailTip" type="xs:string"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="TotalMemberCount" type="xs:int"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="ExternalMemberCount" type="xs:int"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="MaxMessageSize" type="xs:int"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="DeliveryRestricted" type="xs:boolean"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="IsModerated" type="xs:boolean"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="InvalidRecipient" type="xs:boolean"
    minOccurs="0" maxOccurs="1"/>
  <xs:element name="Scope" type="xs:int" minOccurs="0" maxOccurs="1"/>
</xs:sequence>
</xs:complexType>
```

The following table lists the child elements of the **MailTips** complex type.

Element name	Type	Description
RecipientAddress	**t:EmailAddressType** ([MS-OXWSCDATA] section 2.2.3.25)	Specifies the mailbox of the recipient.
PendingMailTips	**t:MailTipTypes** (section 3.1.4.1.4.1)	Indicates that the mail tips in this element could not be evaluated before the server's processing timeout expired.
OutOfOffice	**t:OutOfOfficeMailTip** (section 3.1.4.1.3.6)	Specifies the response message for OOF and the duration for sending this message.
MailboxFull	**xs:boolean** [XMLSCHEMA2]	Specifies whether the mailbox for the recipient is full. Returns "true" if the mailbox

Element name	Type	Description
		is full; otherwise, returns "false".
CustomMailTip	**xs:string** [XMLSCHEMA2]	Specifies a custom mail tip. For an example of a custom mail tip, see section 4.2.
TotalMemberCount	**xs:int** [XMLSCHEMA2]	Specifies the total number of members in a group. This value MUST be a non-negative integer.
ExternalMemberCount	**xs:int**	Specifies the number of external members in a group. This value MUST be a non-negative integer.
MaxMessageSize	**xs:int**	Specifies the maximum message size the recipient can accept. This value MUST be a non-negative integer.
DeliveryRestricted	**xs:boolean**	Indicates whether delivery constraints will prevent the sender's message from reaching the recipient. Returns "true" if the delivery is restricted; otherwise, returns "false".
IsModerated	**xs:boolean**	Specifies whether the recipient's mailbox is being moderated. Returns "true" if the mailbox is moderated; otherwise, returns "false".
InvalidRecipient	**xs:boolean**	Specifies whether the recipient is not valid. Returns "true" if the recipient is not valid; otherwise, returns "false".
Scope	**xs:int**	Specifies the relationship of the recipient to **Active Directory**.

When the **InvalidRecipient** element is sent by the server to the client, the server will indicate which of the given recipients are not valid. A recipient is considered "invalid" in the following cases:

- The recipient's address has a **RoutingType** ([MS-OXWSCDATA] section 2.2.4.27) of "EX"(Exchange Routing Type), an address internal to the server's organization, and the recipient does not exist in the directory.
- The recipient's address has a routing type of **SMTP**, and the **domain** part of the SMTP address is empty.
- The recipient's address has a routing type of SMTP, and the domain part of the SMTP address is a domain for which the organization is authoritative, and the recipient does not exist in the directory.

The allowable values of the **Scope** element are described in the following table.

Value	Meaning
0	None
2	Internal recipient
4	External recipient
8	External partner recipient
16	Non-external partner recipient

3.1.4.1.3.5 m:MailTipsResponseMessageType Complex Type

The **MailTipsResponseMessageType** complex type specifies mail tips settings. The **MailTipsResponseMessageType** complex type extends the **ResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.52).

```
<xs:complexType name="MailTipsResponseMessageType">
    <xs:complexContent>
        <xs:extension base="m:ResponseMessageType">
            <xs:sequence>
                <xs:element name="MailTips" type="t:MailTips" minOccurs="0"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

Element name	Type	Description
MailTips	**t:MailTips** (section 3.1.4.1.3.4)	Contains values for the mail tips service. This element is required. If no mail tips are enabled or defined, the **RecipientAddress** and **PendingMailTip**s elements, as specified in section 3.1.4.1.3.4, are returned.

3.1.4.1.3.6 t:OutOfOfficeMailTip Complex Type

The **OutOfOfficeMailTip** complex type contains the response message and a duration time for sending the response message.

```
<xs:complexType name="OutOfOfficeMailTip">
    <xs:sequence>
        <xs:element name="ReplyBody" type="t:ReplyBody"/>
        <xs:element name="Duration" type="t:Duration" minOccurs="0"/>
    </xs:sequence>
</xs:complexType>
```

Element name	Type	Description
ReplyBody	**t:ReplyBody** ([MS-OXWSCDATA] section 2.2.3.50)	Contains the OOF message response.
Duration	**t:Duration** ([MS-OXWSCDATA] section 2.2.3.22)	Contains the start and end time for sending OOF messages. This element is optional. It is not returned if the time interval is not specified in the OOF message.

3.1.4.1.4 Simple Types

The following table lists the XML schema simple definitions that are specific to this operation.

Simple type name	Description
MailTipTypes	Specifies the types of mail tips that are supported by this service.

3.1.4.1.4.1 t:MailTipTypes Simple Type

The **MailTipsTypes** simple type describes the types of mail tips that are supported by the service.

```
<xs:simpleType name="MailTipTypes">
    <xs:list>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:enumeration value="All"/>
                <xs:enumeration value="OutOfOfficeMessage"/>
                <xs:enumeration value="MailboxFullStatus"/>
                <xs:enumeration value="CustomMailTip"/>
                <xs:enumeration value="ExternalMemberCount"/>
                <xs:enumeration value="TotalMemberCount"/>
                <xs:enumeration value="MaxMessageSize"/>
                <xs:enumeration value="DeliveryRestriction"/>
                <xs:enumeration value="ModerationStatus"/>
                <xs:enumeration value="InvalidRecipient"/>
                <xs:enumeration value="Scope"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:list>
</xs:simpleType>
```

Value	Meaning
All	Represents all available mail tips.
OutOfOfficeMessage	Represents the Out of Office (OOF) message.
MailboxFullStatus	Represents the status for a mailbox being full.
CustomMailTip	Represents a custom mail tip.
ExternalMemberCount	Represents the count of external members.
TotalMemberCount	Represents the count of all members.
MaxMessageSize	Represents the maximum message size a recipient can accept.
DeliveryRestriction	Indicates whether delivery constraints will prevent the sender's message from reaching the recipient.
ModerationStatus	Indicates whether the sender's message will be reviewed by a moderator.
InvalidRecipient	Indicates whether the recipient is not valid.
Scope	Indicates the relationship of the recipient to Active Directory.

3.1.4.1.5 Attributes

This specification does not define any specific XML schema attribute definitions for this operation.

3.1.4.1.6 Groups

This specification does not define any specific XML schema group definitions for this operation.

3.1.4.1.7 Attribute Groups

This specification does not define any specific XML schema attribute group definitions for this operation.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 GetMailTips Request

The following example shows a **GetMailTips** operation request.

```
 <?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xmlns:xsd="http://www.w3.org/2001/XMLSchema"
               xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
               xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2010" />
  </soap:Header>

  <soap:Body>
    <GetMailTips xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <SendingAs>
        <t:EmailAddress>user1@contoso.com</t:EmailAddress>
        <t:RoutingType>SMTP</t:RoutingType>
      </SendingAs>
      <Recipients>
        <t:Mailbox>
          <t:EmailAddress>user2@contoso.com</t:EmailAddress>
          <t:RoutingType>SMTP</t:RoutingType>
        </t:Mailbox>
      </Recipients>
      <MailTipsRequested>All</MailTipsRequested>
    </GetMailTips>
  </soap:Body>

</soap:Envelope>
```

4.2 GetMailTips Response

The following is an example of a successful response to a **GetMailTips** operation request.

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <h:ServerVersionInfo MajorVersion="14" MinorVersion="0" MajorBuildNumber="536"
MinorBuildNumber="0" Version="Exchange2010"
                         xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
                         xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
                         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                         xmlns:xsd="http://www.w3.org/2001/XMLSchema"/>
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <GetMailTipsResponse ResponseClass="Success"
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseCode>NoError</ResponseCode>
      <ResponseMessages>
        <MailTipsResponseMessageType ResponseClass="Success">
          <ResponseCode>NoError</ResponseCode>
          <m:MailTips xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages">
            <t:RecipientAddress
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
              <t:Name/>
              <t:EmailAddress>user2@contoso.com</t:EmailAddress>
              <t:RoutingType>SMTP</t:RoutingType>
            </t:RecipientAddress>
```

```
            <t:PendingMailTips
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"/>
            <t:OutOfOffice
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
              <t:ReplyBody>
                <t:Message/>
              </t:ReplyBody>
            </t:OutOfOffice>
            <t:MailboxFull
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">false</t:MailboxFull>
            <t:CustomMailTip
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"><div>Hello World
Mailtips</div></t:CustomMailTip>
            <t:TotalMemberCount
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">1</t:TotalMemberCount>
            <t:ExternalMemberCount
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">0</t:ExternalMemberCount>
            <t:MaxMessageSize
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">10485760</t:MaxMessageSiz
e>
            <t:DeliveryRestricted
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">false</t:DeliveryRestrict
ed>
            <t:IsModerated
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">false</t:IsModerated>
            <t:InvalidRecipient
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">false</t:InvalidRecipient
>
          </m:MailTips>
        </MailTipsResponseMessageType>
      </ResponseMessages>
    </GetMailTipsResponse>
  </s:Body>
</s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

The Mail Tips Web Service Extensions do not use additional security mechanisms.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

The XML files that are listed in the following table are required in order to implement the functionality described in this document.

File name	Description	Section
MS-OXWMT.wsdl	Contains the WSDL for the implementation of this protocol.	6
MS-OXWMT-messages.xsd	Contains the XML schema message definitions that are used in this protocol.	7.1
MS-OXWMT-types.xsd	Contains the XML schema type definitions that are used in this protocol.	7.2

These files have to be placed in a common folder in order for the WSDL to validate and operate. Also, any schema files that are included in or imported into the MS-OXWMT-types.xsd or MS-OXWMT-messages.xsd schemas have to be placed in the common folder along with the files listed in the table.

This section contains the contents of the MS-OXWMT.wsdl file.

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
  <wsdl:types>
    <xs:schema id="messages" elementFormDefault="qualified" version="Exchange2013"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages">
      <xs:include schemaLocation="MS-OXWMT-messages.xsd"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:message name="GetMailTipsSoapIn">
    <wsdl:part name="request" element="tns:GetMailTips"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
  </wsdl:message>
  <wsdl:message name="GetMailTipsSoapOut">
    <wsdl:part name="GetMailTipsResult" element="tns:GetMailTipsResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
  </wsdl:message>
  <wsdl:portType name="ExchangeServicePortType">
    <wsdl:operation name="GetMailTips">
      <wsdl:input message="tns:GetMailTipsSoapIn"/>
      <wsdl:output message="tns:GetMailTipsSoapOut"/>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="ExchangeServiceBinding" type="tns:ExchangeServicePortType">
    <wsdl:documentation>
      <wsi:Claim conformsTo="http://ws-i.org/profiles/basic/1.0" xmlns:wsi="http://ws-
i.org/schemas/conformanceClaim/"/>
    </wsdl:documentation>
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
    <wsdl:operation name="GetMailTips">
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetMailTips"/>
      <wsdl:input>
        <soap:body parts="request" use="literal"/>
        <soap:header message="tns:GetMailTipsSoapIn" part="RequestVersion" use="literal"/>
        <soap:header message="tns:GetMailTipsSoapIn" part="MailboxCulture" use="literal"/>
      </wsdl:input>
        <wsdl:output>
```

```
        <soap:body parts="GetMailTipsResult" use="literal"/>
        <soap:header message="tns:GetMailTipsSoapOut" part="ServerVersion" use="literal"/>
      </wsdl:output>
    </wsdl:operation>
  </wsdl:binding>
</wsdl:definitions>
```

7 Appendix B: Full XML Schema

For ease of implementation, the following sections provide the full XML schema for this protocol.

Schema name	Prefix	Section
Messages schema	m:	7.1
Types schema	t:	7.2

These files have to be placed in a common folder in order for the WSDL to validate and operate. Also, any schema files that are included in or imported into the MS-OXWMT-types.xsd or MS-OXWMT-messages.xsd schemas have to be placed in the common folder along with the files listed in the table.

7.1 Messages Schema

This section contains the contents of the MS-OXWMT-messages.xsd file and information about additional files that this schema file requires to operate correctly.

MS-OXWMT-messages.xsd includes the file listed in the following table. For the schema file to operate correctly, this file has to be in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

File name	Defining specification
MS-OXWSCDATA-messages.xsd	[MS-OXWSCDATA] section 7.1

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
elementFormDefault="qualified" version="Exchange2013" id="messages">
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="MS-OXWMT-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:complexType name="GetMailTipsType">
    <xs:complexContent>
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element name="SendingAs" type="t:EmailAddressType"/>
          <xs:element name="Recipients" type="t:ArrayOfRecipientsType"/>
          <xs:element name="MailTipsRequested" type="t:MailTipTypes"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetMailTips" type="m:GetMailTipsType"/>
  <xs:element name="GetMailTipsResponse" type="m:GetMailTipsResponseMessageType"/>
  <xs:complexType name="GetMailTipsResponseMessageType">
    <xs:complexContent>
      <xs:extension base="m:ResponseMessageType">
        <xs:sequence>
          <xs:element name="ResponseMessages" type="m:ArrayOfMailTipsResponseMessageType"
minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="ArrayOfMailTipsResponseMessageType">
    <xs:sequence>
```

```
      <xs:element name="MailTipsResponseMessageType" type="m:MailTipsResponseMessageType"
maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="MailTipsResponseMessageType">
    <xs:complexContent>
      <xs:extension base="m:ResponseMessageType">
        <xs:sequence>
          <xs:element name="MailTips" type="t:MailTips" minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:schema>
```

7.2 Types Schema

This section contains the contents of the MS-OXWMT-types.xsd file and information about additional files that this schema file requires to operate correctly.

MS-OXWMT-types.xsd includes the files listed in the following table. For the schema file to operate correctly, these files need to be present in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

File name	Defining specification
MS-OXWSCDATA-types.xsd	[MS-OXWSCDATA] section 7.2

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
elementFormDefault="qualified" version="Exchange2013" id="types">
  <xs:include schemaLocation="MS-OXWSCDATA-types.xsd"/>
  <xs:simpleType name="MailTipTypes">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="All"/>
          <xs:enumeration value="OutOfOfficeMessage"/>
          <xs:enumeration value="MailboxFullStatus"/>
          <xs:enumeration value="CustomMailTip"/>
          <xs:enumeration value="ExternalMemberCount"/>
          <xs:enumeration value="TotalMemberCount"/>
          <xs:enumeration value="MaxMessageSize"/>
          <xs:enumeration value="DeliveryRestriction"/>
          <xs:enumeration value="ModerationStatus"/>
          <xs:enumeration value="InvalidRecipient"/>
          <xs:enumeration value="Scope"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
  <xs:complexType name="OutOfOfficeMailTip">
    <xs:sequence>
      <xs:element name="ReplyBody" type="t:ReplyBody"/>
      <xs:element name="Duration" type="t:Duration" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="MailTips">
    <xs:sequence>
      <xs:element name="RecipientAddress" type="t:EmailAddressType"
        minOccurs="1" maxOccurs="1"/>
```

```
      <xs:element name="PendingMailTips" type="t:MailTipTypes"
        minOccurs="1" maxOccurs="1"/>
      <xs:element name="OutOfOffice" type="t:OutOfOfficeMailTip"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="MailboxFull" type="xs:boolean"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="CustomMailTip" type="xs:string"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="TotalMemberCount" type="xs:int"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="ExternalMemberCount" type="xs:int"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="MaxMessageSize" type="xs:int"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="DeliveryRestricted" type="xs:boolean"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="IsModerated" type="xs:boolean"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="InvalidRecipient" type="xs:boolean"
        minOccurs="0" maxOccurs="1"/>
      <xs:element name="Scope" type="xs:int" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```

8 Appendix C: 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 2010
- Microsoft Exchange Server 2013
- Microsoft Outlook 2010
- Microsoft Outlook 2013
- Microsoft Outlook 2016 Preview

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.

9 Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- The removal of a document from the documentation set.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the technical content of the document is identical to the last released version.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.
- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated**.

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

The changes made to this document are listed in the following table. For more information, please contact dochelp@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
8 Appendix C: Product Behavior	Updated list of supported products.	Y	Content updated due to protocol revision.

10 Index

T

V

W

X