# [MS-OXWOOF]: Out of Office (OOF) Web Service Protocol

#### **Intellectual Property Rights Notice for Open Specifications Documentation**

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- No Trade Secrets. Microsoft does not claim any trade secret rights in this documentation.
- Patents. Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft Open Specification Promise or the Community Promise. If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting ipla@microsoft.com.
- Trademarks. The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights. For a list of Microsoft trademarks, visit www.microsoft.com/trademarks.
- **Fictitious Names.** The example companies, organizations, products, domain names, email addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

**Reservation of Rights.** All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

**Tools.** The Open Specifications do not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them. Certain Open Specifications are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

# **Revision Summary**

Date	Revision History	Revision Class	Comments
04/04/2008	0.1	Major	Initial Availability.
06/27/2008	1.0	Major	Initial Release.
08/06/2008	1.0.1	Editorial	Revised and edit technical content.
09/03/2008	1.0.2	Editorial	Updated references.
12/03/2008	1.0.3	Editorial	Updated IP notice.
02/04/2009	1.0.4	Editorial	Revised and edited technical content.
03/04/2009	1.0.5	Editorial	Revised and edited technical content.
04/10/2009	2.0	Major	Updated technical content and applicable product releases.
07/15/2009	3.0	Major	Revised and edited for technical content.
11/04/2009	3.1.0	Minor	Updated the technical content.
02/10/2010	4.0.0	Major	Updated and revised the technical content.
05/05/2010	4.1.0	Minor	Updated the technical content.
08/04/2010	5.0	Major	Significantly changed the technical content.
11/03/2010	6.0	Major	Significantly changed the technical content.
03/18/2011	7.0	Major	Significantly changed the technical content.
08/05/2011	7.1	Minor	Clarified the meaning of the technical content.
10/07/2011	8.0	Major	Significantly changed the technical content.
01/20/2012	9.0	Major	Significantly changed the technical content.
04/27/2012	9.0	No change	No changes to the meaning, language, or formatting of the technical content.
07/16/2012	9.1	Minor	Clarified the meaning of the technical content.
10/08/2012	9.2	Minor	Clarified the meaning of the technical content.
02/11/2013	9.2	No change	No changes to the meaning, language, or formatting of the technical content.
07/26/2013	9.3	Minor	Clarified the meaning of the technical content.
11/18/2013	10.0	Major	Significantly changed the technical content.
02/10/2014	10.0	No change	No changes to the meaning, language, or formatting of the technical content.

# **Table of Contents**

1		
	1.1 Glossary	
	1.2 References	
	1.2.1 Normative References	
	1.2.2 Informative References	7
	1.3 Overview	7
	1.4 Relationship to Other Protocols	8
	1.5 Prerequisites/Preconditions	
	1.6 Applicability Statement	
	1.7 Versioning and Capability Negotiation	8
	1.8 Vendor-Extensible Fields	
	1.9 Standards Assignments	
	1.9 Standards / losignments	>
2	Messages	. 10
	2.1 Transport	
	2.2 Common Message Syntax	
	2.2.1 Namespaces	
	2.2.2 Messages	
	2.2.3 Elements	
	2.2.3.1 t:Mailbox Element	
	2.2.4 Complex Types	
	2.2.4.1 t:UserOofSettings Complex Type	
	2.2.5 Simple Types	12
	2.2.5.2 t:OofState Simple Type	
	2.2.6 Attributes	
	2.2.7 Groups	
	2.2.8 Attribute Groups	. 13
3	Protocol Details	14
	3.1 ExchangeServicePortType Server Details	1/
	3.1.1 Abstract Data Model	. 17 11
	3.1.2 Timers	
	3.1.3 Initialization	
	3.1.4 Message Processing Events and Sequencing Rules	
	3.1.4.1 GetUserOofSettings Operation	
	3.1.4.1.1 Messages	
	3.1.4.1.1.1 tns:GetUserOofSettingsSoapIn	
	3.1.4.1.1.2 tns:GetUserOofSettingsSoapOut	
	3.1.4.1.2 Elements	
	3.1.4.1.2.1 m:GetUserOofSettingsRequest Element	
	3.1.4.1.2.2 m:GetUserOofSettingsResponse Element	
	3.1.4.1.2.3 t:OofSettings Element	
	3.1.4.1.3 Complex Types	
	3.1.4.1.3.1 tns:GetUserOofSettingsResponse Complex Type	
	3.1.4.1.3.2 tns:GetUserOofSettingsRequest Complex Type	. 19
	3.1.4.2 SetUserOofSettings Operation	
	3.1.4.2.1 Messages	. 20
	3.1.4.2.1.1 tns:SetUserOofSettingsSoapIn	
	3.1.4.2.1.2 tns:SetUserOofSettingsSoapOut	. 21

3.1.4.2.2 Elements	
3.1.4.2.2.1 m:SetUserOofSettingsRequest Element	22
3.1.4.2.2.2 m:SetUserOofSettingsResponse Element	22
3.1.4.2.2.3 t:UserOofSettings Element	22
3.1.4.2.3 Complex Types	23
3.1.4.2.3.1 tns:SetUserOofSettingsResponse Complex Type	23
3.1.4.2.3.2 tns:SetUserOofSettingsRequest Complex Type	23
3.1.5 Timer Events	24
3.1.6 Other Local Events	24
4 Protocol Examples	
4.1 GetUserOofSettings Request	
4.2 GetUserOofSettings Response	
4.3 SetUserOofSettings Request	
4.4 SetUserOofSettings Successful Response	
4.5 SetUserOofSettings Failure Response	26
5 Security	28
5.1 Security Considerations for Implementers	
5.2 Index of Security Parameters	
6 Appendix A: Full WSDL	29
7 Appendix B: Full XML Schema	31
7.1 Messages Schema	
7.2 Types Schema	
7.2 Types senemanisminisminisminisminisminisminisminis	
8 Appendix C: Product Behavior	34
9 Change Tracking	25
S Change Tracking	
10 Index	36

## 1 Introduction

The Out of Office (OOF) Web Service Protocol defines the interaction between a client and a server for configuring response messages that are sent automatically in response to e-mail messages that are sent to people who are out of the office.

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 RFC 2119. Sections 1.5 and 1.9 are 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]:

Coordinated Universal Time (UTC)
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
SOAP
SOAP action
SOAP body
SOAP fault
SOAP header
SOAP message
XML
XML namespace

The following terms are defined in [MS-OXGLOS]:

endpoint
external OOF message
mailbox
OOF message
Out of Office (OOF)
response message
Uniform Resource Locator (URL)
web server
Web Services Description Language (WSDL)
WSDL message
WSDL port type
XML schema

The following terms are specific to this document:

**external user:** Any user who is located outside the enterprise network boundary, including remote users (1), federated users, and public instant messaging (IM) users.

internal users: Users who are within an organization.

**OOF settings:** A set of values that determine whether an OOF message is sent, to whom it is sent, and the contents of the message.

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 <a href="mailto:dochelp@microsoft.com">dochelp@microsoft.com</a>. 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, <a href="http://www.rfc-editor.org/rfc/rfc2119.txt">http://www.rfc-editor.org/rfc/rfc2119.txt</a>

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

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.ietf.org/rfc/rfc2818.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, <a href="http://www.w3.org/TR/2009/REC-xml-names-20091208/">http://www.w3.org/TR/2009/REC-xml-names-20091208/</a>

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

[XMLSCHEMA2] Biron, P.V., and Malhotra, A., Eds., "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-GLOS] Microsoft Corporation, "Windows Protocols Master Glossary".

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

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

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

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

#### 1.3 Overview

This protocol enables a protocol client to manage the messages that users configure to be sent by the server automatically in response to incoming e-mail when the users are away from the office or otherwise unable to respond immediately. The protocol client can set messages for both internal and external e-mail correspondents, start and stop sending **OOF messages**, and schedule the messages so that they are enabled for a specific duration.

This protocol defines the interaction between a client and a server that configures **OOF settings** and OOF messages for users. The conditions under which the OOF messages are sent are determined by the OOF settings.

## 1.4 Relationship to Other Protocols

A client that implements this protocol can use either 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 (4)** to use for each operation.

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

The OOF Web Service Protocol uses SOAP over **HTTP**, as described in [RFC2616], and SOAP over **HTTPS**, as described in [RFC2818], as shown in the following layering diagram.

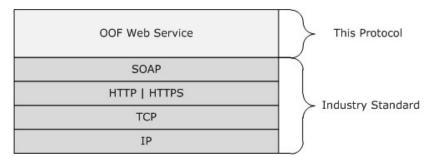


Figure 1: This protocol in relation to other protocols

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 (4) **URL** that is returned by either 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], is a required argument for forming the HTTP request to the **web server** that hosts this protocol. The operations that this protocol uses cannot be accessed unless the correct endpoint (4) that services the target **mailbox** is identified for the HTTP Web requests that target the OOF Web Service Protocol operations.

#### 1.6 Applicability Statement

The OOF Web Service Protocol is applicable to SOAP-based clients, as described in [SOAP1.1].

## 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 a single WSDL port type version. The version of the server responding to the request is identified by using the t:ServerVersionInfo element, as described in [MS-OXWSCDATA] section 2.2.3.10.
- **Security and Authentication Methods:** This protocol relies on the web server that hosts it to perform authentication.
- Localization: This protocol includes text strings in various messages.

## 1.8 Vendor-Extensible Fields

None.

## 1.9 Standards Assignments

None.

## 2 Messages

## 2.1 Transport

Messages are transported by using SOAP version 1.1. For details, see [SOAP1.1].

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

## 2.2 Common Message Syntax

This section contains 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]
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

The following table summarizes the set of common XML schema element definitions defined by this specification. XML schema element definitions that are specific to a particular operation are described with the operation.

Element	Description
t:Mailbox	Identifies a user's mailbox by using an e-mail address.

## 2.2.3.1 t:Mailbox Element

The Mailbox element identifies a user's mailbox by using an e-mail address.

```
<xs:element name="Mailbox"
  type="t:EmailAddress"
/>
```

For details about the **t:EmailAddress** complex type, see [MS-OXWSCDATA] section 2.2.4.26.

## 2.2.4 Complex Types

The following table summarizes the set of common XML schema complex type definitions defined by this specification. XML schema complex type definitions that are specific to a particular operation are described with the operation.

Complex type	Description
t:UserOofSettings	Specifies the OOF settings.

## 2.2.4.1 t:UserOofSettings Complex Type

The **UserOofSetting** complex type specifies the OOF settings.

```
<xs:complexType name="UserOofSettings">
  <xs:sequence>
    <xs:element name="OofState"</pre>
     type="t:OofState"
     minOccurs="1"
     maxOccurs="1"
    <xs:element name="ExternalAudience"</pre>
     type="t:ExternalAudience"
      maxOccurs="1"
     minOccurs="1"
    <xs:element name="Duration"</pre>
      type="t:Duration"
     minOccurs="0"
     maxOccurs="1"
    <xs:element name="InternalReply"</pre>
     type="t:ReplyBody"
     minOccurs="0"
      maxOccurs="1"
    <xs:element name="ExternalReply"</pre>
      type="t:ReplyBody"
     minOccurs="0"
     maxOccurs="1"
     />
  </xs:sequence>
</xs:complexType>
```

The following table lists the child elements of the **t:UserOofSettings** complex type.

Element	Туре	Description
OofState	t:OofState (section 2.2.5.2)	Indicates the user's <b>Out of Office (OOF)</b> status.  This element MUST be present.
ExternalAudience	t:ExternalAudience (section 2.2.5.1)	Indicates how <b>external users</b> are handled. This element MUST be present.
Duration	t:Duration ([MS- OXWSCDATA] section 2.2.4.24)	Indicates the duration for which the OOF status is enabled if the OOF state in the <b>OofState</b> element is set to "Scheduled". The start and end times for this period of time SHOULD<1> be specified in <b>Coordinated Universal Time (UTC)</b> .  This element can be present. It MUST be present if the <b>OofState</b> element is set to" Scheduled" when calling the <b>SetUserOofSettings</b> operation (section 3.1.4.1).
InternalReply	t:ReplyBody ([MS- OXWSCDATA] section 2.2.4.55)	Contains the body of the response OOF message that is sent to <b>internal users</b> .  This element can be present.
ExternalReply	t:ReplyBody	Contains the body of the response OOF message that is sent to external users.  This element can be present.

## 2.2.5 Simple Types

The following table summarizes the set of common XML schema simple type definitions defined by this specification. XML schema simple type definitions that are specific to a particular operation are described with the operation.

Simple type	Description
t:ExternalAudience	Specifies a value that indicates to whom <b>external OOF messages</b> are to be sent.
t:OofState	Specifies the state of the user's mailbox with respect to OOF.

## 2.2.5.1 t:ExternalAudience Simple Type

The **ExternalAudience** simple type specifies a value that indicates to whom external OOF messages are to be sent.

```
<xs:simpleType name="ExternalAudience">
    <xs:restriction
        base="xs:string"
>
        <xs:enumeration
        value="None"
        />
        <xs:enumeration
        value="Known"
        />
        <xs:enumeration
        value="All"</pre>
```

```
/>
</xs:restriction>
</xs:simpleType>
```

The following table lists the values that are defined by the **ExternalAudience** simple type.

Value	Description
None	Specifies that mail sent from external users will not get an OOF message.
Known	Specifies that mail sent from external users who are known to the recipient will receive an OOF message in response to the mail they sent. A known user is one who appears in the recipient's list of contacts in any of the contacts folders in his or her mailbox.
All	Specifies that the external OOF message will be sent to all external users.

## 2.2.5.2 t:OofState Simple Type

The **OofState** simple type specifies the state of the user's mailbox with respect to OOF.

```
<xs:simpleType name="OofState">
<xs:restriction base="xs:string">
<xs:enumeration value="Disabled" />
<xs:enumeration value="Enabled" />
<xs:enumeration value="Scheduled" />
</xs:restriction>
</xs:simpleType>
```

The following table lists the values that are defined by the **OofState** simple type.

Value	Description
Disabled	Specifies that OOF behavior is disabled.
Enabled	Specifies that the OOF state is enabled; this indicates that OOF messages will be sent.
Scheduled	Specifies that the OOF status is set to Enabled for the time period defined by the <b>Duration</b> element.

## 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

This protocol specifies a way of getting OOF settings and configuring them for a mailbox.

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

This protocol specifies a single port type with two operations to manipulate the OOF settings.

#### 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.

This protocol provides operations for sending OOF settings for a mailbox, and for retrieving those settings. The server maintains the OOF settings for the mailbox, modifies them as requested, and uses them to respond to incoming messages appropriately.

The client application is not required to maintain the state of the OOF settings on the server and can request the OOF settings at any time. If more than one client is changing the OOF settings at any one time, there is no requirement that the server lock the existing OOF settings for changes.

#### **3.1.2 Timers**

None.

#### 3.1.3 Initialization

None.

## 3.1.4 Message Processing Events and Sequencing Rules

The following table summarizes the list of WSDL operations defined by this specification.

Operation	Description
GetUserOofSettings	Gets a user's OOF settings and OOF messages from his or her mailbox.
SetUserOofSettings	Sets a user's OOF settings and OOF messages in his or her mailbox.

## 3.1.4.1 GetUserOofSettings Operation

The **GetUserOofSettings** operation retrieves the OOF settings and OOF messages from a user's mailbox.

The following is the WSDL port type specification for this operation.

The following is the WSDL binding specification for this operation. <2>

For a successful request, the **GetUserOofSettings** operation MUST return a **GetUserOofSettingsResponse** element with the **ResponseClass** attribute of the **ResponseMessage** element set to "Success". The **ResponseCode** element of the **ResponseMessage** element MUST be set to "NoError".

If the mailbox that is specified in the request does not belong to the user who is making the request, the server MUST return a **SOAP fault**. The following **XML** specifies the **SOAP body** that MUST be returned.

The **faultstring** element MUST contain the User ID of the user who is making the request and the Mailbox ID of the mailbox for which the attempt was made to change the OOF message.

#### 3.1.4.1.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to the **GetUserOofSettings** operation.

15 / 37

[MS-OXWOOF] — v20140130 Out of Office (OOF) Web Service Protocol

Copyright © 2014 Microsoft Corporation.

Message	Description
GetUserOofSettingsSoapIn	Specifies the request that retrieves a user's OOF status.
GetUserOofSettingsSoapOut	Specifies the response from a <b>GetUserOofSettings</b> operation.

## 3.1.4.1.1.1 tns:GetUserOofSettingsSoapIn

The **GetUserOofSettingsSoapIn** WSDL message specifies the **SOAP message** that represents a request to get the OOF settings for a mailbox.

```
<wsdl:message name="GetUserOofSettingsSoapIn">
  <wsdl:part name="GetUserOofSettingsRequest" element="tns:GetUserOofSettingsRequest"/>
  <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
  <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  </wsdl:message>
```

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

The following table lists and describes the parts of the **GetUserOofSettingsSoapIn** WSDL message.

Part name	Element/type	Description
GetUserOofSettingsRequest	m:GetUserOofSettingsRequest (section 3.1.4.1.2.1)	Specifies the SOAP body of the request to get the OOF settings for a mailbox.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.3.3)	Specifies a <b>SOAP header</b> that identifies the user who the client application is impersonating.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.3.9)	Specifies a SOAP header that identifies the schema version for the <b>GetUserOofSettings</b> operation request. <a>3&gt;</a>

## 3.1.4.1.1.2 tns:GetUserOofSettingsSoapOut

The **GetUserOofSettingsSoapOut** WSDL message specifies the SOAP message that represents a response to a request to get the OOF settings for a mailbox.

```
<wsdl:message name="GetUserOofSettingsSoapOut">
   <wsdl:part name="GetUserOofSettingsResult" element="tns:GetUserOofSettingsResponse"/>
   <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
   </wsdl:message>
```

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

The **GetUserOofSettingsSoapOut** WSDL message contains two parts, as described in the following table.

16 / 37

[MS-OXWOOF] — v20140130 Out of Office (OOF) Web Service Protocol

Copyright © 2014 Microsoft Corporation.

Part name	Element/type	Description
GetUserOofSettingsResult	m:GetUserOofSettingsResponse (section 3.1.4.1.2.2)	Specifies the SOAP body the response to the request for mailbox OOF settings.
ServerVersion	t:ServerVersionInfo ([MS- OXWSCDATA] section 2.2.3.10)	Specifies a SOAP header that identifies the server version for the response.

#### 3.1.4.1.2 Elements

The following table summarizes the XML schema element definitions that are specific to the **GetUserOofSettings** operation.

Element	Description
GetUserOofSettingsRequest	Specifies the root element in a <b>GetUserOofSettings</b> operation request.
GetUserOofSettingsResponse	Specifies the root element in a <b>GetUserOofSettings</b> operation response.
OofSettings	Specifies the OOF settings for a mailbox.

## 3.1.4.1.2.1 m:GetUserOofSettingsRequest Element

The **GetUserOofSettingsRequest** element specifies the root element in a **GetUserOofSettings** request.

```
<xs:element name="GetUserOofSettingsRequest"
   type="tns:GetUserOofSettingsRequest"
/>
```

## 3.1.4.1.2.2 m:GetUserOofSettingsResponse Element

The **GetUserOofSettingsResponse** element specifies the root element in a **GetUserOofSettings** operation response.

```
<xs:element name="GetUserOofSettingsResponse"
  type="tns:GetUserOofSettingsResponse"
/>
```

## 3.1.4.1.2.3 t:OofSettings Element

The **OofSettings** element specifies the OOF settings for a mailbox.

```
<xs:element name="OofSettings"
  type="t:UserOofSettings"
/>
```

17 / 37

[MS-OXWOOF] — v20140130 Out of Office (OOF) Web Service Protocol

Copyright © 2014 Microsoft Corporation.

## 3.1.4.1.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to the **GetUserOofSettings** operation.

Complex type	Description
GetUserOofSettingsRequest	Contains the arguments that are used to get a user's OOF settings.
GetUserOofSettingsResponse	Contains the <b>response message</b> from the <b>GetUserOofSettings</b> operation.

## 3.1.4.1.3.1 tns:GetUserOofSettingsResponse Complex Type

The **GetUserOofSettingsResponse** complex type contains the response message from the **GetUserOofSettings** operation and the OOF settings for the user, as specified in the **GetUserOofSettings** operation request.

```
<xs:complexType name="GetUserOofSettingsResponse">
 <xs:sequence>
    <xs:element name="ResponseMessage"</pre>
     type="m:ResponseMessageType"
     maxOccurs="1"
     minOccurs="1"
     />
    <xs:element</pre>
     maxOccurs="1"
     minOccurs="0"
     ref="t:OofSettings"
    <xs:element name="AllowExternalOof"</pre>
     type="t:ExternalAudience"
     maxOccurs="1"
     minOccurs="0"
     />
 </xs:sequence>
</xs:complexType>
```

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

Element	Туре	Description
ResponseMessage	m:ResponseMessageType ([MS-OXWSCDATA] section 2.2.4.57)	Provides descriptive information about the response status. This element MUST be present.
t:OofSettings	t:OofSettings (section 3.1.4.1.2.3)	Contains the OOF settings. This element can be present.
AllowExternalOof	t:ExternalAudience (section 2.2.5.1)	Contains a value that identifies the recipients to whom external OOF messages are sent. This element can be present.

## 3.1.4.1.3.2 tns:GetUserOofSettingsRequest Complex Type

The **GetUserOofSettingsRequest** complex type contains the arguments that are used to get a user's OOF settings.

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

Element	Туре	Description
t:Mailbox	t:Mailbox (section 2.2.3.1)	Specifies the user for whom OOF settings are to be retrieved.  This element MUST be present.

The sender MUST be the owner of the mailbox specified in the request.

## 3.1.4.2 SetUserOofSettings Operation

The **SetUserOofSettings** operation specifies how to set a mailbox user's OOF settings and response message.

The following is the WSDL port type specification for this operation.

```
<wsdl:operation name="SetUserOofSettings">
  <wsdl:input message="tns:SetUserOofSettingsSoapIn"/>
  <wsdl:output message="tns:SetUserOofSettingsSoapOut"/>
  </wsdl:operation>
```

The following is the WSDL binding specification for this operation. <4>

19 / 37

[MS-OXWOOF] — v20140130 Out of Office (OOF) Web Service Protocol

Copyright © 2014 Microsoft Corporation.

```
<wsdl:output>
    <soap:body parts="SetUserOofSettingsResult" use="literal"/>
        <soap:header message="tns:SetUserOofSettingsSoapOut" part="ServerVersion" use="literal"/>
        </wsdl:output>
</wsdl:operation>
```

For a successful request, the **SetUserOofSettings** operation MUST return a **SetUserOofSettingsResponse** element with the **ResponseClass** attribute of the **ResponseMessage** element set to "Success". The **ResponseCode** element of the **ResponseMessage** element MUST be set to "NoError".

If the request is unsuccessful, the **SetUserOofSettings** operation MUST return a **SetUserOofSettingsResponse** element with the **ResponseClass** attribute of the **ResponseMessage** element set to "Error". The **ResponseCode** element of the **ResponseMessage** element MUST be set to one of the error values listed in the following table.

Error value	Description
ErrorInvalidScheduledOofDuration	Occurs if the specified duration end time is not greater than the start time, or if the end time does not occur in the future, or if the <b>Duration</b> element is not set when the <b>OofState</b> element is set to "Scheduled".
ErrorInvalidUserOofSettings	Occurs when the request is missing an internal or external reply.

If the mailbox that is specified in the request does not belong to the user who is making the request, the server MUST return a SOAP fault. The following XML specifies the SOAP body that MUST be returned in such cases.

The **faultstring** element MUST contain the User ID of the user who is making the request and the Mailbox ID of the mailbox for which the attempt was made to change the OOF message.

#### 3.1.4.2.1 Messages

The following table summarizes the WSDL message definitions that are specific to the **SetUserOofSettings** operation.

Message	Description
SetUserOofSettingsSoapIn	Specifies the request that sets a user's OOF status.
SetUserOofSettingsSoapOut	Specifies the response from the <b>SetUserOofSettings</b> operation.

## 3.1.4.2.1.1 tns:SetUserOofSettingsSoapIn

The **SetUserOofSettingsSoapIn** WSDL message specifies the SOAP message that represents a request to set the OOF settings for a mailbox.

```
<wsdl:message name="SetUserOofSettingsSoapIn">
        <wsdl:part name="SetUserOofSettingsRequest" element="tns:SetUserOofSettingsRequest"/>
        <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
        <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
        </wsdl:message>
```

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

The parts of the **SetUserOofSettingsSoapIn** WSDL message are listed and described in the following table.

Part name	Element/type	Description
SetUserOofSettingsRequest	m:SetUserOofSettingsRequest (section 3.1.4.2.2.1)	Specifies the SOAP body of the request to set OOF settings for a mailbox.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.3.3)	Specifies a SOAP header that identifies the user who the client application is impersonating.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.3.9)	Specifies a SOAP header that identifies the schema version for the <b>SetUserOofSettings</b> operation request.<5>

## 3.1.4.2.1.2 tns:SetUserOofSettingsSoapOut

The **SetUserOofSettingsSoapOut** WSDL message specifies the SOAP message that represents the response from a request to set the OOF settings for a mailbox.

```
<wsdl:message name="SetUserOofSettingsSoapOut">
   <wsdl:part name="SetUserOofSettingsResult" element="tns:SetUserOofSettingsResponse"/>
   <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
   </wsdl:message>
```

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

The parts of the **SetUserOofSettingsSoapOut** WSDL message are listed and described in the following table.

Part name	Element/type	Description
SetUserOofSettingsResult	m:SetUserOofSettingsResponse (section 3.1.4.2.2.2)	Specifies the SOAP body of the response that contains the requested OOF settings.
ServerVersion	t:ServerVersionInfo [MS- OXWSCDATA] section 2.2.3.10)	Specifies a SOAP header that identifies the server version for the response.

#### 3.1.4.2.2 Elements

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

Element	Description
SetUserOofSettingsRequest	Specifies the base element for a <b>SetUserOofSettings</b> operation request.
SetUserOofSettingsResponse	Specifies the base element for a <b>SetUserOofSettings</b> operation response.
UserOofSettings	Specifies the OOF settings for a mailbox.

## 3.1.4.2.2.1 m:SetUserOofSettingsRequest Element

The **SetUserOofSettingsRequest** element specifies the base element for a **SetUserOofSettings** operation request.

```
<xs:element name="SetUserOofSettingsRequest"
   type="tns:SetUserOofSettingsRequest"
/>
```

## 3.1.4.2.2.2 m:SetUserOofSettingsResponse Element

The **SetUserOofSettingsResponse** element specifies the base element for a **SetUserOofSettings** operation response.

```
<xs:element name="SetUserOofSettingsResponse"
  type="tns:SetUserOofSettingsResponse"
/>
```

## 3.1.4.2.2.3 t:UserOofSettings Element

The **UserOofSettings** element specifies the OOF settings for a mailbox.

```
<xs:element name="UserOofSettings"
  type="t:UserOofSettings"
/>
```

## 3.1.4.2.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to the **SetUserOofSettings** operation.

Complex type	Description
SetUserOofSettingsRequest	Specifies the arguments that are used to set a mailbox user's OOF settings.
SetUserOofSettingsResponse	Contains the response message from the <b>SetUserOofSettings</b> operation.

## 3.1.4.2.3.1 tns:SetUserOofSettingsResponse Complex Type

The **SetUserOofSettingsResponse** complex type specifies the result of a **SetUserOofSettingsRequest** complex type message attempt.

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

Element	Туре	Description
ResponseMessage	m:ResponseMessageType	Provides descriptive information about the response status.  This element can be present.

## 3.1.4.2.3.2 tns:SetUserOofSettingsRequest Complex Type

The **SetUserOofSettingsRequest** complex type specifies the arguments that are used to set a mailbox user's OOF settings.

23 / 37

[MS-OXWOOF] — v20140130 Out of Office (OOF) Web Service Protocol

Copyright © 2014 Microsoft Corporation.

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

Element	Туре	Description
t:Mailbox	t:mailbox (section 2.2.3.1)	Specifies the mailbox user. This element MUST be present.
t:UserOofSettings	t:UserOofSettings (section 2.2.4.1)	Specifies the OOF settings. This element MUST be present.

## 3.1.5 Timer Events

None.

#### 3.1.6 Other Local Events

None.

## 4 Protocol Examples

## 4.1 GetUserOofSettings Request

The following example shows how to get a specified user's OOF settings.

## 4.2 GetUserOofSettings Response

The following example shows a successful response to a **GetUserOofSettings** operation request.

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Header>
    <t:ServerVersionInfo MajorVersion="8" MinorVersion="1" MajorBuildNumber="240"
MinorBuildNumber="5" xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types" />
  </soap:Header>
  <soap:Body>
    <GetUserOofSettingsResponse
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseMessage ResponseClass="Success">
        <ResponseCode>NoError</ResponseCode>
      </ResponseMessage>
      <OofSettings xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
        <OofState>Enabled</OofState>
        <ExternalAudience>All</ExternalAudience>
        <Duration>
          <StartTime>2008-02-01T00:00:00
          <EndTime>2008-02-02T00:00:00</EndTime>
        </Duration>
        <InternalReply>
          <Message>I am out of office. This is my internal reply./Message>
        </InternalReply>
        <ExternalReply>
          <Message>I am out of office. This is my external reply./Message>
        </ExternalReply>
      </OofSettings>
      <AllowExternalOof>All</AllowExternalOof>
    </GetUserOofSettingsResponse>
  </soap:Body>
</soap:Envelope>
```

## 4.3 SetUserOofSettings Request

The following example shows how to set a specified user's OOF settings.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
 <soap:Body>
    <SetUserOofSettingsRequest</pre>
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <Mailbox xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
        <Address>u1@example.com</Address>
       <RoutingType>SMTP</RoutingType>
      </Mailbox>
      <UserOofSettings xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
        <OofState>Enabled</OofState>
        <ExternalAudience>All</ExternalAudience>
        <InternalReply>
         <Message>I am out of office. This is my internal reply./Message>
        </InternalReply>
        <ExternalReply>
          <Message>I am out of office. This is my external reply./Message>
        </ExternalReply>
      </UserOofSettings>
    </SetUserOofSettingsRequest>
  </soap:Body>
</soap:Envelope>
```

## 4.4 SetUserOofSettings Successful Response

The following example shows a successful response to a **SetUserOofSettings** operation request.

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Header>
    <t:ServerVersionInfo MajorVersion="8" MinorVersion="1" MajorBuildNumber="240"</pre>
MinorBuildNumber="5" xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types" />
 </soap:Header>
  <soap:Body>
    <SetUserOofSettingsResponse
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
     <ResponseMessage ResponseClass="Success">
        <ResponseCode>NoError</ResponseCode>
      </ResponseMessage>
    </SetUserOofSettingsResponse>
  </soap:Body>
</soap:Envelope>
```

## 4.5 SetUserOofSettings Failure Response

The following example shows an unsuccessful response to a  ${\bf SetUserOofSettings}$  operation request.

26 / 37

[MS-OXWOOF] — v20140130 Out of Office (OOF) Web Service Protocol

Copyright © 2014 Microsoft Corporation.

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Header>
    <t:ServerVersionInfo MajorVersion="8" MinorVersion="1" MajorBuildNumber="240"</pre>
MinorBuildNumber="5" xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types" />
  </soap:Header>
  <soap:Body>
    <SetUserOofSettingsResponse
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseMessage ResponseClass="Error">
        <MessageText>The scheduled Out of Office duration is not valid./MessageText>
        <ResponseCode>ErrorInvalidScheduledOofDuration/ResponseCode>
        <DescriptiveLinkKey>0</DescriptiveLinkKey>
        <MessageXml>
         <ExceptionType
xmlns="http://schemas.microsoft.com/exchange/services/2006/errors">Microsoft.Exchange.InfoWor
ker.Common.OOF.InvalidScheduledOofDuration</ExceptionType>
          <ExceptionCode
xmlns="http://schemas.microsoft.com/exchange/services/2006/errors">158</ExceptionCode>
        </MessageXml>
      </ResponseMessage>
    </SetUserOofSettingsResponse>
  </soap:Body>
</soap:Envelope>
```

# **5** Security

# **5.1** Security Considerations for Implementers

None.

# **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 specified in this document. The contents of each file are included in this section.

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

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-OXWOOF-messages.xsd or MS-OXWOOF-types.xsd schemas have to be placed in the common folder with these files.

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

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"</pre>
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:s="http://www.w3.org/2001/XMLSchema"
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">
    <xs:schema id="messages" elementFormDefault="qualified" version="Exchange2007 SP1"</pre>
xmlns:tns="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">
      <xs:include schemaLocation="MS-OXWOOF-messages.xsd"/>
   </xs:schema>
  </wsdl:types>
  <wsdl:message name="GetUserOofSettingsSoapIn">
   <wsdl:part name="GetUserOofSettingsRequest" element="tns:GetUserOofSettingsRequest"/>
   <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  </wsdl:message>
  <wsdl:message name="GetUserOofSettingsSoapOut">
    <wsdl:part name="GetUserOofSettingsResult" element="tns:GetUserOofSettingsResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
  </wsdl:message>
  <wsdl:message name="SetUserOofSettingsSoapIn">
   <wsdl:part name="SetUserOofSettingsRequest" element="tns:SetUserOofSettingsRequest"/>
      <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
   <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  </wsdl:message>
  <wsdl:message name="SetUserOofSettingsSoapOut">
   <wsdl:part name="SetUserOofSettingsResult" element="tns:SetUserOofSettingsResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
  </wsdl:message>
  <wsdl:portType name="ExchangeServicePortType">
   <wsdl:operation name="GetUserOofSettings">
      <wsdl:input message="tns:GetUserOofSettingsSoapIn"/>
```

```
<wsdl:output message="tns:GetUserOofSettingsSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetUserOofSettings">
      <wsdl:input message="tns:SetUserOofSettingsSoapIn"/>
      <wsdl:output message="tns:SetUserOofSettingsSoapOut"/>
    </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-</pre>
i.org/schemas/conformanceClaim/"/>
    </wsdl:documentation>
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
    <wsdl:operation name="GetUserOofSettings">
      <soap:operation</pre>
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetUserOofSettings"/
      <wsdl:input>
        <soap:header message="tns:GetUserOofSettingsSoapIn" part="Impersonation"</pre>
use="literal"/>
       <soap:body parts="GetUserOofSettingsRequest" use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body parts="GetUserOofSettingsResult" use="literal"/>
        <soap:header message="tns:GetUserOofSettingsSoapOut" part="ServerVersion"</pre>
use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="SetUserOofSettings">
      <soap:operation</pre>
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetUserOofSettings"/
      <wsdl:input>
        <soap:header message="tns:SetUserOofSettingsSoapIn" part="Impersonation"</pre>
use="literal"/>
       <soap:body parts="SetUserOofSettingsRequest" use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body parts="SetUserOofSettingsResult" use="literal"/>
        <soap:header message="tns:SetUserOofSettingsSoapOut" part="ServerVersion"</pre>
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:	<u>7.1</u>
Types schema	t:	<u>7.2</u>

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-OXWOOF-messages.xsd or MS-OXWOOF-types.xsd schemas have to be placed in the common folders along with the files listed in the table.

## 7.1 Messages Schema

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

MS-OXWOOF-messages.xsd references the files listed in the following table. For this messages schema file to operate correctly, the two referenced files have to be present in the folder that contains the WSDL and messages schema files for this protocol.

File name	Defining specification/section
MS-OXWSCDATA-messages.xsd	[MS-OXWSCDATA] section 7.2
MS-OXWOOF-types.xsd	<u>7.2</u>

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"</pre>
xmlns:tns="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:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"</pre>
schemaLocation="MS-OXWOOF-types.xsd"/>
  <xs:complexType name="GetUserOofSettingsRequest">
    <xs:complexContent mixed="false">
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" ref="t:Mailbox"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetUserOofSettingsRequest" type="tns:GetUserOofSettingsRequest"/>
  <xs:complexType name="GetUserOofSettingsResponse">
    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="ResponseMessage"</pre>
type="m:ResponseMessageType"/>
      <xs:element minOccurs="0" maxOccurs="1" ref="t:OofSettings"/>
      <xs:element minOccurs="0" maxOccurs="1" name="AllowExternalOof"</pre>
type="t:ExternalAudience"/>
```

```
</xs:sequence>
  </xs:complexType>
  <xs:element name="GetUserOofSettingsResponse" type="tns:GetUserOofSettingsResponse"/>
  <xs:complexType name="SetUserOofSettingsRequest">
    <xs:complexContent mixed="false">
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" ref="t:Mailbox"/>
          <xs:element minOccurs="1" maxOccurs="1" ref="t:UserOofSettings"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="SetUserOofSettingsRequest" type="tns:SetUserOofSettingsRequest"/>
  <xs:complexType name="SetUserOofSettingsResponse">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="ResponseMessage"</pre>
type="m:ResponseMessageType"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="SetUserOofSettingsResponse" type="tns:SetUserOofSettingsResponse"/>
</xs:schema>
```

## 7.2 Types Schema

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

MS-OXWOOF-types.xsd references the file listed in the following table. For this types schema file to operate correctly, this referenced file has 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"</pre>
xmlns:tns="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:import namespace="http://www.w3.org/XML/1998/namespace"/>
<xs:include schemaLocation="MS-OXWSCDATA-types.xsd" />
 <xs:element name="Mailbox" type="t:EmailAddress"/>
 <xs:simpleType name="OofState">
   <xs:restriction base="xs:string">
      <xs:enumeration value="Disabled"/>
      <xs:enumeration value="Enabled"/>
      <xs:enumeration value="Scheduled"/>
   </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="ExternalAudience">
   <xs:restriction base="xs:string">
      <xs:enumeration value="None"/>
      <xs:enumeration value="Known"/>
      <xs:enumeration value="All"/>
    </xs:restriction>
```

## 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 2007
- Microsoft Exchange Server 2010
- Microsoft Exchange Server 2013
- Microsoft Office Outlook 2007
- Microsoft Outlook 2010
- Microsoft Outlook 2013

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 2.2.4.1: Exchange 2007 does not require that the <Duration> element be specified in UTC.

<2> Section 3.1.4.1: Exchange 2007, Exchange 2010, and Exchange 2010 SP1 do not include the Impersonation header as part of the WSDL input element.

<3> Section 3.1.4.1.1.1: Exchange 2007, Exchange 2010, and Exchange 2010 SP1 do not use the RequestVersion header. The RequestVersion header was introduced in Exchange 2010 SP2.

<4> Section 3.1.4.2: Exchange 2007 and Exchange 2010 do not include the **Impersonation** header as part of the WSDL **input** element. The Impersonation header was introduced in Exchange 2010 SP2.

<5> Section 3.1.4.2.1.1: Exchange 2007, Exchange 2010, and Exchange 2010 SP1 do not use the **RequestVersion** header. The **RequestVersion** header was introduced in Exchange 2010 SP2.

# 9 Change Tracking

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

# 10 Index

Α	Messages
Abstract data model	attribute groups 13 attributes 13
server 14	complex types 11
Applicability 8	elements 10
Attribute groups 13	enumerated 10
Attributes 13	groups 13
Attributes 13	namespaces 10
С	simple types 12
	syntax 10
Capability negotiation 8	t:ExternalAudience Simple Typesimple type 12
Change tracking 35	t:Mailbox Elementelement 11
Complex types 11	t:OofState Simple Typesimple type 13
t:UserOofSettings Complex Type 11	t:UserOofSettings Complex Typecomplex type 11
those of settings complex Type 11	transport 10
D	<u>transport</u> 10
	N
Data model - abstract	**
server 14	Namespaces 10
<u>301701</u> 17	Normative references 7
E	Normative references /
-	0
Elements	•
t:Mailbox Element 11	Operations
Events	GetUserOofSettings Operation 14
local - server 24	SetUserOofSettings Operation 19
	Overview (synopsis) 7
timer - server 24	Overview (synopsis) /
F	Р
•	•
Fields - vendor-extensible 9	Parameters - security index 28
Full WSDL 29	Preconditions 8
Full XML Schema 31	Prerequisites 8
Messages Schema 31	Product behavior 34
Types Schema 32	Protocol Details
Types seriena se	overview 14
G	<u> </u>
<b>G</b>	R
Glossary 6	•••
Groups 13	References 7
<u>5.0455</u> 20	informative 7
I	normative 7
•	Relationship to other protocols 8
Implementer - security considerations 28	- Column to terror protocolo
Index of security parameters 28	S
Informative references 7	•
Initialization	Security
server 14	implementer considerations 28
Introduction 6	parameter index 28
Introduction 0	Sequencing rules
L	server 14
	Server
Local events	abstract data model 14
server 24	GetUserOofSettings Operation operation 14
<u> </u>	initialization 14
М	
ויו	local events 24
Mossago processing	message processing 14
Message processing	sequencing rules 14
server 14	SetUserOofSettings Operation operation 19

```
timer events 24
timers 14
Simple types 12
  t:ExternalAudience Simple Type 12
  t:OofState Simple Type 13
Standards assignments 9
Syntax
  messages - overview 10
Т
t:ExternalAudience Simple Typesimple type 12
t:Mailbox Elementelement 11
t:OofState Simple Typesimple type 13
t:UserOofSettings Complex Typecomplex type 11
Timer events
  server 24
Timers
  server 14
Tracking changes 35
Transport 10
Types
  complex 11
  simple 12
V
Vendor-extensible fields 9
Versioning 8
W
WSDL 29
X
XML Schema 31
  Messages Schema 31
Types Schema 32
```