

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

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## 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.               |

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# 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 contain RFC 2119 language. Section 1.5 and 1.9 are also normative but cannot contain RFC 2119 language. 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)**  
**XML**

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

**endpoint**  
**mailbox**  
**OOF message**  
**Out of Office (OOF)**  
**SOAP action**  
**SOAP body**  
**SOAP fault**  
**SOAP header**  
**SOAP message**  
**Uniform Resource Locator (URL)**  
**Web Services Description Language (WSDL)**  
**WSDL message**  
**WSDL port type**  
**XML namespace**  
**XML schema**

The following terms are specific to this document:

**external OOF message:** An OOF message that is sent to external users.

**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.

**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.

**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

### 1.2.1 Normative References

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

[MS-OXWSCDATA] Microsoft Corporation, "[Common Web Service Data Types](#)", July 2009.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.ietf.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.ietf.org/rfc/rfc2616.txt>

[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] World Wide Web Consortium, "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation 8 December 2009, <http://www.w3.org/TR/REC-xml-names/>

[XMLSCHEMA1] Thompson, H.S., Ed., Beech, D., Ed., Maloney, M., Ed., and Mendelsohn, N., Ed., "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-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)", March 2007.

[MS-OXDCLI] Microsoft Corporation, "[Autodiscover Publishing and Lookup Protocol Specification](#)", June 2008.

[MS-OXGLOS] Microsoft Corporation, "[Exchange Server Protocols Master Glossary](#)", April 2008.

[MS-OXWSADISC] Microsoft Corporation, "[Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol Specification](#)", July 2009.

## 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.

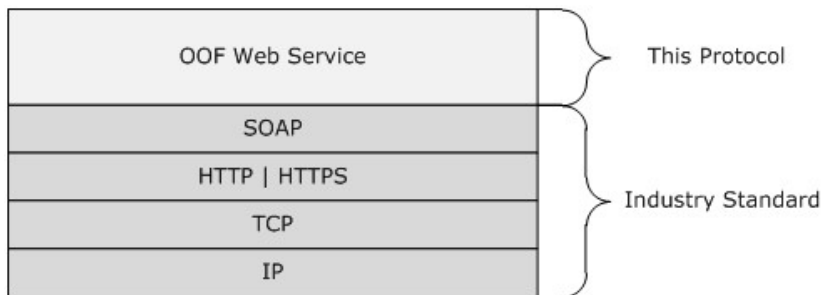
This protocol defines the interaction between a client and a server that configures **OOF settings** and OOF messages for users. The conditions under which the OOF messages are sent are determined by the OOF settings.

#### 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 [\[MS-OXWSADISC\]](#) or the Autodiscover Publishing and Lookup Protocol [\[MS-OXDCLI\]](#) 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 Out of Office (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**

#### 1.5 Prerequisites/Preconditions

The endpoint (4) **URL** that is returned by either the Autodiscover Publishing and Lookup SOAP-Based Web Service protocol [\[MS-OXWSADISC\]](#) or the Autodiscover Publishing and Lookup protocol [\[MS-OXDCLI\]](#) 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 Out of Office (OOF) Web Service protocol operations.

#### 1.6 Applicability Statement

The Out of Office (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 2.2.4.8.

- **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 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            | <a href="http://schemas.xmlsoap.org/WSDL/soap">http://schemas.xmlsoap.org/WSDL/soap</a>                                                 | <a href="#">[SOAP1.1]</a>    |
| tns             | <a href="http://schemas.microsoft.com/exchange/services/2006/messages">http://schemas.microsoft.com/exchange/services/2006/messages</a> |                              |
| xs              | <a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>                                                         | <a href="#">[XMLSCHEMA1]</a> |
| targetNamespace | <a href="http://schemas.microsoft.com/exchange/services/2006/messages">http://schemas.microsoft.com/exchange/services/2006/messages</a> |                              |
| wsdl            | <a href="http://schemas.xmlsoap.org/WSDL/">http://schemas.xmlsoap.org/WSDL/</a>                                                         | <a href="#">[WSDL]</a>       |
| t               | <a href="http://schemas.microsoft.com/exchange/services/2006/types">http://schemas.microsoft.com/exchange/services/2006/types</a>       |                              |
| m               | <a href="http://schemas.microsoft.com/exchange/services/2006/messages">http://schemas.microsoft.com/exchange/services/2006/messages</a> |                              |

#### 2.2.2 Messages

This specification does not define any common XML schema 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                                             |
|------------------|---------------------------------------------------------|
| <b>t:Mailbox</b> | 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 2.2.3.24.

## 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                 |
|--------------------------|-----------------------------|
| <b>t:UserOofSettings</b> | 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"
      type="t:OofState"
      minOccurs="1"
      maxOccurs="1"
    />
    <xs:element name="ExternalAudience"
      type="t:ExternalAudience"
      maxOccurs="1"
      minOccurs="1"
    />
    <xs:element name="Duration"
      type="t:Duration"
      minOccurs="0"
      maxOccurs="1"
    />
    <xs:element name="InternalReply"
      type="t:ReplyBody"
      minOccurs="0"
      maxOccurs="1"
    />
    <xs:element name="ExternalReply"
      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                 | Type                                                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OofState</b>         | <b>t:OofState</b> (section <a href="#">2.2.5.2</a> )                  | Indicates the user's <b>OOF</b> status. This element <b>MUST</b> be present.                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ExternalAudience</b> | <b>t:ExternalAudience</b> (section <a href="#">2.2.5.1</a> )          | Indicates how <b>external users</b> are handled. This element <b>MUST</b> be present.                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Duration</b>         | <b>t:Duration</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.3.22)  | 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 <b>SHOULD</b> be specified in <b>Coordinated Universal Time (UTC)</b> . This element can be present. It <b>MUST</b> be present if the <b>OofState</b> element is set to "Scheduled" when calling the <b>SetUserOofSettings</b> operation (section <a href="#">3.1.4.1</a> ). |
| <b>InternalReply</b>    | <b>t:ReplyBody</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.3.50) | Contains the body of the response OOF message that is sent to <b>internal users</b> . This element can be present.                                                                                                                                                                                                                                                                                                                                             |
| <b>ExternalReply</b>    | <b>t:ReplyBody</b>                                                    | 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                                                                           |
|---------------------------|---------------------------------------------------------------------------------------|
| <b>t:ExternalAudience</b> | Specifies a value that indicates to whom <b>external OOF messages</b> are to be sent. |
| <b>t:OofState</b>         | 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"
    />
  </xs:restriction>
```

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

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

| Value        | Description                                                                                                                                                                                                                                                          |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>None</b>  | Specifies that mail sent from external users will not get an OOF message.                                                                                                                                                                                            |
| <b>Known</b> | 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. |
| <b>All</b>   | Specifies that the external OOF message will be sent to all external users.                                                                                                                                                                                          |

### 2.2.5.2 t:OofState

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 defined by the **ExternalAudience** simple type.

| Value            | Description                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Disabled</b>  | Specifies that OOF behavior is disabled.                                                                    |
| <b>Enabled</b>   | Specifies that the OOF state is enabled; this indicates that OOF messages will be sent.                     |
| <b>Scheduled</b> | 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                                                          |
|---------------------------|----------------------------------------------------------------------|
| <b>GetUserOofSettings</b> | Gets a user's OOF settings and OOF messages from his or her mailbox. |
| <b>SetUserOofSettings</b> | 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.

```

<wsdl:operation name="GetUserOofSettings">
  <wsdl:input message="tns:GetUserOofSettingsSoapIn" />
  <wsdl:output message="tns:GetUserOofSettingsSoapOut" />
</wsdl:operation>

```

The following is the WSDL binding specification for this operation.

```

<wsdl:operation name="GetUserOofSettings">
  <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetUserOofSettings"/
>
  <wsdl:input>
    <soap:body parts="GetUserOofSettingsRequest" use="literal"/>
  </wsdl:input>
  <wsdl:output>
    <soap:body parts="GetUserOofSettingsResult" use="literal"/>
    <soap:header message="tns:GetUserOofSettingsSoapOut" part="ServerVersion"
use="literal"/>
  </wsdl:output>
</wsdl:operation>

```

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.

```

<soap:Body>
  <soap:Fault>
    <faultcode>soap:Client</faultcode>
    <faultstring>Microsoft.Exchange.Data.Storage.AccessDeniedException: User is not mailbox
owner. User = *UserID*, MailboxGuid = *MailboxID* ---> User is not mailbox owner.
</faultstring>
    <faultactor>https://CAS01.example.com/EWS/Exchange.asmx</faultactor>
    <detail>
      <ErrorCode xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">-
2146233088</ErrorCode>
    </detail>
  </soap:Fault>
</soap:Body>

```

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.

| Message                          | Description                                                               |
|----------------------------------|---------------------------------------------------------------------------|
| <b>GetUserOofSettingsSoapIn</b>  | Specifies the request that retrieves a user's Out of Office (OOF) status. |
| <b>GetUserOofSettingsSoapOut</b> | 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: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 two parts of the **GetUserOofSettingsSoapIn** WSDL message.

| Part name                        | Element/type                                                                     | Description                                                                                          |
|----------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>GetUserOofSettingsRequest</b> | <b>m:GetUserOofSettingsRequest</b><br>(section <a href="#">3.1.4.1.2.1</a> )     | Specifies the SOAP body of the request to get the OOF settings for a mailbox.                        |
| <b>Impersonation</b>             | <b>t:ExchangeImpersonation</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.2) | Specifies a <b>SOAP header</b> that identifies the user who the client application is impersonating. |

### 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.

| Part name                       | Element/type                                                                  | Description                                                                   |
|---------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>GetUserOofSettingsResult</b> | <b>m:GetUserOofSettingsResponse</b><br>(section <a href="#">3.1.4.1.2.2</a> ) | Specifies the SOAP body the response to the request for mailbox OOF settings. |

| Part name     | Element/type                                                                 | Description                                                                  |
|---------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| ServerVersion | <b>t:ServerVersionInfo</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.8) | 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                                                                   |
|-----------------------------------|-------------------------------------------------------------------------------|
| <b>GetUserOofSettingsRequest</b>  | Specifies the root element in a <b>GetUserOofSettings</b> operation request.  |
| <b>GetUserOofSettingsResponse</b> | Specifies the root element in a <b>GetUserOofSettings</b> operation response. |
| <b>OofSettings</b>                | 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"
  />
```



### 3.1.4.1.3 Complex Types

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

| Complex type                        | Description                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------|
| <b>GetUserOutOfSettingsRequest</b>  | Contains the arguments that are used to get a user's OOF settings.                   |
| <b>GetUserOutOfSettingsResponse</b> | Contains the <b>response message</b> from the <b>GetUserOutOfSettings</b> operation. |

#### 3.1.4.1.3.1 tns:GetUserOutOfSettingsResponse Complex Type

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

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

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

| Element                 | Type                                                                            | Description                                                                                                             |
|-------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>ResponseMessage</b>  | <b>m:ResponseMessageType</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.3.52) | Provides descriptive information about the response status.<br>This element <b>MUST</b> be present.                     |
| <b>t:OofSettings</b>    | <b>t:OofSettings</b> (section <a href="#">3.1.4.1.2.3</a> )                     | Contains the OOF settings.<br>This element can be present.                                                              |
| <b>AllowExternalOof</b> | <b>t:ExternalAudience</b> (section <a href="#">2.2.5.1</a> )                    | Contains a value that identifies the recipients to whom external OOF messages are sent.<br>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.

```
<xs:complexType name="GetUserOofSettingsRequest">
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element
          maxOccurs="1"
          minOccurs="1"
          ref="t:Mailbox"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

| Element          | Type                                                | Description                                                                                        |
|------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>t:Mailbox</b> | <b>t:Mailbox</b> (section <a href="#">2.2.3.1</a> ) | Specifies the user for whom OOF settings are to be retrieved. This element <b>MUST</b> 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.

```
<wsdl:operation name="SetUserOofSettings">
  <soap:operation
    soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetUserOofSettings"/
  >
  <wsdl:input>
    <soap:body parts="SetUserOofSettingsRequest" use="literal"/>
  </wsdl:input>
  <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                                                                                                                                                                                                                         |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ErrorInvalidScheduledOofDuration</b> | 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". |
| <b>ErrorInvalidUserOofSettings</b>      | 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.

```

<soap:Body>
  <soap:Fault>
    <faultcode>soap:Client</faultcode>
    <faultstring>Microsoft.Exchange.Data.Storage.AccessDeniedException: User is not mailbox
owner. User = *UserID*, MailboxGuid = *MailboxID* ---> User is not mailbox owner.
</faultstring>
    <faultactor>https://CAS01.example.com/EWS/Exchange.asmx</faultactor>
    <detail>
      <ErrorCode xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">-
2146233088</ErrorCode>
    </detail>
  </soap:Fault>
</soap:Body>

```

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                                                          |
|---------------------------------|----------------------------------------------------------------------|
| <b>SetUserOofSettingsSoapIn</b> | Specifies the request that sets a user's Out of Office (OOF) status. |

| Message                          | Description                                                          |
|----------------------------------|----------------------------------------------------------------------|
| <b>SetUserOofSettingsSoapOut</b> | 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: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                                                                                   |
|----------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>SetUserOofSettingsRequest</b> | <b>m:SetUserOofSettingsRequest</b><br>(section <a href="#">3.1.4.2.2.1</a> )     | Specifies the SOAP body of the request to set OOF settings for a mailbox.                     |
| <b>Impersonation</b>             | <b>t:ExchangeImpersonation</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.2) | Specifies a SOAP header that identifies the user who the client application is impersonating. |

### 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="GetUserOofSettingsSoapOut">
  <wsdl:part name="GetUserOofSettingsResult" element="tns:GetUserOofSettingsResponse"/>
  <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                                                                       |
|---------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>SetUserOofSettingsResult</b> | <b>m:SetUserOofSettingsResponse</b><br>(section <a href="#">3.1.4.2.2.2</a> ) | Specifies the SOAP body of the response that contains the requested OOF settings. |
| <b>ServerVersion</b>            | <b>t:ServerVersionInfo</b> <a href="#">[MS-</a>                               | Specifies a SOAP header that                                                      |

| Part name | Element/type                               | Description                                     |
|-----------|--------------------------------------------|-------------------------------------------------|
|           | <a href="#">OXWSCDATA</a> section 2.2.4.8) | identifies the server version for the response. |

### 3.1.4.2.2 SetUserOofSettings Elements

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

| Element                           | Description                                                                    |
|-----------------------------------|--------------------------------------------------------------------------------|
| <b>SetUserOofSettingsRequest</b>  | Specifies the base element for a <b>SetUserOofSettings</b> operation request.  |
| <b>SetUserOofSettingsResponse</b> | Specifies the base element for a <b>SetUserOofSettings</b> operation response. |
| <b>UserOofSettings</b>            | 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                                                                 |
|-----------------------------------|-----------------------------------------------------------------------------|
| <b>SetUserOofSettingsRequest</b>  | Specifies the arguments that are used to set a mailbox user's OOF settings. |
| <b>SetUserOofSettingsResponse</b> | 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.

```
<xs:complexType name="SetUserOofSettingsResponse">
  <xs:sequence>
    <xs:element name="ResponseMessage"
      type="m:ResponseMessageType"
      minOccurs="0"
      maxOccurs="1"
    />
  </xs:sequence>
</xs:complexType>
```

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

| Element                | Type                         | Description                                                                                 |
|------------------------|------------------------------|---------------------------------------------------------------------------------------------|
| <b>ResponseMessage</b> | <b>m:ResponseMessageType</b> | Provides descriptive information about the response status.<br>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.

```
<xs:complexType name="SetUserOofSettingsRequest">
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element
          maxOccurs="1"
          minOccurs="1"
          ref="t:Mailbox"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

    <xs:element
      maxOccurs="1"
      minOccurs="1"
      ref="t:UserOofSettings"
    />
  </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

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

| Element                  | Type                                                                 | Description                                                  |
|--------------------------|----------------------------------------------------------------------|--------------------------------------------------------------|
| <b>t:Mailbox</b>         | <a href="#">t:Mailbox</a> (section <a href="#">2.2.3.1</a> )         | Specifies the mailbox user.<br>This element MUST be present. |
| <b>t:UserOofSettings</b> | <a href="#">t:UserOofSettings</a> (section <a href="#">2.2.4.1</a> ) | Specifies the OOF settings.<br>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.

```
<?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/">
  <soap:Body>
    <GetUserOofSettingsRequest
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <Mailbox xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
        <Address>user@example.com</Address>
      </Mailbox>
    </GetUserOofSettingsRequest>
  </soap:Body>
</soap:Envelope>
```

### 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/"
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</StartTime>
          <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"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetUserOofSettingsRequest
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <Mailbox xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
        <Address>ul@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/"
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>
    <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 **SetUserOofSettings** operation request.

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
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>
    <SetUserOutOfSettingsResponse
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseMessage ResponseClass="Error">
        <MessageText>The scheduled Out of Office duration is not valid.</MessageText>
        <ResponseCode>ErrorInvalidScheduledOutOfDuration</ResponseCode>
        <DescriptiveLinkKey>0</DescriptiveLinkKey>
        <MessageXml>
          <ExceptionType
xmlns="http://schemas.microsoft.com/exchange/services/2006/errors">Microsoft.Exchange.InfoWork
ker.Common.OOF.InvalidScheduledOutOfDuration</ExceptionType>
          <ExceptionCode
xmlns="http://schemas.microsoft.com/exchange/services/2006/errors">158</ExceptionCode>
        </MessageXml>
      </ResponseMessage>
    </SetUserOutOfSettingsResponse>
  </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 following table lists the XML files that are required to implement the functionality that is 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.                  | <a href="#">6.1</a> |
| MS-OXWOOF-messages.xsd | Contains the XML schema message definitions that are used in this protocol. | <a href="#">6.2</a> |
| MS-OXWOOF-types.xsd    | Contains the XML schema type definitions that are used in this protocol.    | <a href="#">6.3</a> |

These files need to be placed in a common folder for the WSDL to validate and operate correctly. Also, any schema files that are referenced in XML **include** or **import** elements by the MS-OXWOOF-types.xsd or MS-OXWOOF-messages.xsd schema need to be placed in the common folder.

### 6.1 WSDL

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

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

| File name               | Section                     |
|-------------------------|-----------------------------|
| MS-OXWOOF-messages.xsd. | section <a href="#">6.2</a> |

```
<?xml version="1.0" encoding="utf-8"?>
<wsl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
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:wsl="http://schemas.xmlsoap.org/wsdl/"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
  <wsl:types>
    <xs:schema id="messages" elementFormDefault="qualified" version="Exchange2007_SP1"
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>
  </wsl:types>
  <wsl:message name="GetUserOofSettingsSoapIn">
    <wsl:part name="GetUserOofSettingsRequest" element="tns:GetUserOofSettingsRequest"/>
  </wsl:message>
  <wsl:message name="GetUserOofSettingsSoapOut">
    <wsl:part name="GetUserOofSettingsResult" element="tns:GetUserOofSettingsResponse"/>
    <wsl:part name="ServerVersion" element="t:ServerVersionInfo"/>
  </wsl:message>
  <wsl:message name="SetUserOofSettingsSoapIn">
    <wsl:part name="SetUserOofSettingsRequest" element="tns:SetUserOofSettingsRequest"/>
  </wsl: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-
i.org/schemas/conformanceClaim/" />
  </wsdl:documentation>
  <soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="document"/>
  <wsdl:operation name="GetUserOofSettings">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetUserOofSettings"/
>
    <wsdl:input>
      <soap:body parts="GetUserOofSettingsRequest" use="literal"/>
    </wsdl:input>
    <wsdl:output>
      <soap:body parts="GetUserOofSettingsResult" use="literal"/>
      <soap:header message="tns:GetUserOofSettingsSoapOut" part="ServerVersion"
use="literal"/>
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="SetUserOofSettings">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetUserOofSettings"/
>
    <wsdl:input>
      <soap:body parts="SetUserOofSettingsRequest" use="literal"/>
    </wsdl:input>
    <wsdl:output>
      <soap:body parts="SetUserOofSettingsResult" use="literal"/>
      <soap:header message="tns:SetUserOofSettingsSoapOut" part="ServerVersion"
use="literal"/>
    </wsdl:output>
  </wsdl:operation>
</wsdl:binding>
</wsdl:definitions>

```

## 6.2 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 | <a href="#">[MS-OXWSCDATA]</a> section 6.2 |
| MS-OXWOOF-types.xsd       | Section <a href="#">6.3</a>                |

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
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="Exchange2010" id="messages">
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
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"
type="m:ResponseMessageType"/>
      <xs:element minOccurs="0" maxOccurs="1" ref="t:OofSettings"/>
      <xs:element minOccurs="0" maxOccurs="1" name="AllowExternalOof"
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"
type="m:ResponseMessageType"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="SetUserOofSettingsResponse" type="tns:SetUserOofSettingsResponse"/>
</xs:schema>

```

## 6.3 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 | <a href="#">[MS-OXWSCDATA]</a> section 6.3 |

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
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="Exchange2010" 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>
  </xs:simpleType>

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

## 7 Appendix B: 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® Office Outlook® 2007
- Microsoft® Outlook® 2010

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.



## 8 Change Tracking

This section identifies changes that were made to the [MS-OXWOOF] protocol document between the November 2010 and March 2011 releases. 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.
- An extensive rewrite, addition, or deletion of major portions of content.
- The removal of a document from the documentation set.
- Changes made for template compliance.

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 language and 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 or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

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.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- 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 [protocol@microsoft.com](mailto:protocol@microsoft.com).

| Section                                                   | Tracking number (if applicable) and description                                                                   | Major change (Y or N) | Change type                                |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------|
| <a href="#">1 Introduction</a>                            | Added information about which sections of the specification are normative and can contain RFC 2119 language.      | Y                     | New content added for template compliance. |
| <a href="#">1.4 Relationship to Other Protocols</a>       | Added more information about related protocols and combined the HTTP and HTTPS layering diagrams into one figure. | N                     | Content updated.                           |
| <a href="#">1.7 Versioning and Capability Negotiation</a> | Added more information about identifying the server version.                                                      | N                     | Content updated.                           |
| <a href="#">2.1 Transport</a>                             | Added more information about authentication.                                                                      | N                     | Content updated.                           |
| <a href="#">2.2.3.1 t:Mailbox Element</a>                 | Added a reference to the t:EmailAddress type specified in [MS-OXWSCDATA].                                         | N                     | Content updated.                           |
| <a href="#">3.1.1 Abstract Data Model</a>                 | Added more information about the conceptual data model for this protocol .                                        | N                     | Content updated.                           |
| <a href="#">3.1.4.1 GetUserOofSettings Operation</a>      | Added the WSDL binding specification for this operation.                                                          | N                     | Content updated.                           |
| <a href="#">3.1.4.1.1 tns:GetUserOofSettingsSoapIn</a>    | Added SOAP action information specific to this WSDL message.                                                      | N                     | Content updated.                           |

| Section                                                                      | Tracking number (if applicable) and description               | Major change (Y or N) | Change type      |
|------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------|------------------|
| <a href="#">3.1.4.1.1.2</a><br><a href="#">tns:GetUserOofSettingsSoapOut</a> | Added SOAP action information specific to this WSDL message.  | N                     | Content updated. |
| <a href="#">3.1.4.2</a><br><a href="#">SetUserOofSettings Operation</a>      | Added the WSDL binding specification for this operation.      | N                     | Content updated. |
| <a href="#">3.1.4.2.1.1</a><br><a href="#">tns:SetUserOofSettingsSoapIn</a>  | Added SOAP action information specific to this WSDL message.  | N                     | Content updated. |
| <a href="#">3.1.4.2.1.2</a><br><a href="#">tns:SetUserOofSettingsSoapOut</a> | Added SOAP action informations specific to this WSDL message. | N                     | Content updated. |

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