

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

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## Revision Summary

Date	Revision History	Revision Class	Comments
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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.
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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.

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# 1 Introduction

This document specifies the Out of Office (OOF) Web Service protocol, which defines the interaction between a client and a server that configures response messages that are sent automatically in response to e-mail messages that are sent to people who are out of the office.

## 1.1 Glossary

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

**Coordinated Universal Time (UTC)**  
**external users**  
**Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**  
**mailbox**  
**OOF message**  
**Out of Office (OOF)**  
**Secure Sockets Layer (SSL)**  
**Simple Mail Transfer Protocol (SMTP)**  
**SOAP body**  
**SOAP fault**  
**Web Services Description Language (WSDL)**  
**WSDL message**  
**WSDL port type**  
**XML**  
**XML namespace**  
**XML schema**

The following terms are specific to this document:

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

**internal users:** Users who are within the organization.

**OOF settings:** The 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

### 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>

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", W3C Note, 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., Eds., et al., "Namespaces in XML 1.0 (Third Edition)", December 2009, <http://www.w3.org/TR/REC-xml-names/>

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

[XMLSCHEMA2] Biron, P., 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-OXGLOS] Microsoft Corporation, "[Exchange Server Protocols Master Glossary](#)", April 2008.

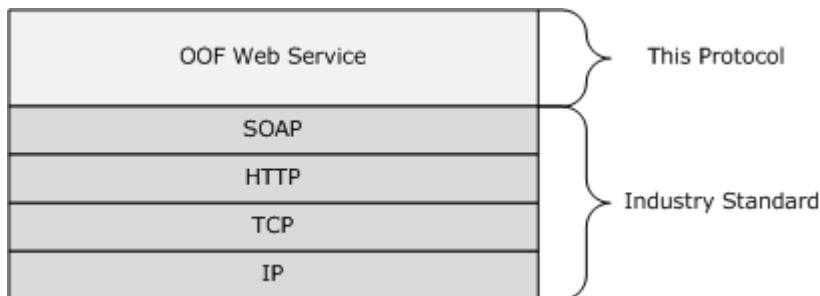
## 1.3 Overview

The Out of Office (OOF) Web Service protocol enables a protocol client to manage the messages that users configure to be sent automatically in response to incoming e-mail by the server when the user is away from the office or unable to respond. 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.

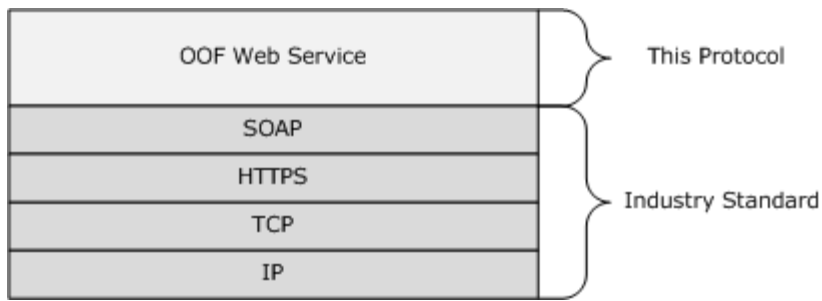
The Out of Office (OOF) Web Service protocol defines the interaction between a client and a server that configures **OOF settings** and OOF messages for users. The conditions in which the OOF message is sent are determined by the OOF settings.

## 1.4 Relationship to Other Protocols

Clients contact the OOF Web Service protocol by using the SOAP protocol [[SOAP1.1](#)] over **HTTP** or **HTTPS** [[RFC2616](#)], as shown in the following figures.



**Figure 1: SOAP over HTTP**



**Figure 2: SOAP over HTTPS**

## 1.5 Prerequisites/Preconditions

None.

## 1.6 Applicability Statement

The **OOF** Web Service protocol is applicable to SOAP-based clients [\[SOAP1.1\]](#).

## 1.7 Versioning and Capability Negotiation

- **Supported Transports:** This protocol uses SOAP 1.1.
- **Protocol Versions:** This protocol has a single **WSDL port type**.
- **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

Soap 1.1, as specified in [\[SOAP1.1\]](#), is supported.

### 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
<a href="#">t:Mailbox</a>	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"
  />

```

## 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
<a href="#">t:UserOutOfSettings</a>	Specifies the OOF settings.

### 2.2.4.1 t:UserOutOfSettings Complex Type

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

```

<xs:complexType name="UserOutOfSettings">
  <xs:sequence>
    <xs:element name="OutOfState"
      type="t:OutOfState"
      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"
    />
    <xs:element name="ExternalReply"
      type="t:ReplyBody"
    />
  </xs:sequence>
</xs:complexType>

```

#### Child Elements

Element	Type	Description
OutOfState	<a href="#">t:OutOfState</a>	Indicates the user's OOF state. MUST be present.
ExternalAudience	<a href="#">t:ExternalAudience</a>	Indicates how <b>external users</b> are handled. MUST be present.

Element	Type	Description
Duration	<a href="#">t:Duration</a>	Indicates the duration for which the OOF status is enabled if the OOF state in the <OofState> element is set to Scheduled. The times SHOULD<1> be in <b>UTC</b> . Can be present. MUST be present if the <OofState> element is set to Scheduled when calling the <b>SetUserOofSettings</b> operation (section <a href="#">3.1.4.1</a> ).
InternalReply	<a href="#">t:ReplyBody</a>	Contains the body of the OOF response message that is sent to <b>internal users</b> . Can be present.
ExternalReply	t:ReplyBody	Contains the body of the OOF response message that is sent to external users. 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
<a href="#">t:ExternalAudience</a>	Specifies a value that determines to whom <b>external OOF messages</b> are sent.
<a href="#">t:OofState</a>	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 determines to whom external OOF messages are 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>
```

#### Enumeration

The following values 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 that are known to the user will receive an OOF message in response to the mail they sent. A known user is one that appears in the user's list of contacts in any of their contacts folders in their mailbox.
All	Specifies that the external OOF message will be sent to all external users.

### 2.2.5.2 t:OofState

The **OofState** 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>
```

Value	Description
Disabled	Specifies that OOF behavior is disabled.
Enabled	Specifies that 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 identified 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 OOF settings 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

The Out of Office (OOF) Web Service Protocol has two operations to manipulate the OOF settings.

Operation	Description
<a href="#">GetUserOofSettings</a>	Specifies how to get the OOF settings and OOF messages from a user's mailbox.
<a href="#">SetUserOofSettings</a>	Specifies how to set the OOF settings and OOF messages in a user's mailbox.

#### 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.

#### 3.1.2 Timers

None.

#### 3.1.3 Initialization

None.

#### 3.1.4 Message Processing Events and Sequencing Rules

This protocol includes the operations listed in the following table.

Operation	Description
<a href="#">GetUserOofSettings</a>	Gets a user's OOF settings and OOF messages from his or her mailbox.
<a href="#">SetUserOofSettings</a>	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**.

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

## Request

Message Format	Description
<a href="#">tns:GetUserOofSettingsSoapIn</a>	Specifies the <b>SOAP message</b> that represents a request to get the OOF settings and OOF messages from a user's mailbox.

## Response

Message Format	Description
<a href="#">tns:GetUserOofSettingsSoapOut</a>	Specifies the SOAP message that is returned by the server in response.

On 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 this 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 (section <a href="#">3.1.4.1</a> ) request.

### 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 user.

```
<wsdl:message name="GetUserOofSettingsSoapIn">
  <wsdl:part name="GetUserOofSettingsRequest" element="tns:GetUserOofSettingsRequest"/>
</wsdl:message>
```

The **GetUserOofSettingsSoapIn** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
GetUserOofSettingsRequest	<b>GetUserOofSettingsRequest</b> (section <a href="#">3.1.4.1.3.1</a> )	Specifies the request.

### 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 user.

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

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

Part name	Element/type	Description
GetUserOofSettingsResult	<b>GetUserOofSettingsResponse</b> (section <a href="#">3.1.4.1.3.1</a> )	Specifies the response.
ServerVersion	<b>ServerVersionInfo</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.8)	Specifies 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 this 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** (section [3.1.4.1](#)) 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 (section [3.1.4.1](#)) 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 this operation.

Complex type	Description
<b>GetUserOofSettingsRequest</b>	Contains the arguments that are used to get a user's OOF settings.
<b>GetUserOofSettingsResponse</b>	Contains the response message 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 (section [3.1.4.1](#)) and the OOF settings for the user as specified in the **GetUserOofSettings** operation request.

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

```

        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>

```

### Child Elements

Element	Type	Description
ResponseMessage	<a href="#">m:ResponseMessageType</a>	Provides descriptive information about the response status. MUST be present.
<a href="#">t:OofSettings</a>	<a href="#">t:OofSettings</a>	Contains the OOF settings. Can be present.
AllowExternalOof	<a href="#">t:ExternalAudience</a>	Contains a value that identifies to whom external OOF messages are sent. 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>

```



## Child Elements

Element	Type	Description
<a href="#">t:Mailbox</a>	<a href="#">t:Mailbox</a>	Specifies the user for which OOF settings are to be retrieved. MUST be present.

The caller 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.

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

#### Request

Message Format	Description
<a href="#">tns:SetUserOofSettingsSoapIn</a>	Specifies the SOAP message that represents a request to set the OOF settings and OOF messages for a user's mailbox.

#### Response

Message Format	Description
<a href="#">tns:SetUserOofSettingsSoapOut</a>	Specifies the SOAP message that is returned by the server in response.

On 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 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 <code>&lt;Duration&gt;</code> element is not set when the <code>&lt;OofState&gt;</code> 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.

```
<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 this operation.

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

```
<wsdl:message name="SetUserOofSettingsSoapIn">
  <wsdl:part name="SetUserOofSettingsRequest" element="tns:SetUserOofSettingsRequest"/>
</wsdl:message>
```

The **SetUserOofSettingsSoapIn** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
SetUserOofSettingsRequest	<b>SetUserOofSettingsRequest</b> (section <a href="#">3.1.4.2.3.2</a> )	Specifies the request.

#### 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 user.

```

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

```

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

Part name	Element/type	Description
SetUserOofSettingsResult	<b>SetUserOofSettingsResponse</b> (section <a href="#">3.1.4.2.3.1</a> )	Specifies the response that contains the requested OOF settings.
ServerVersion	<b>ServerVersionInfo</b> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.8)	Specifies 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
<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 (section [3.1.4.2](#)) 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 (section [3.1.4.2](#)) 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 this 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 (section [3.1.4.2.3.2](#)) message attempt.

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

Child Elements

Element	Type	Description
ResponseMessage	<a href="#">m:ResponseMessageType</a>	Provides descriptive information about the response status. 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:element
      maxOccurs="1"
      minOccurs="1"
      ref="t:UserOutOfSettings"
    />
  </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

### Child Elements

Element	Type	Description
<a href="#">t:Mailbox</a>	<a href="#">t:Mailbox</a>	Specifies the mailbox user. MUST be present.
<a href="#">t:UserOutOfSettings</a>	<a href="#">t:UserOutOfSettings</a>	Specifies the OOF settings. 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 get a user's OOF settings.

```
<?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 SetUserOofSetting 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**

The OOF Web Service protocol does not use additional security mechanisms.

### **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-types.xsd	Contains the XML schema type definitions that are used in this protocol.	<a href="#">6.2</a>
MS-OXWOOF-messages.xsd	Contains the XML schema message 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. Also, any schema files that are referenced in XML <include> or <import> elements by the MS-OXWOOF-types.xsd or MS-OXWOOF-messages.xsd schemas 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 schema file to operate correctly, this file has to be present in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

File name	Section
MS-OXWOOF-messages.xsd.	<a href="#">6.3</a>

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
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">
  <wsdl: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>
  </wsdl:types>
  <wsdl:message name="GetUserOofSettingsSoapIn">
    <wsdl:part name="GetUserOofSettingsRequest" element="tns:GetUserOofSettingsRequest"/>
  </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: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 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 the schema file to operate correctly, this file needs 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>

```

## 6.3 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 the schema file to operate correctly, these files need to be in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

File name	Defining specification/section
MS-OXWSCDATA-messages.xsd	<a href="#">[MS-OXWSCDATA]</a> section 6.3
MS-OXWOOF-types.xsd	Section <a href="#">6.2</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>

```

## 7 Appendix B: Product Behavior

The information in this specification is applicable to the following Microsoft products:

- Microsoft® Office Outlook® 2007
- Microsoft® Exchange Server 2007
- Microsoft® Outlook® 2010
- Microsoft® Exchange Server 2010

Exceptions, if any, are noted below. If a service pack number appears with the product version, behavior changed in that service pack. 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 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 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 May 2010 and August 2010 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>	Updated the introduction.	N	Content update.
<a href="#">1.1 Glossary</a>	Added the term "XML namespace" to the list of terms that are defined in [MS-OXGLOS].	N	Content update.
<a href="#">1.1 Glossary</a>	Added the terms "mailbox" and "SOAP body" to the list of terms that are defined in [MS-OXGLOS].	N	Content update.
<a href="#">1.2.1 Normative References</a>	55751 Moved [MS-OXGLOS] from Normative References section to Informative References section.	N	Content update.
<a href="#">1.2.1 Normative References</a>	56000 Added reference information for [MS-OXWSCDATA].	N	Content update.
<a href="#">1.2.1 Normative References</a>	Removed reference information fro [RFC3066].	N	Content update.
<a href="#">1.4 Relationship to Other Protocols</a>	56235 Updated the text to clarify that the protocol uses HTTP or HTTPS, not both.	N	Content update.
<a href="#">2.2.1</a>	51411	N	Content update.



<b>Section</b>	<b>Tracking number (if applicable) and description</b>	<b>Major change (Y or N)</b>	<b>Change type</b>
<a href="#">Namespaces</a>	Updated the Reference column in the table for the prefixes that are defined in this document.		
<a href="#">2.2.2 Messages</a>	Updated the section title.	N	Content update.
<a href="#">2.2.3 Elements</a>	Added introductory paragraph and summary table.	N	Content updated for template compliance.
<a href="#">2.2.3.1 t:Mailbox Element</a>	55997 Updated the section to conform to current template.	N	Content updated for template compliance.
<a href="#">2.2.4 Complex Types</a>	Added introductory paragraph and summary table.	N	Content updated for template compliance.
<a href="#">2.2.4.1 t:UserOofSettings Complex Type</a>	55968 Moved information specific to the behavior of the SetUserOofSettings operation to this section.	Y	Content update.
<a href="#">2.2.4.1 t:UserOofSettings Complex Type</a>	55995 Removed duplicate information from the <Duration> element description.	N	Content removed.
<a href="#">2.2.4.1 t:UserOofSettings Complex Type</a>	56375 Clarified the definition of the time zone for the <Duration> element.	Y	New product behavior note added.
<a href="#">2.2.4.1 t:UserOofSettings Complex Type</a>	Updated the topic to the current document template.	N	Content updated for template compliance.
<a href="#">2.2.5 Simple Types</a>	Added introductory paragraph and summary table.	N	Content updated for template compliance.
<a href="#">2.2.5.1 t:ExternalAudience Simple Type</a>	56004 Clarified the description of the All enumeration value.	N	Content update.
<a href="#">2.2.5.1 t:ExternalAudience Simple Type</a>	Updated the topic to the current template.	N	Content updated for template compliance.
<a href="#">3.1.4.1 GetUserOofSettings Operation</a>	55969 Added information about the response to the GetUserOofSettings operation request.	N	Content update.

<b>Section</b>	<b>Tracking number (if applicable) and description</b>	<b>Major change (Y or N)</b>	<b>Change type</b>
<a href="#">3.1.4.1 GetUserOofSettings Operation</a>	Updated the section title.	N	Content update.
<a href="#">3.1.4.1.1 Messages</a>	Updated the introductory text.	N	Content update.
<a href="#">3.1.4.1.1.1 tns:GetUserOofSettingsSoapIn</a>	55967 Added a description and the message syntax.	N	Content update.
<a href="#">3.1.4.1.1.2 tns:GetUserOofSettingsSoapOut</a>	55967 Added a description and the message syntax.	N	Content update.
<a href="#">3.1.4.1.2 Elements</a>	56664 Added a summary table for the elements.	Y	Content update.
<a href="#">3.1.4.1.3 Complex Types</a>	Added a summary table for the complex types.	N	Content update.
<a href="#">3.1.4.2 SetUserOofSettings Operation</a>	55967 Moved description of input and output messages to section 3.4.1.2.1.	N	Content removed.
<a href="#">3.1.4.2 SetUserOofSettings Operation</a>	55969 Added information about the response to the SetUserOofSettings operation request.	N	Content update.
<a href="#">3.1.4.2 SetUserOofSettings Operation</a>	55970 Clarified the conditions under which the <Duration> element is set.	N	Content update.
<a href="#">3.1.4.2 SetUserOofSettings Operation</a>	56003 Updated the section to conform to the latest document template.	N	Content update.
<a href="#">3.1.4.2 SetUserOofSettings Operation</a>	Updated the section title.	N	Content update.
<a href="#">3.1.4.2.1 Messages</a>	Updated the introductory text.	N	Content updated for template compliance.
<a href="#">3.1.4.2.1.1 tns:SetUserOofSettingsSoapIn</a>	55967 Added a description and the message syntax.	N	Content update.
<a href="#">3.1.4.2.1.2 tns:SetUserOofSettingsSoapOut</a>	55967 Added a description and the message syntax.	N	Content update.

<b>Section</b>	<b>Tracking number (if applicable) and description</b>	<b>Major change (Y or N)</b>	<b>Change type</b>
<a href="#">3.1.4.2.2 SetUserOofSettings Elements</a>	56664 Added a summary table for the elements.	Y	Content update.
<a href="#">3.1.4.2.3 Complex Types</a>	Added a summary table for the complex types.	N	Content update.
<a href="#">3.1.4.2.3.1 tns:SetUserOofSettingsResponse Complex Type</a>	Updated topic to comply with current template.	N	Content updated for template compliance.
<a href="#">3.1.4.2.3.2 tns:SetUserOofSettingsRequest Complex Type</a>	Updated the structure of the topic.	N	Content updated for template compliance.
<a href="#">6 Appendix A: Full WSDL</a>	56488 Clarified information about using the XML <include> and <import> elements.	N	Content update.
<a href="#">6 Appendix A: Full WSDL</a>	56234 Updated the name of the messages .xsd file.	N	Content update.
<a href="#">6.1 WSDL</a>	55965 Updated the contents of the WSDL file.	Y	Content update.
<a href="#">6.1 WSDL</a>	56488 Added information about the file that is referenced by the WSDL file.	N	Content update.
<a href="#">6.2 Types Schema</a>	55965 Updated the contents of the WSDL file.	Y	Content update.
<a href="#">6.2 Types Schema</a>	56488 Updated the text to clarify that the file references the file listed in the table.	N	Content update.
<a href="#">6.3 Messages Schema</a>	55965 Updated the contents of the WSDL file.	Y	Content update.
<a href="#">6.3 Messages Schema</a>	56488 Updated the text to clarify that the file references the file listed in the table.	N	Content update.
<a href="#">8 Change Tracking</a>	Updated the content to comply with the current protocol specification template.	Y	Content updated for template compliance.

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