

[MS-OXWUMS]: Voice Mail Settings Web Service Protocol Specification

Intellectual Property Rights Notice for Open Specifications Documentation

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

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

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

Revision Summary

Date	Revision History	Revision Class	Comments
04/04/2008	0.1	Major	Initial Availability.
06/27/2008	1.0	Major	Initial Release.
08/06/2008	1.0.1	Editorial	Revised and edited technical content.
09/03/2008	1.0.2	Editorial	Updated references.
12/03/2008	1.0.3	Editorial	Revised and edited technical content.
03/04/2009	1.0.4	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	4.0.1	Editorial	Revised and edited the technical content.

Table of Contents

1 Introduction	7
1.1 Glossary	7
1.2 References	7
1.2.1 Normative References	7
1.2.2 Informative References	8
1.3 Overview	8
1.4 Relationship to Other Protocols	8
1.5 Prerequisites/Preconditions	9
1.6 Applicability Statement	9
1.7 Versioning and Capability Negotiation	9
1.8 Vendor-Extensible Fields	9
1.9 Standards Assignments	9
2 Messages.....	10
2.1 Transport.....	10
2.2 Common Message Syntax	10
2.2.1 Namespaces	10
2.2.2 Simple Types	10
2.2.3 Complex Types	10
2.2.3.1 t:PhoneCallIdType	11
2.2.4 Elements	11
2.2.5 Attributes	11
2.2.6 Groups	11
2.2.7 Attribute Groups	11
2.2.8 Messages	11
3 Protocol Details.....	12
3.1 UMWebServiceSoap Server Details.....	12
3.1.1 Abstract Data Model	12
3.1.2 Timers	12
3.1.3 Initialization	12
3.1.4 Message Processing Events and Sequencing Rules	12
3.1.4.1 Disconnect Operation	13
3.1.4.1.1 Elements	13
3.1.4.1.1.1 Disconnect Element	13
3.1.4.1.1.2 DisconnectResponse Element	14
3.1.4.1.2 Messages	14
3.1.4.1.2.1 DisconnectSoapIn Message	14
3.1.4.1.2.2 DisconnectSoapOut Message	14
3.1.4.2 DisconnectPhoneCall Operation	15
3.1.4.2.1 Complex Types	15
3.1.4.2.1.1 m:DisconnectPhoneCallResponseMessageType	15
3.1.4.2.1.2 m:DisconnectPhoneCallType	15
3.1.4.2.2 Elements	15
3.1.4.2.2.1 m:DisconnectPhoneCall	16
3.1.4.2.2.2 m:DisconnectPhoneCallResponse	16
3.1.4.2.3 Messages	16
3.1.4.2.3.1 DisconnectPhoneCallSoapIn Message	16
3.1.4.2.3.2 DisconnectPhoneCallSoapOut Message	16
3.1.4.3 GetCallInfo Operation	17

3.1.4.3.1 Simple Types	17
3.1.4.3.1.1 UMCallState Simple Type.....	17
3.1.4.3.1.2 UMEventCause Simple Type.....	18
3.1.4.3.2 Complex Types	18
3.1.4.3.2.1 UMCallInfo Complex Type	18
3.1.4.3.3 Elements.....	19
3.1.4.3.3.1 GetCallInfo Element	19
3.1.4.3.3.2 GetCallInfoResponse Element.....	19
3.1.4.3.4 Messages	19
3.1.4.3.4.1 GetCallInfoSoapIn Message	20
3.1.4.3.4.2 GetCallInfoSoapOut Message	20
3.1.4.4 GetPhoneCallInformation Operation	20
3.1.4.4.1 Simples Types	20
3.1.4.4.1.1 t:ConnectionFailureCauseType	20
3.1.4.4.1.2 t:PhoneCallStateType.....	21
3.1.4.4.2 Complex Types	21
3.1.4.4.2.1 m:GetPhoneCallInformationType	21
3.1.4.4.2.2 m:GetPhoneCallInformationResponseMessageType	22
3.1.4.4.2.3 t:PhoneCallInformationType.....	22
3.1.4.4.3 Elements.....	23
3.1.4.4.3.1 m:GetPhoneCallInformation	23
3.1.4.4.3.2 m:GetPhoneCallInformationResponse.....	23
3.1.4.4.4 Messages	23
3.1.4.4.4.1 GetPhoneCallInformationSoapIn	23
3.1.4.4.4.2 GetPhoneCallInformationSoapOut.....	24
3.1.4.5 GetUMProperties Operation	24
3.1.4.5.1 Complex Types	24
3.1.4.5.1.1 UMProperties Complex Type.....	24
3.1.4.5.2 Elements.....	25
3.1.4.5.2.1 GetUMProperties Element	25
3.1.4.5.2.2 GetUMPropertiesResponse Element.....	25
3.1.4.5.3 Messages	26
3.1.4.5.3.1 GetUMPropertiesSoapIn Message	26
3.1.4.5.3.2 GetUMPropertiesSoapOut Message.....	26
3.1.4.6 IsUMEEnabled Operation	26
3.1.4.6.1 Elements.....	27
3.1.4.6.1.1 IsUMEEnabled Element	27
3.1.4.6.1.2 IsUMEEnabledResponse Element	27
3.1.4.6.2 Messages	27
3.1.4.6.2.1 IsUMEEnabledSoapIn Message	27
3.1.4.6.2.2 IsUMEEnabledSoapOut Message	27
3.1.4.7 PlayOnPhone2 Operation	28
3.1.4.7.1 Complex Types	28
3.1.4.7.1.1 m:PlayOnPhoneType	28
3.1.4.7.1.2 m:PlayOnPhone2Type	28
3.1.4.7.1.3 m:PlayOnPhoneResponse2Type	29
3.1.4.7.1.4 m:PlayOnPhoneResponseMessageType	29
3.1.4.7.2 Messages	29
3.1.4.7.2.1 PlayOnPhoneSoapIn2	29
3.1.4.7.2.2 PlayOnPhoneSoapOut2	30
3.1.4.8 PlayOnPhone Operation	30
3.1.4.8.1 Elements.....	30
3.1.4.8.1.1 PlayOnPhone Element	30

3.1.4.8.1.2	PlayOnPhoneResponse Element	31
3.1.4.8.2	Messages	31
3.1.4.8.2.1	PlayOnPhoneSoapIn Message	31
3.1.4.8.2.2	PlayOnPhoneSoapOut Message	32
3.1.4.9	PlayOnPhoneGreeting Operation	32
3.1.4.9.1	Simple Types	32
3.1.4.9.1.1	UMGreetingType	32
3.1.4.9.2	Elements	32
3.1.4.9.2.1	PlayOnPhoneGreeting Element	33
3.1.4.9.2.2	PlayOnPhoneGreetingResponse Element	33
3.1.4.9.3	Messages	33
3.1.4.9.3.1	PlayOnPhoneGreetingSoapIn Message	33
3.1.4.9.3.2	PlayOnPhoneGreetingSoapOut Message	34
3.1.4.10	ResetPIN Operation	34
3.1.4.10.1	Elements	34
3.1.4.10.1.1	ResetPIN Element	34
3.1.4.10.1.2	ResetPINResponse Element	34
3.1.4.10.2	Messages	35
3.1.4.10.2.1	ResetPINSoapIn Message	35
3.1.4.10.2.2	ResetPINSoapOut Message	35
3.1.4.11	SetMissedCallNotificationEnabled Operation	35
3.1.4.11.1	Elements	35
3.1.4.11.1.1	SetMissedCallNotificationEnabled Element	36
3.1.4.11.1.2	SetMissedCallNotificationEnabledResponse Element	36
3.1.4.11.2	Messages	36
3.1.4.11.2.1	SetMissedCallNotificationEnabledSoapIn Message	36
3.1.4.11.2.2	SetMissedCallNotificationEnabledSoapOut Message	36
3.1.4.12	SetOutOfStatus Operation	37
3.1.4.12.1	Elements	37
3.1.4.12.1.1	SetOutOfStatus Element	37
3.1.4.12.1.2	SetOutOfStatusResponse Element	37
3.1.4.12.2	Messages	38
3.1.4.12.2.1	SetOutOfStatusSoapIn Message	38
3.1.4.12.2.2	SetOutOfStatusSoapOut Message	38
3.1.4.13	SetPlayOnPhoneDialString Operation	38
3.1.4.13.1	Elements	38
3.1.4.13.1.1	SetPlayOnPhoneDialString Element	38
3.1.4.13.1.2	SetPlayOnPhoneDialStringResponse Element	39
3.1.4.13.2	Messages	39
3.1.4.13.2.1	SetPlayOnPhoneDialStringSoapIn Message	39
3.1.4.13.2.2	SetPlayOnPhoneDialStringSoapOut Message	39
3.1.4.14	SetTelephoneAccessFolderEmail Operation	40
3.1.4.14.1	Elements	40
3.1.4.14.1.1	SetTelephoneAccessFolderEmail Element	40
3.1.4.14.1.2	SetTelephoneAccessFolderEmailResponse Element	40
3.1.4.14.2	Messages	40
3.1.4.14.2.1	SetTelephoneAccessFolderEmailSoapIn Message	41
3.1.4.14.2.2	SetTelephoneAccessFolderEmailSoapOut Message	41
3.1.5	Timer Events	41
3.1.6	Other Local Events	41
4	Protocol Examples.....	42
4.1	GetUMProperties Example	42

4.2 IsUMEnabled Example	42
4.3 ResetPIN Example	43
4.4 PlayOnPhone Example	43
4.5 PlayOnPhoneGreeting Example	44
4.6 GetCallInfo Example.....	45
4.7 Disconnect Example	45
4.8 SetMissedCallNotificationEnabled Example	46
4.9 SetOutOfStatus Example.....	47
4.10 SetPlayOnPhoneDialString Example.....	47
4.11 SetTelephoneAccessFolderEmail Example.....	48
4.12 SOAP Fault Example.....	48
5 Security.....	50
5.1 Security Considerations for Implementers.....	50
6 Appendix A: Full WSDL.....	51
6.1 WSDL.....	51
6.2 Messages Schema.....	57
6.3 Types Schema.....	62
7 Appendix B: Product Behavior.....	63
8 Change Tracking.....	64
9 Index	66

1 Introduction

The Voice Mail Settings Web service provides an extensibility point that enables clients to read and change information about Unified Messaging properties, and play voice mails or record greetings over the telephone.

1.1 Glossary

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

Entry ID
Out of Office (OOF)
SOAP body
SOAP fault
SOAP header
SOAP message
Unified Messaging
Uniform Resource Locator (URL)
Web Services Description Language (WSDL)
WSDL message
WSDL port type
XML
XML namespace
XML schema

The following terms are specific to this document:

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

[MS-OXOUM] Microsoft Corporation, "[Voice Mail and Fax Objects Protocol Specification](#)", April 2008.

[RFC2045] Freed, N., and Borenstein, N., "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996, <http://www.ietf.org/rfc/rfc2045.txt>

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

[RFC2396] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifiers (URI): Generic Syntax", RFC 2396, August 1998, <http://www.ietf.org/rfc/rfc2396.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>

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

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", 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>

[XML10] Bray, T., Paoli, J., Sperberg-McQueen, C., Eds., et al., "Extensible Markup Language (XML) 1.0 (Third Edition)", W3C Recommendation, February 2004, <http://www.w3.org/TR/2004/REC-xml-20040204/>

[XMLINFOSET] Cowan, J., and Tobin, R., Eds., "XML Information Set (Second Edition)", W3C Recommendation, February 2004, <http://www.w3.org/TR/2004/REC-xml-infoset-20040204>

[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

[MSDN-UMWSR] Microsoft Corporation, "Unified Messaging Web Service Reference", May 2009, <http://go.microsoft.com/fwlink/?LinkId=112217>

1.3 Overview

The Voice Mail Settings Web Service protocol provides an extensibility point that enables clients to read and change information about **Unified Messaging** properties or play voice mail and mailbox items over the telephone.

This specification describes the requests and responses for the Voice Mail Settings Web Service protocol operations.

1.4 Relationship to Other Protocols

The Voice Mail Settings Web service uses SOAP [SOAP1.1] over **HTTPS** [RFC2818], as shown in Figure 1.

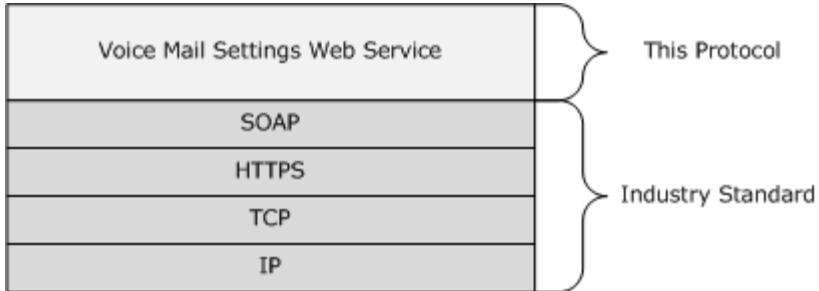


Figure 1: Layering diagram

1.5 Prerequisites/Preconditions

The URL of the Voice Mail Settings Web Service protocol can be retrieved by using the Autodiscover Publishing and Lookup SOAP-Based Web Service protocol [\[MS-OXWSADISC\]](#).

1.6 Applicability Statement

None.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported transports:** This protocol uses SOAP 1.1.
- **Protocol versions:** This protocol has only one **WSDL port type** version.
- **Security and Authentication methods:** The Voice Mail Settings Web service relies on the Web server that hosts the application to perform authentication.
- **Localization:** This protocol includes text strings in various languages for **SOAP fault** responses. The SOAP fault **detail** element (see section [2.2.4](#)) contains a culture-independent error string that allows the client to localize error messages in a different language.
- **Capability Negotiation:** This protocol does not support capability negotiation.

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 more details, see [\[SOAP1.1\]](#).

Security model: The Voice Mail Settings Web service relies on the Web server that hosts the application to perform authentication. The protocol SHOULD use secure communication via HTTPS, as defined in [\[RFC2818\]](#).

2.2 Common Message Syntax

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

2.2.1 Namespaces

This specification defines and references various **XML namespaces** 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
targetNamespace	HTTP://schemas.microsoft.com/exchange/services/2006/messages	[MS-OXWUMS]
tns	HTTP://schemas.microsoft.com/exchange/services/2006/messages	[MS-OXWUMS]
s	HTTP://www.w3.org/2001/XMLSchema	[XMLSCHEMA1]
soap	HTTP://schemas.xmlsoap.org/WSDL/soap/	[WSDL]
WSDL	HTTP://schemas.xmlsoap.org/WSDL/	[WSDL]
xs	HTTP://www.w3.org/2001/XMLSchema	[XMLSCHEMA1]
t	HTTP://schemas.microsoft.com/exchange/services/2006/types	[MS-OXWUMS]
m	HTTP://schemas.microsoft.com/exchange/services/2006/messages	[MS-OXWUMS]

2.2.2 Simple Types

This specification does not define any common XML schema simple types.

2.2.3 Complex Types

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

Complex Type	Description
PhoneCallIdType (section 2.2.3.1)	Specifies the telephone call identifier.

2.2.3.1 t:PhoneCallIdType

The **PhoneCallIdType** type specifies the phone call identifier.

```
<xs:complexType name="PhoneCallIdType">
<xs:attribute name="Id" type="xs:string" use="required"/>
</xs:complexType>
```

2.2.4 Elements

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

2.2.5 Attributes

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

2.2.6 Groups

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

2.2.7 Attribute Groups

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

2.2.8 Messages

This specification does not define any common XML schema messages.

3 Protocol Details

The client side of this protocol is simply a pass-through. 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 UMWebServiceSoap Server Details

3.1.1 Abstract Data Model

The Voice Mail Settings Web service is a stateless protocol.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

This protocol uses the operations that are listed in the following table.

Operation	Description
Disconnect (section 3.1.4.1)	Disconnects a call. The Disconnect operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
DisconnectPhoneCall (section 3.1.4.2)	Disconnects a call. The DisconnectPhoneCall operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.14.
GetCallInfo (section 3.1.4.3)	Returns information about a call. The GetCallInfo operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
GetPhoneCallInformation (section 3.1.4.4)	Returns information about a call. The GetPhoneCallInformation operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.14.
GetUMProperties (section 3.1.4.5)	Returns a list of Unified Messaging properties. The GetUMProperties operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
IsUMEnabled (section 3.1.4.6)	Returns a value that indicates whether the user who is making the request is enabled for Unified Messaging. The IsUMEnabled operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
PlayOnPhone2 (section 3.1.4.7)	Requests that an outbound call is performed and plays a voice message or mailbox item over the telephone. The PlayOnPhone2 operation uses the endpoint specified in [MS-OXDISCLI] section 3.1.4.7.
PlayOnPhone (section 3.1.4.8)	Requests that an outbound call is performed and plays a voice message or mailbox item over the telephone. The

Operation	Description
	PlayOnPhone operation uses the endpoint specified in [MS-OXDISCLI] section 3.1.4.8.
PlayOnPhoneGreeting (section 3.1.4.9)	Makes an outbound call to play and record a greeting over the telephone. The PlayOnPhoneGreeting operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
ResetPIN (section 3.1.4.10)	Creates a new password for the user who is making the request. The ResetPIN operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
SetMissedCallNotificationEnabled (section 3.1.4.11)	Sets a value that indicates whether missed call notifications are enabled for the user who is making the request. The SetMissedCallNotificationEnabled operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
SetOutOfStatus (section 3.1.4.12)	Sets a value that indicates whether the Out of Office (OOF) greeting is enabled for the user who is making the request. The SetOutOfStatus operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
SetPlayOnPhoneDialString (section 3.1.4.13)	Sets the default telephone number that is used in PlayOnPhone and PlayOnPhoneGreeting operation requests. The SetPlayOnPhoneDialString operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.
SetTelephoneAccessFolderEmail (section 3.1.4.14)	Sets the mailbox folder from which the Unified Messaging server will read back to the user over the telephone. The SetTelephoneAccessFolderEmail operation uses the endpoint specified in [MS-OXDISCLI] section 2.2.3.2.5.30.

3.1.4.1 Disconnect Operation

The **Disconnect** operation is used to disconnect a call. If the operation succeeds, a **<DisconnectResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```
<wsdl:operation name="Disconnect">
  <wsdl:input message="tns:DisconnectSoapIn" />
  <wsdl:output message="tns:DisconnectSoapOut" />
</wsdl:operation>
```

3.1.4.1.1 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.1.1.1 Disconnect Element

Defines a request to disconnect a phone call.

```
<s:element name="Disconnect">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="CallId" type="s:string" />
```

```

        </s:sequence>
    </s:complexType>
</s:element>
```

Element	Type	Definition
CallId	s:string	The identifier of the call to disconnect. This identifier is returned as part of the PlayOnPhone or PlayOnPhoneGreeting operations (sections 3.1.4.8 and 3.1.4.9). If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.1.1.2 DisconnectResponse Element

Defines a response to a **Disconnect** request.

```

<s:element name="DisconnectResponse">
    <s:complexType />
</s:element>
```

3.1.4.1.2 Messages

The following **WSDL message** definitions are specific to this operation.

3.1.4.1.2.1 DisconnectSoapIn Message

The **DisconnectSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:Disconnect	Contains the information that is required to disconnect a telephone call.

```

<wsdl:message name="DisconnectSoapIn">
    <wsdl:part name="parameters" element="tns:Disconnect" />
</wsdl:message>
```

3.1.4.1.2.2 DisconnectSoapOut Message

The **DisconnectSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:DisconnectResponse	Specifies a response to a Disconnect operation (section 3.1.4.1) request.

```

<wsdl:message name="DisconnectSoapOut">
    <wsdl:part name="parameters" element="tns:DisconnectResponse" />
</wsdl:message>
```

3.1.4.2 DisconnectPhoneCall Operation

The **DisconnectPhoneCall** operation is used to disconnect a call.[<1>](#)

```
<wsdl:operation name="DisconnectPhoneCall">
    <wsdl:input message="tns:DisconnectPhoneCallSoapIn" />
    <wsdl:output message="tns:DisconnectPhoneCallSoapOut" />
</wsdl:operation>
```

3.1.4.2.1 Complex Types

The following XML schema complex type definitions are specific to this operation.

3.1.4.2.1.1 m:DisconnectPhoneCallResponseType

The **DisconnectPhoneCallResponseType** type specifies a response to disconnect a call. The **DisconnectPhoneCallResponseType** type extends the **ResponseMessageType** type.

```
<xs:complexType name="DisconnectPhoneCallResponseType">
    <xs:complexContent>
        <xs:extension base="m:ResponseMessageType"/>
    </xs:complexContent>
</xs:complexType>
```

3.1.4.2.1.2 m:DisconnectPhoneCallType

The **DisconnectPhoneCallType** type specifies a request to disconnect a call. The **DisconnectPhoneCallType** type extends the **BaseRequestType**.

```
<xs:complexType name="DisconnectPhoneCallType">
    <xs:complexContent>
        <xs:extension base="m:BaseRequestType">
            <xs:sequence>
                <xs:element name="PhoneCallId" type="t:PhoneCallIdType" minOccurs="1" maxOccurs="1"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

Element	Type	Definition
PhoneCallId	t:PhoneCallIdType	Specifies the identifier of the phone call to disconnect. This element MUST occur only once.

3.1.4.2.2 Elements

The following XML schema element definitions are specific to this operation.

Element	Description
m:DisconnectPhoneCall	Specifies a request to disconnect a call.

Element	Description
m:DisconnectPhoneCallResponse	Specifies a response to a request to disconnect a call.

3.1.4.2.2.1 m:DisconnectPhoneCall

The **DisconnectPhoneCall** element specifies a request to disconnect a call.

```
<xs:element name="DisconnectPhoneCall" type="m:DisconnectPhoneCallType"/>
```

3.1.4.2.2.2 m:DisconnectPhoneCallResponse

The **DisconnectPhoneCallResponse** element specifies a response to disconnect a call.

```
<xs:element name="DisconnectPhoneCallResponse"
type="m:DisconnectPhoneCallResponseType"/>
```

3.1.4.2.3 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.2.3.1 DisconnectPhoneCallSoapIn Message

The **DisconnectPhoneCallSoapIn** WSDL message specifies the **DisconnectPhoneCall** request.

Parts for the **DisconnectPhoneCallSoapIn** message are listed in the following table.

Part	Element/Type	Description
request	tns:DisconnectPhoneCall	Specifies the request.
Impersonation	t:ExchangeImpersonation	Specifies Exchange Impersonation information.
MailboxCulture	t:MailboxCulture	Specifies the culture to use for accessing the mailbox . The cultures are defined by [RFC3066] .
RequestVersion	t:RequestServerVersion	Specifies the schema version for the DisconnectPhoneCall request.

```
<wsdl:message name="DisconnectPhoneCallSoapIn">
<wsdl:part name="request" element="tns:DisconnectPhoneCall"/>
<wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
<wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
<wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
</wsdl:message>
```

3.1.4.2.3.2 DisconnectPhoneCallSoapOut Message

The **DisconnectPhoneCallSoapOut** WSDL message specifies the **DisconnectPhoneCall** response.

Parts for the **DisconnectPhoneCallSoapOut** message are listed in the following table.

Part	Element/Type	Description
DisconnectPhoneCallResult	tns:DisconnectPhoneCallResponse	Specifies the response.
ServerVersion	t:ServerVersionInfo	Specifies the server version for the response.

```
<wsdl:message name="DisconnectPhoneCallSoapOut">
  <wsdl:part name="DisconnectPhoneCallResult" element="tns:DisconnectPhoneCallResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

3.1.4.3 GetCallInfo Operation

The **GetCallInfo** operation is used to return information about a call. If the operation succeeds, a `<GetCallInfoResponse>` element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```
<wsdl:operation name="GetCallInfo">
  <wsdl:input message="tns:GetCallInfoSoapIn" />
  <wsdl:output message="tns:GetCallInfoSoapOut" />
</wsdl:operation>
```

3.1.4.3.1 Simple Types

The following XML schema simple definitions are specific to this operation.

3.1.4.3.1.1 UMCallState Simple Type

Indicates the current state of a phone call.

```
<s:simpleType name="UMCallState">
  <s:restriction base="s:string">
    <s:enumeration value="Idle" />
    <s:enumeration value="Connecting" />
    <s:enumeration value="Alerted" />
    <s:enumeration value="Connected" />
    <s:enumeration value="Disconnected" />
    <s:enumeration value="Incoming" />
    <s:enumeration value="Transferring" />
    <s:enumeration value="Forwarding" />
  </s:restriction>
</s:simpleType>
```

Value	Description
Idle	Initial call state.
Connecting	The system is dialing this call.
Alerted	The call is in alerting state (phone is ringing).
Connected	The call is in the connected state.
Disconnected	The call is disconnected.

Value	Description
Incoming	The call is inbound.
Transferring	The call is being transferred to another destination.
Forwarding	The call is being forwarded to another destination.

3.1.4.3.1.2 UMEventCause Simple Type

Indicates the disconnect reason of a phone call.

```
<s:simpleType name="UMEVENTcause">
  <s:restriction base="s:string">
    <s:enumeration value="None" />
    <s:enumeration value="UserBusy" />
    <s:enumeration value="NoAnswer" />
    <s:enumeration value="Unavailable" />
    <s:enumeration value="Other" />
  </s:restriction>
</s:simpleType>
```

Value	Description
None	Call state is not disconnected or disconnect reason is not known.
UserBusy	The called party line was busy.
NoAnswer	The called party did not answer.
Unavailable	The called party number was not available.
Other	Catch-all for other disconnect reasons.

3.1.4.3.2 Complex Types

The following XML schema complex type definitions are specific to this operation.

3.1.4.3.2.1 UMCallInfo Complex Type

```
<s:complexType name="UMCallInfo">
  <s:sequence>
    <s:element minOccurs="1" maxOccurs="1" name="CallState" type="tns:UMCallState" />
    <s:element minOccurs="1" maxOccurs="1" name="EventCause" type="tns:UMEVENTcause" />
  </s:sequence>
</s:complexType>
```

Element	Type	Definition
CallState	tns:UMCallState	Contains a value that indicates the status of a call for which the GetCallInfo operation requested information. MUST be present.
EventCause	tns:UMEVENTcause	Contains a value that indicates the cause of an event for a call for which the GetCallInfo operation requested information.

Element	Type	Definition
		MUST be present.

3.1.4.3.3 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.3.3.1 GetCallInfo Element

Defines a request to get information about a call.

```
<s:element name="GetCallInfo">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="CallId" type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
CallId	s:string	<p>The identifier of the call for which to request information. This identifier is returned as part of the PlayOnPhone or PlayOnPhoneGreeting operations (sections 3.1.4.3.3.1 and 3.1.4.5).</p> <p>If this element is not specified, the implementation can return a SOAP fault response.</p>

3.1.4.3.3.2 GetCallInfoResponse Element

Defines a response to a **GetCallInfo** request.

```
<s:element name="GetCallInfoResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="GetCallInfoResponse"
type="tns:UMCallInfo" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Elements	Type	Definition
GetCallInfoResponse	tns:UMCallInfo	<p>Contains information about a call. See the UMCallInfo complex type for more information (section 3.1.4.1.2.1).</p> <p>If this element is not specified, the implementation can return a SOAP fault response.</p>

3.1.4.3.4 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.3.4.1 GetCallInfoSoapIn Message

The **GetCallInfoSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:GetCallInfo	Contains the data that is required to get information about a telephone call.

```
<wsdl:message name="GetCallInfoSoapIn">
  <wsdl:part name="parameters" element="tns:GetCallInfo" />
</wsdl:message>
```

3.1.4.3.4.2 GetCallInfoSoapOut Message

The **GetCallInfoSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:GetCallInfoResponse	Specifies a response to a GetCallInfo operation (section 3.1.4.3) request.

```
<wsdl:message name="GetCallInfoSoapOut">
  <wsdl:part name="parameters" element="tns:GetCallInfoResponse" />
</wsdl:message>
```

3.1.4.4 GetPhoneCallInformation Operation

The **GetPhoneCallInformation** operation is used to get information about a telephone call.[\(2\)](#)

```
<wsdl:operation name="GetPhoneCallInformation">
  <wsdl:input message="tns:GetPhoneCallInformationSoapIn" />
  <wsdl:output message="tns:GetPhoneCallInformationSoapOut" />
</wsdl:operation>
```

3.1.4.4.1 Simples Types

The following XML schema simple type definitions are specific to this operation.

3.1.4.4.1.1 t:ConnectionFailureCauseType

The **ConnectionFailureCauseType** type specifies the disconnect reason of a telephone call.

```
<xs:simpleType name="ConnectionFailureCauseType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None"/>
    <xs:enumeration value="UserBusy"/>
    <xs:enumeration value="NoAnswer"/>
    <xs:enumeration value="Unavailable"/>
    <xs:enumeration value="Other"/>
  </xs:restriction>
```

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

Value	Description
None	Call state is not disconnected or disconnect reason is not known.
UserBusy	The called party line was busy.
NoAnswer	The called party did not answer.
Unavailable	The called party number was not available.
Other	Catch-all for other disconnect reasons.

3.1.4.4.1.2 t:PhoneCallStateType

The **PhoneCallState** type specifies the current state for a phone call.

```
<xs:simpleType name="PhoneCallStateType">
  <xs:restriction base = "xs:string">
    <xs:enumeration value="Idle"/>
    <xs:enumeration value="Connecting"/>
    <xs:enumeration value="Alerted"/>
    <xs:enumeration value="Connected"/>
    <xs:enumeration value="Disconnected"/>
    <xs:enumeration value="Incoming"/>
    <xs:enumeration value="Transferring"/>
    <xs:enumeration value="Forwarding"/>
  </xs:restriction>
</xs:simpleType>
```

Value	Description
Idle	Initial call state.
Connecting	The system is dialing this call.
Alerted	The call is in alerting state (phone is ringing).
Connected	The call is in the connected state.
Disconnected	The call is disconnected.
Incoming	The call is inbound.
Transferring	The call is being transferred to another destination.
Forwarding	The call is being forwarded to another destination.

3.1.4.4.2 Complex Types

The following XML schema complex type definitions are specific to this operation.

3.1.4.4.2.1 m:GetPhoneCallInformationType

The **GetPhoneCallInformationType** type specifies a request to get telephone call information.

```

<xs:complexType name="GetPhoneCallInformationType">
    <xs:complexContent>
        <xs:extension base="m:BaseRequestType">
            <xs:sequence>
                <xs:element name="PhoneCallId" type="t:PhoneCallIdType" minOccurs="1"
maxOccurs="1"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>

```

Element	Type	Definition
PhoneCallId	t:PhoneCallIdType	Specifies the identifier of the telephone call to disconnect. This element MUST occur only once.

3.1.4.4.2.2 m:GetPhoneCallInformationResponseMessageType

The **GetPhoneCallInformationResponseMessageType** type specifies a response to get telephone call information.

```

<xs:complexType name="GetPhoneCallInformationResponseMessageType">
    <xs:complexContent>
        <xs:extension base="m:ResponseMessageType">
            <xs:sequence>
                <xs:element name="PhoneCallInformation" type="t:PhoneCallInformationType"
minOccurs="0" maxOccurs="1"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>

```

Element	Type	Definition
PhoneCallInformation	t:PhoneCallInformationType	Specifies the state information for a phone call.

3.1.4.4.2.3 t:PhoneCallInformationType

The **PhoneCallInformationType** type specifies the state information for a phone call.

```

<xs:complexType name="PhoneCallInformationType">
    <xs:sequence>
        <xs:element name="PhoneCallState" type="t:PhoneCallStateType" minOccurs="1"
maxOccurs="1"/>
        <xs:element name="ConnectionFailureCause" type="t:ConnectionFailureCauseType"
minOccurs="1" maxOccurs="1"/>
        <xs:element name="SIPResponseText" type="xs:string" minOccurs="0" maxOccurs="1"/>
        <xs:element name="SIPResponseCode" type="xs:int" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>

```

Element	Type	Definition
PhoneCallState	t:PhoneCallStateType	Specifies the state for a telephone call.

Element	Type	Definition
		This element MUST occur.
ConnectionFailureCause	t:ConnectionFailureCauseType	Specifies the cause of a connection failure. This element MUST occur.
SIPResponseText	xs:string	Specifies the SIP response text.
SIPResponseCode	xs:int	Specifies the SIP response code.

3.1.4.4.3 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.4.3.1 m:GetPhoneCallInformation

The **GetPhoneCallInformation** element specifies a request to get telephone call information.

```
<xs:element name="GetPhoneCallInformation" type="m:GetPhoneCallInformationType"/>
```

3.1.4.4.3.2 m:GetPhoneCallInformationResponse

The **GetPhoneCallInformationResponse** element specifies a response to get telephone call information.

```
<xs:element name="GetPhoneCallInformationResponse"
type="m:GetPhoneCallInformationResponseType"/>
```

3.1.4.4 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.4.4.1 GetPhoneCallInformationSoapIn

The **GetPhoneCallInformationSoapIn** WSDL message specifies the **GetPhoneCallInformation** request.

Parts for the **GetPhoneCallInformationSoapIn** message are listed in the following table.

Part	Element/Type	Description
request	tns:GetPhoneCallInformation	Specifies the request.
Impersonation	t:ExchangeImpersonation	Specifies Exchange Impersonation information.
MailboxCulture	t:MailboxCulture	Specifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066] .
RequestVersion	t:RequestServerVersion	Specifies the schema version for the GetPhoneCallInformation request.

```
<wsdl:message name="GetPhoneCallInformationSoapIn">
  <wsdl:part name="request" element="tns:GetPhoneCallInformation"/>
```

```

<wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
<wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
<wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
</wsdl:message>

```

3.1.4.4.2 GetPhoneCallInformationSoapOut

The **GetPhoneCallInformationSoapOut** WSDL message specifies the **GetPhoneCallInformation** response.

Parts for the **GetPhoneCallInformationSoapOut** message are listed in the following table.

Part	Element/Type	Description
GetPhoneCallInformationResult	tns:GetPhoneCallInformationResponse	Specifies the response.
ServerVersion	t:ServerVersionInfo	Specifies the server version for the response.

```

<wsdl:message name="GetPhoneCallInformationSoapOut">
    <wsdl:part name="GetPhoneCallInformationResult"
    element="tns:GetPhoneCallInformationResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>

```

3.1.4.5 GetUMProperties Operation

The **GetUMProperties** operation returns a list of Unified Messaging properties. If the operation succeeds, a **<GetUMPropertiesResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```

<wsdl:operation name="GetUMProperties">
    <wsdl:input message="tns:GetUMPropertiesSoapIn" />
    <wsdl:output message="tns:GetUMPropertiesSoapOut" />
</wsdl:operation>

```

3.1.4.5.1 Complex Types

The following XML schema complex type definitions are specific to this operation.

3.1.4.5.1.1 UMProperties Complex Type

```

<s:complexType name="UMProperties">
    <s:sequence>
        <s:element minOccurs="1" maxOccurs="1" name="OofStatus" type="s:boolean" />
        <s:element minOccurs="1" maxOccurs="1" name="MissedCallNotificationEnabled"
        type="s:boolean" />
        <s:element minOccurs="0" maxOccurs="1" name="PlayOnPhoneDialString" type="s:string" />
        <s:element minOccurs="0" maxOccurs="1" name="TelephoneAccessNumbers"
        type="s:string" />
        <s:element minOccurs="0" maxOccurs="1" name="TelephoneAccessFolderEmail"
        type="s:string" />
    </s:sequence>

```

```
</s:complexType>
```

Element	Type	Definition
OofStatus	s:boolean	Indicates whether the Out of Office greeting is enabled. MUST be present.
MissedCallNotificationEnabled	s:boolean	Indicates whether missed call notifications are enabled. MUST be present.
PlayOnPhoneDialString	s:string	Contains the default telephone number to use for the PlayOnPhone and PlayOnPhoneGreeting operations (sections 3.1.4.8 and 3.1.4.5). If this element is not specified, the implementation can return a SOAP fault response.
TelephoneAccessNumbers	s:string	Contains a comma-separated list of telephone numbers that the user can use to access Unified Messaging via a telephone. If this element is not specified, the implementation can return a SOAP fault response.
TelephoneAccessFolderEmail	s:string	Contains the identifier for the e-mail folder from which Unified Messaging will read messages over the telephone. This value is the folder EntryID [MS-OXGLOS] encoded as a base64 string (section 6.8 of [RFC2045]). If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.5.2 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.5.2.1 GetUMProperties Element

Defines a request to get Unified Messaging properties.

```
<s:element name="GetUMProperties">
  <s:complexType />
</s:element>
```

3.1.4.5.2.2 GetUMPropertiesResponse Element

Defines a response to a **GetUMProperties** request.

```
<s:element name="GetUMPropertiesResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="GetUMPropertiesResponse"
        type="tns:UMProperties" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
GetUMPropertiesResponse	tns:UMProperties	Contains a list of Unified Messaging properties. See the UMProperties complex type for more information (section 3.1.4.3.1.1). If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.5.3 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.5.3.1 GetUMPropertiesSoapIn Message

The **GetUMPropertiesSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns: GetUMProperties	Contains the information that is required to get Unified Messaging properties.

```
<wsdl:message name="GetUMPropertiesSoapIn">
  <wsdl:part name="parameters" element="tns:GetUMProperties" />
</wsdl:message>
```

3.1.4.5.3.2 GetUMPropertiesSoapOut Message

The **GetUMPropertiesSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:GetUMPropertiesResponse	Specifies a response to a GetUMProperties operation (section 3.1.4.5) request.

```
<wsdl:message name="GetUMPropertiesSoapOut">
  <wsdl:part name="parameters" element="tns:GetUMPropertiesResponse" />
</wsdl:message>
```

3.1.4.6 IsUMEnabled Operation

The **IsUMEnabled** operation returns a value that indicates whether the user who is making the request is enabled for Unified Messaging. If the operation succeeds, an **<IsUMEnabledResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.[<3>](#)

```
<wsdl:operation name="IsUMEnabled">
  <wsdl:input message="tns:IsUMEnabledSoapIn" />
  <wsdl:output message="tns:IsUMEnabledSoapOut" />
</wsdl:operation>
```

3.1.4.6.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.6.1.1 IsUMEnabled Element

Defines a request to get whether a mailbox is enabled for Unified Messaging.

```
<s:element name="IsUMEnabled">
  <s:complexType />
</s:element>
```

3.1.4.6.1.2 IsUMEnabledResponse Element

Defines a response to an **IsUMEnabled** request.

```
<s:element name="IsUMEnabledResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="IsUMEnabledResponse"
        type="s:boolean" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
IsUMEnabledResponse	s:boolean	Contains a value that indicates whether a mailbox is enabled for Unified Messaging. MUST be present.

3.1.4.6.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.6.2.1 IsUMEnabledSoapIn Message

The **IsUMEnabledSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:IsUMEnabled	Contains the information that is required to discover whether a mailbox is enabled for Unified Messaging.

```
<wsdl:message name="IsUMEnabledSoapIn">
  <wsdl:part name="parameters" element="tns:IsUMEnabled" />
</wsdl:message>
```

3.1.4.6.2.2 IsUMEnabledSoapOut Message

The **IsUMEnabledSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:IsUMEnabledResponse	Specifies a response to a IsUMEnabled operation (section 3.1.4.6) request.

```
<wsdl:message name="IsUMEnabledSoapOut">
  <wsdl:part name="parameters" element="tns:IsUMEnabledResponse" />
</wsdl:message>
```

3.1.4.7 PlayOnPhone2 Operation

The **PlayOnPhone2** operation initiates an outbound call and plays a voice message over the telephone.[<4>](#)

```
<wsdl:operation name="PlayOnPhone2">
  <wsdl:input message="tns:PlayOnPhoneSoapIn2" />
  <wsdl:output message="tns:PlayOnPhoneSoapOut2" />
</wsdl:operation>
```

3.1.4.7.1 Complex Types

The following XML schema complex type definitions are specific to this operation.

3.1.4.7.1.1 m:PlayOnPhoneType

The **PlayOnPhoneType** type specifies the request to play a voice mail over the telephone.

```
<xss:complexType name="PlayOnPhoneType">
  <xss:complexContent>
    <xss:extension base="m:BaseRequestType">
      <xss:sequence>
        <xss:element name="ItemId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
        <xss:element name="DialString" type="xs:string" minOccurs="1" maxOccurs="1"/>
      </xss:sequence>
    </xss:extension>
  </xss:complexContent>
</xss:complexType>
```

Element	Type	Definition
ItemId	t:ItemIdType	Specifies the voice mail identifier of the voice mail to play on the telephone number identified by the DialString element.
DialString	xs:string	Specifies the dial string of the telephone that plays the voice mail.

3.1.4.7.1.2 m:PlayOnPhone2Type

The **PlayOnPhone2Type** type specifies the request to play a voice mail over the telephone.

```
<xss:complexType name="PlayOnPhone2Type">
  <xss:sequence>
    <xss:element name="PlayOnPhone" type="m:PlayOnPhoneType"/>
  </xss:sequence>
</xss:complexType>
```

```

</xs:sequence>
</xs:complexType>

```

3.1.4.7.1.3 m:PlayOnPhoneResponse2Type

The **PlayOnPhone2Type** type specifies the response to play a voice mail over the telephone.

```

<xs:complexType name="PlayOnPhoneResponse2Type">
    <xs:sequence>
        <xs:element name="PlayOnPhoneResponse" type="m:PlayOnPhoneResponseMessageType"/>
    </xs:sequence>
</xs:complexType>

```

3.1.4.7.1.4 m:PlayOnPhoneResponseMessageType

The **PlayOnPhoneResponseMessageType** type specifies the response to play a voice mail over the telephone.

```

<xs:complexType name="PlayOnPhoneResponseMessageType">
    <xs:complexContent>
        <xs:extension base="m:ResponseMessageType">
            <xs:sequence>
                <xs:element name="PhoneCallId" type="t:PhoneCallIdType" minOccurs="0"
maxOccurs="1"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>

```

Element	Type	Definition
PhoneCallId	t:PhoneCallIdType	Specifies the telephone call identifier.

3.1.4.7.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.7.2.1 PlayOnPhoneSoapIn2

The **PlayOnPhoneSoapIn2** WSDL message specifies the **PlayOnPhone2** request.

Parts for the **PlayOnPhoneSoapIn2** message are listed in the following table.

Part	Element/Type	Description
request	tns:PlayOnPhone2Type	Specifies the request.
Impersonation	t:ExchangeImpersonation	Specifies Exchange Impersonation information.
MailboxCulture	t:MailboxCulture	Specifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066] .
RequestVersion	t:RequestServerVersion	Specifies the schema version for the PlayOnPhone

Part	Element/Type	Description
		request.

```

<wsdl:message name="PlayOnPhoneSoapIn2">
  <wsdl:part name="request" element="tns:PlayOnPhone2Type"/>
  <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
  <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
  <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
</wsdl:message>

```

3.1.4.7.2.2 PlayOnPhoneSoapOut2

The **PlayOnPhoneSoapOut2** WSDL message specifies the **PlayOnPhone2** response.

Parts for the **PlayOnPhoneSoapOut2** message are listed in the following table.

Part	Element/Type	Description
PlayOnPhoneResult	tns:PlayOnPhoneResponse2Type	Specifies the response.
ServerVersion	t:ServerVersionInfo	Specifies the server version for the response.

```

<wsdl:message name="PlayOnPhoneSoapOut2">
  <wsdl:part name="PlayOnPhoneResult" element="tns:PlayOnPhoneResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>

```

3.1.4.8 PlayOnPhone Operation

The **PlayOnPhone** operation initiates an outbound call and plays a voice message over the telephone. If the operation succeeds, a **<PlayOnPhoneResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```

<wsdl:operation name="PlayOnPhone">
  <wsdl:input message="tns:PlayOnPhoneSoapIn" />
  <wsdl:output message="tns:PlayOnPhoneSoapOut" />
</wsdl:operation>

```

3.1.4.8.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.8.1.1 PlayOnPhone Element

Defines a request to play a voice message on a telephone.

```

<s:element name="PlayOnPhone">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="entryId" type="s:string" />
      <s:element minOccurs="0" maxOccurs="1" name="DialString" type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>

```

```
</s:complexType>
</s:element>
```

Element	Type	Definition
EntryID	s:string	The identifier of the voice mail item to play. This value is the EntryID property, as defined in [MS-OXGLOS] and encoded as a base64 string (section 6.8 of [RFC 2045]). If this element is not specified, the implementation can return a SOAP fault response.
DialString	s:string	The telephone number to dial. There are no constraints on the telephone number format. If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.8.1.2 PlayOnPhoneResponse Element

Defines a response to a **PlayOnPhone** request.

```
<s:element name="PlayOnPhoneResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="PlayOnPhoneResponse" type="s:string"
    />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
PlayOnPhoneResponse	s:string	The identifier of the phone call. This value MUST be used as the CallId element for the Disconnect and GetCallInfo requests (sections 3.1.4.2 and 3.1.4.1). If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.8.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.8.2.1 PlayOnPhoneSoapIn Message

The **PlayOnPhoneSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:PlayOnPhone	Contains the information required to play a voice message on a telephone.

```
<wsdl:message name="PlayOnPhoneSoapIn">
  <wsdl:part name="parameters" element="tns:PlayOnPhone" />
</wsdl:message>
```

3.1.4.8.2.2 PlayOnPhoneSoapOut Message

The **PlayOnPhoneSoapOut** message includes one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:PlayOnPhoneResponse	Specifies a response to a PlayOnPhone operation (section 3.1.4.8) request.

```
<wsdl:message name="PlayOnPhoneSoapOut">
  <wsdl:part name="parameters" element="tns:PlayOnPhoneResponse" />
</wsdl:message>
```

3.1.4.9 PlayOnPhoneGreeting Operation

The **PlayOnPhoneGreeting** operation initiates an outbound call to play and record a greeting over the telephone. If the operation succeeds, a `<PlayOnPhoneGreetingResponse>` element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```
<wsdl:operation name="PlayOnPhoneGreeting">
  <wsdl:input message="tns:PlayOnPhoneGreetingSoapIn" />
  <wsdl:output message="tns:PlayOnPhoneGreetingSoapOut" />
</wsdl:operation>
```

3.1.4.9.1 Simple Types

The following XML schema simple definitions are specific to this operation.

3.1.4.9.1.1 UMGreetingType

The type of greeting to be played and recorded through a **PlayOnPhoneGreeting** operation is as follows:

```
<s:simpleType name="UMGreetingType">
  <s:restriction base="s:string">
    <s:enumeration value="NormalCustom" />
    <s:enumeration value="OofCustom" />
  </s:restriction>
</s:simpleType>
```

Value	Meaning
NormalCustom	This is the default greeting to be played to callers when the user is not Out of Office.
OofCustom	Greeting to be played when the user is Out of Office.

3.1.4.9.2 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.9.2.1 PlayOnPhoneGreeting Element

Defines a request to play a Unified Messaging greeting on a telephone.

```
<s:element name="PlayOnPhoneGreeting">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="GreetingType"
type="tns:UMGreetingType" />
      <s:element minOccurs="0" maxOccurs="1" name="DialString" type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
GreetingType	tns:UMGreetingType	The type of greeting to play. See the UMGreetingType simple type for a list of valid values. MUST be present.
DialString	s:string	The telephone number to dial. There are no constraints on the telephone number format. If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.9.2.2 PlayOnPhoneGreetingResponse Element

Defines a response to a **PlayOnPhoneGreeting** request.

```
<s:element name="PlayOnPhoneGreetingResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="PlayOnPhoneGreetingResponse"
type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
PlayOnPhoneGreetingResponse	s:string	The identifier of the phone call. This value MUST be used as the CallId element for the Disconnect and GetCallInfo requests (sections 3.1.4.2 and 3.1.4.1). If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.9.3 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.9.3.1 PlayOnPhoneGreetingSoapIn Message

Parameters for the **PlayOnPhoneGreetingSoapIn** message are as follows.

Parameter	Element/Type	Description
parameters	tns:PlayOnPhoneGreeting	This part contains the information required to play a Unified Messaging greeting on a telephone.

```
<wsdl:message name="PlayOnPhoneGreetingSoapIn">
  <wsdl:part name="parameters" element="tns:PlayOnPhoneGreeting" />
</wsdl:message>
```

3.1.4.9.3.2 PlayOnPhoneGreetingSoapOut Message

Parameters for the **PlayOnPhoneGreetingSoapOut** message are as follows.

Parameter	Element/Type	Description
parameters	tns:PlayOnPhoneGreetingResponse	Response to a PlayOnPhoneGreeting request.

```
<wsdl:message name="PlayOnPhoneGreetingSoapOut">
  <wsdl:part name="parameters" element="tns:PlayOnPhoneGreetingResponse" />
</wsdl:message>
```

3.1.4.10 ResetPIN Operation

The **ResetPIN** operation creates a new password for the user who is making the request. If the operation is successful, a **<ResetPINResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```
<wsdl:operation name="ResetPIN">
  <wsdl:input message="tns:ResetPINSoapIn" />
  <wsdl:output message="tns:ResetPINSoapOut" />
</wsdl:operation>
```

3.1.4.10.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.10.1.1 ResetPIN Element

Defines a request to reset the user's password.

```
<s:element name="ResetPIN">
  <s:complexType />
</s:element>
```

3.1.4.10.1.2 ResetPINResponse Element

Defines a response to a **ResetPIN** request.

```

<s:element name="ResetPINResponse">
  <s:complexType />
</s:element>

```

3.1.4.10.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.10.2.1 ResetPINSoapIn Message

The **ResetPINSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:ResetPIN	Contains the information that is required to reset the user's password.

```

<wsdl:message name="ResetPINSoapIn">
  <wsdl:part name="parameters" element="tns:ResetPIN" />
</wsdl:message>

```

3.1.4.10.2.2 ResetPINSoapOut Message

The **ResetPINSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:ResetPINResponse	Specifies a response to a ResetPIN operation (section 3.1.4.10) request.

```

<wsdl:message name="ResetPINSoapOut">
  <wsdl:part name="parameters" element="tns:ResetPINResponse" />
</wsdl:message>

```

3.1.4.11 SetMissedCallNotificationEnabled Operation

The **SetMissedCallNotificationEnabled** operation sets a value that indicates whether missed call notifications are enabled for the user who is making the request. If the operation succeeds, a **<SetMissedCallNotificationEnabledResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```

<wsdl:operation name="SetMissedCallNotificationEnabled">
  <wsdl:input message="tns:SetMissedCallNotificationEnabledSoapIn" />
  <wsdl:output message="tns:SetMissedCallNotificationEnabledSoapOut" />
</wsdl:operation>

```

3.1.4.11.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.11.1.1 SetMissedCallNotificationEnabled Element

Defines a request to set whether missed call notifications are enabled for the user who is making the request.

```
<s:element name="SetMissedCallNotificationEnabled">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="status" type="s:boolean" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
status	s:boolean	A value that indicates whether to enable or disable missed call notifications for the user who is making the request. MUST be present.

3.1.4.11.1.2 SetMissedCallNotificationEnabledResponse Element

Defines a response to a **SetMissedCallNotificationEnabled** request.

```
<s:element name="SetMissedCallNotificationEnabledResponse">
  <s:complexType />
</s:element>
```

3.1.4.11.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.11.2.1 SetMissedCallNotificationEnabledSoapIn Message

The **SetMissedCallNotificationEnabledSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:SetMissedCallNotificationEnabled	Contains the information that is required to set whether missed call notifications are enabled for the user who is making the request.

```
<wsdl:message name="SetMissedCallNotificationEnabledSoapIn">
  <wsdl:part name="parameters" element="tns:SetMissedCallNotificationEnabled" />
</wsdl:message>
```

3.1.4.11.2.2 SetMissedCallNotificationEnabledSoapOut Message

The **SetMissedCallNotificationEnabledSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:SetMissedCallNotificationEnabledResponse	Specifies a response to a SetMissedCallNotificationEnabled operation (section 3.1.4.11) request.

```
<wsdl:message name="SetMissedCallNotificationEnabledSoapOut">
  <wsdl:part name="parameters" element="tns:SetMissedCallNotificationEnabledResponse" />
</wsdl:message>
```

3.1.4.12 SetOofStatus Operation

The **SetOofStatus** operation sets a value that indicates whether the Out of Office greeting is played for the user who makes the request. If the operation succeeds, a **<SetOofStatusResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```
<wsdl:operation name="SetOofStatus">
  <wsdl:input message="tns:SetOofStatusSoapIn" />
  <wsdl:output message="tns:SetOofStatusSoapOut" />
</wsdl:operation>
```

3.1.4.12.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.12.1.1 SetOofStatus Element

Defines a request to set whether the Out of Office greeting is enabled for the user who is making the request.

```
<s:element name="SetOofStatus">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="status" type="s:boolean" />
    </s:sequence>
  </s:complexType>
</s:element>
```

Element	Type	Definition
status	s:boolean	A value that indicates whether the Out of Office greeting is played to callers. MUST be present.

3.1.4.12.1.2 SetOofStatusResponse Element

Defines a response to a **SetOofStatus** request.

```
<s:element name="SetOofStatusResponse">
  <s:complexType />
</s:element>
```

3.1.4.12.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.12.2.1 SetOfStatusSoapIn Message

The **SetOfStatusSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
Parameters	tns:SetOfStatus	Contains the information that is required to set whether the Out of Office greeting is enabled for the user who is making the request.

```
<wsdl:message name="SetOfStatusSoapIn">
  <wsdl:part name="parameters" element="tns:SetOfStatus" />
</wsdl:message>
```

3.1.4.12.2.2 SetOfStatusSoapOut Message

The **SetOfStatusSoapOut** message contains one part, as listed in the following table.

Part name	Element/Type	Description
parameters	tns:SetOfStatusResponse	Specifies a response to a SetOfStatus operation (section 3.1.4.12) request.

```
<wsdl:message name="SetOfStatusSoapOut">
  <wsdl:part name="parameters" element="tns:SetOfStatusResponse" />
</wsdl:message>
```

3.1.4.13 SetPlayOnPhoneDialString Operation

The **SetPlayOnPhoneDialString** operation sets the default telephone number that is used in **PlayOnPhone** operation (section [3.1.4.8](#)) and **PlayOnPhoneGreeting** operation (section [3.1.4.9](#)) requests. If the operation succeeds, a <SetPlayOnPhoneDialStringResponse> element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```
<wsdl:operation name="SetPlayOnPhoneDialString">
  <wsdl:input message="tns:SetPlayOnPhoneDialStringSoapIn" />
  <wsdl:output message="tns:SetPlayOnPhoneDialStringSoapOut" />
</wsdl:operation>
```

3.1.4.13.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.13.1.1 SetPlayOnPhoneDialString Element

Defines a request to store the default telephone number to use in **PlayOnPhone** and **PlayOnPhoneGreeting** requests.

```
<s:element name="SetPlayOnPhoneDialString">
```

```

<s:complexType>
  <s:sequence>
    <s:element minOccurs="0" maxOccurs="1" name="dialString" type="s:string" />
  </s:sequence>
</s:complexType>
</s:element>

```

Element	Type	Definition
dialString	s:string	A telephone number. There are no constraints on the telephone number format. If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.13.1.2 SetPlayOnPhoneDialStringResponse Element

Defines a response to a **SetPlayOnPhoneDialString** request.

```

<s:element name="SetPlayOnPhoneDialStringResponse">
  <s:complexType />
</s:element>

```

3.1.4.13.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.13.2.1 SetPlayOnPhoneDialStringSoapIn Message

Parameters for the **SetPlayOnPhoneDialStringSoapIn** message are as follows.

Parameter	Element/Type	Description
parameters	tns: SetPlayOnPhoneDialString	This part contains the information required to set the default telephone number to use in PlayOnPhone and PlayOnPhoneGreeting requests.

```

<wsdl:message name="SetPlayOnPhoneDialStringSoapIn">
  <wsdl:part name="parameters" element="tns:SetPlayOnPhoneDialString"/>
</wsdl:message>

```

3.1.4.13.2.2 SetPlayOnPhoneDialStringSoapOut Message

The **SetPlayOnPhoneDialStringSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:SetPlayOnPhoneDialStringResponse	Specifies a response to a SetPlayOnPhoneDialString operation (section 3.1.4.13) request.

```
<wsdl:message name="SetPlayOnPhoneDialStringSoapOut">
```

```

<wsdl:part name="parameters" element="tns:SetPlayOnPhoneDialStringResponse" />
</wsdl:message>

```

3.1.4.14 SetTelephoneAccessFolderEmail Operation

The **SetTelephoneAccessFolderEmail** operation sets the mailbox folder from which the Unified Messaging server will read back to the user over the telephone. If the operation succeeds, a **<SetTelephoneAccessFolderEmailResponse>** element is returned. If the operation fails, a SOAP fault response is returned that contains information about the failure.

```

<wsdl:operation name="SetTelephoneAccessFolderEmail">
  <wsdl:input message="tns:SetTelephoneAccessFolderEmailSoapIn" />
  <wsdl:output message="tns:SetTelephoneAccessFolderEmailSoapOut" />
</wsdl:operation>

```

3.1.4.14.1 Elements

The following XML schema element definitions are specific to this operation.

3.1.4.14.1.1 SetTelephoneAccessFolderEmail Element

Defines a request to set the folder that the Unified Messaging server will use to play e-mail messages over the telephone.

```

<s:element name="SetTelephoneAccessFolderEmail">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="base64FolderId" type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>

```

Element	Type	Definition
base64FolderId	s:string	The folder identifier. This value is the folder EntryID [MS-OXGLOS] that is encoded as a base64 string (section 6.8 of [RFC 2045]). If this element is not specified, the implementation can return a SOAP fault response.

3.1.4.14.1.2 SetTelephoneAccessFolderEmailResponse Element

Defines a response to a **SetTelephoneAccessFolderEmail** request.

```

<s:element name="SetTelephoneAccessFolderEmailResponse">
  <s:complexType />
</s:element>

```

3.1.4.14.2 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.14.2.1 SetTelephoneAccessFolderEmailSoapIn Message

The **SetTelephoneAccessFolderEmailSoapIn** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:SetTelephoneAccessFolderEmail	Contains the information that is required to set the folder that the Unified Messaging server will use to play e-mail messages over the telephone.

```
<wsdl:message name="SetTelephoneAccessFolderEmailSoapIn">
  <wsdl:part name="parameters" element="tns:SetTelephoneAccessFolderEmail" />
</wsdl:message>
```

3.1.4.14.2.2 SetTelephoneAccessFolderEmailSoapOut Message

The **SetTelephoneAccessFolderEmailSoapOut** message contains one part, as listed in the following table.

Part Name	Element/Type	Description
parameters	tns:SetTelephoneAccessFolderEmailResponse	Specifies a response to a SetTelephoneAccessFolderEmail operation (section 3.1.4.14) request.

```
<wsdl:message name="SetTelephoneAccessFolderEmailSoapOut">
  <wsdl:part name="parameters" element="tns:SetTelephoneAccessFolderEmailResponse" />
</wsdl:message>
```

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 GetUMProperties Example

The following example shows how to retrieve the list of Unified Messaging properties for the mailbox of the user who is making the request.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetUMProperties xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetUMPropertiesResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <GetUMPropertiesResponse>
        <OofStatus>false</OofStatus>
        <MissedCallNotificationEnabled>true</MissedCallNotificationEnabled>
        <PlayOnPhoneDialString>12345</PlayOnPhoneDialString>
        <TelephoneAccessNumbers>54321</TelephoneAccessNumbers>
        <TelephoneAccessFolderEmail>AAAAAGsd2rbQLVtLobUGbrq/9IUBAEX2ikn/L8JJt15WH10FAW8AAAFXHhsAAA==</TelephoneAccessFolderEmail>
      </GetUMPropertiesResponse>
    </GetUMPropertiesResponse>
  </soap:Body>
</soap:Envelope>
```

4.2 IsUMEnabled Example

The following example shows how to determine whether the mailbox of the user who is making the request is enabled for Unified Messaging.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <IsUMEnabled xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>
```

Response:

```

<?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:Body>
    <IsUMEnabledResponse xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <IsUMEnabledResponse>true</IsUMEnabledResponse>
    </IsUMEnabledResponse>
  </soap:Body>
</soap:Envelope>

```

4.3 ResetPIN Example

The following example shows how to form a request to reset the password of the user who is making the request.

Request:

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ResetPIN xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>

```

Response:

```

<?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:Body>
    <ResetPINResponse xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>

```

4.4 PlayOnPhone Example

The following example shows how to form a request to make an outbound call and play a message.

Request:

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <PlayOnPhone xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">

      <entryId>AAAAAGsd2rbQLVtLobUGbrq/9IUHAEX2ikn/L8JJtI5WHIOFAW8AAAFXHhsAACxVpEl+KVVL1957wp//x6UA
      GAetcDUAAA==</entryId>
        <DialString>12345</DialString>
      </PlayOnPhone>
    </soap:Body>
</soap:Envelope>

```

```
</soap:Envelope>
```

Response:

```
<?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:Body>
    <PlayOnPhoneResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">

      <PlayOnPhoneResponse>NDEzYjEzNmMtZTE2Zi00NTJlWI3YzctNDhkMTE3MDE3YjlmQGRmLWV1bS0wMS5leGNoYW5n
      ZS5jb3JwLm1pY3Jvc29mdC5jb20=</PlayOnPhoneResponse>
    </PlayOnPhoneResponse>
  </soap:Body>
</soap:Envelope>
```

4.5 PlayOnPhoneGreeting Example

The following example of a **PlayOnPhoneGreeting** request shows how to form a request to make an outbound call and play the normal greeting message on a telephone.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <PlayOnPhoneGreeting
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <GreetingType>NormalCustom</GreetingType>
      <DialString>12345</DialString>
    </PlayOnPhoneGreeting>
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?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:Body>
    <PlayOnPhoneGreetingResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">

      <PlayOnPhoneGreetingResponse>MjA4MTQ5MmItMTBmZC00ZGFmLThiMzEtNDl1NDJjM2Y3MjIxQGRmLWV1bS0wMS5l
      eGNoYW5nZS5jb3JwLm1pY3Jvc29mdC5jb20=</PlayOnPhoneGreetingResponse>
    </PlayOnPhoneGreetingResponse>
  </soap:Body>
</soap:Envelope>
```

4.6 GetCallInfo Example

The following example shows how to get information about a specified outbound call that was previously initiated through a **PlayOnPhone** or **PlayOnPhoneGreeting** operation.

Pre-requisites:

1. Initiate a play-on-phone call by sending either a **PlayOnPhone** or **PlayOnPhoneGreeting** request (see examples in sections [4.2](#) and [4.3](#)).
2. Save the **PlayOnPhoneResponse** value in a temporary variable. This value is the **CallId** that you will use when making the **GetCallInfo** request.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetCallInfo xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <CallId>NDEzYjEzMmMtZTE2Zi00NTJlWI3YzctNDhkMTE3MDE3Yj1mQGRmLWV1bS0wMS5leGNoYW5nzs5jb3JwLm1pY3Jvc29mdC5jb20=</CallId>
    </GetCallInfo>
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetCallInfoResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <GetCallInfoResponse>
        <CallState>Connected</CallState>
        <EventCause>None</EventCause>
      </GetCallInfoResponse>
    </GetCallInfoResponse>
  </soap:Body>
</soap:Envelope>
```

4.7 Disconnect Example

The following example shows how to form a request to disconnect a call that was previously initiated through a **PlayOnPhone** or **PlayOnPhoneGreeting** operation.

Prerequisites:

1. Initiate a play-on-phone call by sending either a **PlayOnPhone** or **PlayOnPhoneGreeting** request (see examples in sections [4.2](#) and [4.3](#)).
2. Save the **PlayOnPhoneResponse** value in a temporary variable. This value is the **CallId** that you will use when making the **Disconnect** request.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <Disconnect xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">

<CallId>NDEzYjEzMmMtZTE2Zi00NTJlWI3YzctNDhkMTE3MDE3Yj1mQGRmLWV1bS0wMS5leGNoYW5nZS5jb3JwLm1pY
3Jvc29mdC5jb20=</CallId>
    </Disconnect>
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <DisconnectResponse xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      </DisconnectResponse>
    </soap:Body>
</soap:Envelope>
```

4.8 SetMissedCallNotificationEnabled Example

The following example shows how to form a request to enable missed-call notifications for the user who is making the request.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetMissedCallNotificationEnabled
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <status>true</status>
    </SetMissedCallNotificationEnabled>
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetMissedCallNotificationEnabledResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>
```

4.9 SetOutOfStatus Example

The **SetOutOfStatus** operation sets a value that indicates whether the **Out-of-Office** greeting is enabled for the user who is making the request.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetOutOfStatus xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <status>true</status>
    </SetOutOfStatus>
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?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:Body>
    <SetOutOfStatusResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>
```

4.10 SetPlayOnPhoneDialString Example

The following example shows how to form a request to set the default telephone number for the user who is making the request.

Request:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetPlayOnPhoneDialString
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <dialString>12345</dialString>
    </SetPlayOnPhoneDialString>
  </soap:Body>
</soap:Envelope>
```

Response:

```
<?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:Body>
```

```

<SetPlayOnPhoneDialStringResponse
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
</soap:Body>
</soap:Envelope>

```

4.11 SetTelephoneAccessFolderEmail Example

The following example shows how to form a request to set the folder, from which a Unified Messaging server will read back to the user over the telephone.

Request:

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetTelephoneAccessFolderEmail
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">

      <base64FolderID>AAAAAGsd2rbQLVtLobUGbrq/9IUBAEX2ikn/L8JJtI5WHIOFAW8AAAFXHhsAAA==</base64FolderID>
    </SetTelephoneAccessFolderEmail>
  </soap:Body>
</soap:Envelope>

```

Response:

```

<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetTelephoneAccessFolderEmailResponse
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages" />
  </soap:Body>
</soap:Envelope>

```

4.12 SOAP Fault Example

Any of the Voice Mail Settings Web service operations returns a SOAP fault. A SOAP fault element is used to carry error and/or status information within a **SOAP** message when there is API misuse or where there are configuration failures. The following example shows a SOAP fault message in response to an invalid **PlayOnPhone** request.

Request:

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <PlayOnPhone xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <entryId>INVALID_ENTRY_ID</entryId>
      <DialString>12345</DialString>
    </PlayOnPhone>
  </soap:Body>
</soap:Envelope>

```

```
</soap:Envelope>
```

Response:

```
<?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:Body>
        <soap:Fault>
            <faultcode>soap:Server</faultcode>
            <faultstring>The object identifier is not valid</faultstring>
            <faultactor>http://srv/unifiedmessaging/service.asmx</faultactor>
            <detail>
                <ExceptionType
                    xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">InvalidObjectException
                </ExceptionType>
            </detail>
        </soap:Fault>
    </soap:Body>
</soap:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

The Voice Mail Settings Web service relies on the Web server that hosts the application to perform authentication.

Use secure communication via HTTPS [\[RFC2818\]](#) when using the Voice Mail Settings Web service.

6 Appendix A: Full WSDL

The **XML** files that are listed in the following table are required in order to implement the functionality specified in this document. The contents of each file are included in this section.

File name	Description	Section
MS-OXWUMS.wsdl	Contains the WSDL for the implementation of this protocol.	6.1
MS-OXWUMS-messages.xsd	Contains the XML schema message definitions that are used in this protocol.	6.2
MS-OXWUMS-types.xsd	Contains the XML schema type definitions that are used in this protocol.	6.3

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

6.1 WSDL

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

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:s="http://www.w3.org/2001/XMLSchema"
    xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
    xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
    xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
    targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages">
    <wsdl:types>
        <s:schema elementFormDefault="qualified"
            targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages">
            <s:include schemaLocation="MS-OXWUMS-messages.xsd"/>
        </s:schema>
    </wsdl:types>
    <wsdl:message name="IsUMEnabledSoapIn">
        <wsdl:part name="parameters" element="tns:IsUMEnabled"/>
    </wsdl:message>
    <wsdl:message name="IsUMEnabledSoapOut">
        <wsdl:part name="parameters" element="tns:IsUMEnabledResponse"/>
    </wsdl:message>
    <wsdl:message name="GetUMPropertiesSoapIn">
        <wsdl:part name="parameters" element="tns:GetUMProperties"/>
    </wsdl:message>
    <wsdl:message name="GetUMPropertiesSoapOut">
        <wsdl:part name="parameters" element="tns:GetUMPropertiesResponse"/>
    </wsdl:message>
    <wsdl:message name="SetOofStatusSoapIn">
        <wsdl:part name="parameters" element="tns:SetOofStatus"/>
    </wsdl:message>
    <wsdl:message name="SetOofStatusSoapOut">
        <wsdl:part name="parameters" element="tns:SetOofStatusResponse"/>
    </wsdl:message>
    <wsdl:message name="SetPlayOnPhoneDialStringSoapIn">
        <wsdl:part name="parameters" element="tns:SetPlayOnPhoneDialString"/>
    </wsdl:message>
```

```

<wsdl:message name="SetPlayOnPhoneDialStringSoapOut">
    <wsdl:part name="parameters" element="tns:SetPlayOnPhoneDialStringResponse"/>
</wsdl:message>
<wsdl:message name="SetTelephoneAccessFolderEmailSoapIn">
    <wsdl:part name="parameters" element="tns:SetTelephoneAccessFolderEmail"/>
</wsdl:message>
<wsdl:message name="SetTelephoneAccessFolderEmailSoapOut">
    <wsdl:part name="parameters" element="tns:SetTelephoneAccessFolderEmailResponse"/>
</wsdl:message>
<wsdl:message name="SetMissedCallNotificationEnabledSoapIn">
    <wsdl:part name="parameters" element="tns:SetMissedCallNotificationEnabled"/>
</wsdl:message>
<wsdl:message name="SetMissedCallNotificationEnabledSoapOut">
    <wsdl:part name="parameters" element="tns:SetMissedCallNotificationEnabledResponse"/>
</wsdl:message>
<wsdl:message name="ResetPINSoapIn">
    <wsdl:part name="parameters" element="tns:ResetPIN"/>
</wsdl:message>
<wsdl:message name="ResetPINSoapOut">
    <wsdl:part name="parameters" element="tns:ResetPINResponse"/>
</wsdl:message>
<wsdl:message name="PlayOnPhoneSoapIn">
    <wsdl:part name="parameters" element="tns:PlayOnPhone"/>
</wsdl:message>
<wsdl:message name="PlayOnPhoneSoapOut">
    <wsdl:part name="parameters" element="tns:PlayOnPhoneResponse"/>
</wsdl:message>
<wsdl:message name="GetCallInfoSoapIn">
    <wsdl:part name="parameters" element="tns:GetCallInfo"/>
</wsdl:message>
<wsdl:message name="GetCallInfoSoapOut">
    <wsdl:part name="parameters" element="tns:GetCallInfoResponse"/>
</wsdl:message>
<wsdl:message name="DisconnectSoapIn">
    <wsdl:part name="parameters" element="tns:Disconnect"/>
</wsdl:message>
<wsdl:message name="DisconnectSoapOut">
    <wsdl:part name="parameters" element="tns:DisconnectResponse"/>
</wsdl:message>
<wsdl:message name="PlayOnPhoneGreetingSoapIn">
    <wsdl:part name="parameters" element="tns:PlayOnPhoneGreeting"/>
</wsdl:message>
<wsdl:message name="PlayOnPhoneGreetingSoapOut">
    <wsdl:part name="parameters" element="tns:PlayOnPhoneGreetingResponse"/>
</wsdl:message>
<wsdl:message name="DisconnectPhoneCallSoapIn">
    <wsdl:part name="request" element="tns:DisconnectPhoneCall"/>
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
</wsdl:message>
<wsdl:message name="DisconnectPhoneCallSoapOut">
    <wsdl:part name="DisconnectPhoneCallResult" element="tns:DisconnectPhoneCallResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
<wsdl:message name="GetPhoneCallInformationSoapIn">
    <wsdl:part name="request" element="tns:GetPhoneCallInformation"/>
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>

```

```

        <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
    </wsdl:message>
    <wsdl:message name="GetPhoneCallInformationSoapOut">
        <wsdl:part name="GetPhoneCallInformationResult"
element="tns:GetPhoneCallInformationResponse"/>
        <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
    </wsdl:message>
    <wsdl:message name="PlayOnPhoneSoapIn2">
        <wsdl:part name="request" type="tns:PlayOnPhone2Type"/>
        <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
        <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
        <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
    </wsdl:message>
    <wsdl:message name="PlayOnPhoneSoapOut2">
        <wsdl:part name="PlayOnPhoneResult" type="tns:PlayOnPhoneResponse2Type"/>
        <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
    </wsdl:message>
<wsdl:portType name="UMWebServiceSoap">
    <wsdl:operation name="IsUMEnabled">
        <wsdl:input message="tns:IsUMEnabledSoapIn"/>
        <wsdl:output message="tns:IsUMEnabledSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="GetUMProperties">
        <wsdl:input message="tns:GetUMPropertiesSoapIn"/>
        <wsdl:output message="tns:GetUMPropertiesSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetOofStatus">
        <wsdl:input message="tns:SetOofStatusSoapIn"/>
        <wsdl:output message="tns:SetOofStatusSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetPlayOnPhoneDialString">
        <wsdl:input message="tns:SetPlayOnPhoneDialStringSoapIn"/>
        <wsdl:output message="tns:SetPlayOnPhoneDialStringSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetTelephoneAccessFolderEmail">
        <wsdl:input message="tns:SetTelephoneAccessFolderEmailSoapIn"/>
        <wsdl:output message="tns:SetTelephoneAccessFolderEmailSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetMissedCallNotificationEnabled">
        <wsdl:input message="tns:SetMissedCallNotificationEnabledSoapIn"/>
        <wsdl:output message="tns:SetMissedCallNotificationEnabledSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="ResetPIN">
        <wsdl:input message="tns:ResetPINSoapIn"/>
        <wsdl:output message="tns:ResetPINSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="PlayOnPhone">
        <wsdl:input message="tns:PlayOnPhoneSoapIn"/>
        <wsdl:output message="tns:PlayOnPhoneSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="GetCallInfo">
        <wsdl:input message="tns:GetCallInfoSoapIn"/>
        <wsdl:output message="tns:GetCallInfoSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="Disconnect">
        <wsdl:input message="tns:DisconnectSoapIn"/>
        <wsdl:output message="tns:DisconnectSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="PlayOnPhoneGreeting">

```

```

        <wsdl:input message="tns:PlayOnPhoneGreetingSoapIn"/>
        <wsdl:output message="tns:PlayOnPhoneGreetingSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="DisconnectPhoneCall">
        <wsdl:input message="tns:DisconnectPhoneCallSoapIn"/>
        <wsdl:output message="tns:DisconnectPhoneCallSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="GetPhoneCallInformation">
        <wsdl:input message="tns:GetPhoneCallInformationSoapIn"/>
        <wsdl:output message="tns:GetPhoneCallInformationSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="PlayOnPhone2">
        <wsdl:input message="tns:PlayOnPhoneSoapIn2"/>
        <wsdl:output message="tns:PlayOnPhoneSoapOut2"/>
    </wsdl:operation>
</wsdl:portType>
<wsdl:binding name="UMWebServiceSoap" type="tns:UMWebServiceSoap">
    <wsdl:documentation>
        <wsi:Claim conformsTo="http://ws-i.org/profiles/basic/1.1" xmlns:wsi="http://ws-i.org/schemas/conformanceClaim"/>
    </wsdl:documentation>
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="IsUMEnabled">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/IsUMEnabled"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUMProperties">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetUMProperties"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="SetOofStatus">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetOofStatus"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="SetPlayOnPhoneDialString">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetPlayOnPhoneDialString"
style="document"/>
        <wsdl:input>

```

```

        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="SetTelephoneAccessFolderEmail">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetTelephoneAccessFo
lderEmail" style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="SetMissedCallNotificationEnabled">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SetMissedCallNotific
ationEnabled" style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="ResetPIN">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/ResetPIN"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="PlayOnPhone">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/PlayOnPhone"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetCallInfo">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetCallInfo"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>

```

```

        </wsdl:operation>
        <wsdl:operation name="Disconnect">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/Disconnect"
style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="PlayOnPhoneGreeting">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/PlayOnPhoneGreeting"
style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="PlayOnPhone2">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/PlayOnPhone"/>
            <wsdl:input>
                <soap:body parts="request" use="literal"/>
                <soap:header message="tns:PlayOnPhoneSoapIn2" part="Impersonation"
use="literal"/>
                <soap:header message="tns:PlayOnPhoneSoapIn2" part="MailboxCulture"
use="literal"/>
                <soap:header message="tns:PlayOnPhoneSoapIn2" part="RequestVersion"
use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body parts="PlayOnPhoneResult" use="literal"/>
                <soap:header message="tns:PlayOnPhoneSoapOut2" part="ServerVersion"
use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetPhoneCallInformation">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetPhoneCallInformation"/>
            <wsdl:input>
                <soap:body parts="request" use="literal"/>
                <soap:header message="tns:GetPhoneCallInformationSoapIn" part="Impersonation"
use="literal"/>
                <soap:header message="tns:GetPhoneCallInformationSoapIn" part="MailboxCulture"
use="literal"/>
                <soap:header message="tns:GetPhoneCallInformationSoapIn" part="RequestVersion"
use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body parts="GetPhoneCallInformationResult" use="literal"/>
                <soap:header message="tns:GetPhoneCallInformationSoapOut" part="ServerVersion"
use="literal"/>
            </wsdl:output>
        </wsdl:operation>
    </wsdl:operations>

```

```

<wsdl:operation name="DisconnectPhoneCall">
    <soap:operation
        soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/DisconnectPhoneCall"
    />
    <wsdl:input>
        <soap:body parts="request" use="literal"/>
        <soap:header message="tns:DisconnectPhoneCallSoapIn" part="Impersonation"
            use="literal"/>
        <soap:header message="tns:DisconnectPhoneCallSoapIn" part="MailboxCulture"
            use="literal"/>
        <soap:header message="tns:DisconnectPhoneCallSoapIn" part="RequestVersion"
            use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body parts="DisconnectPhoneCallResult" use="literal"/>
        <soap:header message="tns:DisconnectPhoneCallSoapOut" part="ServerVersion"
            use="literal"/>
    </wsdl:output>
</wsdl:operation>
</wsdl:binding>
</wsdl:definitions>

```

6.2 Messages Schema

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

MS-OXWUMS-messages.xsd includes the file listed in the following table. 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	Defining specification
MS-OXWSCDATA-messages.xsd	[MS-OXWSCDATA] section 6.2.
MS-OXWUMS-types.xsd	Section 6.3

```

<?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:ts="http://schemas.microsoft.com/exchange/services/2006/types"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:ss="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-OXWUMS-types.xsd"/>
    <s:element name="IsUMEnabled">
        <s:complexType/>
    </s:element>
    <s:element name="IsUMEnabledResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="IsUMEnabledResponse"
                    type="s:boolean"/>
            </s:sequence>
        </s:complexType>
    </s:element>

```

```

</s:element>
<s:element name="GetUMProperties">
    <s:complexType/>
</s:element>
<s:element name="GetUMPropertiesResponse">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="GetUMPropertiesResponse"
type="tns:UMProperties"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:complexType name="UMProperties">
    <s:sequence>
        <s:element minOccurs="1" maxOccurs="1" name="OofStatus" type="s:boolean"/>
        <s:element minOccurs="1" maxOccurs="1" name="MissedCallNotificationEnabled"
type="s:boolean"/>
        <s:element minOccurs="0" maxOccurs="1" name="PlayOnPhoneDialString"
type="s:string"/>
        <s:element minOccurs="0" maxOccurs="1" name="TelephoneAccessNumbers"
type="s:string"/>
        <s:element minOccurs="0" maxOccurs="1" name="TelephoneAccessFolderEmail"
type="s:string"/>
    </s:sequence>
</s:complexType>
<s:element name="SetOofStatus">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="1" maxOccurs="1" name="status" type="s:boolean"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="SetOofStatusResponse">
    <s:complexType/>
</s:element>
<s:element name="SetPlayOnPhoneDialString">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="dialString" type="s:string"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="SetPlayOnPhoneDialStringResponse">
    <s:complexType/>
</s:element>
<s:element name="SetTelephoneAccessFolderEmail">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="base64FolderId" type="s:string"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="SetTelephoneAccessFolderEmailResponse">
    <s:complexType/>
</s:element>
<s:element name="SetMissedCallNotificationEnabled">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="1" maxOccurs="1" name="status" type="s:boolean"/>

```

```

        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="SetMissedCallNotificationEnabledResponse">
    <s:complexType/>
</s:element>
<s:element name="ResetPIN">
    <s:complexType/>
</s:element>
<s:element name="ResetPINResponse">
    <s:complexType/>
</s:element>
<s:element name="PlayOnPhone">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="entryId" type="s:string"/>
            <s:element minOccurs="0" maxOccurs="1" name="DialString" type="s:string"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="PlayOnPhoneResponse">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="PlayOnPhoneResponse"
type="s:string"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="GetCallInfo">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="CallId" type="s:string"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:element name="GetCallInfoResponse">
    <s:complexType>
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="GetCallInfoResponse"
type="tns:UMCallInfo"/>
        </s:sequence>
    </s:complexType>
</s:element>
<s:complexType name="UMCallInfo">
    <s:sequence>
        <s:element minOccurs="1" maxOccurs="1" name="CallState" type="tns:UMCallState"/>
        <s:element minOccurs="1" maxOccurs="1" name="EventCause" type="tns:UMEEventCause"/>
    </s:sequence>
</s:complexType>
<s:simpleType name="UMCallState">
    <s:restriction base="s:string">
        <s:enumeration value="Idle"/>
        <s:enumeration value="Connecting"/>
        <s:enumeration value="Alerted"/>
        <s:enumeration value="Connected"/>
        <s:enumeration value="Disconnected"/>
        <s:enumeration value="Incoming"/>
        <s:enumeration value="Transferring"/>
        <s:enumeration value="Forwarding"/>

```

```

        </s:restriction>
    </s:simpleType>
    <s:simpleType name="UMEEventCause">
        <s:restriction base="s:string">
            <s:enumeration value="None"/>
            <s:enumeration value="UserBusy"/>
            <s:enumeration value="NoAnswer"/>
            <s:enumeration value="Unavailable"/>
            <s:enumeration value="Other"/>
        </s:restriction>
    </s:simpleType>
    <s:element name="Disconnect">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="1" name="CallId" type="s:string"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="DisconnectResponse">
        <s:complexType/>
    </s:element>
    <s:element name="PlayOnPhoneGreeting">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="GreetingType"
type="tns:UMGreetingType"/>
                <s:element minOccurs="0" maxOccurs="1" name="DialString" type="s:string"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:simpleType name="UMGreetingType">
        <s:restriction base="s:string">
            <s:enumeration value="NormalCustom"/>
            <s:enumeration value="OofCustom"/>
        </s:restriction>
    </s:simpleType>
    <s:element name="PlayOnPhoneGreetingResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="1" name="PlayOnPhoneGreetingResponse"
type="s:string"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <xs:complexType name="DisconnectPhoneCallResponseMessageType">
        <xs:complexContent>
            <xs:extension base="m:ResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="DisconnectPhoneCallType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <s:element name="PhoneCallId" type="t:PhoneCallIdType" minOccurs="1"
maxOccurs="1"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>

```

```

<xs:element name="DisconnectPhoneCall" type="m:DisconnectPhoneCallType"/>
<xs:element name="DisconnectPhoneCallResponse" type="m:DisconnectPhoneCallResponseMessageType">
<xs:complexType name="GetPhoneCallInformationType">
<xs:complexContent>
<xs:extension base="m:BaseRequestType">
<xs:sequence>
<xs:element name="PhoneCallId" type="t:PhoneCallIdType" minOccurs="1" maxOccurs="1"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="GetPhoneCallInformationResponseMessageType">
<xs:complexContent>
<xs:extension base="m:ResponseMessageType">
<xs:sequence>
<xs:element name="PhoneCallInformation" type="t:PhoneCallInformationType" minOccurs="0" maxOccurs="1"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:element name="GetPhoneCallInformation" type="m:GetPhoneCallInformationType"/>
<xs:element name="GetPhoneCallInformationResponse" type="m:GetPhoneCallInformationResponseMessageType"/>
<xs:complexType name="PlayOnPhoneType">
<xs:complexContent>
<xs:extension base="m:BaseRequestType">
<xs:sequence>
<xs:element name="ItemId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
<xs:element name="DialString" type="xs:string" minOccurs="1" maxOccurs="1"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="PlayOnPhone2Type">
<xs:sequence>
<xs:element name="PlayOnPhone" type="m:PlayOnPhoneType"/>
</xs:sequence>
</xs:complexType>
<xs:complexType name="PlayOnPhoneResponseMessageType">
<xs:complexContent>
<xs:extension base="m:ResponseMessageType">
<xs:sequence>
<xs:element name="PhoneCallId" type="t:PhoneCallIdType" minOccurs="0" maxOccurs="1"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="PlayOnPhoneResponse2Type">
<xs:sequence>
<xs:element name="PlayOnPhoneResponse" type="m:PlayOnPhoneResponseMessageType"/>
</xs:sequence>
</xs:complexType>
</xs:schema>

```

6.3 Types Schema

This section contains the contents of the MS-OXWUMS-types.xsd file.

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
elementFormDefault="qualified" version="Exchange2010" id="types">
    <xs:complexType name="PhoneCallIdType">
        <xs:attribute name="Id" type="xs:string" use="required"/>
    </xs:complexType>
    <xs:simpleType name="ConnectionFailureCauseType">
        <xs:restriction base="xs:string">
            <xs:enumeration value="None"/>
            <xs:enumeration value="UserBusy"/>
            <xs:enumeration value="NoAnswer"/>
            <xs:enumeration value="Unavailable"/>
            <xs:enumeration value="Other"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="PhoneCallStateType">
        <xs:restriction base="xs:string">
            <xs:enumeration value="Idle"/>
            <xs:enumeration value="Connecting"/>
            <xs:enumeration value="Alerted"/>
            <xs:enumeration value="Connected"/>
            <xs:enumeration value="Disconnected"/>
            <xs:enumeration value="Incoming"/>
            <xs:enumeration value="Transferring"/>
            <xs:enumeration value="Forwarding"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:complexType name="PhoneCallInformationType">
        <xs:sequence>
            <xs:element name="PhoneCallState" type="t:PhoneCallStateType" minOccurs="1"
maxOccurs="1"/>
            <xs:element name="ConnectionFailureCause" type="t:ConnectionFailureCauseType"
minOccurs="1" maxOccurs="1"/>
            <xs:element name="SIPResponseText" type="xs:string" minOccurs="0" maxOccurs="1"/>
            <xs:element name="SIPResponseCode" type="xs:int" minOccurs="0" maxOccurs="1"/>
        </xs:sequence>
    </xs:complexType>
</xs:schema>
```

7 Appendix B: Product Behavior

The information in this specification is applicable to the following product versions. References to product versions include released service packs.

- 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.

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 3.1.4.2:](#) Exchange 2007 and Outlook 2007 do not use the **DisconnectPhoneCall** operation

[<2> Section 3.1.4.4:](#) Exchange 2007 and Outlook 2007 do not use the **GetPhoneCallInformation** operation.

[<3> Section 3.1.4.6:](#) Outlook 2003, Outlook 2007, and Outlook 2010 clients do not use the **IsUMEnabled** operation. For more details specific to the Outlook client implementation of voice mail settings, see [\[MS-OXOUM\]](#).

[<4> Section 3.1.4.7:](#) Exchange 2007 and Outlook 2007 do not use the **PlayOnPhone2** operation.

8 Change Tracking

This section identifies changes made to [MS-OXWUMS] protocol documentation between February 2010 and May 2010 releases. Changes are classed as major, minor, or editorial.

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.
- A protocol is deprecated.
- The removal of a document from the documentation set.
- Changes made for template compliance.

Minor changes do not affect protocol interoperability or implementation. Examples are updates to fix technical accuracy or ambiguity at the sentence, paragraph, or table level.

Editorial changes apply to grammatical, formatting, and style issues.

No changes means that the document is identical to its last release.

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

- New content added.
- Content update.
- 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 always have the revision type "Editorially updated."

Some important terms used in revision 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.

Changes are listed in the following table. If you need further information, please contact protocol@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Revision Type
1.3 Overview	Updated the section title.	N	Content updated for template compliance.

9 Index

A

Abstract data model
[server](#) 12

C

[Capability negotiation](#) 9
[Change tracking](#) 64
Client
[overview](#) 12

D

Data model – abstract
[server](#) 12

E

[Examples - overview](#) 42

F

[Full WSDL](#) 51

G

[Glossary](#) 7

I

[Implementer - security considerations](#) 50
[Informative references](#) 8
[Introduction](#) 7

M

Message processing
[server](#) 12

Messages

overview ([section 2](#) 10, [section 3.1.4.1.2](#) 14,
[section 3.1.4.6.2](#) 27, [section 3.1.4.7.2](#) 29,
[section 3.1.4.8.2](#) 31, [section 3.1.4.10.2](#) 35,
[section 3.1.4.12.2](#) 38, [section 3.1.4.13.2](#) 39,
[section 3.1.4.14.2](#) 40)
[syntax](#) 10
[transport](#) 10

N

[Normative references](#) 7

O

[Overview](#) 8

P

[Preconditions](#) 9
[Prerequisites](#) 9
[Product behavior](#) 63

R

References
[informative](#) 8
[normative](#) 7
[Relationship to other protocols](#) 8

S

Security
[implementer considerations](#) 50
[overview](#) 50
Sequencing rules
[server](#) 12
Server
[abstract data model](#) 12
[message processing](#) 12
[overview](#) 12
[sequencing rules](#) 12
Syntax
[messages - overview](#) 10

T

[Tracking changes](#) 64
[Transport](#) 10

V

[Versioning](#) 9

W

[WSDL](#) 51