# [MS-OXWSCONV]:
# Conversations Web Service Protocol

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## Revision Summary

| Date | Revision History | Revision Class | Comments |
|---|---|---|---|
| 05/05/2010 | 0.1.0 | Major | Initial Release. |
| 08/04/2010 | 0.2 | Minor | Clarified the meaning of the technical content. |
| 11/03/2010 | 0.2 | No change | No changes to the meaning, language, or formatting of the technical content. |
| 03/18/2011 | 1.0 | Major | Significantly changed the technical content. |
| 08/05/2011 | 2.0 | Major | Significantly changed the technical content. |
| 10/07/2011 | 2.0 | No change | No changes to the meaning, language, or formatting of the technical content. |
| 01/20/2012 | 3.0 | Major | Significantly changed the technical content. |
| 04/27/2012 | 3.0 | No change | No changes to the meaning, language, or formatting of the technical content. |
| 07/16/2012 | 4.0 | Major | Significantly changed the technical content. |
| 10/08/2012 | 5.0 | Major | Significantly changed the technical content. |
| 02/11/2013 | 5.0 | No change | No changes to the meaning, language, or formatting of the technical content. |
| 07/26/2013 | 5.1 | Minor | Clarified the meaning of the technical content. |
| 11/18/2013 | 5.2 | Minor | Clarified the meaning of the technical content. |

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# Table of Contents

# 1   Introduction

The Conversations Web Service Protocol enables a protocol client to manage items that can be organized in a conversation. The typical scenarios covered by this protocol involve finding items in a conversation and applying actions to items in a conversation.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

## 1.1   Glossary

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

**Hypertext Transfer Protocol (HTTP)**
**Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**
**SOAP action**
**SOAP body**
**SOAP header**
**SOAP message**
**XML**
**XML namespace**

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

**endpoint**
**mailbox**
**Uniform Resource Locator (URL)**
**Web Services Description Language (WSDL)**
**WSDL message**
**WSDL port type**
**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

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the documents, which are updated frequently. References to other documents include a publishing year when one is available.

### 1.2.1   Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact 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-OXDSCLI] Microsoft Corporation, "Autodiscover Publishing and Lookup Protocol".

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

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

[MS-OXWSCORE] Microsoft Corporation, "Core Items Web Service Protocol".

[MS-OXWSEDISC] Microsoft Corporation, "Electronic Discovery (eDiscovery) Web Service Protocol".

[MS-OXWSFOLD] Microsoft Corporation, "Folders and Folder Permissions Web Service Protocol".

[MS-OXWSSRCH] Microsoft Corporation, "Mailbox Search Web Service Protocol".

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

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

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

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

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

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

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

### 1.2.2  Informative References

[MS-GLOS] Microsoft Corporation, "Windows Protocols Master Glossary".

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

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

### 1.3  Overview

Conversations are a way to organize related e-mail messages in a **mailbox** based on the subject of the messages. By accessing messages based on the message subject, servers and clients can manage more message items with fewer actions. The Conversations Web Service Protocol enables clients to find message items that are grouped into conversations and then manage the grouped items with a single operation.

### 1.4  Relationship to Other Protocols

A client that implements this protocol can use the Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol, as described in [MS-OXWSADISC], or the Autodiscover Publishing and Lookup Protocol, as described in [MS-OXDSCLI], to identify the target **endpoint (4)** to use for each operation.

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

The Conversations Web Service Protocol uses the SOAP Protocol, as described in [SOAP1.1], over **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, which is described in [RFC2818], as shown in the following layering diagram.
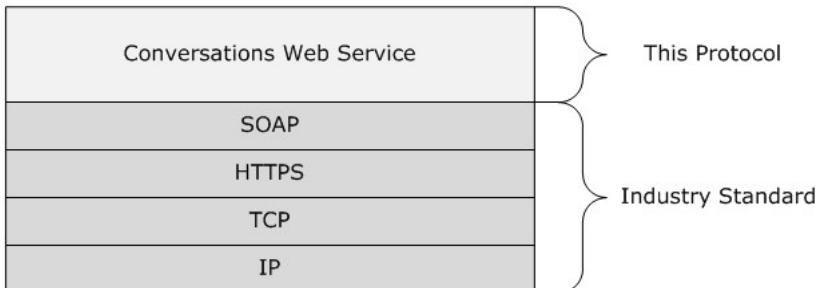


**Figure 1: This protocol in relation to other protocols**

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

## 1.5 Prerequisites/Preconditions

The endpoint (4) **URL** that is returned by either the Autodiscover Publishing Lookup SOAP-Based Web Service Protocol, as specified in [MS-OXWSADISC], or the Autodiscover Publishing and Lookup Protocol, as specified in [MS-OXDSCLI], is required to form the **Hypertext Transfer Protocol (HTTP)** request to the Web server that hosts this protocol. The operations that this protocol defines cannot be accessed unless the correct endpoint (4) is identified in the HTTP Web requests that target this protocol.

## 1.6 Applicability Statement

The Conversations Web Service Protocol is applicable to environments that use Web services to implement conversations in a user's mailbox. This protocol is applicable to all SOAP-based clients, as described in [SOAP1.1].

## 1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports**: This protocol uses SOAP 1.1, as specified in section 2.1.

- **Protocol Versions**: This protocol specifies only one **WSDL port type** version. The **WSDL** version of the request is identified by using the **t:RequestServerVersion** element, as described in [MS-OXWSCDATA] section 2.2.3.9, and the version of the server responding to the request is identified by using the **t:ServerVersionInfo** element, as described in [MS-OXWSCDATA] section 2.2.3.10.

- **Security and Authentication Methods**: This protocol relies on the Web server that is hosting it to perform authentication.

- **Capability Negotiation**: This protocol does not support version negotiation.

## 1.8   Vendor-Extensible Fields

None.

## 1.9   Standards Assignments

None.

# 2 Messages

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

## 2.1 Transport

The SOAP version used for this protocol is SOAP 1.1, as specified in [SOAP1.1].

This protocol relies on the Web server that hosts the application to perform authentication. The protocol MUST use secure communications by means of HTTPS, as defined in [RFC2818].

## 2.2 Common Message Syntax

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

### 2.2.1 Namespaces

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

| Prefix | Namespace URI | Reference |
|--------|---------------|-----------|
| soap | http://schemas.xmlsoap.org/wsdl/soap/ | [SOAP1.1] |
| tns | http://schemas.microsoft.com/exchange/services/2006/messages | |
| wsdl | http://schemas.xmlsoap.org/wsdl/ | [WSDL] |
| t | http://schemas.microsoft.com/exchange/services/2006/types | |
| xs | http://www.w3.org/2001/XMLSchema | [XMLSCHEMA1] |
| m | http://schemas.microsoft.com/exchange/services/2006/messages | |
| none | http://schemas.microsoft.com/exchange/services/2006/messages | |
| none | http://schemas.microsoft.com/exchange/services/2006/types | |

### 2.2.2 Messages

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

### 2.2.3 Elements

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

### 2.2.4 Complex Types

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

### 2.2.5 Simple Types

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

### 2.2.6 Attributes

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

### 2.2.7 Groups

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

### 2.2.8 Attribute Groups

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

# 3 Protocol Details

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

## 3.1 ExchangeServicePortType Server Details

The Conversations Web Service Protocol defines a single WSDL port type.

### 3.1.1 Abstract Data Model

None.

### 3.1.2 Timers

None.

### 3.1.3 Initialization

None.

### 3.1.4 Message Processing Events and Sequencing Rules

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

| Operation name | Description |
|---|---|
| **ApplyConversationAction** (section 3.1.4.3) | Specifies the WSDL messages for applying conversation actions. |
| **FindConversation** (section 3.1.4.1) | Specifies the WSDL messages for finding conversations. |

The **ApplyConversationAction** operation requires a target conversation. The target conversation can be identified by the **FindConversation** operation.

### 3.1.4.1 FindConversation

The **FindConversation** operation specifies the WSDL messages for finding conversations in a mailbox.

The following is the WSDL port type definition of this operation.

```
<wsdl:operation name="FindConversation">
   <wsdl:input message="tns:FindConversationSoapIn"/>
   <wsdl:output message="tns:FindConversationSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification for this operation.

```
<wsdl:operation name="FindConversation">
```

```
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/FindConversation" />
      <wsdl:input>
          <soap:body parts="request" use="literal" />
          <soap:header message="tns:FindConversationSoapIn" part="RequestVersion" use="literal"
/>
          <soap:header message="tns:FindConversationSoapIn" part="Impersonation" use="literal"
/>
      </wsdl:input>
      <wsdl:output>
          <soap:body parts="FindConversationResult" use="literal" />
          <soap:header message="tns:FindConversationSoapOut" part="ServerVersion" use="literal"
/>
      </wsdl:output>
</wsdl:operation>
```

### 3.1.4.1.1   Messages

The following table lists and describes the WSDL message definitions that are specific to the
**FindConversation** operation.

| Message | Description |
|---|---|
| **FindConversationSoapIn** (section 3.1.4.1.1.1) | Specifies the **SOAP message** that represents a request for a collection of conversations. |
| **FindConversationSoapOut** (section 3.1.4.1.1.2) | Specifies the SOAP message that contains a collection of conversations. |

### 3.1.4.1.1.1   FindConversationSoapIn

The **FindConversationSoapIn** WSDL message specifies the SOAP message that represents a
request to find a collection of conversations.

```
<wsdl:message name="FindConversationSoapIn">
  <wsdl:part name="request" element="tns:FindConversation"/>
  <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
  <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
</wsdl:message>
```

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

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

| Part | Element/type | Description |
|---|---|---|
| **request** | **tns:FindConversation** (section 3.1.4.1.2.1) | Specifies the **SOAP body** of the request to find a conversation. This part is required. |
| **Impersonation** | **t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.3.3) | Specifies a **SOAP header** that identifies the user whom the client application is impersonating. This part is optional. |

| Part | Element/type | Description |
|---|---|---|
| **RequestVersion** | **t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.3.9) | Specifies a SOAP header that identifies the schema version for the **FindConversation** operation request. |

### 3.1.4.1.1.2   FindConversationSoapOut

The **FindConversationSoapOut** WSDL message specifies the server response SOAP message that contains a collection of conversations.

```
<wsdl:message name="FindConversationSoapOut">
  <wsdl:part name="FindConversationResult" element="tns:FindConversationResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

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

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

| Part | Element/type | Description |
|---|---|---|
| **FindConversationResult** | **FindConversationResponse** (section 3.1.4.1.2.2) | Specifies the SOAP body of the response to a **FindConversation** operation request. |
| **ServerVersion** | **ServerVersion** ([MS-OXWSCDATA] section 2.2.3.10) | Specifies the SOAP header that identifies the server version for the response. |

### 3.1.4.1.2   Elements

The following table lists and describes the XML schema element definitions that are specific to the **FindConversation** operation.

| Element | Description |
|---|---|
| **FindConversation** (section 3.1.4.1.2.1) | Specifies a request to find conversations in a mailbox. |
| **FindConversationResponse** (section 3.1.4.1.2.2) | Specifies a response that contains a set of conversations found in a mailbox. |

### 3.1.4.1.2.1   FindConversation

The **FindConversation** element specifies a request to find conversations in a mailbox.

```
<xs:element name="FindConversation"
  type="m:FindConversationType"
 />
```

### 3.1.4.1.2.2 FindConversationResponse

The **FindConversationResponse** element specifies a response that contains the results of an attempt to find a conversation in a mailbox.

```
<xs:element name="FindConversationResponse"
  type="m:FindConversationResponseMessageType"
 />
```

### 3.1.4.1.3 Complex Types

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

| Complex type | Description |
|---|---|
| **ArrayOfConversationsType** (section 3.1.4.1.3.1) | Specifies an array of conversations that are returned in the response. |
| **ArrayOfItemClassType** (section 3.1.4.1.3.2) | Specifies an array of unique item classes that are used by the set of items in the conversation. |
| **ConversationType** (section 3.1.4.1.3.4) | Specifies a single conversation. |
| **FindConversationType** (section 3.1.4.1.3.5) | Specifies the search options to be used in searches for conversations. |
| **FindConversationResponseMessageType** (section 3.1.4.1.3.6) | Specifies the results of an attempt to find conversations in a folder. |

### 3.1.4.1.3.1 ArrayOfConversationsType

The **ArrayOfConversationsType** complex type specifies an array of conversations that are returned in the response.

```
<xs:complexType name="ArrayOfConversationsType">
  <xs:choice
    minOccurs="0"
    maxOccurs="unbounded"
  >
    <xs:element name="Conversation"
      type="t:ConversationType"
     />
  </xs:choice>
</xs:complexType>
```

The following table lists and describes the child element of the **ArrayOfConversationsType** complex type.

| Element | Type | Description |
|---|---|---|
| **Conversation** | t:ConversationType (section 3.1.4.1.3.4) | Specifies a single conversation. |

### 3.1.4.1.3.2   ArrayOfItemClassType

The **ArrayOfItemClassType** complex type specifies an array of unique item classes.

```
<xs:complexType name="ArrayOfItemClassType">
  <xs:choice
    minOccurs="0"
    maxOccurs="unbounded"
  >
    <xs:element name="ItemClass"
      type="t:ItemClassType"
    />
  </xs:choice>
</xs:complexType>
```

The following table lists the child element of the **ArrayOfConversationsType** complex type.

| Element | Type | Description |
|---|---|---|
| **ItemClass** | **t:ItemClassType** ([MS-OXWSCORE] section 2.2.5.4) | Specifies a unique item class. |

### 3.1.4.1.3.3   ConversationResponseShapeType

The **ConversationResponseShapeType** complex type specifies the properties that are returned for conversation items returned in the response.<1>

```
<xs:complexType name="ConversationResponseShapeType">
  <xs:sequence>
    <xs:element name="BaseShape" type="t:DefaultShapeNamesType" />
    <xs:element name="AdditionalProperties" type="t:NonEmptyArrayOfPathsToElementType"
minOccurs="0" />
  </xs:sequence>
</xs:complexType>
```

The following table lists the elements of the **ConversationResponseShapeType** complex type.

| Element | Type | Description |
|---|---|---|
| **BaseShape** | **t:DefaultShapeNamesType** ([MS-OXWSCDATA] section 2.2.5.7) | Specifies the base properties to return in the response. |
| **AdditionalProperties** | **t:NonEmptyArrayOfPathsToElementType** ([MS-OXWSCDATA] section 2.2.4.44) | Specifies the additional properties to be returned in the response. |

### 3.1.4.1.3.4   ConversationType

The **ConversationType** complex type specifies a single conversation.

```
<xs:complexType name="ConversationType">
    <xs:sequence>
```

```
        <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="0"/>
        <xs:element name="ConversationTopic" type="xs:string" minOccurs="0"/>
        <xs:element name="UniqueRecipients" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="GlobalUniqueRecipients" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="UniqueUnreadSenders" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="GlobalUniqueUnreadSenders" type="t:ArrayOfStringsType"
  minOccurs="0"/>
        <xs:element name="UniqueSenders" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="GlobalUniqueSenders" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="LastDeliveryTime" type="xs:dateTime" minOccurs="0"/>
        <xs:element name="GlobalLastDeliveryTime" type="xs:dateTime" minOccurs="0"/>
        <xs:element name="Categories" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="GlobalCategories" type="t:ArrayOfStringsType" minOccurs="0"/>
        <xs:element name="FlagStatus" type="t:FlagStatusType" minOccurs="0"/>
        <xs:element name="GlobalFlagStatus" type="t:FlagStatusType" minOccurs="0"/>
        <xs:element name="HasAttachments" type="xs:boolean" minOccurs="0"/>
        <xs:element name="GlobalHasAttachments" type="xs:boolean" minOccurs="0"/>
        <xs:element name="MessageCount" type="xs:int" minOccurs="0"/>
        <xs:element name="GlobalMessageCount" type="xs:int" minOccurs="0"/>
        <xs:element name="UnreadCount" type="xs:int" minOccurs="0"/>
        <xs:element name="GlobalUnreadCount" type="xs:int" minOccurs="0"/>
        <xs:element name="Size" type="xs:int" minOccurs="0"/>
        <xs:element name="GlobalSize" type="xs:int" minOccurs="0"/>
        <xs:element name="ItemClasses" type="t:ArrayOfItemClassType" minOccurs="0"/>
        <xs:element name="GlobalItemClasses" type="t:ArrayOfItemClassType" minOccurs="0"/>
        <xs:element name="Importance" type="t:ImportanceChoicesType" minOccurs="0"/>
        <xs:element name="GlobalImportance" type="t:ImportanceChoicesType" minOccurs="0"/>
        <xs:element name="ItemIds" type="t:NonEmptyArrayOfBaseItemIdsType" minOccurs="0"/>
        <xs:element name="GlobalItemIds" type="t:NonEmptyArrayOfBaseItemIdsType"
  minOccurs="0"/>
        <xs:element name="LastModifiedTime" type="xs:dateTime" minOccurs="0"/>
        <xs:element name="InstanceKey" type="xs:base64Binary" minOccurs="0"/>
        <!-- Maps to ConversationItemSchema.ConversationPreview-->
        <xs:element name="Preview" type="xs:string" minOccurs="0"/>
        <!-- Maps to ConversationItemSchema.ConversationInferredImportance-->
        <xs:element name="InferredImportance" type="t:InferredImportanceType" minOccurs="0"/>
        <!-- Maps to ConversationItemSchema.ConversationGlobalInferredImportance-->
        <xs:element name="GlobalInferredImportance" type="t:InferredImportanceType"
  minOccurs="0"/>
            <xs:element name="GlobalParentFolderIds"
  type="t:NonEmptyArrayOfBaseFolderIdsType" minOccurs="0" />
        <!-- Maps to ConversationItemSchema.NextPredictedAction-->
        <xs:element name="NextPredictedAction" type="t:PredictedMessageActionType"
  minOccurs="0" />
        <!-- Maps to ConversationItemSchema.GroupingAction-->
        <xs:element name="GroupingAction" type="t:PredictedMessageActionType" minOccurs="0"/>
        <!-- Flag for the mailbox scope this conversation was found in -->
        <xs:element name="MailboxScope" type="t:MailboxSearchLocationType" minOccurs="0"/>
        <!-- Maps to ConversationItemSchema.ConversationIconIndex-->
        <xs:element name="IconIndex" type="t:IconIndexType" minOccurs="0"/>
        <!-- Maps to ConversationItemSchema.ConversationGlobalIconIndex-->
        <xs:element name="GlobalIconIndex" type="t:IconIndexType" minOccurs="0"/>
        <!-- Maps to ConversationItemSchema.ConversationDraftItemIds-->
        <xs:element name="DraftItemIds" type="t:NonEmptyArrayOfBaseItemIdsType" minOccurs="0"/>
    </xs:sequence>
</xs:complexType>
```

The following table lists and describes the child elements of the **ConversationType** complex type.

| Element | Type | Description |
|---|---|---|
| **ConversationId** | **t:ItemIdType** ([MS-OXWSCORE] section 2.2.4.17) | Specifies the conversation identifier. |
| **ConversationTopic** | **xs:string** [XMLSCHEMA2] | Specifies the conversation topic. |
| **UniqueRecipients** | **t:ArrayOfStringsType** ([MS-OXWSCDATA] section 2.2.4.11) | Specifies a list of all the people who have received messages in this conversation in the current folder. |
| **GlobalUniqueRecipients** | **t:ArrayOfStringsType** | Specifies a list of all the people who have received messages in this conversation across all folders in the mailbox. |
| **UniqueUnreadSenders** | **t:ArrayOfStringsType** | Specifies a list of all the people who have sent messages that are currently unread in this conversation in the specified folder. |
| **GlobalUniqueUnreadSenders** | **t:ArrayOfStringsType** | Specifies a list of all the people who have sent messages that are currently unread in this conversation across all folders in a mailbox. |
| **UniqueSenders** | **t:ArrayOfStringsType** | Specifies a list of all the senders of conversation items in the specified folder. |
| **GlobalUniqueSenders** | **t:ArrayOfStringsType** | Specifies a list of all the senders of conversation items in a mailbox. |
| **LastDeliveryTime** | **xs:dateTime** [XMLSCHEMA2] | Specifies the delivery time of the last message received in this conversation in the specified folder. |
| **GlobalLastDeliveryTime** | **xs:dateTime** | Specifies the delivery time of the last message received in this conversation across all folders in a mailbox. |
| **Categories** | **t:ArrayOfStringsType** | Specifies the category list for conversation items in the folder that is currently open. |

| Element | Type | Description |
| --- | --- | --- |
| GlobalCategories | t:ArrayOfStringsType | Specifies the category list for all conversation items in a mailbox. |
| FlagStatus | t:FlagStatusType (section 3.1.4.1.4.2) | Specifies the aggregated flag status for conversation items in the folder that is currently open. |
| GlobalFlagStatus | t:FlagStatusType | Specifies the aggregated flag status for all conversation items in mailbox. |
| HasAttachments | xs:boolean [XMLSCHEMA2] | Specifies a value that indicates whether at least one conversation item in the folder that is currently open has an attachment. |
| GlobalHasAttachments | xs:boolean | Specifies a value that indicates whether at least one conversation item in a mailbox has an attachment. |
| MessageCount | xs:int [XMLSCHEMA2] | Specifies the total number of conversation items in the folder that is currently open. |
| GlobalMessageCount | xs:int | Specifies the total number of conversation items in a mailbox. |
| UnreadCount | xs:int | Specifies a count of all the unread conversation items in the folder that is currently open. |
| GlobalUnreadCount | xs:int | Specifies a count of all the unread conversation items in a mailbox. |
| Size | xs:int | Specifies the size of the conversation calculated from the size of all conversation items in the folder that is currently open. |
| GlobalSize | xs:int | Specifies the size of the conversation calculated from the size of all conversation items in a mailbox. |

| Element | Type | Description |
|---|---|---|
| **ItemClasses** | **t:ArrayOfItemClassType** (section 3.1.4.1.3.2) | Specifies a list of item classes that represents all the item classes of the conversation items in the folder that is currently open. |
| **GlobalItemClasses** | **t:ArrayOfItemClassType** | Specifies a list of item classes that represents all the item classes of the conversation items in a mailbox. |
| **Importance** | **t:ImportanceChoicesType** ([MS-OXWSCORE] section 2.2.5.3) | Specifies the aggregated importance for all conversation items in the folder that is currently open. |
| **GlobalImportance** | **t:ImportanceChoicesType** | Specifies the aggregated importance for all conversation items in mailbox. |
| **ItemIds** | **t:NonEmptyArrayOfBaseItemIdsType** ([MS-OXWSCORE] section 2.2.4.9) | Specifies the collection of item identifiers for all conversation items in the folder that is currently open. |
| **GlobalItemIds** | **t:NonEmptyArrayOfBaseItemIdsType** | Specifies the collection of item identifiers for all conversation items in mailbox. |
| **LastModifiedTime** | **xs:dateTime** | Specifies the time at which the item was last modified.<2> |
| **InstanceKey** | **xs:base64Binary** | Specifies the instance key.<3> |
| **Preview** | **xs:string** | Specifies the first 256 characters of the message so that it can be previewed without being opened. |
| **InferredImportance** | **t:InferredImportanceType** | Specifies the inferred importance of the item. |
| **GlobalInferredImportance** | **t:InferredImportanceType** | Specifies the global inferred importance. |
| **GlobalParentFolderIds** | **NonEmptyArrayOfBaseFolderIdsType** ([MS-OXWSFOLD] section 3.1.4.6.3.3) | Specifies the identifiers of the global parent folder.<4> |
| **NextPredictedAction** | **PredictedMessageActionType** ([MS- | Specifies the next |

| Element | Type | Description |
|---|---|---|
| | OXWSCDATA] section 2.2.5.21) | predicted action for the item.<5> |
| **GroupingAction** | **t:PredictedMessageActionType (**[MS-OXWSCDATA] section 2.2.5.21) | Specifies that the next predicted action is grouping items.<6> |
| **MailboxScope** | **t:MailboxSearchLocationType (**[MS-OXWSEDISC] section 3.1.4.4.4.1) | Specifies the mailbox scope.<7> |
| **IconIndex** | **t:IconIndexType** ([MS-OXWSCDATA] section 2.2.5.16) | Specifies the index of the icon to display.<8> |
| **GlobalIconIndex** | **t:IconIndexType** | Specifies the aggregate **IconIndex** element for all messages in a conversation.<9> |
| **DraftItemIds** | **t:NonEmptyArrayOfBaseItemIdsType** | Specifies an array of identifiers for draft items.<10> |

### 3.1.4.1.3.5 FindConversationType

The **FindConversationType** complex type specifies the search options to use when searching for conversations. The **FindConversationType** complex type extends the **BaseRequestType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.15.

```
<xs:complexType name="FindConversationType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:choice minOccurs="0">
          <xs:element name="IndexedPageItemView"
            type="t:IndexedPageViewType"
          />
          <xs:element name="SeekToConditionPageItemView"
            type="t:SeekToConditionPageViewType"
          />
        </xs:choice>
      <xs:element name="SortOrder"
        type="t:NonEmptyArrayOfFieldOrdersType"
        minOccurs="0"
      />
      <xs:element name="ParentFolderId"
        type="t:TargetFolderIdType"
        minOccurs="1"
      />
        <xs:element name="MailboxScope"
          type="t:MailboxSearchLocationType"
          minOccurs="0"
          maxOccurs="1"
        />
        <xs:element name="QueryString"
          type="m:QueryStringType"
```

```
                minOccurs="0"
                maxOccurs="1"
              />
            <xs:element name="ConversationShape"
              type="t:ConversationResponseShapeType"
              minOccurs="0"
              maxOccurs="1"
              />
        </xs:sequence>
        <xs:attribute name="Traversal"
          type="t:ConversationQueryTraversalType"
          use="optional"
         />
        <xs:attribute name="ViewFilter"
          type="t:ViewFilterType"
          use="optional"
         />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

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

| Element | Type | Description |
|---------|------|-------------|
| **IndexedPageItemView** | **t:IndexedPageViewType** ([MS-OXWSSRCH] section 2.2.4.14) | Specifies how conversation search results are returned in a response. This element MUST be present. |
| **SeekToConditionPageItemView** | **t:SeekToConditionPageViewType** ([MS-OXWSSRCH] section 2.2.4.28) | Specifies a condition that has to be satisfied in order to include an item in the result set.<11> |
| **SortOrder** | **t:NonEmptyArrayOfFieldOrdersType** ([MS-OXWSSRCH] section 3.1.4.2.3.8) | Specifies the property and sort order direction that is used to sort conversations in a response. |
| **ParentFolderId** | **t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14) | Specifies the folder that is searched for conversations. This element MUST be present. |
| **MailboxScope** | **t:MailboxSearchLocationType** ([MS-OXWSEDISC] section 3.1.4.4.4.1) | Specifies the mailbox scope. |
| **QueryString** | **m:QueryStringType** ([MS-OXWSSRCH] section 2.2.4.30) | Specifies the query string. |
| **ConversationShape** | **t:ConversationResponseShapeType** (section 3.1.4.1.3.3) | Specifies the properties returned in |

| Element | Type | Description |
|---------|------|-------------|
| | | a response. |
| **Traversal** | **t:ConversationQueryTraversalType** (section 3.1.4.1.4.1) | Specifies whether a query of conversation items is shallow or deep. |
| **ViewFilter** | **t:ViewFilterType** | Specifies the view filter for the search. |

### 3.1.4.1.3.6   FindConversationResponseMessageType

The **FindConversationResponseMessageType** complex type specifies the results of an attempt to find conversations in the specified folder. The **FindConversationResponseMessageType** complex type extends the **ResponseMessageType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.57.

```
<xs:complexType name="FindConversationResponseMessageType">
  <xs:complexContent>
    <xs:extension
      base="m:ResponseMessageType"
    >
      <xs:sequence>
        <xs:element name="Conversations"
          type="t:ArrayOfConversationsType"
          minOccurs="0"
         />
        <xs:element name="HighlightTerms"
          type="t:ArrayOfHighlightTermsType"
          minOccurs="0"
         />
        <xs:element name="TotalConversationsInView"
          type="xs:int"
          minOccurs="0"
         />
        <xs:element name="IndexedOffset"
          type="xs:int"
          minOccurs="0"
         />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

The following table lists and describes the child elements of the **FindConversationResponseMessageType** complex type.

| Element | Type | Description |
|---------|------|-------------|
| **Conversations** | t:ArrayOfConversationsType (section 3.1.4.1.3.1) | Specifies an array of conversations that is returned in a response. This element MUST be present. |

| Element | Type | Description |
|---|---|---|
| **HighlightTerms** | **t:ArrayOfHighlightTermsType** ([MS-OXWSCDATA] section 2.2.4.6) | Specifies an array of highlight terms. |
| **TotalConversationsInView** | **xs:int** ([XMLSCHEMA2]) | Specifies the total number of conversations returned. |
| **IndexedOffset** | **xs:int** | Specifies the indexed offset from the origin of the search results. |

### 3.1.4.1.4   Simple Types

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

| Simple type | Definition |
|---|---|
| **FlagStatusType** (section 3.1.4.1.4.2) | Specifies the flag status for conversation items. |

### 3.1.4.1.4.1   ConversationQueryTraversalType

The **ConversationQueryTraversalType** simple type specifies whether a query of conversation items is shallow or deep.<12>

```
<xs:simpleType name="ConversationQueryTraversalType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Shallow" />
      <xs:enumeration value="Deep" />
    </xs:restriction>
</xs:simpleType>
```

The following table lists and describes the enumeration values that are defined by the **ConversationQueryTraversalType** simple type.

| Value | Description |
|---|---|
| **Shallow** | Specifies a shallow query. |
| **Deep** | Specifies a deep query. |

### 3.1.4.1.4.2   FlagStatusType

The **FlagStatusType** simple type specifies the flag status for conversation items.

```
<xs:simpleType name="FlagStatusType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="NotFlagged"
     />
    <xs:enumeration
```

```
      value="Flagged"
    />
   <xs:enumeration
     value="Complete"
    />
  </xs:restriction>
 </xs:simpleType>
```

The following table lists and describes the enumeration values that are defined by the
**FlagStatusType** simple type.

| Value | Description |
| --- | --- |
| **NotFlagged** | This value sets the flag status to "NotFlagged". |
| **Flagged** | This value sets the flag status to "Flagged". |
| **Complete** | This value sets the flag status to "Complete". |

### 3.1.4.1.4.3  ViewFilter

The **ViewFilterType** simple type specifies a filter for conversation items returned in a
response.<13>

```
  <xs:simpleType name="ViewFilterType">
      <xs:annotation>
        <xs:documentation>Types of view filters for finding
  items/conversations</xs:documentation>
      </xs:annotation>
      <xs:restriction base="xs:string">
        <xs:enumeration value="All" />
        <xs:enumeration value="Flagged" />
        <xs:enumeration value="HasAttachment" />
        <xs:enumeration value="ToOrCcMe" />
        <xs:enumeration value="Unread" />
        <xs:enumeration value="TaskActive" />
        <xs:enumeration value="TaskOverdue" />
        <xs:enumeration value="TaskCompleted" />
        <xs:enumeration value="Suggestions" />
        <xs:enumeration value="SuggestionsRespond" />
        <xs:enumeration value="SuggestionsDelete" />
      </xs:restriction>
  </xs:simpleType>
```

The following table lists and describes the enumeration values that are defined by the
**ViewFilterType** simple type.

| Value | Description |
| --- | --- |
| **All** | Specifies that no filter is applied. |
| **Flagged** | Specifies a filter for all flagged conversation items. |
| **HasAttachment** | Specifies a filter for all conversation items with attachments. |

| Value | Description |
|---|---|
| **ToOrCcMe** | Specifies a filter for all conversation items with the receiver specified on the To and Cc recipient list. |
| **Unread** | Specifies a filter for all unread conversation items. |
| **TaskActive** | Specifies a filter for all active tasks. |
| **TaskOverdue** | Specifies a filter for all overdue tasks. |
| **TaskCompleted** | Specifies a filter for all completed tasks. |
| **Suggestions** | Specifies a filter for all suggestions. |
| **SuggestionsRespond** | Specifies a filter for suggestions and items to respond to.<14> |
| **SuggestionsDelete** | Specifies a filter for suggestions and items to delete.<15> |

### 3.1.4.2   GetConversationItems

The **GetConversationItems** operation specifies the WSDL messages that are used to request and return the contents of a conversation in a mailbox.<16>

```
<wsdl:operation name="GetConversationItems">
    <wsdl:input message="tns:GetConversationItemsSoapIn"/>
    <wsdl:output message="tns:GetConversationItemsSoapOut"/>
</wsdl:operation>
```

### 3.1.4.2.1   Messages

The following table lists and describes the set of the WSDL message definitions that are specific to the **GetConversationItems** operation.

| Message | Description |
|---|---|
| **GetConversationItemsSoapIn** (section 3.1.4.2.1.1) | Specifies the SOAP message that represents a request for the contents of a conversation. |
| **GetConversationItemsSoapOut** (section 3.1.4.2.1.2) | Specifies the SOAP message that contains the contents of a conversation. |

### 3.1.4.2.1.1   GetConversationItemsSoapIn

The **GetConversationItemsSoapIn** WSDL message specifies the SOAP message that represents a request to return the contents of a conversation.

```
<wsdl:message name="GetConversationItemsSoapIn">
    <wsdl:part name="request" element="tns:GetConversationItems" />
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion" />
</wsdl:message>
```

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

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

| Part | Element/type | Description |
|------|--------------|-------------|
| **Request** | **tns:GetConversationItems** (section 3.1.4.2.2.1) | Specifies the SOAP body of the request to return the contents of a conversation. This part is required. |
| **Impersonation** | **t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.3.3) | Specifies a SOAP header that identifies the user whom the client application is impersonating. This part is optional. |
| **RequestVersion** | **t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.3.9) | Specifies a SOAP header that identifies the schema version for the **GetConversationItems** operation request. |

### 3.1.4.2.1.2 GetConversationItemsSoapOut

The **GetConversationItemsSoapOut** WSDL message specifies the server response SOAP message that contains the contents of a conversation.

```
<wsdl:message name="GetConversationItemsSoapOut">
  <wsdl:part name="GetConversationItemsResult"
      element="tns:GetConversationItemsResponse" />
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo" />
</wsdl:message>
```

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

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

| Part | Element/type | Description |
|------|--------------|-------------|
| **GetConversationItemsResult** | **tns:GetConversationItemsResponse** (section 3.1.4.2.2.2) | Specifies the SOAP body of the response to a **GetConversationItems** operation request. |
| **ServerVersion** | **ServerVersion** ([MS-OXWSCDATA] section 2.2.3.10) | Specifies the SOAP header that identifies the server version for the response. |

### 3.1.4.2.2 Elements

The following table lists and describes the XML schema element definitions that are specific to the **GetConversationItems** operation.

| Element | Description |
|---------|-------------|
| **GetConversationItems** (section 3.1.4.2.2.1) | Specifies a request to return the contents of a conversation in a mailbox. |
| **GetConversationItemsResponse** (section | Specifies a response that contains the results of an |

| Element | Description |
|---------|-------------|
| 3.1.4.2.2.2) | attempt to return the contents of a conversation in a mailbox. |

### 3.1.4.2.2.1   GetConversationItems

The **GetConversationItems** element specifies a request to return the contents of a conversation in a mailbox.

```
<xs:element name="GetConversationItems"
    type="m:GetConversationItemsType"
/>
```

### 3.1.4.2.2.2   GetConversationItemsResponse

The **GetConversationItemsResponse** element specifies a response that contains the results of an attempt to return the contents of a conversation in a mailbox.

```
<xs:element name="GetConversationItemsResponse"
    type="m:GetConversationItemsResponseType"
/>
```

### 3.1.4.2.3   Complex Types

The following table lists and describes the XML schema complex type definitions that are specific to the **GetConversationItems** operation.

| Complex type | Description |
|--------------|-------------|
| **m:GetConversationItemsType** (section 3.1.4.2.3.5) | Specifies the request to retrieve conversation items. |
| **m:GetConversationItemsResponseMessageType** (section 3.1.4.2.3.6) | Specifies the response message for the **GetConversationItems** operation. |
| **m:GetConversationItemsResponseType** (section 3.1.4.2.3.7) | Specifies the response for the **GetConversationItems** operation. |

### 3.1.4.2.3.1   ArrayOfConversationNodesType

The **ArrayOfConversationNodesType** complex type specifies an array of conversation nodes.<17>

```
<xs:complexType name="ArrayOfConversationNodesType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="ConversationNode" type="t:ConversationNodeType"/>
    </xs:choice>
</xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **ConversationNode** | **t:ConversationNodeType** (section 3.1.4.2.3.3) | Specifies a single conversation node. |

### 3.1.4.2.3.2   ArrayOfConversationRequestsType

The **ArrayOfConversationRequestsType** complex type specifies one or more conversations to be returned in a response.<18>

```
<xs:complexType name="ArrayOfConversationRequestsType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="Conversation" type="t:ConversationRequestType"/>
    </xs:choice>
</xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **Conversation** | **t:ConversationRequestType** (section 3.1.4.2.3.8) | Specifies a conversation to return in a response. |

### 3.1.4.2.3.3   ConversationNodeType

The **ConversationNodeType** complex type specifies a node of items in a conversation.<19>

```
<xs:complexType name="ConversationNodeType">
    <xs:sequence>
        <xs:element name="InternetMessageId" type="xs:string" minOccurs="0" maxOccurs="1"/>
        <xs:element name="ParentInternetMessageId" type="xs:string" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="Items" type="t:NonEmptyArrayOfAllItemsType" minOccurs="0"
maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **InternetMessageId** | **xs:string** ([XMLSCHEMA2]) | Specifies the internet message identifier of this conversation node. |
| **ParentInternetMessageId** | **xs:string** | Specifies the internet message identifier of the parent conversation node. |
| **Items** | **t:NonEmptyArrayOfAllItemsType** ([MS-OXWSCDATA] section 2.2.4.42) | Specifies all the items in the conversation node. |

### 3.1.4.2.3.4   ConversationResponseType

The **ConversationResponseType** complex type specifies a conversation that is returned in a response.[20]

```
<xs:complexType name="ConversationResponseType">
    <xs:sequence>
        <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
        <xs:element name="SyncState" type="xs:base64Binary" minOccurs="0" maxOccurs="1"/>
        <xs:element name="ConversationNodes" type="t:ArrayOfConversationNodesType"
minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **ConversationId** | **t:ItemIdType** | Specifies the conversation identifier. |
| **SyncState** | **xs:base64Binary** | Specifies the conversation synchronization state. |
| **ConversationNodes** | **t:ArrayOfConversationNodesType** (section 3.1.4.2.3.1) | Specifies the conversation nodes in the conversation. |

### 3.1.4.2.3.5   GetConversationItemsType

The **GetConversationItemsType** complex type specifies the request to return the contents of a conversation. The **GetConversationItemsType** complex type extends the **ResponseMessageType**.

```
<xs:complexType name="GetConversationItemsType">
    <xs:complexContent>
        <xs:extension
            base="m:BaseRequestType"
        >
            <xs:sequence>
                <xs:element name="ItemShape"
                    type="t:ItemResponseShapeType"
                    minOccurs="1"
                    maxOccurs="1"
                 />
                 <xs:element name="FoldersToIgnore"
                     type="t:NonEmptyArrayOfBaseFolderIdsType"
                     minOccurs="0"
                     maxOccurs="1"
                />
                <xs:element name="MaxItemsToReturn"
                    type="xs:int"
                    minOccurs="0"
                    maxOccurs="1"
                />
                <xs:element name="SortOrder"
                    type="t:ConversationNodeSortOrder"
```

```
                        minOccurs="0"
                        maxOccurs="1"
                    />
                    <xs:element name="MailboxScope"
                        type="t:MailboxSearchLocationType"
                        minOccurs="0"
                        maxOccurs="1"
                    />
                    <xs:element name="Conversations"
                        type="t:ArrayOfConversationRequestsType"
                        minOccurs="1"
                    />
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
```

The following table lists the child elements of the **GetConversationItemsType** complex type

| Element | Type | Description |
|---------|------|-------------|
| **ItemShape** | **t:ItemResponseShapeType** ([MS-OXWSCDATA] section 2.2.4.38) | Specifies the properties to return. |
| **FoldersToIgnore** | **t:NonEmptyArrayOfBaseFolderIdsType** ([MS-OXWSCORE] section 2.2.4.9) | Specifies the folders to be ignored in the retrieving conversation items. |
| **MaxItemsToReturn** | **xs:int** | Specifies the maximum number of items to return. |
| **SortOrder** | **t:ConversationNodeSortOrder** (section 3.1.4.2.4.1) | Specifies the sort order for conversation nodes. |
| **MailboxScope** | **t:MailboxSearchLocationType** ([MS-OXWSEDISC] section 3.1.4.4.4.1) | Specifies the mailbox scope. |
| **Conversations** | **t:ArrayOfConversationRequestsType** (section 3.1.4.2.3.2) | Specifies an array of conversation requests. |

### 3.1.4.2.3.6   GetConversationItemsResponseMessageType

The **GetConversationItemsResponseMessageType** complex type specifies the results of an attempt to return the contents of a conversation. The **GetConversationItemsResponseMessageType** complex type extends the **ResponseMessageType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.57.

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

```
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **Conversations** | t:ArrayOfConversationsType (section 3.1.4.1.3.1) | Specifies an array of conversations that is returned in a response. This element MUST be present. |

### 3.1.4.2.3.7   GetConversationItemsResponseType

The **GetConversationItemsResponseType** complex type specifies the response for a **GetConversationItems** operation. The **GetConversationItemsResponseType** complex type extends the **BaseRequestType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.15.

```
<xs:complexType name="GetConversationItemsResponseType">
    <xs:complexContent>
        <xs:extension
            base="m:BaseResponseMessageType"
        />
    </xs:complexContent>
</xs:complexType>
```

### 3.1.4.2.3.8   ConversationRequestType

The **ConversationRequestType** complex type specifies a conversation to return in a response.<21>

```
<xs:complexType name="ConversationRequestType">
    <xs:sequence>
        <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
        <xs:element name="SyncState" type="xs:base64Binary" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **ConversationId** | **t:ItemIdType** ([MS-OXWSCORE] section 2.2.4.17) | Specifies the conversation identifier. |
| **SyncState** | **xs:base64Binary** | Specifies the conversation synchronization state. |

*Release: November 18, 2013*

### 3.1.4.2.4  Simple Types

The following table lists and describes the XML schema simple type definitions that are specific to the **GetConversationItems** operation

| Simple type | Description |
|---|---|
| **t: ConversationNodeSortOrder** (section 3.1.4.2.4.1) | Specifies how conversation nodes are ordered in the response. |

### 3.1.4.2.4.1  ConversationNodeSortOrder

The **ConversationNodeSortOrder** simple type specifies how conversation nodes are ordered in the response.<22>

```
<xs:simpleType name="ConversationNodeSortOrder">
    <xs:restriction base="xs:string">
        <xs:enumeration value="TreeOrderAscending"/>
        <xs:enumeration value="TreeOrderDescending"/>
        <xs:enumeration value="DateOrderAscending"/>
        <xs:enumeration value="DateOrderDescending"/>
    </xs:restriction>
</xs:simpleType>
```

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

| Value | Description |
|---|---|
| **TreeOrderAscending** | Specifies that the conversation node sort order is ascending based on the position in the node tree. |
| **TreeOrderDescending** | Specifies that the conversation node sort order is descending based on the position in the node tree. |
| **DateOrderAscending** | Specifies that the conversation node sort order is ascending based on the last date in the node tree. |
| **DateOrderDescending** | Specifies that the conversation node sort order is descending based on the last date in the node tree. |

### 3.1.4.3  ApplyConversationAction

The **ApplyConversationAction** operation specifies the WSDL message that is used to apply actions to conversations in a mailbox.

The following is the WSDL port type definition of this operation.

```
<wsdl:operation name="ApplyConversationAction">
    <wsdl:input message="tns:ApplyConversationActionSoapIn"/>
    <wsdl:output message="tns:ApplyConversationActionSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification of this operation.

```
<wsdl:operation name="ApplyConversationAction">
    <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/ApplyConversationAct
ion" />
    <wsdl:input>
        <soap:body parts="request" use="literal" />
        <soap:header message="tns:ApplyConversationActionSoapIn" part="RequestVersion"
use="literal" />
        <soap:header message="tns:ApplyConversationActionSoapIn" part="Impersonation"
use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body parts="ApplyConversationActionResult" use="literal" />
        <soap:header message="tns:ApplyConversationActionSoapOut" part="ServerVersion"
use="literal"/>
    </wsdl:output>
</wsdl:operation>
```

### 3.1.4.3.1  Messages

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

| Message | Description |
|---|---|
| **ApplyConversationActionSoapIn** (section 3.1.4.3.1.1) | Specifies the SOAP message that represents a request to apply actions to items in a specified conversation. |
| **ApplyConversationActionSoapOut** (section 3.1.4.3.1.2) | Specifies the SOAP message that represents a response to a request to apply actions to items in a specified conversation. |

### 3.1.4.3.1.1  ApplyConversationActionSoapIn

The **ApplyConversationActionSoapIn** WSDL message specifies the SOAP message that
represents a request to apply actions to items in a specified conversation.

The following is the WSDL message specification of the **ApplyConversationActionSoapIn**
message.

```
<wsdl:message name="ApplyConversationActionSoapIn">
    <wsdl:part name="request" element="tns:ApplyConversationAction"/>
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
</wsdl:message>
```

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

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

| Part | Element/type | Description |
|---|---|---|
| **request** | **ApplyConversationAction** | Specifies the SOAP body of the request to |

| Part | Element/type | Description |
|------|--------------|-------------|
| | (section 3.1.4.3.2.1) | apply conversation actions. This part is required. |
| **Impersonation** | **ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.3.3) | Specifies a SOAP header that identifies the user whom the client application is impersonating. This part is optional. |
| **RequestVersion** | **RequestServerVersion** ([MS-OXWSCDATA] section 2.2.3.9) | Specifies a SOAP header that identifies the schema version for the **ApplyConversationAction** operation request. |

### 3.1.4.3.1.2   ApplyConversationActionSoapOut

The **ApplyConversationActionSoapOut** WSDL message specifies the SOAP message that represents a response to a request to apply actions to items in a specified conversation.

```
<wsdl:message name="ApplyConversationActionSoapOut">
    <wsdl:part name="ApplyConversationActionResult"
element="tns:ApplyConversationActionResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

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

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

| Part | Element/type | Description |
|------|--------------|-------------|
| **ApplyConversationActionResult** | **ApplyConversationActionResponse** (section 3.1.4.3.2.2) | Specifies the SOAP body of the response to an **ApplyConversationAction** operation request. |
| **ServerVersion** | **ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.3.10) | Specifies the SOAP header that identifies the server version for the response. |

### 3.1.4.3.2   Elements

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

| Element | Description |
|---------|-------------|
| **ApplyConversationAction** (section 3.1.4.3.2.1) | Specifies a request to apply actions to a conversation in a mailbox. |
| **ApplyConversationActionResponse** (section 3.1.4.3.2.2) | Specifies a response that contains the results of an attempt to apply conversation actions to a conversation in a mailbox. |

### 3.1.4.3.2.1   ApplyConversationAction

The **ApplyConversationAction** element specifies a request to apply actions to a conversation in a mailbox.

```
<xs:element name="ApplyConversationAction"
    type="m:ApplyConversationActionType"
/>
```

### 3.1.4.3.2.2   ApplyConversationActionResponse

The **ApplyConversationActionResponse** element specifies a response that contains the results of an attempt to apply conversation actions to a conversation in a mailbox. This element MUST be present.

```
<xs:element name="ApplyConversationActionResponse"
    type="m:ApplyConversationActionResponseType"
/>
```

### 3.1.4.3.3   Complex Types

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

| Complex type | Description |
|---|---|
| **ApplyConversationActionResponseType** (section 3.1.4.3.3.1) | Specifies the contents of a response that contains the results of an attempt to apply conversation actions to a conversation in mailbox. |
| **ApplyConversationActionType** (section 3.1.4.3.3.2) | Specifies the contents of a request to apply actions to a conversation in a mailbox. |
| **ConversationActionType** (section 3.1.4.3.3.3) | Specifies a single action to be applied to a conversation. |
| **NonEmptyArrayOfApplyConversationActionType** (section 3.1.4.3.3.4) | Specifies an array of actions to be applied to one or more conversations. |

### 3.1.4.3.3.1   ApplyConversationActionResponseType

The **ApplyConversationActionResponseType** complex type specifies the contents of a response that contains the results of an attempt to apply conversation actions to a conversation in a mailbox. The **ApplyConversationActionResponseType** complex type extends the **BaseResponseMessageType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.16.

```
<xs:complexType name="ApplyConversationActionResponseType">
    <xs:complexContent>
        <xs:extension
            base="m:BaseResponseMessageType"
        />
```

```
            </xs:complexContent>
        </xs:complexType>
```

### 3.1.4.3.3.2  ApplyConversationActionType

The **ApplyConversationActionType** complex type specifies the contents of a request to apply actions to a conversation in a mailbox. The **ApplyConversationActionType** complex type extends the **BaseRequestType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.15.

```
<xs:complexType name="ApplyConversationActionType">
    <xs:complexContent>
        <xs:extension
            base="m:BaseRequestType"
        >
            <xs:sequence>
                <xs:element name="ConversationActions"
                    type="t:NonEmptyArrayOfApplyConversationActionType"
                />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

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

| Element | Type | Description |
|---|---|---|
| **ConversationActions** | t:NonEmptyArrayOfApplyConversationActionType (section 3.1.4.3.3.4) | Specifies a collection of conversations and the actions to apply to them. This element MUST be present. |

### 3.1.4.3.3.3  ConversationActionType

The **ConversationActionType** complex type specifies a single action to be applied to a conversation.

```
<xs:complexType name="ConversationActionType">
    <xs:sequence>
        <xs:element name="Action" type="t:ConversationActionTypeType" minOccurs="1"
maxOccurs="1"/>
        <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
        <xs:element name="ContextFolderId" type="t:TargetFolderIdType" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="ConversationLastSyncTime" type="xs:dateTime" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="ProcessRightAway" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
        <xs:element name="DestinationFolderId" type="t:TargetFolderIdType" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="Categories" type="t:ArrayOfStringsType" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="EnableAlwaysDelete" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
```

```
            <xs:element name="IsRead" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
            <xs:element name="DeleteType" type="t:DisposalType" minOccurs="0" maxOccurs="1"/>
            <xs:element name="RetentionPolicyType" type="t:RetentionType" minOccurs="0"
   maxOccurs="1"/>
         <xs:element name="RetentionPolicyTagId" type="xs:string" minOccurs="0" maxOccurs="1"/>
         <xs:element name="Flag" type="t:FlagType" minOccurs="0" maxOccurs="1"/>
         <xs:element name="SuppressReadReceipts" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
      </xs:sequence>
   </xs:complexType>
```

The following table lists and describes the child elements of the **ConversationActionType** complex type.

| Element | Type | Description |
|---|---|---|
| **Action** | **t:ConversationActionTypeType** (section 3.1.4.3.4.1) | Specifies the action to perform on the conversation specified by the **ConversationId** element. This element MUST be present. |
| **ConversationId** | **t:ItemIdType** ([MS-OXWSCORE] section 2.2.4.17) | Specifies the conversation identifier of the targeted conversation for applying an action. This element MUST be present. |
| **ContextFolderId** | **t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14) | Specifies the folder that is targeted for actions that use folders. This element MUST be present when copying, deleting, moving, and setting the read state on conversation items in a target folder. This element MUST NOT be present when copying, deleting, moving, and setting the read state on all conversation items in a mailbox. |
| **ConversationLastSyncTime** | **xs:dateTime** ([XMLSCHEMA2]) | Specifies the date and time that a conversation was last synchronized. This element MUST be present when trying to delete all items in a conversation that were received up to the specified time. All items received after the specified time MUST NOT be deleted. |
| **ProcessRightAway** | **xs:boolean** ([XMLSCHEMA2]) | Specifies whether the response is sent as soon as the action starts processing on the server, or whether the response is sent after the action has completed. This element MUST be present for the response to be sent asynchronous to the requested action. |
| **DestinationFolderId** | **t:TargetFolderIdType** ([MS- | Specifies the destination folder for |

| Element | Type | Description |
| --- | --- | --- |
| | OXWSFOLD] section 2.2.4.14) | copy and move actions. This element MUST be present when the **Action** element value is set to "AlwaysMove", "Move", or "Copy". |
| **Categories** | **t:ArrayOfStringsType** ([MS-OXWSCDATA] section 2.2.4.11) | Specifies the categories to set on items in a conversation. This element MUST be present when the **Action** element value is set to "AlwaysCategorize". |
| **EnableAlwaysDelete** | **xs:boolean** ([XMLSCHEMA2]) | Specifies a flag that enables deletion for all new items in a conversation. This element MUST be present when the **Action** element value is set to "AlwaysDelete". |
| **IsRead** | **xs:boolean** ([XMLSCHEMA2]) | Specifies a flag that enables setting the read state of items in a conversation. This element MUST be present when the **Action** element value is set to "SetReadState". |
| **DeleteType** | **t:DisposalType** ([MS-OXWSCDATA] section 2.2.5.9) | Specifies how items in a conversation are deleted. This element MUST be present when the **Action** element value is set to "AlwaysDelete" or "Delete". |
| **RetentionPolicyType** | **RetentionType** | Specifies the retention policy for the item.<23> |
| **RetentionPolicyTagId** | **xs:string** ([XMLSCHEMA2]) | Specifies the retention policy tag identifier.<24> |
| **Flag** | **FlagType** ([MS-OXWSCORE] section 2.2.4.2) | Specifies a flag on an item.<25> |
| **SuppressReadReceipts** | **xs:boolean** ([XMLSCHEMA2]) | Specifies whether to suppress a read receipt.<26> |

### 3.1.4.3.3.4   NonEmptyArrayOfApplyConversationAction

The **NonEmptyArrayOfApplyConversationActionType** complex type specifies an array of actions to be applied to one or more conversations.

```
<xs:complexType name="NonEmptyArrayOfApplyConversationActionType">
  <xs:sequence>
    <xs:element name="ConversationAction"
      type="t:ConversationActionType"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

The following table lists and describes the child elements of the **ConversationType** complex type.

| Element | Type | Description |
|---------|------|-------------|
| **ConversationAction** | t:ConversationActionType (section 3.1.4.3.3.3) | Specifies a single conversation action. At least one instance of this element MUST be present. |

### 3.1.4.3.4  Simple Types

The following table lists the XML schema simple type definitions that are specific to the **ApplyConversationAction** operation.

| Simple type | Description |
|-------------|-------------|
| **ConversationActionTypeType** (section 3.1.4.3.4.1) | Specifies the action to apply to items in a conversation. |

### 3.1.4.3.4.1  ConversationActionTypeType

The **ConversationActionTypeType** simple type specifies the action to apply to items in a conversation.

```
<xs:simpleType name="ConversationActionTypeType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="AlwaysCategorize"/>
    <xs:enumeration value="AlwaysDelete"/>
    <xs:enumeration value="AlwaysMove"/>
    <xs:enumeration value="Delete"/>
    <xs:enumeration value="Move"/>
    <xs:enumeration value="Copy"/>
    <xs:enumeration value="SetReadState"/>
    <xs:enumeration value="SetRetentionPolicy" />
    <xs:enumeration value="Flag" />
  </xs:restriction>
</xs:simpleType>
```

The following table lists and describes the enumeration values that are defined by the **ConversationActionTypeType** simple type.

| Value | Description |
|-------|-------------|
| **AlwaysCategorize** | Specifies that items in the conversation are always categorized. |
| **AlwaysDelete** | Specifies that items in the conversation are always deleted. |
| **AlwaysMove** | Specifies that items in the conversation are always moved. |
| **Delete** | Specifies that items in the conversation are to be deleted. |
| **Move** | Specifies that items in the conversation are to be moved. |
| **Copy** | Specifies that items in the conversation are to be copied. |

| Value | Description |
|---|---|
| **SetReadState** | Specifies that items in the conversation are to have the read state set. |
| **SetRetentionPolicy** | Specifies that items in the conversation are to have the retention policy set.<27> |
| **Flag** | Specifies a flag on an item.<28> |

### 3.1.5  Timer Events

None.

### 3.1.6  Other Local Events

None.

# 4   Protocol Examples

This section provides a simplified example of a request/response sequence for the **FindConversation** operation, as specified in section 3.1.4.1.

The following example shows a **FindConversation** request to return a single conversation from the default Inbox folder.

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xmlns:xsd="http://www.w3.org/2001/XMLSchema"
               xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
               xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
               xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2010_SP1" />
  </soap:Header>
  <soap:Body>
    <m:FindConversation>
      <m:IndexedPageItemView BasePoint="Beginning" MaxEntriesReturned="1" Offset="0"/>
      <m:ParentFolderId>
        <t:DistinguishedFolderId Id ="inbox"/>
      </m:ParentFolderId>
    </m:FindConversation>
  </soap:Body>
</soap:Envelope>
```

The following example shows a **FindConversation** response to the request to return a single conversation from the default Inbox folder.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <t:ServerVersionInfo MajorVersion="14"
                         MinorVersion="1"
                         MajorBuildNumber="139"
                         MinorBuildNumber="0"
                         Version="Exchange2010_SP1"
                         xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
                         xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
                         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                         xmlns:xsd="http://www.w3.org/2001/XMLSchema"/>
  </soap:Header>
  <soap:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <FindConversationResponse ResponseClass="Success"

xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseCode>NoError</ResponseCode>
      <Conversations>
        <t:Conversation xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
          <t:ConversationId
Id="AAQkAGYzZjZmNjk5LTIyNTQtNDBjZS05OTk0LTM4OGQ5ZDk4NDE5ZQAQAAGD7JNksE4zm4ATHm5DvYc="/>
          <t:ConversationTopic>Most fascinating</t:ConversationTopic>
          <t:UniqueRecipients>
            <t:String>User1@aujing-dom.extest.microsoft.com</t:String>
            <t:String>User2@aujing-dom.extest.microsoft.com</t:String>
```

```
            </t:UniqueRecipients>
            <t:GlobalUniqueRecipients>
              <t:String>User1@aujing-dom.extest.microsoft.com</t:String>
              <t:String>User2@aujing-dom.extest.microsoft.com</t:String>
            </t:GlobalUniqueRecipients>
            <t:UniqueUnreadSenders>
              <t:String>Microsoft Outlook</t:String>
            </t:UniqueUnreadSenders>
            <t:GlobalUniqueUnreadSenders>
              <t:String>Microsoft Outlook</t:String>
            </t:GlobalUniqueUnreadSenders>
            <t:UniqueSenders>
              <t:String>Microsoft Outlook</t:String>
            </t:UniqueSenders>
            <t:GlobalUniqueSenders>
              <t:String>Microsoft Outlook</t:String>
              <t:String>UserOne</t:String>
            </t:GlobalUniqueSenders>
            <t:LastDeliveryTime>2010-04-03T23:15:49Z</t:LastDeliveryTime>
            <t:GlobalLastDeliveryTime>2010-04-03T23:15:49Z</t:GlobalLastDeliveryTime>
            <t:HasAttachments>false</t:HasAttachments>
            <t:GlobalHasAttachments>false</t:GlobalHasAttachments>
            <t:MessageCount>1</t:MessageCount>
            <t:GlobalMessageCount>2</t:GlobalMessageCount>
            <t:UnreadCount>1</t:UnreadCount>
            <t:GlobalUnreadCount>1</t:GlobalUnreadCount>
            <t:Size>6505</t:Size>
            <t:GlobalSize>7814</t:GlobalSize>
            <t:ItemClasses>
              <t:ItemClass>REPORT.IPM.Note.NDR</t:ItemClass>
            </t:ItemClasses>
            <t:GlobalItemClasses>
              <t:ItemClass>REPORT.IPM.Note.NDR</t:ItemClass>
              <t:ItemClass>IPM.Note</t:ItemClass>
            </t:GlobalItemClasses>
            <t:Importance>Normal</t:Importance>
            <t:GlobalImportance>Normal</t:GlobalImportance>
            <t:ItemIds>
              <t:ItemId Id="AAMkAGYzZjidkC+NAAAAY89GAAA=" ChangeKey="CQAAAA=="/>
            </t:ItemIds>
            <t:GlobalItemIds>
              <t:ItemId Id="AAMkAGYzZjidkC+NAAAAY89GAAA=" ChangeKey="CQAAAA=="/>
              <t:ItemId Id="AAMkAGYzZjidkC+NAAAAY9LrAAA=" ChangeKey="CQAAAA=="/>
            </t:GlobalItemIds>
          </t:Conversation>
        </Conversations>
      </FindConversationResponse>
    </soap:Body>
  </soap:Envelope>
```

# 5   Security

## 5.1   Security Considerations for Implementers

None.

## 5.2   Index of Security Parameters

None.

# 6   Appendix A: Full WSDL

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

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

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

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

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
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>
    <xs:schema id="messages" elementFormDefault="qualified" version="Exchange2013"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages">
      <xs:include schemaLocation="MS-OXWSCONV-messages.xsd"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:portType name="ExchangeServicePortType">
    <wsdl:operation name="FindConversation">
      <wsdl:input message="tns:FindConversationSoapIn"/>
      <wsdl:output message="tns:FindConversationSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="GetConversationItems">
      <wsdl:input message="tns:GetConversationItemsSoapIn"/>
      <wsdl:output message="tns:GetConversationItemsSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyConversationAction">
      <wsdl:input message="tns:ApplyConversationActionSoapIn"/>
      <wsdl:output message="tns:ApplyConversationActionSoapOut"/>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="ExchangeServiceBinding" type="tns:ExchangeServicePortType">
    <wsdl:documentation>
      <wsi:Claim conformsTo="http://ws-i.org/profiles/basic/1.0" xmlns:wsi="http://ws-
i.org/schemas/conformanceClaim/"/>
    </wsdl:documentation>
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="FindConversation">
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/FindConversation"/>
```

```
      <wsdl:input>
        <soap:body parts="request" use="literal"/>
        <soap:header message="tns:FindConversationSoapIn" part="RequestVersion"
use="literal"/>
        <soap:header message="tns:FindConversationSoapIn" part="Impersonation"
use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body parts="FindConversationResult" use="literal"/>
        <soap:header message="tns:FindConversationSoapOut" part="ServerVersion"
use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetConversationItems">
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetConversationItems
"/>
      <wsdl:input>
        <soap:body parts="request" use="literal"/>
        <soap:header message="tns:GetConversationItemsSoapIn" part="RequestVersion"
use="literal"/>
        <soap:header message="tns:GetConversationItemsSoapIn" part="Impersonation"
use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body parts="GetConversationItemsResult" use="literal"/>
        <soap:header message="tns:GetConversationItemsSoapOut" part="ServerVersion"
use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="ApplyConversationAction">
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/ApplyConversationAct
ion"/>
      <wsdl:input>
        <soap:body parts="request" use="literal"/>
        <soap:header message="tns:ApplyConversationActionSoapIn" part="RequestVersion"
use="literal"/>
        <soap:header message="tns:ApplyConversationActionSoapIn" part="Impersonation"
use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body parts="ApplyConversationActionResult" use="literal"/>
        <soap:header message="tns:ApplyConversationActionSoapOut" part="ServerVersion"
use="literal"/>
      </wsdl:output>
    </wsdl:operation>
  </wsdl:binding>
  <wsdl:message name="FindConversationSoapIn">
    <wsdl:part name="request" element="tns:FindConversation"/>
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  </wsdl:message>
  <wsdl:message name="FindConversationSoapOut">
    <wsdl:part name="FindConversationResult" element="tns:FindConversationResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
  </wsdl:message>
  <wsdl:message name="ApplyConversationActionSoapIn">
    <wsdl:part name="request" element="tns:ApplyConversationAction"/>
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
```

```
      <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
   </wsdl:message>
   <wsdl:message name="ApplyConversationActionSoapOut">
      <wsdl:part name="ApplyConversationActionResult"
 element="tns:ApplyConversationActionResponse"/>
      <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
   </wsdl:message>
   <wsdl:message name="GetConversationItemsSoapIn">
      <wsdl:part name="request" element="tns:GetConversationItems"/>
      <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
      <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
   </wsdl:message>
   <wsdl:message name="GetConversationItemsSoapOut">
      <wsdl:part name="GetConversationItemsResult" element="tns:GetConversationItemsResponse"/>
      <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
   </wsdl:message>
</wsdl:definitions>
```

.

# 7 Appendix B: Full XML Schema

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

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

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

## 7.1 Messages Schema

This section provides the contents of the messages schema and information about additional files that the messages schema file requires successful validation. The messages schema is referenced from the WSDL file as MS-OXWSCONV-messages.xsd. The following table lists additional files that have to be present in the folder that contains the messages schema.

| File name | Defining specification |
|---|---|
| MS-OXWSCONV-types.xsd | 7.2 |
| MS-OXWSCDATA-messages.xsd | [MS-OXWSCDATA] section 7.1 |

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema id="messages" elementFormDefault="qualified" version="Exchange2013"
xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages">
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="MS-OXWSCONV-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:complexType name="FindConversationType">
    <xs:complexContent>
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:choice minOccurs="0">
            <xs:element name="IndexedPageItemView" type="t:IndexedPageViewType"/>
            <xs:element name="SeekToConditionPageItemView"
type="t:SeekToConditionPageViewType"/>
          </xs:choice>
          <xs:element name="SortOrder" type="t:NonEmptyArrayOfFieldOrdersType"
minOccurs="0"/>
          <xs:element name="ParentFolderId" type="t:TargetFolderIdType" minOccurs="1"/>
          <xs:element name="MailboxScope" type="t:MailboxSearchLocationType" minOccurs="0"
maxOccurs="1"/>
          <xs:element name="QueryString" type="m:QueryStringType" minOccurs="0"
maxOccurs="1"/>
          <xs:element name="ConversationShape" type="t:ConversationResponseShapeType"
minOccurs="0" maxOccurs="1"/>
        </xs:sequence>
        <xs:attribute name="Traversal" type="t:ConversationQueryTraversalType"
use="optional"/>
```

```xml
                <xs:attribute name="ViewFilter" type="t:ViewFilterType" use="optional"/>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="FindConversation" type="m:FindConversationType"/>
    <xs:complexType name="FindConversationResponseMessageType">
        <xs:complexContent>
            <xs:extension base="m:ResponseMessageType">
                <xs:sequence>
                    <xs:element name="Conversations" type="t:ArrayOfConversationsType" minOccurs="0"/>
                    <xs:element name="HighlightTerms" type="t:ArrayOfHighlightTermsType"
 minOccurs="0"/>
                    <xs:element name="TotalConversationsInView" type="xs:int" minOccurs="0"/>
                    <xs:element name="IndexedOffset" type="xs:int" minOccurs="0"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="FindConversationResponse" type="m:FindConversationResponseMessageType"/>
    <xs:complexType name="ApplyConversationActionType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="ConversationActions"
 type="t:NonEmptyArrayOfApplyConversationActionType"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="ApplyConversationAction" type="m:ApplyConversationActionType"/>
    <xs:complexType name="ApplyConversationActionResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="ApplyConversationActionResponse"
 type="m:ApplyConversationActionResponseType"/>
    <xs:complexType name="GetConversationItemsType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="ItemShape" type="t:ItemResponseShapeType" minOccurs="1"
 maxOccurs="1"/>
                    <xs:element name="FoldersToIgnore" type="t:NonEmptyArrayOfBaseFolderIdsType"
 minOccurs="0" maxOccurs="1"/>
                    <xs:element name="MaxItemsToReturn" type="xs:int" minOccurs="0" maxOccurs="1"/>
                    <xs:element name="SortOrder" type="t:ConversationNodeSortOrder" minOccurs="0"
 maxOccurs="1"/>
                    <xs:element name="MailboxScope" type="t:MailboxSearchLocationType" minOccurs="0"
 maxOccurs="1"/>
                    <xs:element name="Conversations" type="t:ArrayOfConversationRequestsType"
 minOccurs="1"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetConversationItems" type="m:GetConversationItemsType"/>
    <xs:complexType name="GetConversationItemsResponseMessageType">
        <xs:complexContent>
            <xs:extension base="m:ResponseMessageType">
```

```
        <xs:sequence>
          <xs:element name="Conversation" type="t:ConversationResponseType" minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="GetConversationItemsResponseType">
    <xs:complexContent>
      <xs:extension base="m:BaseResponseMessageType"/>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetConversationItemsResponse" type="m:GetConversationItemsResponseType"/>
</xs:schema>
```

## 7.2  Types Schema

This section provides the contents of the types schema and information about additional files that the types schema file requires for successful validation. The types schema is referenced from the messages schema file as MS-OXWSCONV-types.xsd. The following table lists additional files that have to be present in the folder that contains the types schema file.

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

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema id="types" elementFormDefault="qualified" version="Exchange2013"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:include schemaLocation="MS-OXWSCDATA-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSEDISC-types.xsd"/>
  <xs:complexType name="ArrayOfItemClassType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="ItemClass" type="t:ItemClassType"/>
    </xs:choice>
  </xs:complexType>
  <xs:simpleType name="ConversationActionTypeType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="AlwaysCategorize"/>
      <xs:enumeration value="AlwaysDelete"/>
      <xs:enumeration value="AlwaysMove"/>
      <xs:enumeration value="Delete"/>
      <xs:enumeration value="Move"/>
      <xs:enumeration value="Copy"/>
      <xs:enumeration value="SetReadState"/>
      <xs:enumeration value="SetRetentionPolicy" />
     <xs:enumeration value="Flag" />
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="ConversationActionType">
    <xs:sequence>
      <xs:element name="Action" type="t:ConversationActionTypeType" minOccurs="1"
 maxOccurs="1"/>
      <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="ContextFolderId" type="t:TargetFolderIdType" minOccurs="0"
 maxOccurs="1"/>
```

```xml
         <xs:element name="ConversationLastSyncTime" type="xs:dateTime" minOccurs="0"
maxOccurs="1"/>
         <xs:element name="ProcessRightAway" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
         <xs:element name="DestinationFolderId" type="t:TargetFolderIdType" minOccurs="0"
maxOccurs="1"/>
         <xs:element name="Categories" type="t:ArrayOfStringsType" minOccurs="0" maxOccurs="1"/>
         <xs:element name="EnableAlwaysDelete" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
         <xs:element name="IsRead" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
         <xs:element name="DeleteType" type="t:DisposalType" minOccurs="0" maxOccurs="1"/>
         <xs:element name="RetentionPolicyType" type="t:RetentionType" minOccurs="0"
maxOccurs="1"/>
         <xs:element name="RetentionPolicyTagId" type="xs:string" minOccurs="0" maxOccurs="1"/>
         <xs:element name="Flag" type="t:FlagType" minOccurs="0" maxOccurs="1"/>
         <xs:element name="SuppressReadReceipts" type="xs:boolean" minOccurs="0" maxOccurs="1"/>
     </xs:sequence>
   </xs:complexType>
   <xs:complexType name="NonEmptyArrayOfApplyConversationActionType">
     <xs:sequence>
       <xs:element name="ConversationAction" type="t:ConversationActionType"
maxOccurs="unbounded"/>
     </xs:sequence>
   </xs:complexType>
   <xs:complexType name="ConversationType">
     <xs:sequence>
       <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="0"/>
       <xs:element name="ConversationTopic" type="xs:string" minOccurs="0"/>
       <xs:element name="UniqueRecipients" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="GlobalUniqueRecipients" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="UniqueUnreadSenders" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="GlobalUniqueUnreadSenders" type="t:ArrayOfStringsType"
minOccurs="0"/>
       <xs:element name="UniqueSenders" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="GlobalUniqueSenders" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="LastDeliveryTime" type="xs:dateTime" minOccurs="0"/>
       <xs:element name="GlobalLastDeliveryTime" type="xs:dateTime" minOccurs="0"/>
       <xs:element name="Categories" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="GlobalCategories" type="t:ArrayOfStringsType" minOccurs="0"/>
       <xs:element name="FlagStatus" type="t:FlagStatusType" minOccurs="0"/>
       <xs:element name="GlobalFlagStatus" type="t:FlagStatusType" minOccurs="0"/>
       <xs:element name="HasAttachments" type="xs:boolean" minOccurs="0"/>
       <xs:element name="GlobalHasAttachments" type="xs:boolean" minOccurs="0"/>
       <xs:element name="MessageCount" type="xs:int" minOccurs="0"/>
       <xs:element name="GlobalMessageCount" type="xs:int" minOccurs="0"/>
       <xs:element name="UnreadCount" type="xs:int" minOccurs="0"/>
       <xs:element name="GlobalUnreadCount" type="xs:int" minOccurs="0"/>
       <xs:element name="Size" type="xs:int" minOccurs="0"/>
       <xs:element name="GlobalSize" type="xs:int" minOccurs="0"/>
       <xs:element name="ItemClasses" type="t:ArrayOfItemClassType" minOccurs="0"/>
       <xs:element name="GlobalItemClasses" type="t:ArrayOfItemClassType" minOccurs="0"/>
       <xs:element name="Importance" type="t:ImportanceChoicesType" minOccurs="0"/>
       <xs:element name="GlobalImportance" type="t:ImportanceChoicesType" minOccurs="0"/>
       <xs:element name="ItemIds" type="t:NonEmptyArrayOfBaseItemIdsType" minOccurs="0"/>
       <xs:element name="GlobalItemIds" type="t:NonEmptyArrayOfBaseItemIdsType"
minOccurs="0"/>
       <xs:element name="LastModifiedTime" type="xs:dateTime" minOccurs="0"/>
       <xs:element name="InstanceKey" type="xs:base64Binary" minOccurs="0"/>
       <!-- Maps to ConversationItemSchema.ConversationPreview-->
       <xs:element name="Preview" type="xs:string" minOccurs="0"/>
       <!-- Maps to ConversationItemSchema.NextPredictedAction-->
```

```xml
      <xs:element name="NextPredictedAction" type="t:PredictedMessageActionType"
minOccurs="0" />
      <!-- Maps to ConversationItemSchema.GroupingAction-->
      <xs:element name="GroupingAction" type="t:PredictedMessageActionType" minOccurs="0"/>
      <!-- Flag for the mailbox scope this conversation was found in -->
      <xs:element name="MailboxScope" type="t:MailboxSearchLocationType" minOccurs="0"/>
      <!-- Maps to ConversationItemSchema.ConversationIconIndex-->
      <xs:element name="IconIndex" type="t:IconIndexType" minOccurs="0"/>
      <!-- Maps to ConversationItemSchema.ConversationGlobalIconIndex-->
      <xs:element name="GlobalIconIndex" type="t:IconIndexType" minOccurs="0"/>
      <!-- Maps to ConversationItemSchema.ConversationDraftItemIds-->
      <xs:element name="DraftItemIds" type="t:NonEmptyArrayOfBaseItemIdsType" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ArrayOfConversationsType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="Conversation" type="t:ConversationType"/>
    </xs:choice>
  </xs:complexType>
  <xs:simpleType name="ConversationQueryTraversalType">
    <xs:annotation>
      <xs:documentation>Types of sub-tree traversal for conversations</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:enumeration value="Shallow"/>
      <xs:enumeration value="Deep"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="ConversationResponseShapeType">
    <xs:sequence>
      <xs:element name="BaseShape" type="t:DefaultShapeNamesType"/>
      <xs:element name="AdditionalProperties" type="t:NonEmptyArrayOfPathsToElementType"
minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ConversationRequestType">
    <xs:sequence>
      <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="SyncState" type="xs:base64Binary" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ArrayOfConversationRequestsType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="Conversation" type="t:ConversationRequestType"/>
    </xs:choice>
  </xs:complexType>
  <xs:complexType name="ConversationNodeType">
    <xs:sequence>
      <xs:element name="InternetMessageId" type="xs:string" minOccurs="0" maxOccurs="1"/>
      <xs:element name="ParentInternetMessageId" type="xs:string" minOccurs="0"
maxOccurs="1"/>
      <xs:element name="Items" type="t:NonEmptyArrayOfAllItemsType" minOccurs="0"
maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ArrayOfConversationNodesType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="ConversationNode" type="t:ConversationNodeType"/>
    </xs:choice>
```

```
      </xs:complexType>
      <xs:complexType name="ConversationResponseType">
        <xs:sequence>
          <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="1" maxOccurs="1"/>
          <xs:element name="SyncState" type="xs:base64Binary" minOccurs="0" maxOccurs="1"/>
          <xs:element name="ConversationNodes" type="t:ArrayOfConversationNodesType"
   minOccurs="0" maxOccurs="1"/>
        </xs:sequence>
      </xs:complexType>
      <xs:simpleType name="ConversationNodeSortOrder">
        <xs:restriction base="xs:string">
          <xs:enumeration value="TreeOrderAscending"/>
          <xs:enumeration value="TreeOrderDescending"/>
          <xs:enumeration value="DateOrderAscending"/>
          <xs:enumeration value="DateOrderDescending"/>
        </xs:restriction>
      </xs:simpleType>
      <xs:simpleType name="ViewFilterType">
        <xs:annotation>
          <xs:documentation>Types of view filters for finding
   items/conversations</xs:documentation>
        </xs:annotation>
        <xs:restriction base="xs:string">
          <xs:enumeration value="All"/>
          <xs:enumeration value="Flagged"/>
          <xs:enumeration value="HasAttachment"/>
          <xs:enumeration value="ToOrCcMe"/>
          <xs:enumeration value="Unread"/>
          <xs:enumeration value="TaskActive"/>
          <xs:enumeration value="TaskOverdue"/>
          <xs:enumeration value="TaskCompleted"/>
          <xs:enumeration value="Suggestions"/>
          <xs:enumeration value="SuggestionsRespond"/>
          <xs:enumeration value="SuggestionsDelete"/>
        </xs:restriction>
      </xs:simpleType>
   </xs:schema>
```

# 8 Appendix C: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

▪ Microsoft Exchange Server 2010 Service Pack 1 (SP1)

▪ Microsoft Exchange Server 2013

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms SHOULD or SHOULD NOT implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that the product does not follow the prescription.

<1> Section 3.1.4.1.3.3:  Exchange 2010 does not use the **ConversationResponseShapeType** complex type.

<2> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **LastModifiedTime** element.

<3> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **InstanceKey** element.

<4> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **GlobalParentFolderIds** element.

<5> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **NextPredictedAction** element.

<6> Section 3.1.4.1.3.4:  Exchange 2010.does not use the **GroupingAction** element.

<7> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **MailboxScope** element.

<8> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **IconIndex** element.

<9> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **GlobalIconIndex** element.

<10> Section 3.1.4.1.3.4:  Exchange 2010 does not use the **DraftItemIds** element.

<11> Section 3.1.4.1.3.5:  Exchange 2007 and Exchange 2010 do not use the **SeekToConditionPageItemView**, **MailboxScope**, **QueryString**, **ConversationShape**, **Traversal**, or **ViewFilter** elements.

<12> Section 3.1.4.1.4.1:  Exchange 2010 does not use the **ConversationQueryTraversalType** simple type. The **ConversationQueryTraversalType** simple type was introduced in Exchange 2013.

<13> Section 3.1.4.1.4.3:  Exchange 2010 does not use the **ViewFilterType** simple type. The **ViewFilterType** simple type was introduced in Exchange 2013.

<14> Section 3.1.4.1.4.3:  Exchange 2010 and Exchange 2013 do not use the **SuggestionsRespond** value. Exchange 2010 and Exchange 2013 will return an empty set if this filter value is used in a request.

<15> Section 3.1.4.1.4.3:  Exchange 2010 and Exchange 2013 do not use the **SuggestionsDelete** value. Exchange 2010 and Exchange 2013 will return an empty set if this filter value is used in a request.

<16> Section 3.1.4.2:  Exchange 2010 does not use the **GetConversationItems** operation.

<17> Section 3.1.4.2.3.1:  Exchange 2010 does not use the **ArrayOfConversationNodesType** complex type.

<18> Section 3.1.4.2.3.2:  Exchange 2010 does not use the **ArrayOfConversationRequestsType** complex type.

<19> Section 3.1.4.2.3.3: Exchange 2010 does not use the **ConversationNodeType** complex type.

<20> Section 3.1.4.2.3.4:  Exchange 2010 does not use the **ConversationResponseType** complex type.

<21> Section 3.1.4.2.3.8:  Exchange 2010 does not use the **ConversationRequestType** complex type.

<22> Section 3.1.4.2.4.1:  Exchange 2010 does not use the **ConversationNodeSortOrder** simple type.

<23> Section 3.1.4.3.3.3:  Exchange 2007 and Exchange 2010 do not support the **RetentionPolicyType** value.

<24> Section 3.1.4.3.3.3:  Exchange 2007 and Exchange 2010 do not support the **RetentionPolicyTagId** value.

<25> Section 3.1.4.3.3.3:  Exchange 2007 and Exchange 2010 do not support the **Flag** element.

<26> Section 3.1.4.3.3.3:  Exchange 2007 and Exchange 2010 do not support the **SuppressReadReceipt** element.

<27> Section 3.1.4.3.4.1:  Exchange 2007 and Exchange 2010 do not support the **SetRetentionPolicy** value.

<28> Section 3.1.4.3.4.1:  Exchange 2007 and Exchange 2010 do not support the **Flag** value.

# 9   Change Tracking

This section identifies changes that were made to the [MS-OXWSCONV] protocol document between the July 2013 and November 2013 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

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

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

- A document revision that incorporates changes to interoperability requirements or functionality.

- The removal of a document from the documentation set.

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

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

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

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

- New content added.

- Content updated.

- Content removed.

- New product behavior note added.

- Product behavior note updated.

- Product behavior note removed.

- New protocol syntax added.

- Protocol syntax updated.

- Protocol syntax removed.

- New content added due to protocol revision.

- Content updated due to protocol revision.

- Content removed due to protocol revision.

- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.

- Protocol syntax removed due to protocol revision.

- Obsolete document removed.

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

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

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.

- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

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

| Section | Tracking number (if applicable) and description | Major change (Y or N) | Change type |
|---|---|---|---|
| 2.1 Transport | Changed SHOULD to MUST in description. | N | Content updated. |
| 3.1.4.1.3.4 ConversationType | Added the name attribute to the schema definition for this complex type. | N | Content updated. |
| 3.1.4.3.3.1 ApplyConversationActionResponseType | Added complex type name to schema definition. | N | Content updated. |

# 10   Index

**A**

Abstract data model
   server 11
Applicability 7
Attribute groups 10
Attributes 10

**C**

Capability negotiation 7
Change tracking 55
Complex types 10

**D**

Data model - abstract
   server 11

**E**

Events
   local - server 40
   timer - server 40

**F**

Fields - vendor-extensible 8
Full WSDL 44
Full XML Schema 47
   Messages Schema 47
   Types Schema 49

**G**

Glossary 5
Groups 10

**I**

Implementer - security considerations 43
Index of security parameters 43
Informative references 6
Initialization
   server 11
Introduction 5

**L**

Local events
   server 40

**M**

Message processing
   server 11
Messages
   attribute groups 10

attributes 10
complex types 10
elements 9
enumerated 9
groups 10
namespaces 9
simple types 10
syntax 9
transport 9

**N**

Namespaces 9
Normative references 5

**O**

Operations
   ApplyConversationAction 32
   FindConversation 11
   GetConversationItems 25
Overview (synopsis) 6

**P**

Parameters - security index 43
Preconditions 7
Prerequisites 7
Product behavior 53
Protocol Details
   overview 11

**R**

References 5
   informative 6
   normative 5
Relationship to other protocols 6

**S**

Security
   implementer considerations 43
   parameter index 43
Sequencing rules
   server 11
Server
   abstract data model 11
   ApplyConversationAction operation 32
   FindConversation operation 11
   GetConversationItems operation 25
   initialization 11
   local events 40
   message processing 11
   sequencing rules 11
   timer events 40
   timers 11
Simple types 10