[MS-OXWSCORE]:
Core Items Web Service Protocol Specification

Revision Summary

Date	Revision History	Revision Class	Comments
07/15/2009	1.0	Major	Initial Availability.
11/04/2009	1.1.0	Minor	1.1.0
02/10/2010	1.1.0	None	Version 1.1.0 release
05/05/2010	1.1.1	Editorial	Revised and edited the technical content.
08/04/2010	1.1.1	No change	No changes to the meaning, language, or formatting of the technical content.
11/03/2010	2.0	Major	Significantly changed the technical content.
03/18/2011	3.0	Major	Significantly changed the technical content.

Table of Contents

1   Introduction

The Core Items Web Service protocol is responsible for creating, updating, and deleting items on the server.

Sections 1.8, 2, and 3 of this specification are normative and contain RFC 2119 language. Sections 1.5 and 1.9 are also normative, but cannot contain RFC 2119 language. All other sections and examples in this specification are informative.

1.1   Glossary

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

Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
XML

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

base64 encoding
blind carbon copy (Bcc) recipient
carbon copy (Cc) recipient
delivery receipt
mailbox
meeting
MIME message
Multipurpose Internet Mail Extensions (MIME)
Outbox folder
read receipt
recipient
SOAP body
SOAP header
SOAP message
To recipient
Uniform Resource Locator (URL)
Web Services Description Language (WSDL)
WSDL message
WSDL port type
XML namespace
XML schema

The following terms are specific to this document:

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as described in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2   References

1.2.1   Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site,

http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624, as an additional source.

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

[MS-OXWSCONT] Microsoft Corporation, "Contacts Web Service Protocol Specification", July 2009.

[MS-OXWSDLIST] Microsoft Corporation, "Distribution List Creation and Usage Web Service Protocol Specification", July 2009.

[MS-OXWSFOLD] Microsoft Corporation, "Folders and Folder Permissions Web Service Protocol Specification", July 2009.

[MS-OXWSGTZ] Microsoft Corporation, "Get Server Time Zone Web Service Protocol Specification", July 2009.

[MS-OXWSMSG] Microsoft Corporation, "E-Mail Message Types Web Service Protocol Specification", July 2009.

[MS-OXWSMTGS] Microsoft Corporation, "Calendaring Web Service Protocol Specification", July 2009.

[MS-OXWSPOST] Microsoft Corporation, "Post Items Web Service Protocol Specification", July 2009.

[MS-OXWSTASK] Microsoft Corporation, "Tasks Web Service Protocol Specification", July 2009.

[MS-OXWSXPROP] Microsoft Corporation, "Extended Properties Web Service Protocol Specification", July 2009.

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

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

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

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

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

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

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

1.2.2 Informative References

[MS-GLOS] Microsoft Corporation, "Windows Protocols Master Glossary", March 2007.

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

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

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

1.3 Overview

The Core Items Web Service Protocol provides clients with the ability to create, update, and delete items on the server. Clients use this protocol to create items such as messages, tasks, and **meetings**, or get properties of an existing item. Clients can also use this protocol to update, delete, move, or copy items on the server.

1.4 Relationship to Other Protocols

The Core Items Web Service Protocol uses SOAP over **HTTP**, as described in [RFC2616], and SOAP over **HTTPS**, as described in [RFC2818], as shown in the following layering diagram.
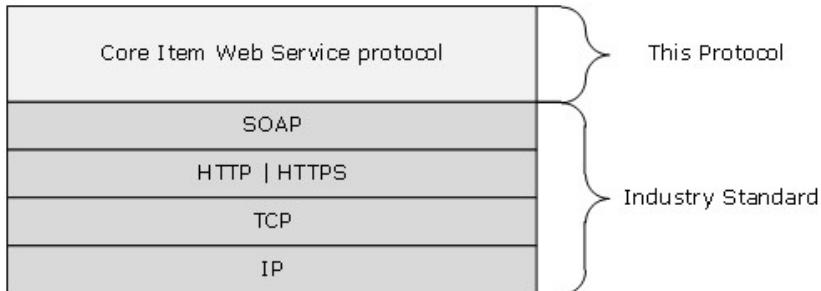
Figure 1: This protocol in relation to other protocols

The item information that is returned by the Core Items Web Service protocol is used when requests are made by using the following protocols:

- Contacts Web Service Protocol, as described in [MS-OXWSCONT]

- Distribution List Creation and Usage Web Service Protocol, as described in [MS-OXWSDLIST]

- E-Mail Message Types Web Service Protocol, as described in I [MS-OXWSMSG]

- Calendaring Web Service Protocol, as described in [MS-OXWSMTGS]

- Post Items Web Service Protocol, as described in [MS-OXWSPOST]

- Tasks Web Service Protocol, as described in [MS-OXWSTASK]

1.5 Prerequisties/Preconditions

None.

1.6 Applicability Statement

The protocol specified in this document is applicable to environments that copy, create, delete, get, move, or update items by using the serve''s Web services.

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.

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

- **Localization:** This protocol includes text strings in various messages. Localization considerations for such strings are specified in section 3.1.4.

- **Capability Negotiation:** None.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2   Messages

2.1   Transport

The SOAP version supported is SOAP 1.1. For details, see [SOAP1.1].

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	
s	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1]
targetNamespace	http://schemas.microsoft.com/exchange/services/2006/messages	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
t	http://schemas.microsoft.com/exchange/services/2006/types	

2.2.2   Simple Types

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

Simple type name	Description
t:DerivedItemIdType	Specifies the identifier of the recurring master of a recurring item.
t:ImportanceChoicesType	Specifies the levels of importance for an item.
t:ItemClassType	Specifies an item class.
t:ReminderMinutesBeforeStartType	Specifies the number of minutes before an event occurs when a reminder is displayed.

2.2.2.1   t:DerivedItemIdType Simple Type

The **DerivedItemIdType** simple type specifies the identifier of the recurring master of a recurring item.

```
<xs:simpleType name="DerivedItemIdType">
  <xs:restriction
    base="xs:string"
   />
</xs:simpleType>
```

2.2.2.2   t:ImportanceChoicesType Simple Type

The **ImportanceChoicesType** simple type specifies the levels of importance for an item.

```
<xs:simpleType name="ImportanceChoicesType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="High"
     />
    <xs:enumeration
      value="Low"
     />
    <xs:enumeration
      value="Normal"
     />
  </xs:restriction>
</xs:simpleType>
```

The following values are defined by the **ImportanceChoicesType** simple type.

Value	Meaning
High	Specifies high importance.
Low	Specifies low importance.
Normal	Specifies normal importance.

2.2.2.3   t:ItemClassType Simple Type

The **ItemClassType** simple type specifies an item class.

```
<xs:simpleType name="ItemClassType">
  <xs:restriction
    base="xs:string"
   />
</xs:simpleType>
```

2.2.2.4   t:ReminderMinutesBeforeStartType Simple Type

The **ReminderMinutesBeforeStartType** simple type specifies the number of minutes before an event occurs when a reminder is displayed.

```
<xs:simpleType name="ReminderMinutesBeforeStartType">
  <xs:union>
    <xs:simpleType
      id="ReminderMinutesBeforeStartType"
    >
      <xs:restriction
        base="xs:int"
      >
        <xs:minInclusive
          value="0"
        />
        <xs:maxInclusive
          value="2629800"
        />
      </xs:restriction>
    </xs:simpleType>
    <xs:simpleType
      id="ReminderMinutesBeforeStartMarkerType"
    >
      <xs:restriction
        base="xs:int"
      >
        <xs:minInclusive
          value="1525252321"
        />
        <xs:maxInclusive
          value="1525252321"
        />
      </xs:restriction>
    </xs:simpleType>
  </xs:union>
</xs:simpleType>
```

2.2.3   Complex Types

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

Complex type name	Description
BaseMoveCopyItemType	Specifies the base type for the **CopyItemType** complex type (section 3.1.4.1.1.2) and the **MoveItemType** complex type (section 3.1.4.5.1.2).
SendItemResponseType	Specifies a response to a call to the **SendItem** operation ([MS-OXWSMSG] section 3.1.4.7).
SendItemType	Specifies a request to send a message.
UpdateItemResponseMessageType	Specifies the status and result of a single call to the **UpdateItem** operation (section 3.1.4.7).
ConflictResultsType	Specifies the number of conflicts in an **UpdateItem** operation response.

Complex type name	Description
ItemType	Specifies a generic item in the server data store.
MimeContentType	Specifies the native **MIME** stream of an object that is represented in base-64 encoded binary format.
NonEmptyArrayOfBaseItemIdsType	Specifies a collection of items.
NonEmptyArrayOfInternetHeadersType	Specifies the collection of all Internet message headers that are contained in an item.
NonEmptyArrayOfResponseObjectsType	Specifies an array of response objects.
OccurrenceItemIdType	Specifies a single occurrence of a recurring item.
RecurringMasterItemIdType	Specifies a recurrence master item by identifying the identifiers of one of its related occurrence items.
ItemIdType	Specifies an item identifier of an item.
ReferenceItemResponseType	Specifies a referenced item for a response object.
SmartResponseBaseType	Specifies the base type for **ReplyToItem**, **ReplyAllToItem**, **ForwardItem**, and **CancelCalendarItem** operation response objects.
SmartResponseType	Specifies the base type for **ReplyToItem**, **ReplyAllToItem**, **ForwardItem**, and **CancelCalendarItem** operation response objects.

2.2.3.1   m:BaseMoveCopyItemType Complex Type

The **BaseMoveCopyItemType** complex type specifies the base type for the **CopyItemType** complex type, as specified in section 3.1.4.1.1.2, and the **MoveItemType** complex type, as specified in section 3.1.4.5.1.2. The **BaseMoveCopyItemType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="BaseMoveCopyItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="ToFolderId"
          type="t:TargetFolderIdType"
         />
        <xs:element name="ItemIds"
          type="t:NonEmptyArrayOfBaseItemIdsType"
         />
        <xs:element name="ReturnNewItemIds"
          type="xs:boolean"
          minOccurs="0"
         />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
ToFolderId	**t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14)	Specifies an instance of the **TargetFolderIdType** complex type that specifies the folder to which to move or copy the items specified by the **ItemIds** property.
ItemIds	**t:NonEmptyArrayOfBaseItemIdsType** (section 2.2.3.8)	Specifies an array of elements of type **BaseItemIdType** that specifies a set of items to move or copy.
ReturnNewItemIds	**xs:boolean** [XMLSCHEMA2]	Specifies a Boolean value that indicates whether the **ItemID** is to be returned for new items.<1>

2.2.3.2   m:SendItemResponseType Complex Type

The **SendItemResponseType** complex type specifies a response to a call to the **SendItem** operation, as specified in section 3.1.4.6. The **SendItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

2.2.3.3   m:SendItemType Complex Type

The **SendItemType** complex type specifies a request to send a message. The **SendItemType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="SendItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
    <xs:sequence>
      <xs:element name="ItemIds"
        type="t:NonEmptyArrayOfBaseItemIdsType"
       />
      <xs:element name="SavedItemFolderId"
        type="t:TargetFolderIdType"
        minOccurs="0"
       />
    </xs:sequence>
```

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

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

Element name	Type	Description
ItemIds	**t:NonEmptyArrayOfBaseItemIdsType** (section 2.2.3.8)	Specifies an array of item identifiers that are used to determine the items to try to send.
SavedItemFolderId	**t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14)	Specifies the identity of the folder that contains a saved version of the sent item.

2.2.3.4   m:UpdateItemResponseMessageType Complex Type

The **UpdateItemResponseMessageType** complex type specifies the status and result of a single call to the **UpdateItem** operation, as specified in section 3.1.4.7. The **UpdateItemResponseMessageType** complex type extends the **ItemInfoResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.34).

```
<xs:complexType name="UpdateItemResponseMessageType">
  <xs:complexContent>
    <xs:extension
      base="m:ItemInfoResponseMessageType"
    >
      <xs:sequence>
        <xs:element name="ConflictResults"
          type="t:ConflictResultsType"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
ConflictResults	**t:ConflictResultsType** (section 2.2.3.5)	Specifies the number of conflicts in the result.

2.2.3.5   t:ConflictResultsType Complex Type

The **ConflictResultsType** complex type specifies the number of conflicts in an **UpdateItem** operation response, as specified in section 3.1.4.7.

```
<xs:complexType name="ConflictResultsType">
  <xs:sequence>
    <xs:element name="Count"
      type="xs:int"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
Count	**xs:int** [XMLSCHEMA2]	Specifies an integer value that indicates the number of conflicts in an **UpdateItem** operation response.

2.2.3.6   t:ItemType Complex Type

The **ItemType** complex type specifies a generic item on the server.

```
<xs:complexType name="ItemType">
  <xs:sequence>
    <xs:element name="MimeContent"
      type="t:MimeContentType"
      minOccurs="0"
     />
    <xs:element name="ItemId"
      type="t:ItemIdType"
      minOccurs="0"
     />
    <xs:element name="ParentFolderId"
      type="t:FolderIdType"
      minOccurs="0"
     />
    <xs:element name="ItemClass"
      type="t:ItemClassType"
      minOccurs="0"
     />
    <xs:element name="Subject"
      type="xs:string"
      minOccurs="0"
     />
    <xs:element name="Sensitivity"
      type="t:SensitivityChoicesType"
      minOccurs="0"
     />
    <xs:element name="Body"
      type="t:BodyType"
      minOccurs="0"
     />
    <xs:element name="Attachments"
      type="t:NonEmptyArrayOfAttachmentsType"
      minOccurs="0"
     />
    <xs:element name="DateTimeReceived"
```

```
   type="xs:dateTime"
   minOccurs="0"
 />
<xs:element name="Size"
  type="xs:int"
  minOccurs="0"
 />
<xs:element name="Categories"
  type="t:ArrayOfStringsType"
  minOccurs="0"
 />
<xs:element name="Importance"
  type="t:ImportanceChoicesType"
  minOccurs="0"
 />
<xs:element name="InReplyTo"
  type="xs:string"
  minOccurs="0"
 />
<xs:element name="IsSubmitted"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="IsDraft"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="IsFromMe"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="IsResend"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="IsUnmodified"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="InternetMessageHeaders"
  type="t:NonEmptyArrayOfInternetHeadersType"
  minOccurs="0"
 />
<xs:element name="DateTimeSent"
  type="xs:dateTime"
  minOccurs="0"
 />
<xs:element name="DateTimeCreated"
  type="xs:dateTime"
  minOccurs="0"
 />
<xs:element name="ResponseObjects"
  type="t:NonEmptyArrayOfResponseObjectsType"
  minOccurs="0"
 />
<xs:element name="ReminderDueBy"
  type="xs:dateTime"
  minOccurs="0"
 />
```

```
<xs:element name="ReminderIsSet"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="ReminderMinutesBeforeStart"
  type="t:ReminderMinutesBeforeStartType"
  minOccurs="0"
 />
<xs:element name="DisplayCc"
  type="xs:string"
  minOccurs="0"
 />
<xs:element name="DisplayTo"
  type="xs:string"
  minOccurs="0"
 />
<xs:element name="HasAttachments"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="ExtendedProperty"
  type="t:ExtendedPropertyType"
  minOccurs="0"
  maxOccurs="unbounded"
 />
<xs:element name="Culture"
  type="xs:language"
  minOccurs="0"
 />
<xs:element name="EffectiveRights"
  type="t:EffectiveRightsType"
  minOccurs="0"
 />
<xs:element name="LastModifiedName"
  type="xs:string"
  minOccurs="0"
 />
<xs:element name="LastModifiedTime"
  type="xs:dateTime"
  minOccurs="0"
 />
<xs:element name="IsAssociated"
  type="xs:boolean"
  minOccurs="0"
 />
<xs:element name="WebClientReadFormQueryString"
  type="xs:string"
  minOccurs="0"
 />
<xs:element name="WebClientEditFormQueryString"
  type="xs:string"
  minOccurs="0"
 />
<xs:element name="ConversationId"
  type="t:ItemIdType"
  minOccurs="0"
 />
<xs:element name="UniqueBody"
  type="t:BodyType"
```

```
         minOccurs="0"
      />
   </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
MimeContent	**t:MimeContentType**	Specifies an instance of the **MimeContentType** class that contains the native MIME stream of an object that is represented in base64Binary format.
ItemId	**t:ItemIdType**	Specifies an instance of the **ItemIdType** class that represents the unique identifier and change key of an item in the server data store.
ParentFolderId	**t:FolderIdType** ([MS-OXWSCDATA] section 2.2.3.29)	Specifies an instance of the **FolderIdType** class that represents the identifier of the parent folder that contains the item or folder.
ItemClass	**t:ItemClassType** (section 2.2.2.3)	Specifies a string value that indicates the message class of the item.
Subject	**xs:string** [XMLSCHEMA2]	Specifies a string value that represents the subject property of items. The subject is limited to 255 characters.
Sensitivity	**t:SensitivityChoicesType** ([MS-OXWSCDATA] section 2.2.2.21)	Specifies one of the valid **SensitivityChoicesType** simple type enumeration values that indicates the sensitivity level of an item.
Body	**t:BodyType** ([MS-OXWSCDATA] section 2.2.3.16)	Specifies the body content of an item.
Attachments	**t:NonEmptyArrayOfAttachmentsType** ([MS-OXWSCDATA] section 2.2.3.39)	Specifies an **AttachmentType** array that contains the items or files that are attached to an item.
DateTimeReceived	**xs:dateTime** [XMLSCHEMA2]	Specifies the date and time that an item in a **mailbox** was received.
Size	**xs:int** [XMLSCHEMA2]	Specifies an integer value

Element name	Type	Description
		that represents the size in bytes of an item.
Categories	**t:ArrayOfStringsType** ([MS-OXWSCDATA] section 2.2.3.10)	Specifies a string array that identifies the categories to which an item in the mailbox belongs.
Importance	**t:ImportanceChoicesType** (section 2.2.2.2)	Specifies one of the valid **ImportanceChoicesType** values to indicate the importance of the item.
InReplyTo	**xs:string**	Specifies a string value that contains the identifier of the item to which this item is a reply.
IsSubmitted	**xs:boolean** [XMLSCHEMA2]	Specifies a Boolean value that indicates whether an item has been submitted to the **Outbox folder**.
IsDraft	**xs:boolean**	Specifies a Boolean value that indicates whether the item has been sent.
IsFromMe	**xs:boolean**	Specifies a Boolean value that indicates whether a user sent an item to him or herself.
IsResend	**xs:boolean**	Specifies a Boolean value that indicates whether the item has previously been sent.
IsUnmodified	**xs:boolean**	Specifies a Boolean value that indicates whether the item has been modified.
InternetMessageHeaders	**t:NonEmptyArrayOfInternetHeadersType** (section 2.2.3.9)	Specifies an array of the type **InternetHeaderType** that represents the collection of all Internet message headers that are contained in an item in a mailbox.
DateTimeSent	**xs:dateTime**	Specifies the date and time when an item in a mailbox was sent.
DateTimeCreated	**xs:dateTime**	Specifies the date and time that an item in the mailbox was created.
ResponseObjects	**t:NonEmptyArrayOfResponseObjectsType** (section 2.2.3.10)	Specifies an array of the type **ResponseObjectType** elements that contains a

Element name	Type	Description
		collection of all the response objects that are associated with an item.
ReminderDueBy	**xs:dateTime**	Specifies an instance of the **DateTime** structure that represents the date and time when the event occurs. This is used by the **ReminderMinutesBeforeStart** element to determine when the reminder is displayed.
ReminderIsSet	**xs:boolean**	Specifies a Boolean value that indicates whether a reminder has been set for an item.
ReminderMinutesBeforeStart	**t:ReminderMinutesBeforeStartType** (section 2.2.2.4)	Specifies a string value that indicates the number of minutes before an event occurs when a reminder is displayed.
DisplayCc	**xs:string**	Specifies the display string that is used for the contents of the Cc box. This is the concatenated string of all **Cc recipient** display names.
DisplayTo	**xs:string**	Specifies the display string that is used for the contents of the To box. This is the concatenated string of all **To recipient** display names.
HasAttachments	**xs:boolean**	Specifies a Boolean value that indicates whether the item has at least one attachment.
ExtendedProperty	**t:ExtendedPropertyType** ([MS-OXWSXPROP] section 2.2.4.2)	Specifies an array of **ExtendedPropertyType** elements that identify extended MAPI properties.
Culture	**xs:language** [XMLSCHEMA2]	Specifies the culture for a given item in a mailbox.
EffectiveRights	**t:EffectiveRightsType** ([MS-OXWSCDATA] section 2.2.3.23)	Specifies an **EffectiveRightsType** element that represents the client's rights based on the permission settings for the item or folder.
LastModifiedName	**xs:string**	Specifies a string value that contains the name of the

Element name	Type	Description
		user who last modified the item.
LastModifiedTime	**xs:dateTime**	Specifies an instance of the **DateTime** structure that represents the date and time that the item was last modified.
IsAssociated	**xs:boolean**	Specifies a value that indicates whether this is an associated item.
WebClientReadFormQueryString	**xs:string**	Specifies the query string that should be appended to the Web client **URL** to open this item by using the appropriate read form in a Web browser.
WebClientEditFormQueryString	**xs:string**	Specifies the query string that should be appended to the Web client URL to open this item by using the appropriate edit form in a Web browser.
ConversationId	**t:ItemIdType**	Specifies the ID of the conversation that this item is part of.
UniqueBody	**t:BodyType**	Specifies the body part that is unique to the conversation that this item is part of.

2.2.3.7 t:MimeContentType Complex Type

The **MimeContentType** complex type specifies the native MIME stream of an object that is represented in **base64 encoding**.

```
<xs:complexType name="MimeContentType">
  <xs:simpleContent>
    <xs:extension
      base="xs:string"
    >
      <xs:attribute name="CharacterSet"
        type="xs:string"
        use="optional"
      />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

The following table lists the attributes of the **MimeContentType** complex type.

Attribute name	Type	Description
CharacterSet	xs:string [XMLSCHEMA2]	Specifies the International Standards Organization (ISO) name of the character set that is used in the MIME message.

2.2.3.8 t:NonEmptyArrayOfBaseItemIdsType Complex Type

The **NonEmptyArrayOfBaseItemIdsType** complex type specifies a collection of items.

```
<xs:complexType name="NonEmptyArrayOfBaseItemIdsType">
  <xs:choice
    minOccurs="1"
    maxOccurs="unbounded"
  >
    <xs:element name="ItemId"
      type="t:ItemIdType"
     />
    <xs:element name="OccurrenceItemId"
      type="t:OccurrenceItemIdType"
     />
    <xs:element name="RecurringMasterItemId"
      type="t:RecurringMasterItemIdType"
     />
  </xs:choice>
</xs:complexType>
```

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

Element name	Type	Description
ItemId	t:ItemIdType (section 2.2.3.13)	Specifies the item identifier.
OccurrenceItemId	t:OccurrenceItemIdType (section 2.2.3.11)	Specifies a single occurrence of a recurring item.
RecurringMasterItemId	t:RecurringMasterItemIdType (section 2.2.3.12)	Specifies a recurrence master item by identifying the identifiers of one of its related occurrence items.

2.2.3.9 t:NonEmptyArrayOfInternetHeadersType Complex Type

The **NonEmptyArrayOfInternetHeadersType** complex type specifies the collection of all Internet message headers that are contained in an item.

```
<xs:complexType name="NonEmptyArrayOfInternetHeadersType">
  <xs:sequence>
    <xs:element name="InternetMessageHeader"
      type="t:InternetHeaderType"
      maxOccurs="unbounded"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
InternetMessageHeader	**t:InternetHeaderType**	Specifies a single Internet message header.

2.2.3.10   t:NonEmptyArrayOfResponseObjectsType Complex Type

The **NonEmptyArrayOfResponseObjectsType** complex type specifies an array of response objects.

```
<xs:complexType name="NonEmptyArrayOfResponseObjectsType">
  <xs:choice
    maxOccurs="unbounded"
    minOccurs="0"
  >
    <xs:element name="AcceptItem"
      type="t:AcceptItemType"
     />
    <xs:element name="TentativelyAcceptItem"
      type="t:TentativelyAcceptItemType"
     />
    <xs:element name="DeclineItem"
      type="t:DeclineItemType"
     />
    <xs:element name="ReplyToItem"
      type="t:ReplyToItemType"
     />
    <xs:element name="ForwardItem"
      type="t:ForwardItemType"
     />
    <xs:element name="ReplyAllToItem"
      type="t:ReplyAllToItemType"
     />
    <xs:element name="CancelCalendarItem"
      type="t:CancelCalendarItemType"
     />
    <xs:element name="RemoveItem"
      type="t:RemoveItemType"
     />
    <xs:element name="SuppressReadReceipt"
      type="t:SuppressReadReceiptType"
     />
    <xs:element name="PostReplyItem"
      type="t:PostReplyItemType"
     />
    <xs:element name="AcceptSharingInvitation"
      type="t:AcceptSharingInvitationType"
     />
  </xs:choice>
</xs:complexType>
```

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

Element name	Type	Description
AcceptItem	**t:AcceptItemType** ([MS-OXWSMTGS] section 2.2.3.1)	Specifies an Accept reply to a meeting request.
TentativelyAcceptItem	**t:TentativelyAcceptItemType** ([MS-OXWSMTGS] section 2.2.3.20)	Specifies a Tentative reply to a meeting request.
DeclineItem	**t:DeclineItemType** ([MS-OXWSMTGS] section 2.2.3.9)	Specifies a Decline reply to a meeting request.
ReplyToItem	**t:ReplyToItemType** ([MS-OXWSCDATA] section 2.2.3.51)	Specifies a reply to the sender of an item.
ForwardItem	**t:ForwardItemType** ([MS-OXWSCDATA] section 2.2.3.31)	Specifies an server store item to forward to **recipients**.
ReplyAllToItem	**t:ReplyAllToItemType** ([MS-OXWSCDATA] section 2.2.3.49)	Specifies a reply to the sender and all identified recipients of an item in the server store.
CancelCalendarItem	**t:CancelCalendarItemType** ([MS-OXWSMTGS] section 2.2.3.8)	Specifies the response object that is used to cancel a meeting.
RemoveItem	**t:RemoveItemType** ([MS-OXWSMTGS] section 2.2.3.19)	Specifies a response object that is used to remove a meeting item when a MeetingCancellation message is received.
SuppressReadReceipt	**t:SuppressReadReceiptType** ([MS-OXWSCDATA] section 2.2.3.56)	Specifies to suppress read receipts.
PostReplyItem	**t:PostReplyItemType** ([MS-OXWSPOST] section 2.2.3.3)	Specifies a reply to a post item.
AcceptSharingInvitation	**t:AcceptSharingInvitationType** ([MS-OXWSCDATA] section 2.2.3.3)	Specifies to accept a sharing invitation.

2.2.3.11   t:OccurrenceItemIdType Complex Type

The **OccurrenceItemIdType** complex type specifies a single occurrence of a recurring item. The **OccurrenceItemIdType** complex type extends the **BaseItemIdType** complex type ([MS-OXWSCDATA] section 2.2.3.12).

```
<xs:complexType name="OccurrenceItemIdType">
  <xs:complexContent>
    <xs:extension
      base="t:BaseItemIdType"
    >
      <xs:attribute name="RecurringMasterId"
        type="t:DerivedItemIdType"
        use="required"
       />
      <xs:attribute name="ChangeKey"
        type="xs:string"
        use="optional"
```

```
                />
       <xs:attribute name="InstanceIndex"
         type="xs:int"
         use="required"
        />
     </xs:extension>
   </xs:complexContent>
 </xs:complexType>
```

The following table lists the attributes of the **OccurrenceItemIdType** complex type.

Attribute name	Type	Description
RecurringMasterId	t:DerivedItemIdType (section 2.2.2.1)	Specifies the identifier of the recurring master of a recurring item.
ChangeKey	**xs:string** [XMLSCHEMA2]	Specifies a specific version of a single occurrence of a recurring master item.
InstanceIndex	**xs:int** [XMLSCHEMA2]	Specifies the index of the item occurrence.

2.2.3.12   t:RecurringMasterItemIdType Complex Type

The **RecurringMasterItemIdType** complex type specifies a recurrence master item by identifying the identifiers of one of its related occurrence items. The **RecurringMasterItemIdType** complex type extends the **BaseItemIdType** complex type ([MS-OXWSCDATA] section 2.2.3.12).

```
 <xs:complexType name="RecurringMasterItemIdType">
   <xs:complexContent>
     <xs:extension
       base="t:BaseItemIdType"
     >
       <xs:attribute name="OccurrenceId"
         type="t:DerivedItemIdType"
         use="required"
        />
       <xs:attribute name="ChangeKey"
         type="xs:string"
         use="optional"
        />
     </xs:extension>
   </xs:complexContent>
 </xs:complexType>
```

The following table lists the attributes of the **RecurringMasterItemIdType** complex type.

Attribute name	Type	Description
OccurrenceId	t:DerivedItemIdType (section 2.2.2.1)	Specifies a single occurrence of a recurring master item.
ChangeKey	**xs:string** [XMLSCHEMA2]	Specifies a specific version of a single occurrence of

Attribute name	Type	Description
		a recurring master item.

2.2.3.13 t:ItemIdType Complex Type

The **ItemIdType** complex type specifies an item identifier of an item. The **ItemIdType** complex type extends the **BaseItemIdType** complex type ([MS-OXWSCDATA] section 2.2.3.12).

```
<xs:complexType name="ItemIdType">
  <xs:complexContent>
    <xs:extension
      base="t:BaseItemIdType"
    >
      <xs:attribute name="Id"
        type="xs:string"
        use="required"
       />
      <xs:attribute name="ChangeKey"
        type="xs:string"
        use="optional"
       />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

The following table lists the attributes of the **ItemIdType** complex type.

Attribute name	Type	Description
Id	**xs:string** [XMLSCHEMA2]	Specifies an item identifier. The maximum size is 512 bytes after base64 encoding.
ChangeKey	**xs:string**	Specifies a change key. The maximum size is 512 bytes after base64 encoding.

2.2.3.14 t:ReferenceItemResponseType Complex Type

The **ReferenceItemResponseType** complex type specifies a referenced item for a response object. The **ReferenceItemResponseType** complex type extends the **ResponseObjectType** complex type ([MS-OXWSCDATA] section 2.2.3.54).

```
<xs:complexType name="ReferenceItemResponseType">
  <xs:complexContent>
    <xs:restriction
      base="t:ResponseObjectType"
    >
      <xs:sequence>
        <xs:element name="ReferenceItemId"
          type="t:ItemIdType"
          minOccurs="0"
         />
```

```
            </xs:sequence>
            <xs:attribute name="ObjectName"
              type="xs:string"
              use="prohibited"
             />
          </xs:restriction>
        </xs:complexContent>
      </xs:complexType>
```

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

Element name	Type	Description
ReferenceItemId	**t:ItemIdType** (section 2.2.3.13)	Specifies the referenced item identifier.
ObjectName	**xs:string** [XMLSCHEMA2]	Specifies the name of the reply object class as a string.

2.2.3.15   t:SmartResponseBaseType Complex Type

The **SmartResponseBaseType** complex type specifies the base type for the **ReplyToItemType** complex type ([MS-OXWSCDATA] section 2.2.3.51), the **ReplyAllToItemType** complex type ([MS-OXWSCDATA] section 2.2.3.49), the **ForwardItemType** complex type ([MS-OXWSCDATA] section 2.2.3.31), and the **CancelCalendarItemType** complex type, as specified in [MS-OXWSMTGS] section 2.2.3.8. The **SmartResponseBaseType** complex type extends the **ResponseObjectType** complex type ([MS-OXWSCDATA] section 2.2.3.54).

```
    <xs:complexType name="SmartResponseBaseType">
      <xs:complexContent>
        <xs:restriction
          base="t:ResponseObjectType"
        >
          <xs:sequence>
            <xs:element name="Subject"
              type="xs:string"
              minOccurs="0"
             />
            <xs:element name="Body"
              type="t:BodyType"
              minOccurs="0"
             />
            <xs:element name="ToRecipients"
              type="t:ArrayOfRecipientsType"
              minOccurs="0"
             />
            <xs:element name="CcRecipients"
              type="t:ArrayOfRecipientsType"
              minOccurs="0"
             />
            <xs:element name="BccRecipients"
              type="t:ArrayOfRecipientsType"
              minOccurs="0"
             />
            <xs:element name="IsReadReceiptRequested"
```

```
              type="xs:boolean"
              minOccurs="0"
             />
          <xs:element name="IsDeliveryReceiptRequested"
              type="xs:boolean"
              minOccurs="0"
             />
          <xs:element name="From"
              type="t:SingleRecipientType"
              minOccurs="0"
             />
          <xs:element name="ReferenceItemId"
              type="t:ItemIdType"
              minOccurs="0"
             />
        </xs:sequence>
        <xs:attribute name="ObjectName"
           type="xs:string"
           use="prohibited"
         />
      </xs:restriction>
    </xs:complexContent>
  </xs:complexType>
```

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

Element name	Type	Description
Subject	**xs:string** [XMLSCHEMA2]	Specifies the subject.
Body	**t:BodyType**	Specifies the body content of an item.
ToRecipients	**t:ArrayOfRecipientsType** ([MS-OXWSCDATA] section 2.2.3.8)	Specifies a collection of recipients of an e-mail message. This property is required for sending a message.
CcRecipients	**t:ArrayOfRecipientsType**	Specifies a collection of carbon copy (Cc) recipients of an e-mail message.
BccRecipients	**t:ArrayOfRecipientsType**	Specifies a collection of **blind carbon copy (Bcc) recipients** of an e-mail message.
IsReadReceiptRequested	**xs:boolean [XMLSCHEMA2]**	Specifies whether a **read receipt** is requested.
IsDeliveryReceiptRequested	**xs:boolean**	Specifies whether a **delivery receipt** is requested.
From	**t:SingleRecipientType** ([MS-OXWSCDATA] section 2.2.3.55)	Specifies the addressee from whom a message was sent.
ReferenceItemId	t:ItemIdType (section 2.2.3.13)	Specifies the item identifier that is related to a response object.

The following table lists the attributes of the **SmartResponseBaseType** complex type.

Attribute name	Type	Description
ObjectName	**xs:string**	Specifies the name of the reply object class as an English string.

2.2.3.16   t:SmartResponseType Complex Type

The **SmartResponseType** complex type specifies the base type for the **ReplyToItemType** complex type ([MS-OXWSCDATA] section 2.2.3.51), the **ReplyAllToItemType** complex type ([MS-OXWSCDATA] section 2.2.3.49), the **ForwardItemType** complex type ([MS-OXWSCDATA] section 2.2.3.31), and the **CancelCalendarItemType** complex type, as specified in [MS-OXWSMTGS] section 2.2.3.8. The **SmartResponseType** complex type extends the **SmartResponseBaseType** complex type, as specified in section 2.2.3.15.

```
<xs:complexType name="SmartResponseType">
  <xs:complexContent>
    <xs:extension
      base="t:SmartResponseBaseType"
    >
      <xs:sequence>
        <xs:element name="NewBodyContent"
          type="t:BodyType"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
NewBodyContent	**t:BodyType** ([MS-OXWSCDATA] section 2.2.3.16)	Specifies the new body content of a message response object.

2.2.4   Elements

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

Element name	Description
BaseItemId	Specifies the base class for IDs that represent items in a mailbox.

2.2.4.1   t:BaseItemId Element

The **BaseItemId** element specifies the base class for IDs that represent items in a mailbox.

```
<xs:element name="t:BaseItemId"
  type="t:BaseItemIdType"
```

```
 abstract="true"
/>
```

2.2.5   Attributes

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

2.2.6   Groups

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

2.2.7   Attribute Groups

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

2.2.8   Messages

This specification does not define any common XML schema message 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 that are returned by the transport are passed directly back to the higher-layer protocol or application.

3.1   ExchangeServicePortType Server Details

The Core Items Web Service Protocol defines a single port type with six operations.

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

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

Operation name	Description
GetItem	Gets items on the server.
CreateItem	Creates items on the server.
DeleteItem	Deletes items on the server.
UpdateItem	Updates items on the server.
MoveItem	Moves items on the server.
CopyItem	Copies items on the server.

3.1.4.1   CopyItem

The CopyItem operation copies items on the server.

The following is the WSDL port type specification for the **CopyItem** operation.

```
<wsdl:operation name="CopyItem" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
    <wsdl:input message="tns:CopyItemSoapIn" />
    <wsdl:output message="tns:CopyItemSoapOut" />
</wsdl:operation>
```

3.1.4.1.1 Complex Types

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

Complex type name	Description
CopyItemResponseType	Specifies the response that is returned by the **CopyItem** operation
CopyItemType	Specifies an operation to copy items in a mailbox.

3.1.4.1.1.1 m:CopyItemResponseType Complex Type

The **CopyItemResponseType** complex type specifies the response that is returned by the **CopyItem** operation. The **CopyItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.1.1.2 m:CopyItemType Complex Type

The **CopyItemType** complex type specifies an operation to copy items in a mailbox. The **CopyItemType** complex type extends the **BaseMoveCopyItemType** complex type, as specified in section 2.2.3.1.

```
<xs:complexType name="CopyItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseMoveCopyItemType"
    />
  </xs:complexContent>
</xs:complexType>
```

3.1.4.1.2 Elements

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

Element name	Description
CopyItem	Specifies a request to copy an item in a mailbox.
CopyItemResponse	Specifies a response to a **CopyItemCopyItem** operation request.

3.1.4.1.2.1 CopyItem Element

The CopyItem element specifies a request to copy an item in a mailbox.

```
<xs:element name="CopyItem"
  type="m:CopyItemType"
 />
```

3.1.4.1.2.2 CopyItemResponse Element

The **CopyItemResponse** element specifies a response to a **CopyItem** operation request.

```
<xs:element name="CopyItemResponse"
  type="m:CopyItemResponseType"
 />
```

3.1.4.1.3 Messages

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

Message	Description
CopyItemSoapIn	Specifies the **SOAP message** that requests to copy an item in a mailbox.
CopyItemSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.1.3.1 tns:CopyItemSoapIn Message

The **CopyItemSoapIn** message contains four parts, as described in the following table.

Part name	Element/type	Description
request	**tns:CopyItem** (section 3.1.4.1.2.1)	Specifies the **SOAP body** of the request.
Impersonation	**t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a **SOAP header** that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **CopyItem** operation request.

3.1.4.1.3.2 tns:CopyItemSoapOut Message

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

Part name	Element/type	Description
CopyItemResult	**tns:CopyItemResponse** (section 3.1.4.1.2.2)	Specifies the SOAP body of the response message.
ServerVersion	**t:ServerVersionInfo** ([MS-	Specifies a SOAP header that identifies the

Part name	Element/type	Description
	OXWSCDATA] section 2.2.4.8)	schema version for the **CopyItemSoapOut** message.

3.1.4.2 CreateItem

The **CreateItem** operation creates items on the server.

The following is the WSDL port type specification for the **CreateItem** operation.

```
<wsdl:operation name="CreateItem" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
    <wsdl:input message="tns:CreateItemSoapIn" />
    <wsdl:output message="tns:CreateItemSoapOut" />
</wsdl:operation>
```

3.1.4.2.1 Complex Types

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

Complex type name	Description
CreateItemResponseType	Specifies a response to a **CreateItemCreateItem** operation request.
CreateItemType	Specifies a request to create an item or response object.

3.1.4.2.1.1 m:CreateItemResponseType Complex Type

The **CreateItemResponseType** complex type specifies a response to a **CreateItem** operation request. The **CreateItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.2.1.2 m:CreateItemType Complex Type

The **CreateItemType** complex type specifies a request to create an item or response object. The **CreateItemTYpe** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="CreateItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
```

```
          <xs:element name="SavedItemFolderId"
            type="t:TargetFolderIdType"
            minOccurs="0"
           />
          <xs:element name="Items"
            type="t:NonEmptyArrayOfAllItemsType"
           />
        </xs:sequence>
        <xs:attribute name="MessageDisposition"
          type="t:MessageDispositionType"
          use="optional"
         />
        <xs:attribute name="SendMeetingInvitations"
          type="t:CalendarItemCreateOrDeleteOperationType"
          use="optional"
         />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

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

Element name	Type	Description
SavedItemFolderId	**t:TargetFolderIdType**	Specifies the folder in which new items are saved.
Items	**t:NonEmptyArrayOfAllItemsType**	Specifies the collection of items to create.

The following table lists the attributes of the **CreateItemType** complex type.

Attribute name	Type	Description
MessageDisposition	**t:MessageDispositionType**	Specifies an enumeration that describes how an item is handled after it is created.
SendMeetingInvitations	**t:CalendarItemCreateOrDeleteOperationType**	Specifies an enumeration that describes how meeting requests are handled after they are created.

3.1.4.2.2 Elements

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

Element name	Description
CreateItem	Specifies a request to create an item.
CreateItemResponse	Specifies a response to a **CreateItem** operation request.

3.1.4.2.2.1   CreateItem Element

The **CreateItem** element specifies a request to create an item.

```
<xs:element name="CreateItem"
  type="m:CreateItemType"
 />
```

3.1.4.2.2.2   CreateItemResponse Element

The **CreateItemResponse** element specifies a response to a **CreateItem** operation request.

```
<xs:element name="CreateItemResponse"
  type="m:CreateItemResponseType"
 />
```

3.1.4.2.3   Messages

The following WSDL message definitions are specific to this operation.

Message name	Description
CreateItemSoapIn	Specifies the SOAP message that requests to create an item.
CreateItemSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.2.3.1   tns:CreateItemSoapIn Message

The **CreateItemSoapIn** message contains five parts, as described in the following table.

Part name	Element/type	Description
request	**tns:CreateItem** (section 3.1.4.2.1.2)	Specifies the SOAP body of the request.
Impersonation	**t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **CreateItem** operation (section 3.1.4.2) request.
TimeZoneContext	**t:TimeZoneContext** ([MS-OXWSGTZ] section 2.2.4.11)	Specifies a SOAP header that identifies the time zone to use for all responses from the server. All times that are returned from the server will be converted to the specified time zone.

3.1.4.2.3.2 tns:CreateItemSoapOut Message

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

Part name	Element/type	Description
CreateItemResult	**tns:CreateItemResponse**	Specifies the SOAP body of the response message.
ServerVersion	t:ServerVersionInfo ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **CreateItemSoapOut** message.

3.1.4.3 DeleteItem

The **DeleteItem** operation deletes items on the server.

3.1.4.3.1 Complex Types

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

Complex type name	Description
DeleteItemResponseType	Specifies a response to a single **DeleteItemDeleteItem** operation request.
DeleteItemType	Specifies a request to delete items.

3.1.4.3.1.1 m:DeleteItemResponseType Complex Type

The **DeleteItemResponseType** complex type specifies a response to a single **DeleteItem** operation request. The **DeleteItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.3.1.2 m:DeleteItemType Complex Type

The **DeleteItemType** complex type specifies a request to delete items. The **DeleteItemType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="DeleteItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
```

```
            <xs:element name="ItemIds"
              type="t:NonEmptyArrayOfBaseItemIdsType"
             />
         </xs:sequence>
         <xs:attribute name="DeleteType"
           type="t:DisposalType"
           use="required"
          />
         <xs:attribute name="SendMeetingCancellations"
           type="t:CalendarItemCreateOrDeleteOperationType"
           use="optional"
          />
         <xs:attribute name="AffectedTaskOccurrences"
            type="t:AffectedTaskOccurrencesType"
            use="optional"
          />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

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

Element name	Type	Description
ItemIds	**t:NonEmptyArrayOfBaseItemIdsType** (section 2.2.3.8)	Specifies the collection of items to delete.

The following table lists the attributes of the **DeleteItemType** complex type.

Attribute name	Type	Description
DeleteType	**t:DisposalType** ([MS-OXWSCDATA] section 2.2.2.8)	Specifies an enumeration value that describes how an item is deleted.
SendMeetingCancellations	**t:CalendarItemCreateOrDeleteOperationType** ([MS-OXWSMTGS] section 2.2.2.1)	Specifies an enumeration that describes how cancellations are handled for deleted meetings.
AffectedTaskOccurrences	**t:AffectedTaskOccurrencesType** ([MS-OXWSTASK] section 3.1.4.3.1.1)	Specifies an enumeration value that indicates whether a task instance or task master is deleted.

3.1.4.3.2   Elements

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

Element name	Description
DeleteItem	Specifies a request to delete an item from a mailbox.
DeleteItemResponse	Specifies a response to a single **DeleteItem** operation request.

3.1.4.3.2.1   DeleteItem Element

The **DeleteItem** element specifies a request to delete an item from a mailbox.

```
<xs:element name="DeleteItem"
  type="m:DeleteItemType"
 />
```

3.1.4.3.2.2   DeleteItemResponse Element

The **DeleteItemResponse** element specifies a response to a single **DeleteItem** operation request.

```
<xs:element name="DeleteItemResponse"
  type="m:DeleteItemResponseType"
 />
```

3.1.4.3.3   Messages

The following WSDL message definitions are specific to this operation.

Message name	Description
DeleteItemSoapIn	Specifies the SOAP message that requests an item be deleted from a mailbox.
DeleteItemSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.3.3.1   tns:DeleteItemSoapIn Message

The **DeleteItemSoapIn** message contains four parts, as described in the following table.

Part name	Element/type	Description
request	**tns:DeleteItem** (section 3.1.4.3.2.1)	Specifies the SOAP body of the request.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	t:MailboxCulture ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **DeleteItem** operation request.

3.1.4.3.3.2   tns:DeleteItemSoapOut Message

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

Part name	Element/type	Description
DeleteItemResult	**tns:DeleteItemResponse** (section 3.1.4.3.2.2)	Specifies the SOAP body of the response message.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **DeleteItemSoapOut** message.

3.1.4.4   GetItem

The **GetItem** operation gets items on the server.

3.1.4.4.1   Complex Types

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

Complex type name	Description
GetItemResponseType	Specifies a response to a **GetItemGetItem** operation request.
GetItemType	Specifies a request to get items from a mailbox.

3.1.4.4.1.1   m:GetItemResponseType Complex Type

The **GetItemResponseType** complex type specifies a response to a **GetItem** operation request. The **GetItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.4.1.2   m:GetItemType Complex Type

The **GetItemType** complex type specifies a request to get items from a mailbox. The **GetItemType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="GetItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
```

```
            <xs:element name="ItemShape"
              type="t:ItemResponseShapeType"
             />
            <xs:element name="ItemIds"
              type="t:NonEmptyArrayOfBaseItemIdsType"
             />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

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

Element name	Type	Description
ItemShape	t:ItemResponseShapeType ([MS-OXWSCDATA] section 2.2.3.35)	Specifies the response shape of the **GetItem** operation response.
ItemIds	t:NonEmptyArrayOfBaseItemIdsType (section 2.2.3.8)	Specifies the collection of items to get.

3.1.4.4.2   Elements

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

Element name	Description
GetItem	Specifies a request to get an item from a mailbox.
GetItemResponse	Specifies a response to a **GetItem** operation request.

3.1.4.4.2.1   GetItem Element

The **GetItem** element specifies a request to get an item from a mailbox.

```
<xs:element name="GetItem"
  type="m:GetItemType"
 />
```

3.1.4.4.2.2   GetItemResponse Element

The **GetItemResponse** element specifies a response to a **GetItem** operation request.

```
<xs:element name="GetItemResponse"
  type="m:GetItemResponseType"
 />
```

3.1.4.4.3 Messages

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

Message name	Description
GetItemSoapIn	Specifies the SOAP message that requests to get an item from a mailbox.
GetItemSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.4.3.1 tns:GetItemSoapIn Message

The **GetItemSoapIn** message contains five parts, as described in the following table.

Part name	Element/type	Description
request	**tns:GetItem** (section 3.1.4.4.2.1)	Specifies the SOAP body of the request.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	t:MailboxCulture ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **GetItem** operation request.
TimeZoneContext	**t:TimeZoneContex** ([MS-OXWSGTZ] section 2.2.4.11)	Specifies a SOAP header that identifies the time zone to use for all responses from the server. All times that are returned from the server will be converted to the specified time zone.

3.1.4.4.3.2 tns:GetItemSoapOut Message

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

Part Name	Element/Type	Description
GetItemResult	**tns:GetItemResponse** (section 3.1.4.4.2.2)	Specifies the SOAP body of the response message.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **GetItemSoapOut** message.

3.1.4.5 MoveItem

The **MoveItem** operation moves items on the server.

3.1.4.5.1 Complex Types

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

Complex type name	Description
MoveItemResponseType	Specifies a response to a call to the **MoveItem** operation.
MoveItemType	Specifies an operation to move items in a mailbox.

3.1.4.5.1.1 m:MoveItemResponseType Complex Type

The **MoveItemResponseType** complex type specifies a response to a call to the **MoveItem** operation. The **MoveItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.5.1.2 m:MoveItemType Complex Type

The **MoveItemType** complex type specifies an operation to move items in a mailbox. The **MoveItemType** complex type extends the **BaseMoveCopyItemType** complex type, as specified in section 2.2.3.1.

```
<xs:complexType name="MoveItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseMoveCopyItemType"
    />
  </xs:complexContent>
</xs:complexType>
```

3.1.4.5.2 Elements

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

Element name	Description
MoveItem	Specifies a request to move an item.
MoveItemResponse	Specifies a response to a **MoveItem** operation request.

3.1.4.5.2.1 MoveItem Element

The **MoveItem** element specifies a request to move an item.

```
<xs:element name="MoveItem"
  type="m:MoveItemType"
 />
```

3.1.4.5.2.2 MoveItemResponse Element

The **MoveItemResponse** element specifies a response to a **MoveItem** operation request.

```
<xs:element name="MoveItemResponse"
  type="m:MoveItemResponseType"
 />
```

3.1.4.5.3 Messages

The following WSDL message definitions are specific to this operation.

Message name	Description
MoveItemSoapIn	Specifies the SOAP message that requests to move an item in a mailbox.
MoveItemSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.5.3.1 tns:MoveItemSoapIn Message

The **MoveItemSoapIn** message contains four parts, as described in the following table.

Part name	Element/type	Description
request	**tns:MoveItem** (section 3.1.4.5.2.1)	Specifies the SOAP body of the request.
Impersonation	**t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **MoveItem** operation request.

3.1.4.5.3.2 tns:MoveItemSoapOut Message

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

Part name	Element/type	Description
MoveItemResult	**tns:MoveItemResponse** (section 3.1.4.5.2.2)	Specifies the SOAP body of the response message.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **MoveItemSoapOut** message.

3.1.4.6   SendItem

The **SendItem** operation sends messages and post items on the server.

3.1.4.6.1   Complex Types

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

Complex type name	Description
SendItemResponseType	Specifies a response to a **SendItem** operation request.
SendItemType	Specifies a request to send messages and post items on the server.

3.1.4.6.1.1   m:SendItemResponseType Complex Type

The **SendItemResponseType** complex type specifies a response to a **SendItem** operation request. The **SendItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.6.1.2   m:SendItemType Complex Type

The **SendItemType** complex type specifies a request to send messages and post items on the server. The **SendItemType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="SendItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="ItemIds"
          type="t:NonEmptyArrayOfBaseItemIdsType"
        />
        <xs:element name="SavedItemFolderId"
          type="t:TargetFolderIdType"
          minOccurs="0"
        />
      </xs:sequence>
      <xs:attribute name="SaveItemToFolder"
        type="xs:boolean"
        use="required"
      />
    </xs:extension>
  </xs:complexContent>
```

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

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

Element name	Type	Description
ItemIds	**t:NonEmptyArrayOfBaseItemIdsType** (section 2.2.3.8)	Specifies an array of item identifiers that are used to determine the items to try to send.
SavedItemFolderId	**t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14)	Specifies the identity of the folder that contains a saved version of the sent item.

The following table lists the attributes of the **SendItemType** complex type.

Attribute name	Type	Description
SaveItemToFolder	**xs:boolean** [XMLSCHEMA2]	Specifies a Boolean value that specifies whether a copy of the sent item is saved.

3.1.4.6.2 Elements

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

Element name	Description
SendItem	Specifies the root element in a request to send an item.
SentItemResponse	Specifies a response to a **SendItem** operation request.

3.1.4.6.2.1 SendItem Element

The **SendItem** element specifies the root element in a request to send an item.

```
<xs:element name="SendItem"
  type="m:SendItemType"
 />
```

3.1.4.6.2.2 SendItemResponse Element

The **SendItemResponse** element specifies a response to a **SendItem** operation request.

```
<xs:element name="SendItemResponse"
  type="m:SendItemResponseType"
 />
```

3.1.4.6.3 Messages

The following WSDL message definitions are specific to this operation.

Message name	Description
SendItemSoapIn	Specifies the SOAP message that requests to send an item.
SendItemSoapOut	Specifies the SOAP message that is sent by the server in response.

3.1.4.6.3.1 tns:SendItemSoapIn Message

The **SendItemSoapIn** message contains four parts, as described in the following table.

Part name	Element/type	Description
request	**tns:SendItem** (section 3.1.4.6.2.1)	Specifies the SOAP body of the request.
Impersonation	**t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **MoveItem** operation request.

3.1.4.6.3.2 tns:SendItemSoapOut Message

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

Part name	Element/type	Description
SendItemResult	**tns:SendItemResponse** (section 3.1.4.6.2.2)	Specifies the SOAP body of the response message.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **SendItemSoapOut** message.

3.1.4.7 UpdateItem

The **UpdateItem** operation updates items on the server.

3.1.4.7.1 Simple Types

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

Simple type name	Description
ConflictResolutionType	Specifies how a conflict is handled during an **UpdateItem** operation

3.1.4.7.1.1 t:ConflictResolutionType Simple Type

The **ConflictResolutionType** simple type specifies how a conflict is handled during an **UpdateItem** operation.

```
<xs:simpleType name="ConflictResolutionType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="AlwaysOverwrite"
     />
    <xs:enumeration
      value="AutoResolve"
     />
    <xs:enumeration
      value="NeverOverwrite"
     />
  </xs:restriction>
</xs:simpleType>
```

The following values are defined by the **ConflictResolutionType** simple type.

Value	Meaning
AlwaysOverwrite	If there is a conflict, the **UpdateItem** operation will overwrite information.
AutoResolve	The **UpdateItem** operation automatically resolves any conflict. The "AutoResolve" option will in most cases overwrite the existing value for a property. In some cases, the new value is ignored and the original value is retained. For example, user A changes the **Sensitivity** property from "Normal" to "Confidential". Then user B sets the value to "Public". In this example, the "Confidential" setting is retained and user B's update is ignored.
NeverOverwrite	If conflict exists, the **UpdateItem** operation fails and an error is returned.

3.1.4.7.2 Complex Types

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

Complex type name	Description
UpdateItemResponseType	Specifies the response to a call to the **UpdateItem** operation.
UpdateItemType	Specifies a request to update a set of items.
AppendToItemFieldType	Specifies data to append to a single property of an item during and **UpdateItem** operation.
ChangeDescriptionType	Specifies the base type that is used to describe changes in **UpdateFolder** operations, as specified in [MS-OXWSFOLD] section 3.1.4.8, and **UpdateItem** operations.
DeleteItemFieldType	Specifies a property to delete from an item.

Complex type name	Description
ItemChangeDescriptionType	Specifies data that describes changes that are applied by using the **UpdateItem** operation.
ItemChangeType	Specifies an item identifier and the updates to apply to the item.
NonEmptyArrayOfItemChangeDescriptionsType	Specifies an array of items and their change types.
NonEmptyArrayOfItemChangesType	Specifies an array of items and their changes.
SetItemFieldType	Specifies an update to a single property of an item.

3.1.4.7.2.1   m:UpdateItemResponseType Complex Type

The **UpdateItemResponseType** complex type specifies the response to a call to the **UpdateItem** operation. The **UpdateItemResponseType** complex type extends the **BaseResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.15).

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

3.1.4.7.2.2   m:UpdateItemType Complex Type

The **UpdateItemType** complex type specifies a request to update a set of items. The **UpdateItemType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="UpdateItemType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="SavedItemFolderId"
          type="t:TargetFolderIdType"
          minOccurs="0"
         />
        <xs:element name="ItemChanges"
          type="t:NonEmptyArrayOfItemChangesType"
         />
      </xs:sequence>
      <xs:attribute name="ConflictResolution"
        type="t:ConflictResolutionType"
        use="required"
       />
      <xs:attribute name="MessageDisposition"
        type="t:MessageDispositionType"
```

```
        use="optional"
      />
     <xs:attribute name="SendMeetingInvitationsOrCancellations"
       type="t:CalendarItemUpdateOperationType"
       use="optional"
      />
    </xs:extension>
  </xs:complexContent>
 </xs:complexType>
```

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

Element name	Type	Description
SavedItemFolderId	**t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14)	Specifies the target folder for saved items.
ItemChanges	**t:NonEmptyArrayOfItemChangesType** (section 3.1.4.7.2.9)	Specifies an array of item changes.

The following table lists the attributes of the **UpdateItemType** complex type.

Attribute name	Type	Description
ConflictResolution	**t:ConflictResolutionType** (section 3.1.4.7.1.1)	Specifies an enumeration value that represents the type of conflict resolution that is performed during an update.
MessageDisposition	**t:MessageDispositionType** ([MS-OXWSMSG] section 2.2.5.1)	Specifies an enumeration value that describes how a message item is handled after it is updated.
SendMeetingInvitationsOrCancellations	**t:CalendarItemUpdateOperationType** ([MS-OXWSMTGS] section 2.2.2.3)	Specifies an enumeration value that describes how a calendar item is handled after it is updated.

3.1.4.7.2.3 t:AppendToItemFieldType Complex Type

The **AppendToItemFieldType** complex type specifies data to append to a single property of an item during and **UpdateItem** operation. The **AppendToItemFieldType** complex type extends the **ItemChangeDescriptionType** complex type, as specified in section 3.1.4.7.2.6.

```
<xs:complexType name="AppendToItemFieldType">
  <xs:complexContent>
    <xs:extension
      base="t:ItemChangeDescriptionType"
    >
      <xs:choice>
        <xs:element name="Item"
          type="t:ItemType"
         />
        <xs:element name="Message"
          type="t:MessageType"
         />
        <xs:element name="CalendarItem"
          type="t:CalendarItemType"
         />
        <xs:element name="Contact"
          type="t:ContactItemType"
         />
        <xs:element name="DistributionList"
          type="t:DistributionListType"
         />
        <xs:element name="MeetingMessage"
          type="t:MeetingMessageType"
         />
        <xs:element name="MeetingRequest"
          type="t:MeetingRequestMessageType"
         />
        <xs:element name="MeetingResponse"
          type="t:MeetingResponseMessageType"
         />
        <xs:element name="MeetingCancellation"
          type="t:MeetingCancellationMessageType"
         />
        <xs:element name="Task"
          type="t:TaskType"
         />
        <xs:element name="PostItem"
          type="t:PostItemType"
         />
      </xs:choice>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
Item	**t:ItemType** (section 2.2.3.6)	Specifies a generic item.

Element name	Type	Description
Message	t:MessageType ([MS-OXWSMSG] section 2.2.4.1)	Specifies an e-mail message or non-IPM.Note item.
CalendarItem	t:CalendarItemType ([MS-OXWSMTGS] section 2.2.3.4)	Specifies a calendar item.
Contact	t:ContactItemType ([MS-OXWSCONT] section 2.2.4.1)	Specifies a contact item.
DistributionList	t:DistributionListType ([MS-OXWSDLIST] section 2.2.4.3)	Specifies a distribution list.
MeetingMessage	t:MeetingMessageType ([MS-OXWSMTGS] section 2.2.3.11)	Specifies a meeting.
MeetingRequest	t:MeetingRequestMessageType ([MS-OXWSMTGS] section 2.2.3.12)	Specifies a meeting request.
MeetingResponse	t:MeetingResponseMessageType ([MS-OXWSMTGS] section 2.2.3.13)	Specifies a meeting response.
MeetingCancellation	t:MeetingCancellationMessageType ([MS-OXWSMTGS] section 2.2.3.10)	Specifies a meeting cancellation.
Task	t:TaskType ([MS-OXWSTASK] section 2.2.4.3)	Specifies a task.
PostItem	t:PostItemType ([MS-OXWSPOST] section 2.2.3.1)	Specifies a post item.

3.1.4.7.2.4   t:ChangeDescriptionType Complex Type

The **ChangeDescriptionType** complex type specifies the base type that is used to describe changes in **UpdateFolder** operation, as specified in [MS-OXWSFOLD] section 3.1.4.8 ,and **UpdateItem** operation, as specified in (section 3.1.4.7).

```
<xs:complexType name="ChangeDescriptionType"
  abstract="true"
>
  <xs:sequence>
    <xs:element
      ref="t:Path"
    />
  </xs:sequence>
</xs:complexType>
```

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

Element	Type	Description
Path	t:Path ([MS-OXWSCDATA] section 2.2.4.6)	Specifies a substitution group that specifies the property to update.

3.1.4.7.2.5   t:DeleteItemFieldType Complex Type

The **DeleteItemFieldType** complex type specifies a property to delete from an item. The **DeleteItemFieldType** complex type extends the **ItemChangeDescriptionType** complex type, as specified in section 3.1.4.7.2.6.

```
<xs:complexType name="DeleteItemFieldType">
  <xs:complexContent>
    <xs:extension
      base="t:ItemChangeDescriptionType"
    >
      <xs:sequence />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

3.1.4.7.2.6   t:ItemChangeDescriptionType Complex Type

The **ItemChangeDescriptionType** complex type specifies data that describes changes that are applied by using the **UpdateItem** operation. The **ItemChangeDescriptionType** complex type extends the **ChangeDescriptionType** complex type, as specified in section 3.1.4.7.2.4.

```
<xs:complexType name="ItemChangeDescriptionType">
  <xs:complexContent>
    <xs:extension
      base="t:ChangeDescriptionType"
    />
  </xs:complexContent>
</xs:complexType>
```

3.1.4.7.2.7   t:ItemChangeType Complex Type

The **ItemChangeType** complex type specifies an item identifier and the updates to apply to the item.

```
<xs:complexType name="ItemChangeType">
  <xs:sequence>
    <xs:choice>
      <xs:element name="ItemId"
        type="t:ItemIdType"
      />
      <xs:element name="OccurrenceItemId"
        type="t:OccurrenceItemIdType"
      />
      <xs:element name="RecurringMasterItemId"
        type="t:RecurringMasterItemIdType"
      />
    </xs:choice>
    <xs:element name="Updates"
      type="t:NonEmptyArrayOfItemChangeDescriptionsType"
    />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
ItemId	**t:ItemIdType** (section 2.2.3.13)	Specifies an item identifier of an item in a mailbox.
OccurrenceItemId	**t:OccurrenceItemIdType** (section 2.2.3.11)	Specifies a single occurrence of a recurring item.
RecurringMasterItemId	**t:RecurringMasterItemIdType** (section 2.2.3.12)	Specifies a recurrence master item by identifying the identifiers of one of its related occurrence items.
Updates	**t:NonEmptyArrayOfItemChangeDescriptionsType** (section 3.1.4.7.2.8)	Specifies an array that defines append, set, and delete changes to item properties.

3.1.4.7.2.8   t:NonEmptyArrayOfItemChangeDescriptionsType Complex Type

The **NonEmptyArrayOfItemChangeDescriptionsType** complex type specifies an array of items and their change types.

```
<xs:complexType name="NonEmptyArrayOfItemChangeDescriptionsType">
  <xs:choice
    maxOccurs="unbounded"
  >
    <xs:element name="AppendToItemField"
      type="t:AppendToItemFieldType"
     />
    <xs:element name="SetItemField"
      type="t:SetItemFieldType"
     />
    <xs:element name="DeleteItemField"
      type="t:DeleteItemFieldType"
     />
  </xs:choice>
</xs:complexType>
```

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

Element name	Type	Description
AppendToItemField	**t:AppendToItemFieldType** (section 3.1.4.7.2.3)	Specifies data to append to a single property of an item during an **UpdateItem** operation.
SetItemField	**t:SetItemFieldType** (section 3.1.4.7.2.10)	Specifies an update to a single property of an item in an **UpdateItem** operation.
DeleteItemField	**t:DeleteItemFieldType** (section 3.1.4.7.2.5)	Specifies an operation to delete a given property from an item during an **UpdateItem** operation.

3.1.4.7.2.9   t:NonEmptyArrayOfItemChangesType Complex Type

The **NonEmptyArrayOfItemChangesType** complex type specifies an array of items and their changes.

```
<xs:complexType name="NonEmptyArrayOfItemChangesType">
  <xs:sequence>
    <xs:element name="ItemChange"
      type="t:ItemChangeType"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
ItemChange	t:ItemChangeType (section 3.1.4.7.2.7)	Specifies an item identifier and the updates to apply to the item.

3.1.4.7.2.10   t:SetItemFieldType Complex Type

The **SetItemFieldType** complex type specifies an update to a single property of an item. The **SetItemFieldType** complex type extends the **ItemChangeDescription** complex type, as specified in section 3.1.4.7.2.6.

```
<xs:complexType name="SetItemFieldType">
  <xs:complexContent>
    <xs:extension
      base="t:ItemChangeDescriptionType"
    >
      <xs:choice>
        <xs:element name="Item"
          type="t:ItemType"
         />
        <xs:element name="Message"
          type="t:MessageType"
         />
        <xs:element name="CalendarItem"
```

```
        type="t:CalendarItemType"
     />
        <xs:element name="Contact"
          type="t:ContactItemType"
        />
        <xs:element name="DistributionList"
          type="t:DistributionListType"
        />
        <xs:element name="MeetingMessage"
          type="t:MeetingMessageType"
        />
        <xs:element name="MeetingRequest"
          type="t:MeetingRequestMessageType"
        />
        <xs:element name="MeetingResponse"
          type="t:MeetingResponseMessageType"
        />
        <xs:element name="MeetingCancellation"
          type="t:MeetingCancellationMessageType"
        />
        <xs:element name="Task"
          type="t:TaskType"
        />
        <xs:element name="PostItem"
          type="t:PostItemType"
        />
      </xs:choice>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
Item	**t:ItemType** (section 2.2.3.6)	Specifies a generic item.
Message	**t:MessageType** ([MS-OXWSMSG] section 2.2.4.1)	Specifies an e-mail message or non-IPM.Note item.
CalendarItem	**t:CalendarItemType** ([MS-OXWSMTGS] section 2.2.3.4)	Specifies a calendar item.
Contact	**t:ContactItemType** ([MS-OXWSCONT] section 2.2.4.1)	Specifies a contact item.
DistributionList	**t:DistributionListType** ([MS-OXWSDLIST] section 2.2.4.3)	Specifies a distribution list.
MeetingMessage	**t:MeetingMessageType** ([MS-OXWSMTGS] section 2.2.3.11)	Specifies a meeting.
MeetingRequest	**t:MeetingRequestMessageType** ([MS-OXWSMTGS] section 2.2.3.12)	Specifies a meeting request.
MeetingResponse	**t:MeetingResponseMessageType** ([MS-	Specifies meeting

Element name	Type	Description
	OXWSMTGS] section 2.2.3.13)	response.
MeetingCancellation	**t:MeetingCancellationMessageType** ([MS-OXWSMTGS] section 2.2.3.10)	Specifies meeting cancellation.
Task	**t:TaskType** ([MS-OXWSTASK] section 2.2.4.3)	Specifies a task.
PostItem	**t:PostItemType** ([MS-OXWSPOST] section 2.2.3.1)	Specifies a post item.

3.1.4.7.3 Elements

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

Element name	Description
UpdateItem	Specifies a request to update an item in a mailbox.

3.1.4.7.3.1 UpdateItem Element

The **UpdateItem** element specifies a request to update an item in a mailbox.

```
<xs:element name="UpdateItem"
  type="m:UpdateItemType"
 />
```

3.1.4.7.3.2 UpdateItemResponse Element

The **UpdateItemResponse** element specifies a response to an **UpdateItem** operation request.

```
<xs:element name="UpdateItemResponse"
  type="m:UpdateItemResponseType"
 />
```

3.1.4.7.4 Messages

The following WSDL message definitions are specific to this operation.

Message name	Description
UpdateItemSoapIn	Specifies the SOAP message that requests that an item be updated.
UpdateItemSoapOut	Specifies the SOAP message that is returned in response.

3.1.4.7.4.1 tns:UpdateItemSoapIn Message

The **UpdateItemSoapIn** message contains five parts, as described in the following table.

Part name	Element/type	Description
request	**tns:UpdateItem** (section [3.1.4.7.3.1](#))	Specifies the SOAP body of the request.
Impersonation	**t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.4.2)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.4.5)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.7)	Specifies a SOAP header that identifies the schema version for the **UpdateItem** operation request.
TimeZoneContext	**t:TimeZoneContext** ([MS-OXWSGTZ] section 2.2.4.11)	Specifies a SOAP header that identifies the time zone to use for all responses from the server. All times that are returned from the server will be converted to the specified time zone.

3.1.4.7.4.2   tns:UpdateItemSoapOut Message

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

Part name	Element/type	Description
UpdateItemResult	**tns:UpdateItemResponse** (section [3.1.4.7.3.2](#))	Specifies the the SOAP body of response message.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **UpdateItemSoapOut** message.

3.1.5   Timer Events

None.

3.1.6   Other Local Events

None.

4 Protocol Examples

None.

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

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

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

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

6.1 WSDL

This section contains the contents of the MS-OXWSCORE.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:s="http://www.w3.org/2001/XMLSchema" 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="Exchange2010"
xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
            <xs:import
namespace="http://schemas.microsoft.com/exchange/services/2006/types" schemaLocation="MS-
OXWSCORE-types.xsd"/>
            <xs:include schemaLocation="MS-OXWSCORE-messages.xsd" />
            <!-- Add global elements and types from messages.xsd -->
        </xs:schema>
        <xs:schema id="types" elementFormDefault="qualified" version="Exchange2010"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
            <xs:import namespace="http://www.w3.org/XML/1998/namespace"/>
            <!-- Add global elements and types from types.xsd -->
        </xs:schema>
    </wsdl:types>
    <wsdl:portType name="ExchangeServicePortType">
        <wsdl:operation name="GetItem">
            <wsdl:input message="tns:GetItemSoapIn"/>
            <wsdl:output message="tns:GetItemSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="CreateItem">
```

```
                    <wsdl:input message="tns:CreateItemSoapIn"/>
                    <wsdl:output message="tns:CreateItemSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteItem">
                    <wsdl:input message="tns:DeleteItemSoapIn"/>
                    <wsdl:output message="tns:DeleteItemSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="UpdateItem">
                    <wsdl:input message="tns:UpdateItemSoapIn"/>
                    <wsdl:output message="tns:UpdateItemSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="MoveItem">
                    <wsdl:input message="tns:MoveItemSoapIn"/>
                    <wsdl:output message="tns:MoveItemSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="CopyItem">
                    <wsdl:input message="tns:CopyItemSoapIn"/>
                    <wsdl:output message="tns:CopyItemSoapOut"/>
            </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="GetItem">
                    <soap:operation
 soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetItem"/>
                    <wsdl:input>
                            <soap:header message="tns:GetItemSoapIn" part="Impersonation"
 use="literal"/>
                            <soap:header message="tns:GetItemSoapIn" part="MailboxCulture"
 use="literal"/>
                            <soap:header message="tns:GetItemSoapIn" part="RequestVersion"
 use="literal"/>
                            <soap:header message="tns:GetItemSoapIn" part="TimeZoneContext"
 use="literal"/>
                            <soap:body parts="request" use="literal"/>
                    </wsdl:input>
                    <wsdl:output>
                            <soap:body parts="GetItemResult" use="literal"/>
                            <soap:header message="tns:GetItemSoapOut" part="ServerVersion"
 use="literal"/>
                    </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="CreateItem">
                    <soap:operation
 soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/CreateItem"/>
                    <wsdl:input>
                            <soap:header message="tns:CreateItemSoapIn" part="Impersonation"
 use="literal"/>
                            <soap:header message="tns:CreateItemSoapIn" part="MailboxCulture"
 use="literal"/>
                            <soap:header message="tns:CreateItemSoapIn" part="RequestVersion"
 use="literal"/>
                            <soap:header message="tns:CreateItemSoapIn" part="TimeZoneContext"
 use="literal"/>
                            <soap:body parts="request" use="literal"/>
                    </wsdl:input>
```

```
                <wsdl:output>
                        <soap:body parts="CreateItemResult" use="literal"/>
                        <soap:header message="tns:CreateItemSoapOut" part="ServerVersion"
use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="DeleteItem">
                <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/DeleteItem"/>
                <wsdl:input>
                        <soap:header message="tns:DeleteItemSoapIn" part="Impersonation"
use="literal"/>
                        <soap:header message="tns:DeleteItemSoapIn" part="MailboxCulture"
use="literal"/>
                        <soap:header message="tns:DeleteItemSoapIn" part="RequestVersion"
use="literal"/>
                        <soap:body parts="request" use="literal"/>
                </wsdl:input>
                <wsdl:output>
                        <soap:body parts="DeleteItemResult" use="literal"/>
                        <soap:header message="tns:DeleteItemSoapOut" part="ServerVersion"
use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="UpdateItem">
                <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/UpdateItem"/>
                <wsdl:input>
                        <soap:header message="tns:UpdateItemSoapIn" part="Impersonation"
use="literal"/>
                        <soap:header message="tns:UpdateItemSoapIn" part="MailboxCulture"
use="literal"/>
                        <soap:header message="tns:UpdateItemSoapIn" part="RequestVersion"
use="literal"/>
                        <soap:header message="tns:UpdateItemSoapIn" part="TimeZoneContext"
use="literal"/>
                        <soap:body parts="request" use="literal"/>
                </wsdl:input>
                <wsdl:output>
                        <soap:body parts="UpdateItemResult" use="literal"/>
                        <soap:header message="tns:UpdateItemSoapOut" part="ServerVersion"
use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="MoveItem">
                <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/MoveItem"/>
                <wsdl:input>
                        <soap:header message="tns:MoveItemSoapIn" part="Impersonation"
use="literal"/>
                        <soap:header message="tns:MoveItemSoapIn" part="MailboxCulture"
use="literal"/>
                        <soap:header message="tns:MoveItemSoapIn" part="RequestVersion"
use="literal"/>
                        <soap:body parts="request" use="literal"/>
                </wsdl:input>
                <wsdl:output>
                        <soap:body parts="MoveItemResult" use="literal"/>
                        <soap:header message="tns:MoveItemSoapOut" part="ServerVersion"
use="literal"/>
```

```
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="CopyItem">
                <soap:operation
 soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/CopyItem"/>
                <wsdl:input>
                    <soap:header message="tns:CopyItemSoapIn" part="Impersonation"
 use="literal"/>
                    <soap:header message="tns:CopyItemSoapIn" part="MailboxCulture"
 use="literal"/>
                    <soap:header message="tns:CopyItemSoapIn" part="RequestVersion"
 use="literal"/>
                    <soap:body parts="request" use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body parts="CopyItemResult" use="literal"/>
                    <soap:header message="tns:CopyItemSoapOut" part="ServerVersion"
 use="literal"/>
                </wsdl:output>
            </wsdl:operation>
        </wsdl:binding>
        <wsdl:message name="GetItemSoapIn">
            <wsdl:part name="request" element="tns:GetItem"/>
            <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
            <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
            <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
            <wsdl:part name="TimeZoneContext" element="t:TimeZoneContext"/>
        </wsdl:message>
        <wsdl:message name="GetItemSoapOut">
            <wsdl:part name="GetItemResult" element="tns:GetItemResponse"/>
            <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
        </wsdl:message>
        <wsdl:message name="CreateItemSoapIn">
            <wsdl:part name="request" element="tns:CreateItem"/>
            <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
            <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
            <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
            <wsdl:part name="TimeZoneContext" element="t:TimeZoneContext"/>
        </wsdl:message>
        <wsdl:message name="CreateItemSoapOut">
            <wsdl:part name="CreateItemResult" element="tns:CreateItemResponse"/>
            <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
        </wsdl:message>
        <wsdl:message name="DeleteItemSoapIn">
            <wsdl:part name="request" element="tns:DeleteItem"/>
            <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
            <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
            <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
        </wsdl:message>
        <wsdl:message name="DeleteItemSoapOut">
            <wsdl:part name="DeleteItemResult" element="tns:DeleteItemResponse"/>
            <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
        </wsdl:message>
        <wsdl:message name="UpdateItemSoapIn">
            <wsdl:part name="request" element="tns:UpdateItem"/>
            <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
            <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
            <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
            <wsdl:part name="TimeZoneContext" element="t:TimeZoneContext"/>
```

```
        </wsdl:message>
        <wsdl:message name="UpdateItemSoapOut">
            <wsdl:part name="UpdateItemResult" element="tns:UpdateItemResponse"/>
            <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
        </wsdl:message>
        <wsdl:message name="MoveItemSoapIn">
            <wsdl:part name="request" element="tns:MoveItem"/>
            <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
            <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
            <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
        </wsdl:message>
        <wsdl:message name="MoveItemSoapOut">
            <wsdl:part name="MoveItemResult" element="tns:MoveItemResponse"/>
            <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
        </wsdl:message>
        <wsdl:message name="CopyItemSoapIn">
            <wsdl:part name="request" element="tns:CopyItem"/>
            <wsdl:part name="Impersonation" element="t:ExchangeImpersonation"/>
            <wsdl:part name="MailboxCulture" element="t:MailboxCulture"/>
            <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
        </wsdl:message>
        <wsdl:message name="CopyItemSoapOut">
            <wsdl:part name="CopyItemResult" element="tns:CopyItemResponse"/>
            <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
        </wsdl:message>
    </wsdl:definitions>
```

6.2   Types Schema

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

MS-OXWSCORE-types.xsd includes the following file. To operate correctly, this file has to be
included in the folder that contains the WSDL, types, and messages schema files for this protocol.

File name	Defining specification
MS-OXWSCDATA-types.xsd	[MS-OXWSCDATA] section 6.3

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
elementFormDefault="qualified" version="Exchange2010" id="types">
    <xs:import namespace="http://www.w3.org/XML/1998/namespace"/>
    <xs:include schemaLocation="MS-OXWSCDATA-types.xsd"/>
    <xs:complexType name="AppendToItemFieldType">
        <xs:complexContent>
            <xs:extension base="t:ItemChangeDescriptionType">
                <xs:choice>
                    <xs:element name="Item" type="t:ItemType"/>
                    <xs:element name="Message" type="t:MessageType"/>
                    <xs:element name="CalendarItem" type="t:CalendarItemType"/>
                    <xs:element name="Contact" type="t:ContactItemType"/>
```

```xml
                    <xs:element name="DistributionList" type="t:DistributionListType"/>
                    <xs:element name="MeetingMessage" type="t:MeetingMessageType"/>
                    <xs:element name="MeetingRequest"
  type="t:MeetingRequestMessageType"/>
                    <xs:element name="MeetingResponse"
  type="t:MeetingResponseMessageType"/>
                    <xs:element name="MeetingCancellation"
  type="t:MeetingCancellationMessageType"/>
                    <xs:element name="Task" type="t:TaskType"/>
                    <xs:element name="PostItem" type="t:PostItemType"/>
                </xs:choice>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="BaseItemId" type="t:BaseItemIdType"/>
    <xs:complexType name="ChangeDescriptionType" abstract="true">
        <xs:sequence>
            <xs:element ref="t:Path"/>
        </xs:sequence>
    </xs:complexType>
    <xs:simpleType name="ConflictResolutionType">
        <xs:restriction base="xs:string">
            <xs:enumeration value="NeverOverwrite"/>
            <xs:enumeration value="AutoResolve"/>
            <xs:enumeration value="AlwaysOverwrite"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:complexType name="ConflictResultsType">
        <xs:sequence>
            <xs:element name="Count" type="xs:int"/>
        </xs:sequence>
    </xs:complexType>
    <xs:complexType name="DeleteItemFieldType">
        <xs:complexContent>
            <xs:extension base="t:ItemChangeDescriptionType">
                <xs:sequence/>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:simpleType name="DerivedItemIdType">
        <xs:restriction base="xs:string"/>
    </xs:simpleType>
    <xs:simpleType name="ImportanceChoicesType">
        <xs:restriction base="xs:string">
            <xs:enumeration value="Low"/>
            <xs:enumeration value="Normal"/>
            <xs:enumeration value="High"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:complexType name="ItemChangeDescriptionType">
        <xs:complexContent>
            <xs:extension base="t:ChangeDescriptionType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="ItemChangeType">
        <xs:sequence>
            <xs:choice>
                <xs:element name="ItemId" type="t:ItemIdType"/>
                <xs:element name="OccurrenceItemId" type="t:OccurrenceItemIdType"/>
```

```xml
                        <xs:element name="RecurringMasterItemId"
type="t:RecurringMasterItemIdType"/>
                </xs:choice>
                <xs:element name="Updates"
type="t:NonEmptyArrayOfItemChangeDescriptionsType"/>
            </xs:sequence>
    </xs:complexType>
    <xs:simpleType name="ItemClassType">
            <xs:restriction base="xs:string"/>
    </xs:simpleType>
    <xs:complexType name="ItemIdType">
            <xs:annotation>
                <xs:documentation>Identifier for a fully resolved item</xs:documentation>
            </xs:annotation>
            <xs:complexContent>
                <xs:extension base="t:BaseItemIdType">
                    <xs:attribute name="Id" type="xs:string" use="required"/>
                    <xs:attribute name="ChangeKey" type="xs:string" use="optional"/>
                </xs:extension>
            </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="ItemType">
            <xs:sequence>
                <xs:element name="MimeContent" type="t:MimeContentType" minOccurs="0"/>
                <xs:element name="ItemId" type="t:ItemIdType" minOccurs="0"/>
                <xs:element name="ParentFolderId" type="t:FolderIdType" minOccurs="0"/>
                <xs:element name="ItemClass" type="t:ItemClassType" minOccurs="0"/>
                <xs:element name="Subject" type="xs:string" minOccurs="0"/>
                <xs:element name="Sensitivity" type="t:SensitivityChoicesType" minOccurs="0"/>
                <xs:element name="Body" type="t:BodyType" minOccurs="0"/>
                <xs:element name="Attachments" type="t:NonEmptyArrayOfAttachmentsType"
 minOccurs="0"/>
                <xs:element name="DateTimeReceived" type="xs:dateTime" minOccurs="0"/>
                <xs:element name="Size" type="xs:int" minOccurs="0"/>
                <xs:element name="Categories" type="t:ArrayOfStringsType" minOccurs="0"/>
                <xs:element name="Importance" type="t:ImportanceChoicesType" minOccurs="0"/>
                <xs:element name="InReplyTo" type="xs:string" minOccurs="0"/>
                <xs:element name="IsSubmitted" type="xs:boolean" minOccurs="0"/>
                <xs:element name="IsDraft" type="xs:boolean" minOccurs="0"/>
                <xs:element name="IsFromMe" type="xs:boolean" minOccurs="0"/>
                <xs:element name="IsResend" type="xs:boolean" minOccurs="0"/>
                <xs:element name="IsUnmodified" type="xs:boolean" minOccurs="0"/>
                <xs:element name="InternetMessageHeaders"
type="t:NonEmptyArrayOfInternetHeadersType" minOccurs="0"/>
                <xs:element name="DateTimeSent" type="xs:dateTime" minOccurs="0"/>
                <xs:element name="DateTimeCreated" type="xs:dateTime" minOccurs="0"/>
                <xs:element name="ResponseObjects" type="t:NonEmptyArrayOfResponseObjectsType"
 minOccurs="0"/>
                <xs:element name="ReminderDueBy" type="xs:dateTime" minOccurs="0"/>
                <xs:element name="ReminderIsSet" type="xs:boolean" minOccurs="0"/>
                <xs:element name="ReminderMinutesBeforeStart"
 type="t:ReminderMinutesBeforeStartType" minOccurs="0"/>
                <xs:element name="DisplayCc" type="xs:string" minOccurs="0"/>
                <xs:element name="DisplayTo" type="xs:string" minOccurs="0"/>
                <xs:element name="HasAttachments" type="xs:boolean" minOccurs="0"/>
                <xs:element name="ExtendedProperty" type="t:ExtendedPropertyType"
 minOccurs="0" maxOccurs="unbounded"/>
                <xs:element name="Culture" type="xs:language" minOccurs="0"/>
                <xs:element name="EffectiveRights" type="t:EffectiveRightsType"
 minOccurs="0"/>
```

```
                <xs:element name="LastModifiedName" type="xs:string" minOccurs="0"/>
                <xs:element name="LastModifiedTime" type="xs:dateTime" minOccurs="0"/>
                <xs:element name="IsAssociated" type="xs:boolean" minOccurs="0"/>
                <xs:element name="WebClientReadFormQueryString" type="xs:string"
minOccurs="0"/>
                <xs:element name="WebClientEditFormQueryString" type="xs:string"
minOccurs="0"/>
                <xs:element name="ConversationId" type="t:ItemIdType" minOccurs="0"/>
                <xs:element name="UniqueBody" type="t:BodyType" minOccurs="0"/>
        </xs:sequence>
    </xs:complexType>
    <xs:complexType name="MimeContentType">
        <xs:simpleContent>
            <xs:extension base="xs:string">
                <xs:attribute name="CharacterSet" type="xs:string" use="optional"/>
            </xs:extension>
        </xs:simpleContent>
    </xs:complexType>
    <xs:complexType name="NonEmptyArrayOfBaseItemIdsType">
        <xs:choice maxOccurs="unbounded">
            <xs:element name="ItemId" type="t:ItemIdType"/>
            <xs:element name="OccurrenceItemId" type="t:OccurrenceItemIdType"/>
            <xs:element name="RecurringMasterItemId" type="t:RecurringMasterItemIdType"/>
        </xs:choice>
    </xs:complexType>
    <xs:complexType name="NonEmptyArrayOfInternetHeadersType">
        <xs:sequence>
            <xs:element name="InternetMessageHeader" type="t:InternetHeaderType"
maxOccurs="unbounded"/>
        </xs:sequence>
    </xs:complexType>
    <xs:complexType name="NonEmptyArrayOfItemChangeDescriptionsType">
        <xs:choice maxOccurs="unbounded">
            <xs:element name="AppendToItemField" type="t:AppendToItemFieldType"/>
            <xs:element name="SetItemField" type="t:SetItemFieldType"/>
            <xs:element name="DeleteItemField" type="t:DeleteItemFieldType"/>
        </xs:choice>
    </xs:complexType>
    <xs:complexType name="NonEmptyArrayOfItemChangesType">
        <xs:sequence>
            <xs:element name="ItemChange" type="t:ItemChangeType" maxOccurs="unbounded"/>
        </xs:sequence>
    </xs:complexType>
    <xs:complexType name="NonEmptyArrayOfResponseObjectsType">
        <xs:choice minOccurs="0" maxOccurs="unbounded">
            <xs:element name="AcceptItem" type="t:AcceptItemType"/>
            <xs:element name="TentativelyAcceptItem" type="t:TentativelyAcceptItemType"/>
            <xs:element name="DeclineItem" type="t:DeclineItemType"/>
            <xs:element name="ReplyToItem" type="t:ReplyToItemType"/>
            <xs:element name="ForwardItem" type="t:ForwardItemType"/>
            <xs:element name="ReplyAllToItem" type="t:ReplyAllToItemType"/>
            <xs:element name="CancelCalendarItem" type="t:CancelCalendarItemType"/>
            <xs:element name="RemoveItem" type="t:RemoveItemType"/>
            <xs:element name="SuppressReadReceipt" type="t:SuppressReadReceiptType"/>
            <xs:element name="PostReplyItem" type="t:PostReplyItemType"/>
            <xs:element name="AcceptSharingInvitation"
type="t:AcceptSharingInvitationType"/>
        </xs:choice>
    </xs:complexType>
```

```xml
<xs:complexType name="OccurrenceItemIdType">
      <xs:complexContent>
            <xs:extension base="t:BaseItemIdType">
                  <xs:attribute name="RecurringMasterId" type="t:DerivedItemIdType"
use="required"/>
                  <xs:attribute name="ChangeKey" type="xs:string" use="optional"/>
                  <xs:attribute name="InstanceIndex" type="xs:int" use="required"/>
            </xs:extension>
      </xs:complexContent>
</xs:complexType>
<xs:complexType name="RecurringMasterItemIdType">
      <xs:complexContent>
            <xs:extension base="t:BaseItemIdType">
                  <xs:attribute name="OccurrenceId" type="t:DerivedItemIdType"
use="required"/>
                  <xs:attribute name="ChangeKey" type="xs:string" use="optional"/>
            </xs:extension>
      </xs:complexContent>
</xs:complexType>
<xs:complexType name="ReferenceItemResponseType">
      <xs:complexContent>
            <xs:restriction base="t:ResponseObjectType">
                  <xs:sequence>
                        <xs:element name="ReferenceItemId" type="t:ItemIdType"
minOccurs="0"/>
                  </xs:sequence>
                  <xs:attribute name="ObjectName" type="xs:string" use="prohibited"/>
            </xs:restriction>
      </xs:complexContent>
</xs:complexType>
<xs:simpleType name="ReminderMinutesBeforeStartType">
      <xs:union>
            <xs:simpleType id="ReminderMinutesBeforeStartType">
                  <xs:restriction base="xs:int">
                        <xs:minInclusive value="0"/>
                        <xs:maxInclusive value="2629800"/>
                  </xs:restriction>
            </xs:simpleType>
            <xs:simpleType id="ReminderMinutesBeforeStartMarkerType">
                  <xs:restriction base="xs:int">
                        <xs:minInclusive value="1525252321"/>
                        <xs:maxInclusive value="1525252321"/>
                  </xs:restriction>
            </xs:simpleType>
      </xs:union>
</xs:simpleType>
<xs:complexType name="SetItemFieldType">
      <xs:complexContent>
            <xs:extension base="t:ItemChangeDescriptionType">
                  <xs:choice>
                        <xs:element name="Item" type="t:ItemType"/>
                        <xs:element name="Message" type="t:MessageType"/>
                        <xs:element name="CalendarItem" type="t:CalendarItemType"/>
                        <xs:element name="Contact" type="t:ContactItemType"/>
                        <xs:element name="DistributionList" type="t:DistributionListType"/>
                        <xs:element name="MeetingMessage" type="t:MeetingMessageType"/>
                        <xs:element name="MeetingRequest"
type="t:MeetingRequestMessageType"/>
```

```
                         <xs:element name="MeetingResponse"
type="t:MeetingResponseMessageType"/>
                         <xs:element name="MeetingCancellation"
type="t:MeetingCancellationMessageType"/>
                         <xs:element name="Task" type="t:TaskType"/>
                         <xs:element name="PostItem" type="t:PostItemType"/>
                    </xs:choice>
               </xs:extension>
          </xs:complexContent>
     </xs:complexType>
     <xs:complexType name="SmartResponseBaseType">
          <xs:complexContent>
               <xs:restriction base="t:ResponseObjectType">
                    <xs:sequence>
                         <xs:element name="Subject" type="xs:string" minOccurs="0"/>
                         <xs:element name="Body" type="t:BodyType" minOccurs="0"/>
                         <xs:element name="ToRecipients" type="t:ArrayOfRecipientsType"
minOccurs="0"/>
                         <xs:element name="CcRecipients" type="t:ArrayOfRecipientsType"
minOccurs="0"/>
                         <xs:element name="BccRecipients" type="t:ArrayOfRecipientsType"
minOccurs="0"/>
                         <xs:element name="IsReadReceiptRequested" type="xs:boolean"
minOccurs="0"/>
                         <xs:element name="IsDeliveryReceiptRequested" type="xs:boolean"
minOccurs="0"/>
                         <xs:element name="From" type="t:SingleRecipientType" minOccurs="0"/>
                         <xs:element name="ReferenceItemId" type="t:ItemIdType"
minOccurs="0"/>
                    </xs:sequence>
                    <xs:attribute name="ObjectName" type="xs:string" use="prohibited"/>
               </xs:restriction>
          </xs:complexContent>
     </xs:complexType>
     <xs:complexType name="SmartResponseType">
          <xs:complexContent>
               <xs:extension base="t:SmartResponseBaseType">
                    <xs:sequence>
                         <xs:element name="NewBodyContent" type="t:BodyType" minOccurs="0"/>
                    </xs:sequence>
               </xs:extension>
          </xs:complexContent>
     </xs:complexType>
</xs:schema>
```

6.3   Messages Schema

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

MS-OXWSCORE-messages.xsd includes the file listed in the following table. To operate correctly, this file has to be present in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

File name	Defining specification
MS-OXWSCDATA-messages.xsd	[MS-OXWSCDATA] section 6.

File name	Defining specification
MS-OXWSCDATA-types.xsd	[MS-OXWSCDATA] section 6.
MS-OXWSMSG-types.xsd	[MS-OXWSMSG] section 6.

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
elementFormDefault="qualified" version="Exchange2010" id="messages">
    <!-- Import common types. -->
    <!--<xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="types.xsd"/>-->
    <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="MS-OXWSCDATA-types.xsd"/>
    <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="MS-OXWSCORE-types.xsd"/>
    <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="MS-OXWSMSG-types.xsd"/>
    <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
    <xs:complexType name="BaseMoveCopyItemType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="ToFolderId" type="t:TargetFolderIdType"/>
                    <xs:element name="ItemIds" type="t:NonEmptyArrayOfBaseItemIdsType"/>
                    <xs:element name="ReturnNewItemIds" type="xs:boolean"
minOccurs="0"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="CopyItem" type="m:CopyItemType"/>
    <xs:complexType name="CopyItemType">
        <xs:complexContent>
            <xs:extension base="m:BaseMoveCopyItemType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="CopyItemResponse" type="m:CopyItemResponseType"/>
    <xs:complexType name="CopyItemResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="CreateItemResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="CreateItemResponse" type="m:CreateItemResponseType"/>
    <xs:complexType name="CreateItemType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="SavedItemFolderId" type="t:TargetFolderIdType"
minOccurs="0"/>
```

```
                    <xs:element name="Items" type="t:NonEmptyArrayOfAllItemsType"/>
                </xs:sequence>
                <xs:attribute name="MessageDisposition" type="t:MessageDispositionType"
  use="optional"/>
                <xs:attribute name="SendMeetingInvitations"
  type="t:CalendarItemCreateOrDeleteOperationType" use="optional"/>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="CreateItem" type="m:CreateItemType"/>
    <xs:complexType name="DeleteItemType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="ItemIds" type="t:NonEmptyArrayOfBaseItemIdsType"/>
                </xs:sequence>
                <xs:attribute name="DeleteType" type="t:DisposalType" use="required"/>
                <xs:attribute name="SendMeetingCancellations"
  type="t:CalendarItemCreateOrDeleteOperationType" use="optional"/>
                <xs:attribute name="AffectedTaskOccurrences"
  type="t:AffectedTaskOccurrencesType" use="optional"/>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="DeleteItem" type="m:DeleteItemType"/>
    <xs:complexType name="DeleteItemResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="DeleteItemResponse" type="m:DeleteItemResponseType"/>
    <xs:complexType name="GetItemType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="ItemShape" type="t:ItemResponseShapeType"/>
                    <xs:element name="ItemIds" type="t:NonEmptyArrayOfBaseItemIdsType"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetItem" type="m:GetItemType"/>
    <xs:complexType name="GetItemResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetItemResponse" type="m:GetItemResponseType"/>
    <xs:complexType name="MoveItemResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="MoveItemResponse" type="m:MoveItemResponseType"/>
    <xs:complexType name="MoveItemType">
        <xs:complexContent>
            <xs:extension base="m:BaseMoveCopyItemType"/>
        </xs:complexContent>
    </xs:complexType>
```

```
<xs:element name="MoveItem" type="m:MoveItemType"/>
<xs:complexType name="SendItemResponseType">
    <xs:complexContent>
        <xs:extension base="m:BaseResponseMessageType"/>
    </xs:complexContent>
</xs:complexType>
<xs:element name="SendItemResponse" type="m:SendItemResponseType"/>
<xs:complexType name="SendItemType">
    <xs:complexContent>
        <xs:extension base="m:BaseRequestType">
            <xs:sequence>
                <xs:element name="ItemIds" type="t:NonEmptyArrayOfBaseItemIdsType"/>
                <xs:element name="SavedItemFolderId" type="t:TargetFolderIdType"
minOccurs="0"/>
            </xs:sequence>
            <xs:attribute name="SaveItemToFolder" type="xs:boolean" use="required"/>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:element name="SendItem" type="m:SendItemType"/>
<xs:complexType name="UpdateItemResponseType">
    <xs:complexContent>
        <xs:extension base="m:BaseResponseMessageType"/>
    </xs:complexContent>
</xs:complexType>
<xs:element name="UpdateItemResponse" type="m:UpdateItemResponseType"/>
<xs:complexType name="UpdateItemType">
    <xs:complexContent>
        <xs:extension base="m:BaseRequestType">
            <xs:sequence>
                <xs:element name="SavedItemFolderId" type="t:TargetFolderIdType"
minOccurs="0"/>
                <xs:element name="ItemChanges"
type="t:NonEmptyArrayOfItemChangesType"/>
            </xs:sequence>
            <xs:attribute name="ConflictResolution" type="t:ConflictResolutionType"
use="required"/>
            <xs:attribute name="MessageDisposition" type="t:MessageDispositionType"
use="optional"/>
            <xs:attribute name="SendMeetingInvitationsOrCancellations"
type="t:CalendarItemUpdateOperationType" use="optional"/>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:element name="UpdateItem" type="m:UpdateItemType"/>
<xs:complexType name="UpdateItemResponseMessageType">
    <xs:complexContent>
        <xs:extension base="m:ItemInfoResponseMessageType">
            <xs:sequence>
                <xs:element name="ConflictResults" type="t:ConflictResultsType"
minOccurs="0"/>
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
</xs:schema>
```

7   Appendix B: Product Behavior

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

- Microsoft® Exchange Server 2007

- Microsoft® Exchange Server 2010

- Microsoft® Exchange Server 2010 Service Pack 1 (SP1)

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

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

<1> Section 2.2.3.1: Exchange 2010 does not support the **ReturnNewItemIds** element.

8 Change Tracking

This section identifies changes that were made to the [MS-OXWSCORE] protocol document between the November 2010 and March 2011 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

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

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

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

- An extensive rewrite, addition, or deletion of major portions of content.

- The removal of a document from the documentation set.

- Changes made for template compliance.

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

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

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

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

- New content added.

- Content updated.

- Content removed.

- New product behavior note added.

- Product behavior note updated.

- Product behavior note removed.

- New protocol syntax added.

- Protocol syntax updated.

- Protocol syntax removed.

- New content added due to protocol revision.

- Content updated due to protocol revision.

- Content removed due to protocol revision.

- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.

- Protocol syntax removed due to protocol revision.

- New content added for template compliance.

- Content updated for template compliance.

- Content removed for template compliance.

- Obsolete document removed.

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

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

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

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

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

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
1 Introduction	Added information about which sections of the specification are normative and can contain RFC 2119 language.	Y	Content updated for template compliance.
1.4 Relationship to Other Protocols	Consolidated the HTTP and HTTPS layering diagrams.	N	Content updated.
2.2.3.1 m:BaseMoveCopyItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.2 m:SendItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.3 m:SendItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.4 m:UpdateItemResponseMessageType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.11 t:OccurrenceItemIdType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.12 t:RecurringMasterItemIdType Complex	Added information about the base class for this complex	N	Content updated.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
Type	type.		
2.2.3.13 t:ItemIdType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.13 t:ItemIdType Complex Type	Added text to the description for ID and ChangeKey to specify maximum value size.	N	Content updated.
2.2.3.14 t:ReferenceItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.15 t:SmartResponseBaseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
2.2.3.16 t:SmartResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.1.1.1 m:CopyItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.1.1.2 m:CopyItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.2.1.1 m:CreateItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.2.1.2 m:CreateItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.3.1.1 m:DeleteItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.3.1.2 m:DeleteItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.4.1.1 m:GetItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.4.1.2 m:GetItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.5.1.1 m:MoveItemResponseType Complex	Added information about the base class for this complex	N	Content updated.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
Type	type.		
3.1.4.5.1.2 m:MoveItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.6.1.1 m:SendItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.6.1.2 m:SendItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.7.2.1 m:UpdateItemResponseType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.7.2.2 m:UpdateItemType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.7.2.3 t:AppendToItemFieldType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.7.2.5 t:DeleteItemFieldType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.7.2.6 t:ItemChangeDescriptionType Complex Type	Added information about the base class for this complex type.	N	Content updated.
3.1.4.7.2.10 t:SetItemFieldType Complex Type	Added information about the base class for this complex type.	N	Content updated.
6.3 Messages Schema	Updated the name of the XSD file.	N	Content updated.
	Removed section 3.2.	N	Content updated for template compliance.

9   Index