[MS-OXWSPOST]:
Post Items Web Service Protocol

Revision Summary

Date	Revision History	Revision Class	Comments
07/15/2009	1.0	Major	Initial Availability.
11/04/2009	2.0.0	Major	Updated and revised the technical content.
02/10/2010	2.1.0	Minor	Updated the technical content.
05/05/2010	2.1.1	Editorial	Revised and edited the technical content.
08/04/2010	3.0	Major	Significantly changed the technical content.
11/03/2010	3.0	No change	No changes to the meaning, language, or formatting of the technical content.
03/18/2011	3.0	No change	No changes to the meaning, language, or formatting of the technical content.
08/05/2011	4.0	Major	Significantly changed the technical content.
10/07/2011	4.1	Minor	Clarified the meaning of the technical content.
01/20/2012	5.0	Major	Significantly changed the technical content.
04/27/2012	5.0	No change	No changes to the meaning, language, or formatting of the technical content.
07/16/2012	5.1	Minor	Clarified the meaning of the technical content.
10/08/2012	5.2	Minor	Clarified the meaning of the technical content.
02/11/2013	5.2	No change	No changes to the meaning, language, or formatting of the technical content.
07/26/2013	5.3	Minor	Clarified the meaning of the technical content.
11/18/2013	5.3	No change	No changes to the meaning, language, or formatting of the technical content.
02/10/2014	5.3	No change	No changes to the meaning, language, or formatting of the technical content.

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1 Introduction

The Post Items Web Service Protocol enables a client to create, retrieve, update, move, copy, and delete **Post objects** on the server.

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

1.1 Glossary

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

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

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

conversation
endpoint
header
message store
Post object
public folder
Uniform Resource Locator (URL)
web server
Web Services Description Language (WSDL)
WSDL message
WSDL port type
XML namespace prefix
XML schema

The following terms are specific to this document:

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

1.2 References

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

1.2.1 Normative References

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

[MS-OXDSCLI] Microsoft Corporation, "Autodiscover Publishing and Lookup Protocol".

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

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

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

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

[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

[RFC2822] Resnick, P., Ed., "Internet Message Format", STD 11, RFC 2822, April 2001, http://www.ietf.org/rfc/rfc2822.txt

[RFC850] Horton, M., "Standard for Interchange of USENET Messages", RFC 850, June 1983, http://www.rfc-editor.org/rfc/rfc850.txt

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

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

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

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

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

1.2.2 Informative References

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

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

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

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

1.3 Overview

This protocol enables clients to create, retrieve, update, move, copy, and delete Post objects on the server. Clients can use the data types and operations described by this protocol to manage post items.

1.4 Relationship to Other Protocols

A client that implements this protocol can use the Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol, as described in [MS-OXWSADISC], or the Autodiscover Publishing and Lookup

Protocol, as described in [MS-OXDSCLI], to identify the target **endpoint (4)** to use for each operation.

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

This protocol can use the item identifier(s) returned by the Mailbox Search Web Service Protocol, as described in [MS-OXWSSRCH], to access Post objects on the server.

This protocol uses operations that are described in [MS-OXWSCORE] to retrieve, delete, update, move, copy, and create Post objects on the server. For more information about these operations, see section 3.1.4.

This protocol uses SOAP over **HTTP**, as described in [RFC2616], and SOAP over **HTTPS**, as described in [RFC2818], as shown in the following layering diagram.

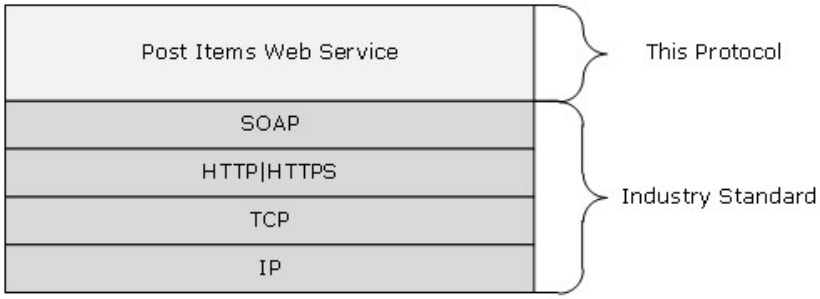

Figure 1: This protocol in relation to other protocols

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

1.5 Prerequisites/Preconditions

The endpoint (4) **Uniform Resource Locator (URL)** that is returned by either the Autodiscover Publishing Lookup SOAP-Based Web Service Protocol, as specified in [MS-OXWSADISC], or the Autodiscover Publishing and Lookup Protocol, specified in [MS-OXDSCLI], is required to form the HTTP request to the **Web server** that hosts this protocol. To retrieve the endpoint (4) as described in either the Autodiscover Publishing Lookup SOAP-Based Web Service Protocol or the Autodiscover Publishing and Lookup Protocol, the client needs to have a valid mail-enabled account. The operations that this protocol defines cannot be accessed unless the correct endpoint (4) is identified in the HTTP Web requests that target this protocol.

1.6 Applicability Statement

This protocol is applicable to client programs that create, move, copy, modify, delete, or retrieve Post objects in the server **message store**.

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 and in [SOAP1.1].

- **Protocol Versions:** This protocol specifies only one **WSDL port type** version. The **WSDL** version of the request is identified by using the RequestServerVersion element, as described in [MS-OXWSCDATA] section 2.2.3.9, and the version of the server responding to the request is identified by using the **ServerVersionInfo** element, as described in [MS-OXWSCDATA] section 2.2.3.10.
- **Security and Authentication Methods:** This protocol relies on the Web server that is hosting it to perform authentication.
- **Localization:** This protocol includes text strings in various messages. Localization considerations for such strings are specified in section 3.1.4.
- **Capability Negotiation:** This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

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

2.1 Transport

Messages are transported by using SOAP version 1.1, as specified in [SOAP1.1].

This protocol relies on the Web server that hosts the application to perform authentication. The protocol MUST support SOAP over HTTP, as specified in [RFC2616], and SHOULD support SOAP over HTTPS, as specified in [RFC2818].

2.2 Common Message Syntax

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

2.2.1 Namespaces

This specification defines and references various **XML namespace** by using the mechanisms specified in [XMLNS]. Although this specification associates a specific **XML namespace prefix** with each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and is 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	[XMLSCHEMA2]
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA2]
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
t	http://schemas.microsoft.com/exchange/services/2006/types	

2.2.2 Messages

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

2.2.3 Elements

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

2.2.4 Complex Types

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

Complex type name	Description
PostItemType	Represents a Post object in a server message store.
PostReplyItemBaseType	Represents the base type for the **PostReplyItemType** complex type.
PostReplyItemType	Contains a reply to a Post object.

2.2.4.1 t:PostItemType Complex Type

The **PostItemType** complex type represents a Post object in a server message store. The **PostItemType** complex type extends the **ItemType** complex type, as specified in [MS-OXWSCORE] section 2.2.4.22.

```
<xs:complexType name="PostItemType">
  <xs:complexContent>
    <xs:extension
      base="t:ItemType"
    >
      <xs:sequence>
        <xs:element name="ConversationIndex"
          type="xs:base64Binary"
          minOccurs="0"
         />
        <xs:element name="ConversationTopic"
          type="xs:string"
          minOccurs="0"
         />
        <xs:element name="From"
          type="t:SingleRecipientType"
          minOccurs="0"
         />
        <xs:element name="InternetMessageId"
          type="xs:string"
          minOccurs="0"
         />
        <xs:element name="IsRead"
          type="xs:boolean"
          minOccurs="0"
         />
        <xs:element name="PostedTime"
          type="xs:dateTime"
          minOccurs="0"
         />
        <xs:element name="References"
          type="xs:string"
          minOccurs="0"
         />
        <xs:element name="Sender"
          type="t:SingleRecipientType"
          minOccurs="0"
```

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

The following table lists the child elements of the PostItemType complex type.

Element name	Type	Description
ConversationIndex	**xs:base64Binary** ([XMLSCHEMA2])	Contains a binary ID that represents the thread to which this Post object belongs.
ConversationTopic	**xs:string** ([XMLSCHEMA2])	Represents the **conversation** identifier.
From	**t:SingleRecipientType** ([MS-OXWSCDATA] section 2.2.4.60)	Represents the address from which the Post object is sent, and can only be set at creation time.
InternetMessageId	**xs:string**	Represents the Internet message identifier, as specified in [RFC2822], of the Post object.
IsRead	**xs:boolean** ([XMLSCHEMA2])	Indicates whether the Post object has been read.
PostedTime	**xs:dateTime** ([XMLSCHEMA2])	Represents the time at which a Post object is posted. This element is read-only.
References	**xs:string**	Represents the USENET **header (2)**, as specified in [RFC850], that is used to associate replies with the Post object.
Sender	**t:SingleRecipientType**	Identifies the sender of the Post object, and can only be set at creation time.

2.2.4.2 t:PostReplyItemBaseType Complex Type

The **PostReplyItemBaseType** complex type is the base type for the **PostReplyItemType** type, as specified in section 2.2.4.3. The **PostReplyItemBaseType** complex type extends the **ResponseObjectType** complex type, as specified in [MS-OXWSCDATA] section 2.2.4.59.

```
<xs:complexType name="t:PostReplyItemBaseType">
  <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="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 **PostReplyItemBaseType** complex type.

Element name	Type	Description
Subject	**xs:string** ([XMLSCHEMA2])	Represents the subject of the Post object. The value of the **Subject** element is limited to 255 characters. Values larger than 255 characters are truncated to the first 252 characters. Three '.' characters are appended to the resulting truncated value.
Body	**t:BodyType** ([MS-OXWSCDATA] section 2.2.4.17)	Represents the body content of the Post object.
ReferenceItemId	**t:ItemIdType**	Identifies the Post object to which the response refers. This element MUST be present.

The following table lists the attribute of the **PostReplyItemBaseType** complex type.

Attribute name	Type	Description
ObjectName	**xs:string** ([XMLSCHEMA2])	Represents the name of an object. This name depends on the actual resource accessed.

2.2.4.3 t:PostReplyItemType Complex Type

The **PostReplyItemType** complex type contains a reply to a Post object. The **PostReplyItemType** complex type extends the **PostReplyItemBaseType** complex type, as specified in section 2.2.4.2.

```
<xs:complexType>
  <xs:complexContent>
    <xs:extension
      base="t:PostReplyItemBaseType"
    >
      <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 element of the **PostReplyItemType** complex type.

Element name	Type	Description
NewBodyContent	**t:BodyType** ([MS-OXWSCDATA] section 2.2.4.17)	Represents the new body content of a Post object.

2.2.5 Simple Types

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

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3 Protocol Details

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

3.1 ExchangeServicePortType Server Details

This protocol defines a single port type and uses six operations that are specified in [MS-OXWSCORE]. These operations enable client implementations to create, retrieve, update, move, copy, and delete Post objects on the server.

3.1.1 Abstract Data Model

None.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

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

Operation	Description
CopyItem	Copies Post objects on the server.
CreateItem	Creates Post objects on the server.
DeleteItem	Deletes Post objects on the server.
GetItem	Retrieves Post objects from the server.
MoveItem	Moves Post objects on the server.
UpdateItem	Updates Post objects on the server.

3.1.4.1 CopyItem Operation

The **CopyItem** operation copies Post objects on the server. This operation is specified in [MS-OXWSCORE] section 3.1.4.1.

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

```
<wsdl:operation name="CopyItem">
     <wsdl:input message="tns:CopyItemSoapIn" />
     <wsdl:output message="tns:CopyItemSoapOut" />
</wsdl:operation>
```

The following is the WSDL binding specification for the **CopyItem** 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>
```

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

Message name	Description
CopyItemSoapIn	The **CopyItemSoapIn** message is specified in [MS-OXWSCORE] section 3.1.4.1.1.1. It specifies the **CopyItem** operation request to copy one or more Post objects on the server. The **CopyItem** element ([MS-OXWSCORE] section 3.1.4.1.2.1) that specifies the XML request MUST contain the following child elements: **ToFolderId** ([MS-OXWSCORE] section 2.2.4.15) **ItemIds** ([MS-OXWSCORE] section 2.2.4.15) The **ItemIds** element MUST contain one or more **ItemId** child elements ([MS-OXWSCORE] section 2.2.4.27), each one having an **Id** attribute ([MS-OXWSCORE] section 2.2.4.23) that identifies a Post object. The **ItemIds** element MUST NOT contain an **OccurrenceId** child element ([MS-OXWSCORE] section 2.2.4.27) or a **RecurringMasterItemId** child element ([MS-OXWSCORE] section 2.2.4.27) in a request to copy a Post object.
CopyItemSoapOut	The **CopyItemSoapOut** message is specified in [MS-OXWSCORE] section 3.1.4.1.1.2. It specifies the server response to the **CopyItem** operation request. In the response message, the **Items** element ([MS-OXWSCDATA] section 2.2.4.37) contains one or more **PostItem** elements of type **PostItemType** (section 2.2.4.1).

The client sends a **tns:CopyItemSoapIn** request WSDL message and the server MUST respond with a **tns:CopyItemSoapOut** response WSDL message.

3.1.4.2 CreateItem Operation

The **CreateItem** operation creates Post objects on the server. This operation is specified in [MS-OXWSCORE] section 3.1.4.2.

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

```
<wsdl:operation name="CreateItem">
     <wsdl:input message="tns:CreateItemSoapIn" />
     <wsdl:output message="tns:CreateItemSoapOut" />
```

```
</wsdl:operation>
```

The following is the WSDL binding specification for the **CreateItem** 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>
```

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

Message name	Description
CreateItemSoapIn	The **CreateItemSoapIn** message is specified in [MS-OXWSCORE] section 3.1.4.1.1.1. It specifies the **CreateItem** operation request to create one or more Post objects on the server. The **Items** child element ([MS-OXWSCDATA] section 2.2.4.42) of the **CreateItem** element ([MS-OXWSCORE] section 3.1.4.2.2.1) that specifies the XML request MUST contain one or more **PostItem** elements ([MS-OXWSCDATA] section 2.2.4.42) or **PostItemReply** elements ([MS-OXWSCDATA] section 2.2.4.42).
CreateItemSoapOut	The **CreateItemSoapOut** message is specified in[MS-OXWSCORE] section 3.1.4.2.1.2. It specifies the server response to the **CreateItem** operation request. In the response message, the **Items** element ([MS-OXWSCDATA] section 2.2.4.37) contains one or more **PostItem** elements ([MS-OXWSCDATA] section 2.2.4.8).

The client sends a **tns:CreateItemSoapIn** request WSDL message and the server MUST respond with a **tns:CreateItemSoapOut** response WSDL message.

3.1.4.3 DeleteItem Operation

The **DeleteItem** operation deletes Post objects on the server. This operation is specified in [MS-OXWSCORE] section 3.1.4.3.

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

```
<wsdl:operation name="DeleteItem">
     <wsdl:input message="tns:DeleteItemSoapIn" />
     <wsdl:output message="tns:DeleteItemSoapOut" />
```

```
</wsdl:operation>
```

The following is the WSDL binding specification for the **DeleteItem** 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>
```

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

Message name	Description
DeleteItemSoapIn	The **DeleteItemSoapIn** message is specified in [MS-OXWSCORE] section 3.1.4.3.1.1. It specifies the **DeleteItem** operation request to delete one or more Post objects on the server. The **DeleteItem** element ([MS-OXWSCORE] section 3.1.4.3.2.1) that specifies the XML request MUST contain the **ItemIds** child element ([MS-OXWSCORE] section 3.1.4.3.3.2). The **ItemIds** element MUST contain one or more **ItemId** child elements ([MS-OXWSCORE] section 2.2.4.27), each one having an **Id** attribute ([MS-OXWSCORE] section 2.2.4.23) that identifies a Post object. The **ItemIds** element MUST NOT contain an **OccurrenceId** child element ([MS-OXWSCORE] section 2.2.4.27) or a **RecurringMasterItemId** child element ([MS-OXWSCORE] section 2.2.4.27) in a request to delete a Post object.
DeleteItemSoapOut	The **DeleteItemSoapOut** message is specified in [MS-OXWSCORE] section 3.1.4.3.1.2. It specifies the server response to the **DeleteItem** operation request.

The client sends a **tns:DeleteItemSoapIn** request WSDL message and the server MUST respond with a **tns:DeleteItemSoapOut** response WSDL message.

3.1.4.4 GetItem Operation

The **GetItem** operation retrieves Post objects from the server. This operation is specified in [MS-OXWSCORE] section 3.1.4.4.

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

```
<wsdl:operation name="GetItem">
     <wsdl:input message="tns:GetItemSoapIn" />
     <wsdl:output message="tns:GetItemSoapOut" />
```

```
</wsdl:operation>
```

The following is the WSDL binding specification for the **GetItem** operation.

```
<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>
```

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

Message name	Description
GetItemSoapIn	The **GetItemSoapIn** message is specified in [MS-OXWSCORE] section 3.1.4.4.1.1. It specifies the **GetItem** operation request to retrieve one or more Post objects from the server. The **GetItem** element ([MS-OXWSCORE] section 3.1.4.4.2.1) that specifies the XML request MUST contain the following child elements: **ItemShape** ([MS-OXWSCORE] section 3.1.4.4.3.2) **ItemIds** ([MS-OXWSCORE] section 3.1.4.4.3.2) The **ItemIds** element MUST contain one or more **ItemId** child elements ([MS-OXWSCORE] section 2.2.4.27), each one having an **Id** attribute ([MS-OXWSCORE] section 2.2.4.23) that identifies a Post object. The **ItemIds** element MUST NOT contain an **OccurrenceId** child element ([MS-OXWSCORE] section 2.2.4.27) or a **RecurringMasterItemId** child element ([MS-OXWSCORE] section 2.2.4.27) in a request to retrieve a Post object.
GetItemSoapOut	The **GetItemSoapOut** message is specified in [MS-OXWSCORE] section 3.1.4.4.1.2. It specifies the server response to the **GetItem** operation request. In the response message, the **Items** element ([MS-OXWSCDATA] section 2.2.4.37) contains one or more **PostItem** elements of type **PostItemType** (section 2.2.4.1).

The client sends a **tns:GetItemSoapIn** request WSDL message and the server MUST respond with a **tns:GetItemSoapOut** response WSDL message.

3.1.4.5 MoveItem Operation

The **MoveItem** operation moves Post objects on the server. This operation is specified in [MS-OXWSCORE] section 3.1.4.7.

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

```
<wsdl:operation name="MoveItem">
     <wsdl:input message="tns:MoveItemSoapIn" />
     <wsdl:output message="tns:MoveItemSoapOut" />
</wsdl:operation>
```

The following is the WSDL binding specification for the **MoveItem** 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>
```

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

Message name	Description
MoveItemSoapIn	The **MoveItemSoapIn** message is specified in [MS-OXWSCORE] section 3.1.4.7.1.1. It specifies the **MoveItem** operation request to move one or more Post objects on the server. The **MoveItem** element ([MS-OXWSCORE] section 3.1.4.7.2.1) that specifies the XML request MUST contain the following child elements: **ToFolderId** ([MS-OXWSCORE] section 2.2.4.15) **ItemIds** ([MS-OXWSCORE] section 2.2.4.15) The **ItemIds** element MUST contain one or more **ItemId** child elements ([MS-OXWSCORE] section 2.2.4.27), each one having an **Id** attribute ([MS-OXWSCORE] section 2.2.4.23) that identifies a Post object. The **ItemIds** element MUST NOT contain an **OccurrenceId** child element ([MS-OXWSCORE] section 2.2.4.27) or a **RecurringMasterItemId** child element ([MS-OXWSCORE] section 2.2.4.27) in a request to move a Post object.
MoveItemSoapOut	The **MoveItemSoapOut** message is specified in [MS-OXWSCORE] section 3.1.4.7.1.2. It specifies the server response to the **MoveItem** operation request. In the response message, the **Items** element ([MS-OXWSCDATA] section 2.2.4.37) contains one or more **PostItem** elements of type **PostItemType** (section 2.2.4.1).

The client sends a **tns:MoveItemSoapIn** request WSDL message and the server MUST respond with a **tns:MoveItemSoapOut** response WSDL message.

3.1.4.6 UpdateItem Operation

The **UpdateItem** operation updates Post objects on the server. This operation is specified in [MS-OXWSCORE] section 3.1.4.9.

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

```
<wsdl:operation name="UpdateItem">
     <wsdl:input message="tns:UpdateItemSoapIn" />
     <wsdl:output message="tns:UpdateItemSoapOut" />
</wsdl:operation>
```

The following is the WSDL binding specification for the **UpdateItem** 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>
```

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

Message name	Description
UpdateItemSoapIn	The **UpdateItemSoapIn** message is specified in [MS-OXWSCORE] section 3.1.4.9.1.1. It specifies the **UpdateItem** operation request to update one or more Post objects on the server. The **UpdateItem** element ([MS-OXWSCORE] section 3.1.4.9.2.1) that specifies the XML request MUST contain an **ItemChanges** element ([MS-OXWSCORE] section 3.1.4.9.3.2) that contains one or more **ItemChange** elements ([MS-OXWSCORE] section 3.1.4.9.3.9). Each **ItemChange** element MUST contain an **ItemId** child element ([MS-OXWSCORE] section 3.1.4.9.3.7) with an **Id** attribute ([MS-OXWSCORE] section 2.2.4.23) that identifies the Post object. An **ItemChange** element MUST NOT contain an **OccurrenceId** child element ([MS-OXWSCORE] section 3.1.4.9.3.7) or a **RecurringMasterItemId** child element ([MS-OXWSCORE] section 3.1.4.9.3.7) for a change to a Post object. Each **AppendToField** element ([MS-OXWSCORE] section 3.1.4.9.3.8) and **SetItemField** element ([MS-OXWSCORE] section 3.1.4.9.3.8) in the request MUST contain a **PostItem** element of type **PostItemType** (section 2.2.4.1).
UpdateItemSoapOut	The **UpdateItemSoapOut** message is specified in [MS-OXWSCORE] section 3.1.4.9.1.2. It specifies the server response to the **UpdateItem** operation request. In the response message, the **Items** element ([MS-OXWSCDATA] section 2.2.4.37) contains one or more **PostItem** elements of type **PostItemType**.

The client sends a **tns:UpdateItemSoapIn** request WSDL message and the server MUST respond with a **tns:UpdateItemSoapOut** response WSDL message.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

In the following examples, Jason Carlson is using a protocol client to manage Post objects in a **public folder** named "Announcements". Jason's company holds a company-wide meeting every three months, and Jason wants to announce the dates for the meetings in this public folder.

4.1 Copying a Post Object

In this scenario, Jason wants to create a copy of the Post object that he created for the July 22 meeting so that he can later modify it to announce the next company meeting on October 21.

The following is the client request to copy the Post object.

```
<?xml version="1.0" encoding="utf-16"?>
<CopyItemType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ToFolderId xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <FolderId Id="AQEuAAADGkRzkKpmEc2byACqAC/EWgMAtzciqtvmvEOGtSfqReMVLgABEfqapwAAAA=="
ChangeKey="AQAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+pqp"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </ToFolderId>
  <ItemIds xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+py4"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </ItemIds>
  <ReturnNewItemIds
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">true</ReturnNewItemIds>
</CopyItemType>
```

The following is the server response.

```
<?xml version="1.0" encoding="utf-16"?>
<CopyItemResponseType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ResponseMessages xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <CopyItemResponseMessage ResponseClass="Success">
      <ResponseCode>NoError</ResponseCode>
      <Items>
        <PostItem xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
          <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqzAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAAA==" />
        </PostItem>
      </Items>
    </CopyItemResponseMessage>
  </ResponseMessages>
</CopyItemResponseType>
```

4.2 Creating a Post Object

In this scenario, Jason wants to create a new Post object to announce the upcoming company meeting on July 22.

The following is the client request to create a new Post object.

```
<?xml version="1.0" encoding="utf-16"?>
<CreateItemType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" MessageDisposition="SaveOnly">
  <SavedItemFolderId xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <FolderId Id="AQEuAAADGkRzkKpmEc2byACqAC/EWgMAtzciqtvmvEOGtSfqReMVLgABEfqapwAAAA=="
ChangeKey="AQAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+pqp"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </SavedItemFolderId>
  <Items xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <PostItem xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
      <Subject>Company meeting scheduled for July 22</Subject>
      <Body BodyType="HTML">Please see www.contoso.com/companymeeting for full
details.</Body>
      <From>
        <Mailbox>
          <EmailAddress>jason@contoso.com</EmailAddress>
        </Mailbox>
      </From>
    </PostItem>
  </Items>
</CreateItemType>
```

The following is the server response.

```
<?xml version="1.0" encoding="utf-16"?>
<CreateItemResponseType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ResponseMessages xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <CreateItemResponseMessage ResponseClass="Success">
      <ResponseCode>NoError</ResponseCode>
      <Items>
        <PostItem xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
          <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+py4" />
        </PostItem>
      </Items>
    </CreateItemResponseMessage>
  </ResponseMessages>
</CreateItemResponseType>
```

4.3 Deleting a Post Object

In this scenario, Jason wants to delete the Post object from the "Archive" public folder.

The following is the client request to delete the Post object.

```
<?xml version="1.0" encoding="utf-16"?>
<DeleteItemType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" DeleteType="HardDelete">
  <ItemIds xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6nq4AAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+p7GAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6nq4AAAA="
```

```
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+qDG"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </ItemIds>
</DeleteItemType>
```

The following is the server response.

```
<?xml version="1.0" encoding="utf-16"?>
<DeleteItemResponseType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ResponseMessages xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <DeleteItemResponseMessage ResponseClass="Success">
      <ResponseCode>NoError</ResponseCode>
    </DeleteItemResponseMessage>
  </ResponseMessages>
</DeleteItemResponseType>
```

4.4 Moving a Post Object

In this scenario, Jason wants to move the Post object announcing the July 22 meeting to a public folder named "Archive".

The following is the client request to move the Post object.

```
<?xml version="1.0" encoding="utf-16"?>
<MoveItemType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ToFolderId xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <FolderId Id="AQEuAAADGkRzkKpmEc2byACqAC/EWgMAtzciqtvmvEOGtSfqReMVLgABEfqergAAAA=="
ChangeKey="AQAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+p6w"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </ToFolderId>
  <ItemIds xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+py6"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </ItemIds>
  <ReturnNewItemIds
xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">true</ReturnNewItemIds>
</MoveItemType>
```

The following is the server response.

```
<?xml version="1.0" encoding="utf-16"?>
<MoveItemResponseType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ResponseMessages xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <MoveItemResponseMessage ResponseClass="Success">
      <ResponseCode>NoError</ResponseCode>
      <Items>
        <PostItem xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
          <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6nq4AAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+p7GAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6nq4AAAA="
ChangeKey="FgAAAA==" />
```

```
        </PostItem>
      </Items>
    </MoveItemResponseMessage>
  </ResponseMessages>
</MoveItemResponseType>
```

4.5 Retrieving a Post Object

In this scenario, Jason wants to view the new Post object that he just created to make sure that there are no errors.

The following is the client request to retrieve the Post object from the server.

```
<?xml version="1.0" encoding="utf-16"?>
<GetItemType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ItemShape xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <BaseShape
xmlns="http://schemas.microsoft.com/exchange/services/2006/types">Default</BaseShape>
  </ItemShape>
  <ItemIds xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+py4"
xmlns="http://schemas.microsoft.com/exchange/services/2006/types" />
  </ItemIds>
</GetItemType>
```

The following is the server response.

```
<?xml version="1.0" encoding="utf-16"?>
<GetItemResponseType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ResponseMessages xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <GetItemResponseMessage ResponseClass="Success">
      <ResponseCode>NoError</ResponseCode>
      <Items>
        <PostItem xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
          <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+py4" />
          <Subject>Company meeting scheduled for July 22</Subject>
          <HasAttachments>false</HasAttachments>
          <ConversationIndex>AcxcN9djfXVXymjrQSGXSyVFdhtJJA==</ConversationIndex>
          <ConversationTopic>Company meeting scheduled for July 22</ConversationTopic>
          <From>
            <Mailbox>
              <Name>Jason Carlson</Name>
              <EmailAddress>jason@contoso.com</EmailAddress>
              <RoutingType>SMTP</RoutingType>
              <MailboxType>Mailbox</MailboxType>
            </Mailbox>
          </From>
```

```
<InternetMessageId>&lt;B73722AADBE6BC4386B527EA45E3152E0111FA9EBE@E14MBX.contoso.com&gt;</Int
ernetMessageId>
          <PostedTime>2011-08-16T17:13:39Z</PostedTime>
          <Sender>
            <Mailbox>
              <Name>Jason Carlson</Name>
              <EmailAddress>jason@contoso.com</EmailAddress>
              <RoutingType>SMTP</RoutingType>
              <MailboxType>Mailbox</MailboxType>
            </Mailbox>
          </Sender>
        </PostItem>
      </Items>
    </GetItemResponseMessage>
  </ResponseMessages>
</GetItemResponseType>
```

4.6 Updating a Post Object

In this scenario, Jason wants to update the copy of the original Post object that was created in the example in section 4.1 to announce the next company meeting on October 21.

The following is the client request to update the Post object.

```
<?xml version="1.0" encoding="utf-16"?>
<UpdateItemType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" ConflictResolution="AlwaysOverwrite">
  <ItemChanges xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <ItemChange xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
      <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1J+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1J+pF4xUuAAER+py4" />
      <Updates>
        <SetItemField>
          <FieldURI FieldURI="item:Subject" />
          <PostItem>
            <Subject>Company meeting scheduled for October 21</Subject>
          </PostItem>
        </SetItemField>
      </Updates>
    </ItemChange>
  </ItemChanges>
</UpdateItemType>
```

The following is the server response.

```
<?xml version="1.0" encoding="utf-16"?>
<UpdateItemResponseType xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ResponseMessages xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <UpdateItemResponseMessage ResponseClass="Success">
      <ResponseCode>NoError</ResponseCode>
      <Items>
        <PostItem xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
```

```
          <ItemId
Id="AQIARgAAAxpEc5CqZhHNm8gAqgAvxFoJALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAC3NyKq2+a8Q4a1aJ+pF4xUuA
AER+pqyAAAALgAAAxpEc5CqZhHNm8gAqgAvxFoDALc3Iqrb5rxDhrUn6kXjFS4AARH6mqcAAAA="
ChangeKey="FgAAABYAAAC3NyKq2+a8Q4a1aJ+pF4xUuAAER+py6" />
        </PostItem>
      </Items>
      <ConflictResults>
        <Count xmlns="http://schemas.microsoft.com/exchange/services/2006/types">0</Count>
      </ConflictResults>
    </UpdateItemResponseMessage>
  </ResponseMessages>
</UpdateItemResponseType>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

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

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

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

This section contains the contents of the MS-OXWSPOST.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="Exchange2013"
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"/>
      <xs:include schemaLocation="MS-OXWSCORE-messages.xsd"/>
      <!-- Add global elements and types from messages.xsd -->
    </xs:schema>
    <xs:schema id="types" elementFormDefault="qualified" version="Exchange2013"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns="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>
```

7 Appendix B: Full XML Schema

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

Schema name	Prefix	Section
Messages schema	m:	[MS-OXWSCORE] section 7.1
Types schema	t:	7.2

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

7.1 Messages Schema

This protocol uses the XML schema message definitions in MS-OXWSCORE-messages.xsd, as described in [MS-OXWSCORE] section 7.1.

7.2 Types Schema

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

MS-OXWSPOST-types.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-OXWSCORE-types.xsd	[MS-OXWSCORE] section 7.2

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
elementFormDefault="qualified" version="Exchange2013" id="types">
  <xs:import namespace="http://www.w3.org/XML/1998/namespace"/>
<xs:include schemaLocation="MS-OXWSCORE-types.xsd"/>


  <xs:complexType name="PostItemType">
    <xs:complexContent>
      <xs:extension base="t:ItemType">
        <xs:sequence>
          <xs:element name="ConversationIndex" type="xs:base64Binary" minOccurs="0"/>
          <xs:element name="ConversationTopic" type="xs:string" minOccurs="0"/>
          <!-- From property can only be set at creation time -->
          <xs:element name="From" type="t:SingleRecipientType" minOccurs="0"/>
          <xs:element name="InternetMessageId" type="xs:string" minOccurs="0"/>
          <xs:element name="IsRead" type="xs:boolean" minOccurs="0" />
          <!-- PostedTime is read only -->
          <xs:element name="PostedTime" type="xs:dateTime" minOccurs="0"/>
          <xs:element name="References" type="xs:string" minOccurs="0" />
          <!-- Sender can only be set at creation time -->
```

```
          <xs:element name="Sender" type="t:SingleRecipientType" minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>

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

8 Appendix C: Product Behavior

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

- Microsoft Exchange Server 2007 Service Pack 1 (SP1)
- Microsoft Exchange Server 2010
- Microsoft Exchange Server 2013

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

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

9 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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