[MS-OXWSPOST]:
Post Items Web Service Protocol Specification

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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.

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1 Introduction

This document specifies the Post Items Web Service protocol.

1.1 Glossary

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

folder
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
message
SOAP body
SOAP fault
SOAP header
SOAP message
store
Web Services Description Language (WSDL)
WSDL message
WSDL port type
XML
XML namespace
XML schema

The following terms are specific to this document:

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

1.2 References

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site, http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624, as an additional source.

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

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

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

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", W3C Note, May 2000, http://www.w3.org/TR/2000/NOTE-SOAP-20000508/

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

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

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

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

1.2.2 Informative References

None.

1.3 Overview

The Post Item Web Service protocol provides clients with the ability to send items from the server.

1.4 Relationship to Other Protocols

This protocol uses SOAP over **HTTP** and SOAP over **HTTPS**, as shown in the following figures.

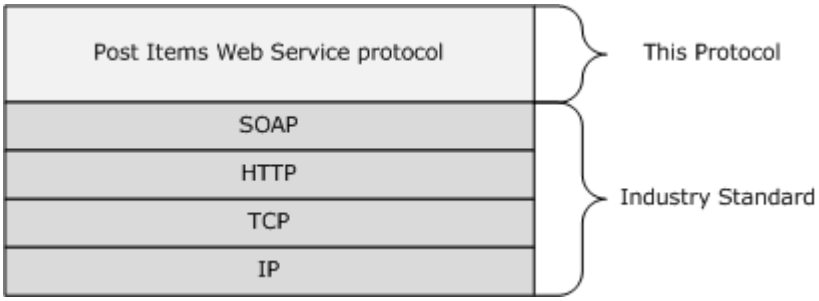

Figure 1: SOAP over HTTP

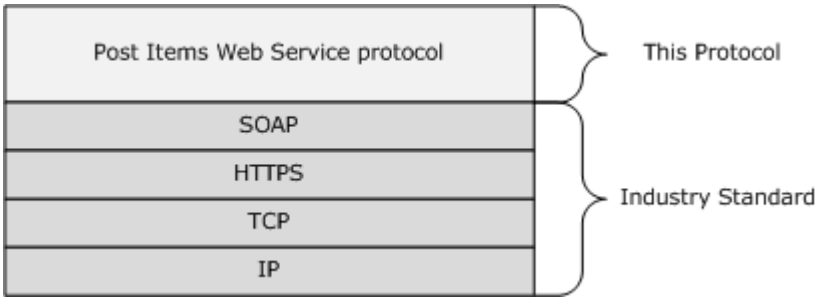

Figure 2: SOAP over HTTPS

1.5 Prerequisites/Preconditions

None.

1.6 Applicability Statement

This protocol is applicable to client programs that create, update, manage, or send post items in the server data **store**.

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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.

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2 Messages

2.1 Transport

The SOAP version supported is SOAP 1.1, as specified in [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 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	[MS-OXWSPOST]
s	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1]
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
t	http://schemas.microsoft.com/exchange/services/2006/types	[MS-OXWSPOST]
targetNamespace	http://schemas.microsoft.com/exchange/services/2006/messages	[MS-OXWSPOST]

2.2.2 Simple Types

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

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	Description
t:PostItemType	Represents a post item in a server store.
t:PostReplyItemBaseType	Represents the base class for the **PostReplyItemType** class.
t:PostReplyItemType	Contains a reply to a post item.

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2.2.3.1 t:PostItemType Complex Type

The **PostItemType** complex type represents a post item in a message server store.

```
<xs:complexType name="PostItemType">
  <xs:complexContent>
    <xs:extension
      base="t:ItemType"
    >
      <xs:sequence
        minOccurs="0"
      >
        <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>
```

Child Elements

Element	Type	Description
ConversationIndex	xs:base64Binary	Contains a binary ID that represents the thread to which this message belongs.

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Element	Type	Description
ConversationTopic	xs:string	Represents the conversation identifier.
From	t:SingleRecipientType	Represents the address from which the message was sent, and can only be set at creation time.
InternetMessageId	xs:string	Represents the Internet message identifier of an item.
IsRead	xs:boolean	Indicates whether a message has been read.
PostedTime	xs:dateTime	Represents the time at which a <PostItem> was posted. This element is read-only.
References	xs:string	Represents the Usenet header that is used to associate replies with the original message.
Sender	**t:SingleRecipientType**	Identifies the sender of an item, and can only be set at creation time.

2.2.3.2 t:PostReplyItemBaseType Complex Type

The **PostReplyItemBaseType** complex type is the base type for the **PostReplyItemType** type.

```
<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:BodyType"
          minOccurs="0"
         />
      </xs:sequence>
      <xs:attribute name="ObjectName"
        type="xs:string"
        use="prohibited"
       />
    </xs:restriction>
  </xs:complexContent>
</xs:complexType>
```

Child Elements

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Element	Type	Description
Subject	xs:string	Represents the subject property of sever store items. The <Subject> is limited to 255 characters.
Body	t:BodyType	Represents the actual body content of a message.
ReferenceItemId	t:BodyType	Identifies the item to which the response object refers.

Attributes

Name	Type	Description
ObjectName	xs:string	The name of an object; this name depends on the actual resource accessed.

2.2.3.3 t:PostReplyItemType Complex Type

The **PostReplyItemType** complex type contains a reply to a post item.

```
<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>
```

Child Elements

Element	Type	Description
NewBodyContent	t:BodyType	Represents the new body content of a message.

2.2.4 Elements

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

2.2.5 Attributes

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

2.2.6 Groups

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

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2.2.7 Attribute Groups

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

2.2.8 Message Syntax

This specification does not define any common XML schema message syntax definitions.

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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.

Operation	Description
GetItem	Defines a request to get an item from a **mailbox** in the server.
SendItem	Defines a request to send an item from a mailbox in the server.
DeleteItem	Defines a request to delete an item from a mailbox in the server.
UpdateItem	Defines a request to update an item in a mailbox.
MoveItem	Defines a request to move an item in the server.
CopyItem	Defines a request to copy an item in a mailbox in the server.
CreateItem	Defines a request to create an item in the server.

3.1.1 Abstract Data Model

This protocol is a stateless protocol.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing

This protocol includes the operations listed in the following table.

Operation	Description
GetItem	Gets items in the server.
SendItem	Sends items in the server.
DeleteItem	Deletes items in the server.
UpdateItem	Updates items in the server.
MoveItem	Moves items in the server.
CopyItem	Copies items in the server.
CreateItem	Creates items in the server.

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3.1.4.1 GetItem

This protocol uses the **GetItem** operation specified in [MS-OXWSCORE] section 3.1.4.4 to get post item elements.

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

Request

Message Format	Description
tns:GetItemSoapIn	Specifies the **SOAP message** that defines the post item to get. The **Items** child element of the **GetItem** child element that specifies the XML request MUST contain the following elements: **t:ItemResponseShapeType**, **t:ItemIdType**. All other elements MUST be empty.

Response

Message Format	Description
tns:GetItemSoapOut	Specifies the SOAP message returned by the server in response. The server returns a **t:ItemResponseShapeType** element that contains properties associated with the post item.

3.1.4.2 SendItem

This protocol uses the **SendItem** operation specified in [MS-OXWSCORE] section 3.1.4.6 to send post item elements.

```
<wsdl:operation name="SendItem">
          <wsdl:input message="tns:SendItemSoapIn" />
          <wsdl:output message="tns:SendItemSoapOut" />
      </wsdl:operation>
```

Request

Message Format	Description
tns:SendItemSoapIn	Specifies the SOAP message that defines the post item to send. The **Items** child element of the **SendItem** child element that specifies the XML request MUST contain the following elements: **t:TargetFolderIdType**, and **t:ItemIdType**. If the post item is a recurring calendar item, then **t:OccurrenceItemIdType**, and **t:RecurringMasterItemIdType** SHOULD be included. All other elements MUST be empty.

Response

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Message Format	Description
tns:SendItemSoapOut	Specifies the SOAP message returned by the server in response.

3.1.4.3 DeleteItem

This protocol uses the **DeleteItem** operation specified in [MS-OXWSCORE] section 3.1.4.3 to delete post item elements.

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

Request

Message Format	Description
tns:DeleteItemSoapIn	Specifies the SOAP message that defines the post item to delete. The Items child element of the DeleteItem child element that specifies the XML request MUST contain one or more t:ItemIdType elements. All other elements MUST be empty.

Response

Message Format	Description
tns:DeleteItemSoapOut	Specifies the SOAP message returned by the server in response.

3.1.4.4 UpdateItem

This protocol uses the **UpdateItem** operation specified in [MS-OXWSCORE] section 3.1.4.7 to update post item elements.

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

Request

Message Format	Description
tns:UpdateItemSoapIn	Specifies the SOAP message that defines the post item to update. The Items child element of the CreateItem child element that specifies the XML request MUST contain one or more elements of the following types: t:PostItemType, or t:PostReplyItemType. All other elements MUST be empty.

Response

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Message Format	Description
tns:UpdateItemSoapOut	Specifies the SOAP message returned by the server in response.

3.1.4.5 MoveItem

This protocol uses the **MoveItem** operation specified in [MS-OXWSCORE] section 3.1.4.1 to move post item elements.

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

Request

Message Format	Description
tns:MoveItemSoapIn	Specifies the SOAP message that defines the post item to move. The **Items** child element of the **MoveItem** child element that specifies the XML request MUST contain the following elements: **t:TargetFolderIdType**, and **t:ItemIdType**. All other elements MUST be empty.

Response

Message Format	Description
tns:MoveItemSoapOut	Specifies the SOAP message returned by the server in response.

3.1.4.6 CopyItem

This protocol uses the **CopyItem** operation specified in [MS-OXWSCORE] section 3.1.4.1 to copy post item elements.

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

Request

Message Format	Description
tns:CopyItemSoapIn	Specifies the SOAP message that defines the post item to copy. The **Items** child element of the **CopyItem** child element that specifies the XML request MUST contain the following elements: **t:TargetFolderIdType**, and **t:ItemIdType**. All other elements MUST be empty.

Response

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Message Format	Description
tns:CopyItemSoapOut	Specifies the SOAP message returned by the server in response.

3.1.4.7 Create Item

This protocol uses the **CreateItem** operation specified in [MS-OXWSCORE] section 3.1.4.2 to create post item elements.

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

Request

Message Format	Description
tns:CreateItemSoapIn	Specifies the SOAP message that defines the contact item to create. The **Items** child element of the **CreateItem** child element that specifies the XML request MUST contain one or more elements of the following types: **t:PostItemType**, or **t:PostReplyItemType**. All other elements MUST be empty.

Response

Message Format	Description
tns:CreateItemSoapOut	Specifies the SOAP message returned by the server in response.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

3.2 Client 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.

3.2.1 Client Abstract Data Model

None.

3.2.2 Client Timers

None.

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3.2.3 Client Initialization

None.

3.2.4 Client Message Processing Events and Sequencing

None.

3.2.5 Client Timer Events

None.

3.2.6 Client Other Local Events

None.

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4 Protocol Examples

None.

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5 Security

5.1 Security Considerations for Implementers

This protocol does not use additional security mechanisms.

5.2 Index of Security Parameters

None.

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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-OXWSPOST.wsdl	Contains the WSDL for the implementation of this protocol.	6.1
MS-OXWSPost-types.xsd	Contains the XML schema type definitions that are used in this protocol.	6.2
MS-OXWSPOST-messages.xsd	Contains the XML schema message definitions that are used in this protocol.	6.3

These files need 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-OXWSPOST-messages.xsd schemas need to be placed in the common folder with these files.

6.1 WSDL

This section contains the content of the MS-OXWSPOST.wsdl file and information about additional files that this WSDL file requires to operate correctly.

For MS-OXWSPOST.wsdl to operate correctly the file shown in the following table MUST be present in the folder that contains the WSDL, types schema and messages schema files for this protocol.

Defining specification	File name
[MS-OXWSCORE], section 6.3	MS-OXWSCORE-messages.xsd

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="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"/>
               <xs:include schemaLocation="MS-OXWSCORE-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"/>
```


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```
                <!-- 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="SendItem">
                <wsdl:input message="tns:SendItemSoapIn"/>
                <wsdl:output message="tns:SendItemSoapOut"/>
            </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>
```


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```
          <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="SendItem">
               <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/SendItem"/>
```


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```
                <wsdl:input>
                     <soap:header message="tns:SendItemSoapIn" part="Impersonation"
use="literal"/>
                     <soap:header message="tns:SendItemSoapIn" part="MailboxCulture"
use="literal"/>
                     <soap:header message="tns:SendItemSoapIn" part="RequestVersion"
use="literal"/>
                     <soap:body parts="request" use="literal"/>
                </wsdl:input>
                <wsdl:output>
                     <soap:body parts="SendItemResult" use="literal"/>
                     <soap:header message="tns:SendItemSoapOut" 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">
```


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```
        <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="SendItemSoapIn">
        <wsdl:part name="request" element="tns:SendItem"/>
        <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="SendItemSoapOut">
        <wsdl:part name="SendItemResult" element="tns:SendItemResponse"/>
        <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"/>
```


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```
        <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-OXWSPOST-types.xsd file and information about additional files that this schema file requires to operate correctly.

For MS-OXWSPOST-types.xsd to operate correctly the file shown in the following table needs to be present in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

Defining specification	File name
[MS-OXWSCORE], section 6.2	MS-OXWSCORE-types.xsd

MS-OXWSPOST-types.xsd file:

```
<?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-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>
```


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```
      </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>
```

6.3 Messages Schema

No messages schema file is specified for this protocol.

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7 Appendix B: Product Behavior

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

- Microsoft® Exchange Server 2010

Exceptions, if any, are noted below. If a service pack number appears with the product version, behavior changed in that service pack. The new behavior also applies to subsequent service packs of the product unless otherwise specified.

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

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8 Change Tracking

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

Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- A protocol is deprecated.
- The removal of a document from the documentation set.
- Changes made for template compliance.

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

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

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

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

- New content added.
- Content update.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.
- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.

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- Content removed for template compliance.
- Obsolete document removed.

Editorial changes always have the revision type "Editorially updated."

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

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

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

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

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

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