

[MS-OXWSUSRCFG]: User Configuration 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	1.0.1	Editorial	Revised and edited the technical content.
02/10/2010	1.2.0	Minor	Updated the technical content.
05/05/2010	1.2.1	Editorial	Revised and edited the technical content.
08/04/2010	1.3	Minor	Clarified the meaning of the technical content.
11/03/2010	1.3	No change	No changes to the meaning, language, or formatting of the technical content.
03/18/2011	2.0	Major	Significantly changed the technical content.
08/05/2011	3.0	Major	Significantly changed the technical content.
10/07/2011	3.0	No change	No changes to the meaning, language, or formatting of the technical content.
01/20/2012	4.0	Major	Significantly changed the technical content.

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1 Introduction

The User Configuration Web Service Protocol is used to access user configuration objects. Clients use the SOAP Protocol, as described in [\[SOAP1.1\]](#), to contact the user configuration service.

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

1.1 Glossary

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

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

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

endpoint
folder associated information (FAI)
mailbox
SOAP action
SOAP body
SOAP header
SOAP message
Web Services Description Language (WSDL)
WSDL message
WSDL port type
XML namespace
XML schema

The following terms are specific to this document:

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

1.2 References

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

1.2.1 Normative References

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

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

[MS-OXWSCORE] Microsoft Corporation, "[Core Items Web Service Protocol Specification](#)".

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

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

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

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

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

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

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

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

1.2.2 Informative References

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

[MS-OXDCLI] Microsoft Corporation, "[Autodiscover Publishing and Lookup Protocol Specification](#)".

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

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

[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>

1.3 Overview

The User Configuration Web Service Protocol specifies the messages that are used to create, delete, get, and update user configuration objects, also known as **folder associated information (FAI)**.

The following figure shows the User Configuration Web Service Protocol request and response messages.

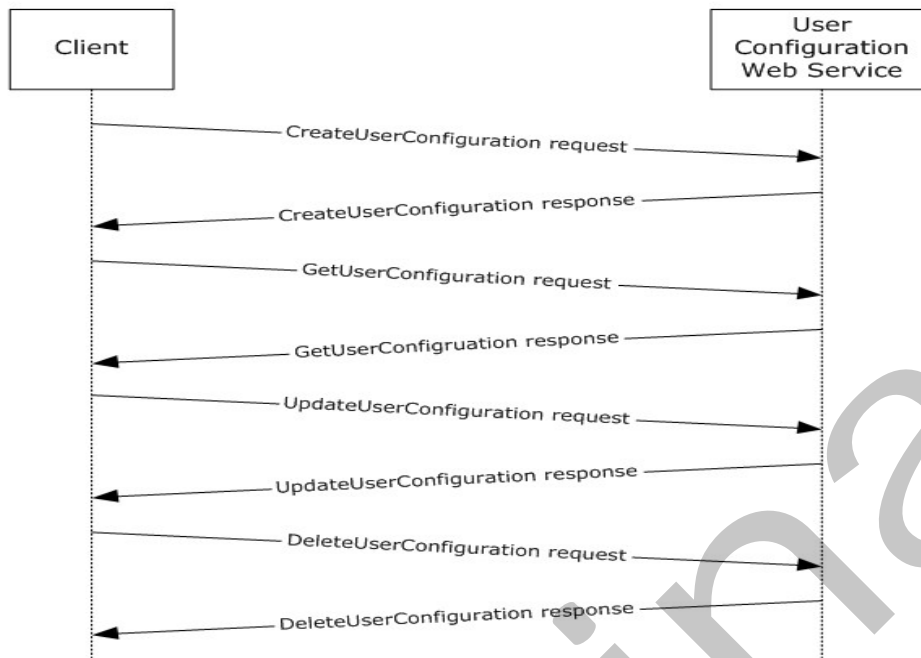


Figure 1: User Configuration Web Service Protocol request and response messages

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 uses SOAP over **HTTP**, as described in [\[RFC2616\]](#), and SOAP over **HTTPS**, as described in [\[RFC2818\]](#), as shown in the following layering diagram.

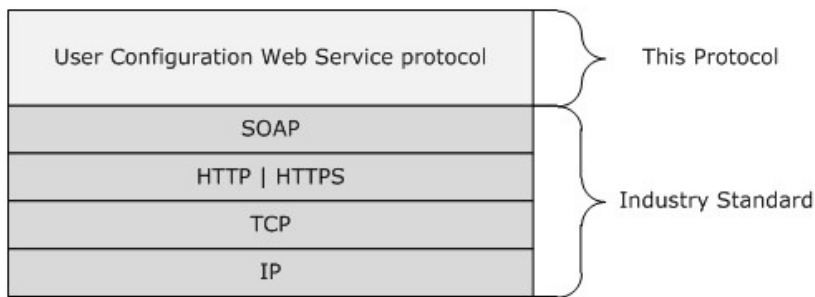


Figure 2: User Configuration Web Service Protocol HTTP stack

1.5 Prerequisites/Preconditions

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

1.6 Applicability Statement

The protocol specified in this document is applicable to environments that create, delete, get, or update folder associated information (FAI).

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses SOAP 1.1, as specified in section [2.1](#).
- **Protocol Versions:** This protocol specifies only one **WSDL port type** version. The **WSDL** version of the request is identified by using the **t:RequestServerVersion** element, as described in [\[MS-OXWSCDATA\]](#) section 2.2.4.9, and the version of the server responding to the request is identified by using the **t:ServerVersionInfo** element, as described in [\[MS-OXWSCDATA\]](#) section 2.2.4.10.
- **Security and Authentication Methods:** This protocol relies on the Web server that is hosting it to perform authentication.
- **Capability Negotiation:** This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

This protocol consists of extensible fields. The applicable property types for extended fields are specified in section [2.2.5.2](#).

1.9 Standards Assignments

None.

2 Messages

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

2.1 Transport

The SOAP version supported is SOAP 1.1. For details, see [\[SOAP1.1\]](#).

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

2.2 Common Message Syntax

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

2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
m	http://schemas.microsoft.com/exchange/services/2006/messages	
t	http://schemas.microsoft.com/exchange/services/2006/types	
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1]
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
tns	http://schemas.microsoft.com/exchange/services/2006/messages	
targetNamespace	http://schemas.microsoft.com/exchange/services/2006/messages	

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 that are defined by this specification. XML schema complex type definitions that are specific to a particular operation are defined with the operation.

Complex type name	Description
UserConfigurationDictionaryEntryType	Specifies the contents of a single dictionary entry property.
UserConfigurationDictionaryObjectType	Specifies a dictionary object.
UserConfigurationDictionaryType	Specifies a set of dictionary properties.
UserConfigurationNameType	Specifies the name and the associated folder for a user configuration object.
UserConfigurationType	Specifies a single user configuration object.

2.2.4.1 t:UserConfigurationDictionaryEntryType Complex Type

The **UserConfigurationDictionaryEntryType** complex type specifies the contents of a single dictionary entry property.

```
<xs:complexType name="UserConfigurationDictionaryEntryType">
  <xs:sequence>
    <xs:element name="DictionaryKey"
      type="t:UserConfigurationDictionaryObjectType"
    />
    <xs:element name="DictionaryValue"
      type="t:UserConfigurationDictionaryObjectType"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
DictionaryKey	t:UserConfigurationDictionaryObjectType (section 2.2.4.2)	Specifies the dictionary key for a dictionary property.
DictionaryValue	t:UserConfigurationDictionaryObjectType (section 2.2.4.2)	Specifies the dictionary value for a dictionary property.

2.2.4.2 t:UserConfigurationDictionaryObjectType Complex Type

The **UserConfigurationDictionaryObjectType** complex type specifies a dictionary object.

```
<xs:complexType name="UserConfigurationDictionaryObjectType">
  <xs:sequence>
    <xs:element name="Type"
```

```

        type="t:UserConfigurationDictionaryObjectTypesType"
      />
    <xs:element name="Value"
      type="xs:string"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

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

Element name	Type	Description
Type	t:UserConfigurationDictionaryObjectTypesType (section 2.2.5.1)	Specifies the dictionary object type.
Value	xs:string ([XMLSCHEMA2])	Specifies the dictionary object value as a string.

2.2.4.3 t:UserConfigurationDictionaryType Complex Type

The **UserConfigurationDictionaryType** complex type specifies a set of dictionary properties.

```

<xs:complexType name="UserConfigurationDictionaryType">
  <xs:sequence>
    <xs:element name="DictionaryEntry"
      type="t:UserConfigurationDictionaryEntryType"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

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

Element	Type
DictionaryEntry	t:UserConfigurationDictionaryEntryType (section 2.2.4.1)

2.2.4.4 t:UserConfigurationNameType Complex Type

The **UserConfigurationNameType** complex type specifies the name and the associated folder for a user configuration object.

```

<xs:complexType name="UserConfigurationNameType">
  <xs:complexContent>
    <xs:extension
      base="t:TargetFolderIdType"
    />
  >

```

```

    <xs:attribute name="Name"
      type="t:NonEmptyStringType"
      use="required"
    />
  </xs:extension>
</xs:complexContent>
</xs:complexType>

```

The following table lists and describes the attributes of the **UserConfigurationNameType** complex type.

Attribute name	Type	Description
Name	t:NonEmptyStringType (section 2.2.2.19)	Specifies the name of a user configuration object.

2.2.4.5 t:UserConfigurationType Complex Type

The **UserConfigurationType** complex types specifies a single user configuration object.

```

<xs:complexType name="UserConfigurationType">
  <xs:sequence>
    <xs:element name="UserConfigurationName"
      type="t:UserConfigurationNameType"
    />
    <xs:element name="ItemId"
      type="t:ItemIdType"
      minOccurs="0"
    />
    <xs:element name="Dictionary"
      type="t:UserConfigurationDictionaryType"
      minOccurs="0"
    />
    <xs:element name="XmlData"
      type="xs:base64Binary"
      minOccurs="0"
    />
    <xs:element name="BinaryData"
      type="xs:base64Binary"
      minOccurs="0"
    />
  </xs:sequence>
</xs:complexType>

```

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

Element name	Type	Description
UserConfigurationName	t:UserConfigurationNameType (section 2.2.4.4)	Specifies the user configuration object name. The user configuration object name

Element name	Type	Description
		MUST be present.
ItemId	t:ItemIdType ([MS-OXWSCORE] section 2.2.4.15)	Specifies the user configuration object item identifier.
Dictionary	t:UserConfigurationDictionaryType (section 2.2.4.3)	Specifies a set of dictionary property entries.
XmlData	xs:base64Binary ([XMLSCHEMA2])	Specifies XML data property content.
BinaryData	xs:base64Binary ([XMLSCHEMA2])	Specifies binary data property content.

2.2.5 Simple Types

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

Simple type name	Description
UserConfigurationDictionaryObjectTypesType	Specifies the data type for a user configuration object dictionary property.
UserConfigurationPropertyType	Specifies the property types to get in a GetUserConfiguration operation, as specified in section 3.1.4.3 .

2.2.5.1 t:UserConfigurationDictionaryObjectTypesType Simple Type

The **UserConfigurationDictionaryObjectTypesType** simple type specifies the data type for a user configuration object dictionary property.

```
<xs:simpleType name="UserConfigurationDictionaryObjectTypesType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="DateTime"
    />
    <xs:enumeration
      value="Boolean"
    />
    <xs:enumeration
      value="Byte"
    />
    <xs:enumeration
      value="String"
    />
    <xs:enumeration
      value="Integer32"
    />
    <xs:enumeration
      value="UnsignedInteger32"
    />
  </xs:restriction>
</xs:simpleType>
```

```

/>
<xs:enumeration
  value="Integer64"
/>
<xs:enumeration
  value="UnsignedInteger64"
/>
<xs:enumeration
  value="StringArray"
/>
<xs:enumeration
  value="ByteArray"
/>
</xs:restriction>
</xs:simpleType>

```

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

Value name	Description
DateTime	Specifies a DateTime data type for a dictionary entry.
Boolean	Specifies a Boolean data type for a dictionary entry.
Byte	Specifies a byte data type for a dictionary entry.
String	Specifies a string data type for a dictionary entry.
Integer32	Specifies a signed 32-bit integer data type for a dictionary entry.
UnsignedInteger32	Specifies an unsigned 32-bit integer data type for a dictionary entry.
Integer64	Specifies a signed 64-bit integer data type for a dictionary entry.
UnsignedInteger64	Specifies an unsigned 64-bit integer data type for a dictionary entry.
StringArray	Specifies a string array data type for a dictionary entry.
ByteArray	Specifies a byte array data type for a dictionary entry.

2.2.5.2 t:UserConfigurationPropertyType Simple Type

The **UserConfigurationPropertyType** simple type specifies the property types to get in a **GetUserConfiguration** operation, as specified in section [3.1.4.3](#).

```

<xs:simpleType name="UserConfigurationPropertyType">
  <xs:list>
    <xs:simpleType>
      <xs:restriction
        base="xs:string"
      >
        <xs:enumeration
          value="Id"
        />
      </xs:enumeration>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>

```

```

        value="Dictionary"
      />
    <xs:enumeration
      value="XmlData"
    />
    <xs:enumeration
      value="BinaryData"
    />
    <xs:enumeration
      value="All"
    />
  </xs:restriction>
</xs:simpleType>
</xs:list>
</xs:simpleType>

```

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

Value name	Description
Id	Specifies the identifier property.
Dictionary	Specifies dictionary property types.
XmlData	Specifies XML data property types.
BinaryData	Specifies binary data property types.
All	Specifies the identifier, dictionary, XML data, and binary property types.

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.

2.2.9 Common Data Structures

This specification does not define any common XML schema data structures.

3 Protocol Details

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

3.1 ExchangeServicePortType Server Details

The User Configuration Web Service Protocol defines a single WSDL port type. This protocol uses the operations that are listed and described in the following table.

Operation name	Description
CreateUserConfiguration	Specifies the WSDL messages for creating user configuration objects.
DeleteUserConfiguration	Specifies the WSDL messages for deleting user configuration objects.
GetUserConfiguration	Specifies the WSDL messages for getting user configuration objects.
UpdateUserConfiguration	Specifies the WSDL messages for updating user configuration objects.

3.1.1 Abstract Data Model

The User Configuration Web Service Protocol is a stateless protocol. The server maintains the user configuration object data.

The client is not required to maintain the state of the user configuration objects on the server and can retrieve the current set of configuration objects at any time. If more than one client accesses user configuration objects at the same time, there is no requirement that the server lock the existing set of permissions for changes.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

The following table summarizes the WSDL operations as defined by this specification. The operations do not have any sequencing rules.

Operation name	Description
CreateUserConfiguration (section 3.1.4.1)	Specifies the WSDL messages for creating user configuration objects.
DeleteUserConfiguration (section 3.1.4.2)	Specifies the WSDL messages for deleting user configuration objects.
GetUserConfiguration (section 3.1.4.3)	Specifies the WSDL messages for getting user configuration objects.

Operation name	Description
UpdateUserConfiguration (section 3.1.4.4)	Specifies the WSDL messages for updating user configuration objects.

3.1.4.1 CreateUserConfiguration

The **CreateUserConfiguration** operation specifies the WSDL messages for creating user configuration objects.

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

```
<wsdl:operation name="CreateUserConfiguration">
  <wsdl:input message="tns:CreateUserConfigurationSoapIn"/>
  <wsdl:output message="tns:CreateUserConfigurationSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification for this operation.

```
<wsdl:operation name="CreateUserConfiguration">
  <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/CreateUserConfigurat
ion" />
  <wsdl:input>
    <soap:header message="tns:CreateUserConfigurationSoapIn" part="Impersonation"
use="literal"/>
    <soap:header message="tns:CreateUserConfigurationSoapIn" part="MailboxCulture"
use="literal"/>
    <soap:header message="tns:CreateUserConfigurationSoapIn" part="RequestVersion"
use="literal"/>
    <soap:body parts="request" use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body parts="CreateUserConfigurationResult" use="literal" />
    <soap:header message="tns:CreateUserConfigurationSoapOut" part="ServerVersion"
use="literal"/>
  </wsdl:output>
</wsdl:operation>
```

3.1.4.1.1 Messages

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

Message name	Description
CreateUserConfigurationSoapIn	Specifies the SOAP message that creates a user configuration object.
CreateUserConfigurationSoapOut	Specifies the SOAP message that is returned by the server in response to a CreateUserConfiguration operation request.

3.1.4.1.1.1 CreateUserConfigurationSoapIn

The **CreateUserConfigurationSoapIn** WSDL message specifies the **CreateUserConfiguration** operation request to create a user configuration object.

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

The **CreateUserConfigurationSoapIn** WSDL message is the input message for the **SOAP action** <http://schemas.microsoft.com/exchange/services/2006/messages/CreateUserConfiguration>.

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

Part name	Element/type	Description
request	tns:CreateUserConfiguration (section 3.1.4.1.2.1)	Specifies the SOAP body of the request to create a user configuration object. This part is required.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.4.3)	Specifies a SOAP header that identifies the user whom the client application is impersonating. This part is optional.
MailboxCulture	t:MailboxCulture ([MS-OXWSCDATA] section 2.2.4.6)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox . The cultures are defined in [RFC3066] . This part is optional.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.4.9)	Specifies a SOAP header that identifies the schema version for the CreateUserConfiguration operation request.

3.1.4.1.1.2 CreateUserConfigurationSoapOut

The **CreateUserConfigurationSoapOut** WSDL message specifies the server response to a **CreateUserConfiguration** operation request to create a user configuration object.

```
<wsdl:message name="CreateUserConfigurationSoapOut">
  <wsdl:part name="CreateUserConfigurationResult"
    element="tns:CreateUserConfigurationResponse" />
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

The **CreateUserConfigurationSoapOut** WSDL message is the output message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/CreateUserConfiguration>.

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

Part name	Element/type	Description
CreateUserConfigurationResult	tns:CreateUserConfigurationResponse (section 3.1.4.1.2.2)	Specifies the SOAP body of the response to a CreateUserConfiguration operation request.
ServerVersion	t:ServerVersionInfo (IMS-OXWSCDATA section 2.2.4.10)	Specifies the SOAP header that identifies the server version for the response to a CreateUserConfiguration request.

3.1.4.1.2 Elements

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

Element name	Description
CreateUserConfiguration	Specifies a request to create a user configuration object.
CreateUserConfigurationResponse	Specifies a response to a CreateUserConfiguration operation request.

3.1.4.1.2.1 CreateUserConfiguration Element

The **CreateUserConfiguration** element specifies a request to create a user configuration object.

```
<xs:element name="CreateUserConfiguration"
  type="m:CreateUserConfigurationType"
  />
```

3.1.4.1.2.2 CreateUserConfigurationResponse Element

The **CreateUserConfigurationResponse** element specifies a response to a **CreateUserConfiguration** operation request (section [3.1.4.1](#)).

```
<xs:element name="CreateUserConfigurationResponse"
  type="m:CreateUserConfigurationResponseType"
  />
```

3.1.4.1.3 Complex Types

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

Complex type name	Description
CreateUserConfigurationResponseType	Specifies a response to a CreateUserConfiguration

Complex type name	Description
	operation request.
CreateUserConfigurationType	Specifies a CreateUserConfiguration operation request.

3.1.4.1.3.1 m:CreateUserConfigurationResponseType Complex Type

The **CreateUserConfigurationResponseType** complex type specifies the response to a **CreateUserConfiguration** operation request (section [3.1.4.1](#)). The **CreateUserConfigurationResponseType** complex type extends the **BaseResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.16.

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

3.1.4.1.3.2 m:CreateUserConfigurationType Complex Type

The **CreateUserConfigurationType** complex type specifies a **CreateUserConfiguration** operation request (section [3.1.4.1](#)). The **CreateUserConfigurationType** complex type extends the **BaseRequestType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.15.

```
<xs:complexType name="CreateUserConfigurationType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
    <xs:sequence>
      <xs:element name="UserConfiguration"
        type="t:UserConfigurationType"
      />
    </xs:sequence>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
UserConfiguration	t:UserConfigurationType (section 2.2.4.5)	Specifies the user configuration object to be created.

3.1.4.1.4 Simple Types

None.

3.1.4.1.5 Attributes

None.

3.1.4.1.6 Groups

None

3.1.4.1.7 Attribute Groups

None.

3.1.4.2 DeleteUserConfiguration

The **DeleteUserConfiguration** operation specifies the WSDL messages for deleting user configuration objects.

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

```
<wsdl:operation name="DeleteUserConfiguration">
  <wsdl:input message="tns:DeleteUserConfigurationSoapIn"/>
  <wsdl:output message="tns:DeleteUserConfigurationSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification for this operation.

```
<wsdl:operation name="DeleteUserConfiguration">
  <soap:operation
  soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/DeleteUserConfiguration" />
  <wsdl:input>
    <soap:header message="tns:DeleteUserConfigurationSoapIn" part="Impersonation"
    use="literal"/>
    <soap:header message="tns:DeleteUserConfigurationSoapIn" part="MailboxCulture"
    use="literal"/>
    <soap:header message="tns:DeleteUserConfigurationSoapIn" part="RequestVersion"
    use="literal"/>
    <soap:body parts="request" use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body parts="DeleteUserConfigurationResult" use="literal" />
    <soap:header message="tns:DeleteUserConfigurationSoapOut" part="ServerVersion"
    use="literal"/>
  </wsdl:output>
</wsdl:operation>
```

3.1.4.2.1 Messages

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

Message name	Description
DeleteUserConfigurationSoapIn	Specifies the SOAP message that deletes a user configuration object.
DeleteUserConfigurationSoapOut	Specifies the SOAP message that is returned by the server in response to a DeleteUserConfiguration operation request.

3.1.4.2.1.1 DeleteUserConfigurationSoapIn

The **DeleteUserConfigurationSoapIn** WSDL message specifies a **DeleteUserConfiguration** operation request to delete a user configuration object.

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

The **DeleteUserConfigurationSoapIn** WSDL message is the input message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/DeleteUserConfiguration>.

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

Part name	Element/type	Description
request	tns:DeleteUserConfiguration (section 3.1.4.2.2.1)	Specifies the SOAP body of a request to delete a user configuration object. This part is required.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.4.3)	Specifies a SOAP header that identifies the user whom the client application is impersonating. This part is optional.
MailboxCulture	t:MailboxCulture ([MS-OXWSCDATA] section 2.2.4.6)	Specifies a SOAP header that identifies the culture to be used for accessing the mailbox. The cultures are defined in [RFC3066] . This part is optional.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.4.9)	Specifies a SOAP header that identifies the schema version for the DeleteUserConfiguration operation request (section 3.1.4.2).

3.1.4.2.1.2 DeleteUserConfigurationSoapOut

The **DeleteUserConfigurationSoapOut** WSDL message specifies the server response to a **DeleteUserConfiguration** operation request to delete a user configuration object.

```
<wsdl:message name="DeleteUserConfigurationSoapOut">
  <wsdl:part name="DeleteUserConfigurationResult"
    element="tns:DeleteUserConfigurationResponse" />
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

</wsdl:message>

The **DeleteUserConfigurationSoapOut** WSDL message is the output message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/DeleteUserConfiguration>.

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

Part name	Element/type	Description
DeleteUserConfigurationResult	tns>DeleteUserConfigurationResponse (section 3.1.4.2.2.2)	Specifies the SOAP body of the response to a DeleteUserConfiguration operation request.
ServerVersion	t:ServerVersionInfo (IMS-OXWSCDATA section 2.2.4.10)	Specifies the SOAP header that identifies the server version for the response.

3.1.4.2.2 Elements

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

Element name	Description
DeleteUserConfiguration	Specifies a request to delete a user configuration object.
DeleteUserConfigurationResponse	Specifies the response to a DeleteUserConfiguration operation request.

3.1.4.2.2.1 DeleteUserConfiguration Element

The **DeleteUserConfiguration** element specifies a request to delete a user configuration object.

```
<xs:element name="DeleteUserConfiguration"
  type="m>DeleteUserConfigurationType"
  />
```

3.1.4.2.2.2 DeleteUserConfigurationResponse Element

The **DeleteUserConfigurationResponse** element specifies the response to a **DeleteUserConfiguration** operation request (section [3.1.4.2](#)).

```
<xs:element name="DeleteUserConfigurationResponse"
  type="m>DeleteUserConfigurationResponseType"
  />
```


3.1.4.2.3 Complex Types

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

Complex type name	Description
DeleteUserConfigurationResponseType	Specifies the response to a DeleteUserConfiguration operation request.
DeleteUserConfigurationType	Specifies a DeleteUserConfiguration operation request.

3.1.4.2.3.1 m>DeleteUserConfigurationResponseType Complex Type

The **DeleteUserConfigurationResponseType** complex type specifies the response for a **DeleteUserConfiguration** operation request (section [3.1.4.2](#)). The **DeleteUserConfigurationResponseType** complex type extends the **BaseResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.16.

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

3.1.4.2.3.2 m>DeleteUserConfigurationType Complex Type

The **DeleteUserConfigurationType** complex type specifies a **DeleteUserConfiguration** operation request (section [3.1.4.2](#)). The **DeleteUserConfigurationType** complex type extends the **BaseRequestType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.15.

```
<xs:complexType name="DeleteUserConfigurationType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
    <xs:sequence>
      <xs:element name="UserName"
        type="t:UserName"
      />
    </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
UserConfigurationName	t:UserConfigurationNameType (section 2.2.4.4)	Specifies the name of the user configuration object to be deleted.

3.1.4.2.4 Simple Types

None.

3.1.4.2.5 Attributes

None

3.1.4.2.6 Groups

None.

3.1.4.2.7 Attribute Groups

None.

3.1.4.3 GetUserConfiguration

The **GetUserConfiguration** operation specifies the WSDL messages that are used to get user configuration objects.

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

```
<wsdl:operation name="GetUserConfiguration">
  <wsdl:input message="tns:GetUserConfigurationSoapIn"/>
  <wsdl:output message="tns:GetUserConfigurationSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification for this operation.

```
<wsdl:operation name="GetUserConfiguration">
  <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetUserConfiguration" />
  <wsdl:input>
    <soap:header message="tns:GetUserConfigurationSoapIn" part="Impersonation"
use="literal"/>
    <soap:header message="tns:GetUserConfigurationSoapIn" part="MailboxCulture"
use="literal"/>
    <soap:header message="tns:GetUserConfigurationSoapIn" part="RequestVersion"
use="literal"/>
    <soap:body parts="request" use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body parts="GetUserConfigurationResult" use="literal" />
    <soap:header message="tns:GetUserConfigurationSoapOut" part="ServerVersion"
use="literal"/>
  </wsdl:output>
```

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

3.1.4.3.1 Messages

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

Message name	Description
GetUserConfigurationSoapIn	Specifies the SOAP message that gets a user configuration object.
GetUserConfigurationSoapOut	Specifies the SOAP message that is returned by the server in response to the GetUserConfiguration operation request.

3.1.4.3.1.1 GetUserConfigurationSoapIn

The **GetUserConfigurationSoapIn** WSDL message specifies a **GetUserConfiguration** operation request to delete a user configuration object.

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

The **GetUserConfigurationSoapIn** WSDL message is the input message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/GetUserConfiguration>.

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

Part name	Element/type	Description
request	tns:GetUserConfiguration (section 3.1.4.3.2.1)	Specifies the SOAP body of a request to get a user configuration object. This part is required.
Impersonation	t:ExchangeImpersonation ([MS- OXWSCDATA] section 2.2.4.3)	Specifies a SOAP header that identifies the user whom the client application is impersonating. This part is optional.
MailboxCulture	t:MailboxCulture ([MS- OXWSCDATA] section 2.2.4.6)	Specifies a SOAP header that identifies the culture to be used for accessing the mailbox. The cultures are defined in RFC3066 . This part is optional.
RequestVersion	t:RequestServerVersion ([MS- OXWSCDATA] section 2.2.4.9)	Specifies a SOAP header that identifies the schema version for the GetUserConfiguration operation request (section 3.1.4.3).

3.1.4.3.1.2 GetUserConfigurationSoapOut

The **GetUserConfigurationSoapOut** WSDL message specifies the server response to a **GetUserConfiguration** operation request to get a user configuration object.

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

Part name	Element/type	Description
GetUserConfigurationResult	tns:GetUserConfigurationResponse (section 3.1.4.3.2.2)	Specifies the SOAP body of the response to a GetUserConfiguration operation request.
ServerVersion	t:ServerVersionInfo ([MS-OXWSCDATA] section 2.2.4.10)	Specifies the SOAP header that identifies the server version for the response.

3.1.4.3.2 Elements

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

Element name	Description
GetUserConfiguration	Specifies a request to get a user configuration object.
GetUserConfigurationResponse	Specifies the response to a GetUserConfiguration operation request.

3.1.4.3.2.1 GetUserConfiguration Element

The **GetUserConfiguration** element specifies a request to get a user configuration object.

```
<xs:element name="GetUserConfiguration"
  type="m:GetUserConfigurationType"
  />
```

3.1.4.3.2.2 GetUserConfigurationResponse Element

The **GetUserConfigurationResponse** element specifies the response to a **GetUserConfiguration** operation request (section [3.1.4.3](#)).

```
<xs:element name="GetUserConfigurationResponse"
  type="m:GetUserConfigurationResponseType"
  />
```

3.1.4.3.3 Complex Types

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

Complex type name	Description
GetUserConfigurationResponseMessageType	Specifies a user configuration object returned in a response.
GetUserConfigurationResponseType	Specifies a response to a GetUserConfiguration operation request.
GetUserConfigurationType	Specifies a GetUserConfiguration operation request.

3.1.4.3.3.1 t:GetUserConfigurationResponseMessageType Complex Type

The **GetUserConfigurationResponseMessageType** complex type specifies a user configuration object that is returned in a response to a **GetUserConfiguration** operation request. The **GetUserConfigurationResponseMessageType** complex type extends the **ResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.57.

```
<xs:complexType name="GetUserConfigurationResponseMessageType">
  <xs:complexContent>
    <xs:extension
      base="m:ResponseMessageType"
    >
      <xs:sequence>
        <xs:element name="UserConfiguration"
          type="t:UserConfigurationType"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
UserConfiguration	t:UserConfigurationType (section 2.2.4.5)	Specifies a single user configuration object.

3.1.4.3.3.2 m:GetUserConfigurationResponseType Complex Type

The **GetUserConfigurationResponseType** complex type specifies the response to a **GetUserConfiguration** operation request (section [3.1.4.3](#)). The **GetUserConfigurationResponseType** complex type extends the **BaseResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.16.

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

3.1.4.3.3 m:GetUserConfigurationType Complex Type

The **GetUserConfigurationType** complex type specifies a **GetUserConfiguration** operation request (section [3.1.4.3](#)). The **GetUserConfigurationType** complex type extends the **BaseRequestType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.15.

```
<xs:complexType name="GetUserConfigurationType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="UserConfigurationName"
          type="t:UserConfigurationNameType"
        />
        <xs:element name="UserConfigurationProperties"
          type="t:UserConfigurationPropertyType"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
UserConfigurationName	t:UserConfigurationNameType (section 2.2.4.4)	Specifies the name and the associated folder for a user configuration object.
UserConfigurationProperties	t:UserConfigurationPropertyType (section 2.2.5.2)	Specifies the property types to get in a GetUserConfiguration operation (section 3.1.4.3).

3.1.4.3.4 Simple Types

None.

3.1.4.3.5 Attributes

None.

3.1.4.3.6 Groups

None.

3.1.4.3.7 Attribute Groups

None.

3.1.4.4 UpdateUserConfiguration

The **UpdateUserConfiguration** operation specifies the WSDL messages for updating user configuration objects.

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

```
<wsdl:operation name="UpdateUserConfiguration">
  <wsdl:input message="tns:UpdateUserConfigurationSoapIn"/>
  <wsdl:output message="tns:UpdateUserConfigurationSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification for the operation.

```
<wsdl:operation name="UpdateUserConfiguration">
  <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/UpdateUserConfigurat
ion" />
  <wsdl:input>
    <soap:header message="tns:UpdateUserConfigurationSoapIn" part="Impersonation"
use="literal"/>
    <soap:header message="tns:UpdateUserConfigurationSoapIn" part="MailboxCulture"
use="literal"/>
    <soap:header message="tns:UpdateUserConfigurationSoapIn" part="RequestVersion"
use="literal"/>
    <soap:body parts="request" use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body parts="UpdateUserConfigurationResult" use="literal" />
    <soap:header message="tns:UpdateUserConfigurationSoapOut" part="ServerVersion"
use="literal"/>
  </wsdl:output>
</wsdl:operation>
```

3.1.4.4.1 Messages

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

Message name	Description
UpdateUserConfigurationSoapIn	Specifies the SOAP message that updates a user configuration object.
UpdateUserConfigurationSoapOut	Specifies the SOAP message that is returned by the server in response to a UpdateUserConfiguration operation request.

3.1.4.4.1.1 UpdateUserConfigurationSoapIn

The **UpdateUserConfigurationSoapIn** WSDL message specifies an **UpdateUserConfiguration** operation request to update a user configuration object.

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

The **UpdateUserConfigurationSoapIn** WSDL message is the input message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/UpdateUserConfiguration>.

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

Part name	Element/type	Description
request	tns:UpdateUserConfiguration (section 3.1.4.4.2.1)	Specifies the SOAP body of a request to update a user configuration object. This part is required.
Impersonation	t:ExchangeImpersonation ([MS-OXWSCDATA] section 2.2.4.3)	Specifies a SOAP header that identifies the user whom the client application is impersonating. This part is optional.
MailboxCulture	t:MailboxCulture ([MS-OXWSCDATA] section 2.2.4.6)	Specifies a SOAP header that identifies the culture to be used for accessing the mailbox. The cultures are defined in [RFC3066] . This part is optional.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.4.9)	Specifies a SOAP header that identifies the schema version for a UpdateUserConfiguration operation (section 3.1.4.4) request.

3.1.4.4.1.2 UpdateUserConfigurationSoapOut

The **UpdateUserConfigurationSoapOut** WSDL message specifies the server response to a **UpdateUserConfiguration** operation request to update a user configuration object.

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

Part name	Element/type	Description
UpdateUserConfigurationResult	tns:UpdateUserConfigurationResponse (section 3.1.4.4.2.2)	Specifies the SOAP body of the response to an UpdateUserConfiguration operation request.
ServerVersion	t:ServerVersionInfo ([MS-OXWSCDATA] section 2.2.4.10)	Specifies the SOAP header that identifies the server version for the response to an

Part name	Element/type	Description
		UpdateUserConfiguration operation request.

3.1.4.4.2 Elements

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

Element name	Description
UpdateUserConfiguration	Specifies a request to update a user configuration object.
UpdateUserConfigurationResponse	Specifies the response to an UpdateUserConfiguration operation request.

3.1.4.4.2.1 UpdateUserConfiguration Element

The **UpdateUserConfiguration** element specifies a request to update a user configuration object.

```
<xs:element name="UpdateUserConfiguration"
  type="m:UpdateUserConfigurationType"
  />
```

3.1.4.4.2.2 UpdateUserConfigurationResponse Element

The **UpdateUserConfigurationResponse** element specifies the response to an **UpdateUserConfiguration** operation request (section [3.1.4.4](#)).

```
<xs:element name="UpdateUserConfigurationResponse"
  type="m:UpdateUserConfigurationResponseType"
  />
```

3.1.4.4.3 Complex Types

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

Complex type name	Description
UpdateUserConfigurationResponseType	Specifies the response to an UpdateUserConfiguration operation request.
UpdateUserConfigurationType	Specifies an UpdateUserConfiguration operation request.

3.1.4.4.3.1 m:UpdateUserConfigurationResponseType Complex Type

The **UpdateUserConfigurationResponseType** complex type specifies the response to an **UpdateUserConfiguration** operation request (section [3.1.4.4](#)). The

UpdateUserConfigurationResponseType complex type extends the **BaseResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.16.

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

3.1.4.4.3.2 m:UpdateUserConfigurationType Complex Type

The **UpdateUserConfigurationType** complex type specifies an **UpdateUserConfiguration** operation request (section [3.1.4.4](#)). The **UpdateUserConfigurationType** complex type extends the **BaseRequestType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.3.15.

```
<xs:complexType name="UpdateUserConfigurationType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="UserConfiguration"
          type="t:UserConfigurationType"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
UserConfiguration	t:UserConfigurationType (section 2.2.4.5)	Specifies the user configuration object that contains updated data.

3.1.4.4.4 Simple Types

None.

3.1.4.4.5 Attributes

None.

3.1.4.4.6 Groups

None.

3.1.4.4.7 Attribute Groups

None.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

3.2 Client Details

None.

3.2.1 Abstract Data Model

None.

3.2.2 Timers

None.

3.2.3 Initialization

None.

3.2.4 Message Processing Events and Sequencing

None.

3.2.5 Timer Events

None.

3.2.6 Other Local Events

None.

4 Protocol Examples

None.

Preliminary

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

Preliminary

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-OXWSUSRCFG.wsdl	Contains the WSDL for the implementation of this protocol.	6
MS-OXWSUSRCFG-messages.xsd	Contains the XML schema message definitions that are used in this protocol.	7.1
MS-OXWSUSRCFG-types.xsd	Contains the XML schema type definitions that are used in this protocol.	7.2

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

This section contains the contents of the MS-OXWSUSRCFG.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:include schemaLocation="MS-OXWSUSRCFG-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"/>
    </xs:schema>
  </wSDL:types>
  <wSDL:portType name="ExchangeServicePortType">
    <wSDL:operation name="CreateUserConfiguration">
      <wSDL:input message="tns:CreateUserConfigurationSoapIn"/>
      <wSDL:output message="tns:CreateUserConfigurationSoapOut"/>
    </wSDL:operation>
    <wSDL:operation name="DeleteUserConfiguration">
      <wSDL:input message="tns:DeleteUserConfigurationSoapIn"/>
      <wSDL:output message="tns:DeleteUserConfigurationSoapOut"/>
    </wSDL:operation>
    <wSDL:operation name="GetUserConfiguration">
      <wSDL:input message="tns:GetUserConfigurationSoapIn"/>
      <wSDL:output message="tns:GetUserConfigurationSoapOut"/>
    </wSDL:operation>
  </wSDL:portType>

```

```

        <wsdl:operation name="UpdateUserConfiguration">
            <wsdl:input message="tns:UpdateUserConfigurationSoapIn"/>
            <wsdl:output message="tns:UpdateUserConfigurationSoapOut"/>
        </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="CreateUserConfiguration">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/CreateUserConfigurat
ion"/>
            <wsdl:input>
                <soap:header message="tns:CreateUserConfigurationSoapIn"
part="Impersonation" use="literal"/>
                <soap:header message="tns:CreateUserConfigurationSoapIn"
part="MailboxCulture" use="literal"/>
                <soap:header message="tns:CreateUserConfigurationSoapIn"
part="RequestVersion" use="literal"/>
                <soap:body parts="request" use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body parts="CreateUserConfigurationResult" use="literal"/>
                <soap:header message="tns:CreateUserConfigurationSoapOut"
part="ServerVersion" use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="DeleteUserConfiguration">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/DeleteUserConfigurat
ion"/>
            <wsdl:input>
                <soap:header message="tns>DeleteUserConfigurationSoapIn"
part="Impersonation" use="literal"/>
                <soap:header message="tns>DeleteUserConfigurationSoapIn"
part="MailboxCulture" use="literal"/>
                <soap:header message="tns>DeleteUserConfigurationSoapIn"
part="RequestVersion" use="literal"/>
                <soap:body parts="request" use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body parts="DeleteUserConfigurationResult" use="literal"/>
                <soap:header message="tns>DeleteUserConfigurationSoapOut"
part="ServerVersion" use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetUserConfiguration">
            <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetUserConfiguration
"/>
            <wsdl:input>
                <soap:header message="tns:GetUserConfigurationSoapIn"
part="Impersonation" use="literal"/>
                <soap:header message="tns:GetUserConfigurationSoapIn"
part="MailboxCulture" use="literal"/>
                <soap:header message="tns:GetUserConfigurationSoapIn"
part="RequestVersion" use="literal"/>
                <soap:body parts="request" use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
</wsdl:service>

```

```

        </wsdl:input>
        <wsdl:output>
            <soap:body parts="GetUserConfigurationResult" use="literal"/>
            <soap:header message="tns:GetUserConfigurationSoapOut"
part="ServerVersion" use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="UpdateUserConfiguration">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/UpdateUserConfigurat
ion"/>
        <wsdl:input>
            <soap:header message="tns:UpdateUserConfigurationSoapIn"
part="Impersonation" use="literal"/>
            <soap:header message="tns:UpdateUserConfigurationSoapIn"
part="MailboxCulture" use="literal"/>
            <soap:header message="tns:UpdateUserConfigurationSoapIn"
part="RequestVersion" use="literal"/>
            <soap:body parts="request" use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body parts="UpdateUserConfigurationResult" use="literal"/>
            <soap:header message="tns:UpdateUserConfigurationSoapOut"
part="ServerVersion" use="literal"/>
        </wsdl:output>
    </wsdl:operation>
</wsdl:binding>
<wsdl:message name="CreateUserConfigurationSoapIn">
    <wsdl:part name="request" element="tns:CreateUserConfiguration"/>
    <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="CreateUserConfigurationSoapOut">
    <wsdl:part name="CreateUserConfigurationResult"
element="tns:CreateUserConfigurationResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
<wsdl:message name="DeleteUserConfigurationSoapIn">
    <wsdl:part name="request" element="tns>DeleteUserConfiguration"/>
    <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="DeleteUserConfigurationSoapOut">
    <wsdl:part name="DeleteUserConfigurationResult"
element="tns>DeleteUserConfigurationResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
<wsdl:message name="GetUserConfigurationSoapIn">
    <wsdl:part name="request" element="tns:GetUserConfiguration"/>
    <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="GetUserConfigurationSoapOut">
    <wsdl:part name="GetUserConfigurationResult"
element="tns:GetUserConfigurationResponse"/>
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>

```



```
<wsdl:message name="UpdateUserConfigurationSoapIn">
  <wsdl:part name="request" element="tns:UpdateUserConfiguration"/>
  <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="UpdateUserConfigurationSoapOut">
  <wsdl:part name="UpdateUserConfigurationResult"
element="tns:UpdateUserConfigurationResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
</wsdl:definitions>
```

7 Appendix B: Full XML Schema

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

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

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

7.1 Messages Schema

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

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

File name	Defining specification
MS-OXWSCDATA-messages.xsd	[MS-OXWSCDATA] section 7.1

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
  xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/messages"
  xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
  elementFormDefault="qualified" version="Exchange2010" id="messages">
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
    schemaLocation="MS-OXWSUSRCFG-types.xsd"/>
  <xs:complexType name="CreateUserConfigurationType">
    <xs:complexContent>
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element name="UserConfiguration"
            type="t:UserConfigurationType"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="CreateUserConfiguration" type="m:CreateUserConfigurationType"/>
  <xs:complexType name="CreateUserConfigurationResponseType">
    <xs:complexContent>
      <xs:extension base="m:BaseResponseMessageType">
        </xs:complexContent>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="CreateUserConfigurationResponse"
    type="m:CreateUserConfigurationResponseType"/>
  <xs:complexType name="DeleteUserConfigurationType">
```

```

        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="UserConfigurationName"
type="t:UserConfigurationNameType"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="DeleteUserConfiguration" type="m:DeleteUserConfigurationType"/>
    <xs:complexType name="DeleteUserConfigurationResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="DeleteUserConfigurationResponse"
type="m:DeleteUserConfigurationResponseType"/>
    <xs:complexType name="GetUserConfigurationType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="UserConfigurationName"
type="t:UserConfigurationNameType"/>
                    <xs:element name="UserConfigurationProperties"
type="t:UserConfigurationPropertyType"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetUserConfiguration" type="m:GetUserConfigurationType"/>
    <xs:complexType name="GetUserConfigurationResponseMessageType">
        <xs:complexContent>
            <xs:extension base="m:ResponseMessageType">
                <xs:sequence>
                    <xs:element name="UserConfiguration" type="t:UserConfigurationType"
minOccurs="0"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:complexType name="GetUserConfigurationResponseType">
        <xs:complexContent>
            <xs:extension base="m:BaseResponseMessageType"/>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="GetUserConfigurationResponse"
type="m:GetUserConfigurationResponseType"/>
    <xs:complexType name="UpdateUserConfigurationType">
        <xs:complexContent>
            <xs:extension base="m:BaseRequestType">
                <xs:sequence>
                    <xs:element name="UserConfiguration"
type="t:UserConfigurationType"/>
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="UpdateUserConfiguration" type="m:UpdateUserConfigurationType"/>
    <xs:complexType name="UpdateUserConfigurationResponseType">

```

```

    <xs:complexContent>
      <xs:extension base="m:BaseResponseMessageType"/>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="UpdateUserConfigurationResponse"
    type="m:UpdateUserConfigurationResponseType"/>
</xs:schema>

```

7.2 Types Schema

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

MS-OXWSUSRCFG-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, and messages schema files for this protocol.

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

```

<?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-OXWSFOLD-types.xsd"/>
  <xs:complexType name="UserConfigurationNameType">
    <xs:complexContent>
      <xs:extension base="t:TargetFolderIdType">
        <xs:attribute name="Name" type="t:NonEmptyStringType" use="required"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:simpleType name="UserConfigurationDictionaryObjectTypesType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="DateTime"/>
      <xs:enumeration value="Boolean"/>
      <xs:enumeration value="Byte"/>
      <xs:enumeration value="String"/>
      <xs:enumeration value="Integer32"/>
      <xs:enumeration value="UnsignedInteger32"/>
      <xs:enumeration value="Integer64"/>
      <xs:enumeration value="UnsignedInteger64"/>
      <xs:enumeration value="StringArray"/>
      <xs:enumeration value="ByteArray"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="UserConfigurationDictionaryObjectType">
    <xs:sequence>
      <xs:element name="Type" type="t:UserConfigurationDictionaryObjectTypesType"/>
      <xs:element name="Value" type="xs:string" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="UserConfigurationDictionaryEntryType">
    <xs:sequence>

```

```

        <xs:element name="DictionaryKey"
type="t:UserConfigurationDictionaryObjectType"/>
        <xs:element name="DictionaryValue"
type="t:UserConfigurationDictionaryObjectType" nillable="true"/>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="UserConfigurationDictionaryType">
    <xs:sequence>
        <xs:element name="DictionaryEntry"
type="t:UserConfigurationDictionaryEntryType" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="UserConfigurationType">
    <xs:sequence>
        <xs:element name="UserConfigurationName" type="t:UserConfigurationNameType"/>
        <xs:element name="ItemId" type="t:ItemIdType" minOccurs="0"/>
        <xs:element name="Dictionary" type="t:UserConfigurationDictionaryType"
minOccurs="0"/>
        <xs:element name="XmlData" type="xs:base64Binary" minOccurs="0"/>
        <xs:element name="BinaryData" type="xs:base64Binary" minOccurs="0"/>
    </xs:sequence>
</xs:complexType>
<xs:simpleType name="UserConfigurationPropertyType">
    <xs:list>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:enumeration value="Id"/>
                <xs:enumeration value="Dictionary"/>
                <xs:enumeration value="XmlData"/>
                <xs:enumeration value="BinaryData"/>
                <xs:enumeration value="All"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:list>
</xs:simpleType>
</xs:schema>

```

8 Appendix C: Product Behavior

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

- Microsoft® Exchange Server 2010
- Microsoft® Exchange Server 15 Technical Preview

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

This section identifies changes that were made to the [MS-OXWSUSRCFG] protocol document between the October 2011 and January 2012 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

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

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

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

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

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

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

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

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

- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- Obsolete document removed.

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

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

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

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

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
8 Appendix C: Product Behavior	Added Exchange 15 Technical Preview to the list of applicable product versions.	Y	Content updated.

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