# [MS-OXWSUSRCFG]:
# User Configuration Web Service Protocol Specification

## 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 | 1.2.1 | No change | No changes to the meaning, language, or formatting of the technical content. |
| 11/03/2010 | 1.2.1 | No change | No changes to the meaning, language, or formatting of the technical content. |

# Contents

# 1   Introduction

This document specifies the User Configuration Web Service protocol. The User Configuration Web Service protocol is used to access user configuration objects. Clients use the SOAP protocol [SOAP1.1] to contact the user configuration service.

## 1.1   Glossary

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

> **folder associated item (FAI)**
> **Hypertext Transfer Protocol (HTTP)**
> **Hyptertext Transfer Protocol over Secure Socket Layers (HTTPS)**
> **property**
> **SOAP body**
> **SOAP message**
> **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-OXWSCDATA] Microsoft Corporation, "Common Web Service Data Types", July 2009.

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

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

[RFC3066] Alvestrand, H., "Tags for the Identification of Languages", BCP 47, 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", 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/

[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

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

## 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 items (FAIs)**.

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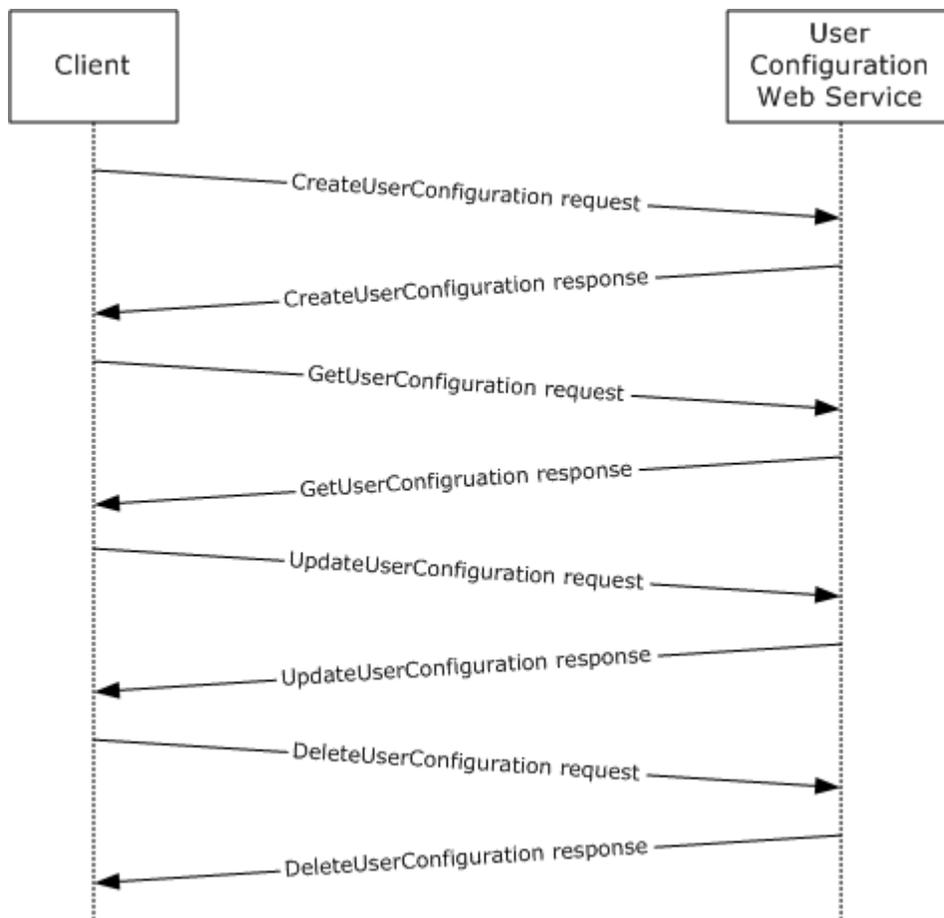


**Figure 1: User Configuration Web service request/response messages**

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## 1.4 Relationship to Other Protocols

The User Configuration Web service protocol uses SOAP over **HTTP** and SOAP over **HTTPS**, as shown in the following layering diagrams.
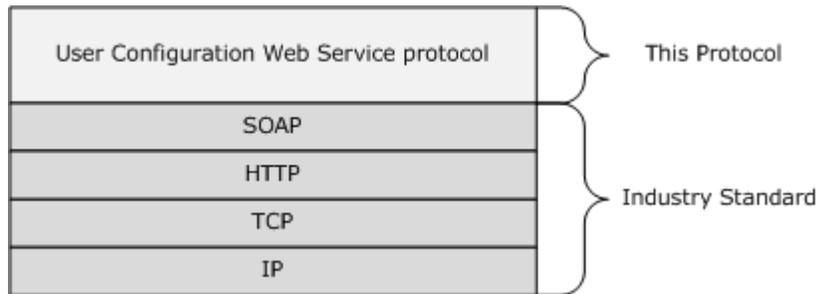


**Figure 2: User Configuration Web Service protocol HTTP stack**
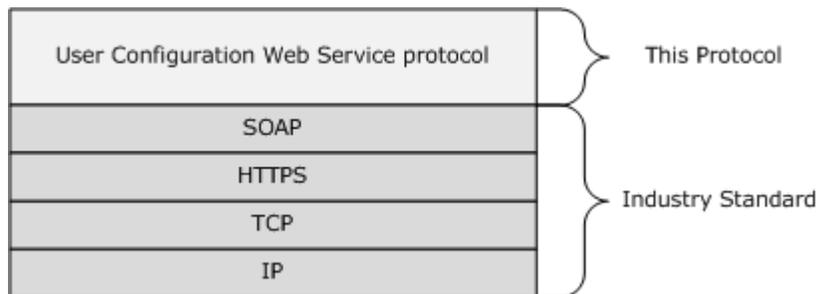


**Figure 3: User Configuration Web Service protocol HTTPS stack**

## 1.5 Prerequisites/Preconditions

None.

## 1.6 Applicability Statement

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

## 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.

▪ **Capability Negotiation:** None.

## 1.8 Vendor-Extensible Fields

None.

## 1.9   Standards Assignments

None.

# 2 Messages

## 2.1 Transport

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

## 2.2 Common Message Syntax

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

### 2.2.1 Namespaces

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

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

### 2.2.2 Simple Types

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

Enumeration

The following values are defined by the **UserConfigurationDictionaryObjectTypesType** simple type:

| Value | 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. |

## 2.2.2.2 t:UserConfigurationPropertyType Simple Type

The UserConfigurationPropertyType simple type specifies the property types to get in a GetUserConfiguration operation (section 3.1.4.3).

```
<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>
```

Enumeration

The following values are defined by the **UserConfigurationPropertyType** simple type:

| Value | 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. |

## 2.2.3 Complex Types

## 2.2.3.1 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>
```

Child Elements

| Element | Type | Description |
|---|---|---|
| DictionaryKey | t:UserConfigurationDictionaryObjectType | Specifies the dictionary key for a dictionary property. |
| DictionaryValue | t:UserConfigurationDictionaryObjectType | Specifies the dictionary value for a dictionary property. |

### 2.2.3.2   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>
```

Child Elements

| Element | Type | Description |
|---|---|---|
| Type | t:UserConfigurationDictionaryObjectTypesType | Specifies the dictionary object type. |
| Value | xs:string | Specifies the dictionary object value as a string. |

### 2.2.3.3   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>
```

Child Elements

| Element | Type |
|---------|------|
| DictionaryEntry | t:UserConfigurationDictionaryEntryType |

### 2.2.3.4   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>
```

Attributes

| Name | Type | Description |
|------|------|-------------|
| Name | t:NonEmptyStringType | Specifies the name of a user configuration object. |

### 2.2.3.5   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>
```

Child Elements

| Element | Type | Description |
|---------|------|-------------|
| UserConfigurationName | t:UserConfigurationNameType | Specifies the user configuration object name. The user configuration object name MUST be present. |
| ItemId | t:ItemIdType | Specifies the user configuration object item identifier. |
| Dictionary | t:UserConfigurationDictionaryType | Specifies a set of dictionary property entries. |
| XmlData | xs:base64Binary | Specifies XML data property content. |
| BinaryData | xs:base64Binary | Specifies binary data property content. |

## 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.

## 2.2.7   Attribute Groups

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

## 2.2.8   Messages

This specification does not define any common WSDL message definitions.

# 3   Protocol Details

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

## 3.1   ExchangeServicePortType Server Details

The User Configuration Web Service protocol defines a single port type.

| Operation | 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.

### 3.1.2   Timers

None.

### 3.1.3   Initialization

None.

### 3.1.4   Message Processing Events and Sequencing

This protocol includes the operations that are listed in the following table. The operations do not have any sequencing rules.

| Operation | 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. |
| 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.

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

Request

| Message Format | Description |
|---|---|
| **tns:CreateUserConfigurationSoapIn** | Specifies the **SOAP message** that is sent to the server to create a user configuration object. |

Response

| Message Format | Description |
|---|---|
| **tns:CreateUserConfigurationSoapOut** | Specifies the SOAP message that is sent from the server after an attempt to create a user configuration object. |

### 3.1.4.1.1  Simple Types

This specification does not define any specific XML schema simple type definitions for this operation.

### 3.1.4.1.2  Complex Types

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

#### 3.1.4.1.2.1   m:CreateUserConfigurationResponseType Complex Type

The CreateUserConfigurationResponseType complex type specifies a response for the CreateUserConfiguration operation (section 3.1.4.1).

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

#### 3.1.4.1.2.2   m:CreateUserConfigurationType Complex Type

The CreateUserConfigurationType complex type specifies a CreateUserConfiguration operation (section 3.1.4.1) request.

```
<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>
```

Child Elements

| Element | Type | Description |
|---------|------|-------------|
| UserConfiguration | t:UserConfigurationType | Specifies the user configuration object to create. |

### 3.1.4.1.3  Elements

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

#### 3.1.4.1.3.1  CreateUserConfiguration Element

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

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

#### 3.1.4.1.3.2  CreateUserConfigurationResponse Element

The tns:CreateUserConfigurationResponse element specifies a response to a CreateUserConfiguration operation (section 3.1.4.1) request.

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

### 3.1.4.1.4  Attributes

This specification does not define any specific XML schema attribute definitions for this operation.

### 3.1.4.1.5  Groups

This specification does not define any specific XML schema group definitions for this operation.

### 3.1.4.1.6  Attribute Groups

This specification does not define any specific XML schema attribute group definitions for this operation.

### 3.1.4.1.7  Messages

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

#### 3.1.4.1.7.1  CreateUserConfigurationSoapIn

The CreateUserConfigurationSoapIn message contains four parts.

| Part Name | Element/Type | Description |
|---|---|---|
| request | tns:CreateUserConfiguration | Specifies the request. |
| Impersonation | t:ExchangeImpersonation | Specifies an account to impersonate. |
| MailboxCulture | t:MailboxCulture | Specifies the culture to use for accessing the server. The cultures are defined by [RFC3066]. |
| RequestVersion | t:RequestServerVersion | Specifies the schema version for the CreateUserConfiguration operation (section 3.1.4.1) request. |

#### 3.1.4.1.7.2  CreateUserConfigurationSoapOut

The CreateUserConfigurationSoapOut message contains two parts.

| Part Name | Element/Type | Description |
|---|---|---|
| CreateUserConfigurationResult | tns:CreateUserConfigurationResponse | Specifies the response. |
| ServerVersion | t:ServerVersionInfo | Specifies the server version for the response. |

### 3.1.4.2  DeleteUserConfiguration

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

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

Request

| Message Format | Description |
|---|---|
| **tns:DeleteUserConfigurationSoapIn** | Specifies the SOAP message that is sent to the server to delete a user configuration object. |

Response

| Message Format | Description |
| --- | --- |
| **tns:DeleteUserConfigurationSoapOut** | Specifies the SOAP message that is sent from the server after an attempt to delete a user configuration object. |

### 3.1.4.2.1  Simple Types

This specification does not define any specific XML schema simple type definitions for this operation.

### 3.1.4.2.2  Complex Types

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

#### 3.1.4.2.2.1  m:DeleteUserConfigurationResponseType Complex Type

The m:DeleteUserConfigurationResponseType complex type specifies a response for the DeleteUserConfiguration operation (section 3.1.4.2).

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

#### 3.1.4.2.2.2  m:DeleteUserConfigurationType Complex Type

The DeleteUserConfigurationType complex type specifies a DeleteUserConfiguration operation (section 3.1.4.2) request.

```
<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>
```

Child Elements

| Element | Type | Description |
| --- | --- | --- |
| UserConfigurationName | t:UserConfigurationNameType | Specifies the name of the user configuration object. |

### 3.1.4.2.3  Elements

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

#### 3.1.4.2.3.1  DeleteUserConfiguration Element

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

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

#### 3.1.4.2.3.2  DeleteUserConfigurationResponse Element

The DeleteUserConfigurationResponse element specifies a response to a DeleteUserConfiguration operation (section 3.1.4.2) request.

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

### 3.1.4.2.4  Attributes

This specification does not define any specific XML schema attribute definitions for this operation.

### 3.1.4.2.5  Groups

This specification does not define any specific XML schema group definitions for this operation.

### 3.1.4.2.6  Attribute Groups

This specification does not define any specific XML schema attribute group definitions for this operation.

### 3.1.4.2.7  Messages

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

#### 3.1.4.2.7.1  DeleteUserConfigurationSoapIn

The DeleteUserConfigurationSoapIn message contains the four parts listed in the following table.

| Part Name | Element/Type | Description |
|---|---|---|
| request | tns:DeleteUserConfiguration | Specifies the request. |
| Impersonation | t:ExchangeImpersonation | Specifies an account to impersonate. |
| MailboxCulture | t:MailboxCulture | Specifies the culture to use for accessing the server. The cultures are defined by http://www.ietf.org/rfc/rfc3066.txt. |

| Part Name | Element/Type | Description |
|---|---|---|
| RequestVersion | t:RequestServerVersion | Specifies the schema version for the DeleteUserConfiguration operation (section 3.1.4.2) request. |

### 3.1.4.2.7.2 DeleteUserConfigurationSoapOut

The DeleteUserConfigurationSoapOut message contains the two parts described in the following table.

| Part Name | Element/Type | Description |
|---|---|---|
| DeleteUserConfigurationResult | tns:DeleteUserConfigurationResponse | Specifies the response. |
| ServerVersion | t:ServerVersionInfo | Specifies the server version for the response. |

### 3.1.4.3 GetUserConfiguration

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

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

Request

| Message Format | Description |
|---|---|
| **tns:GetUserConfigurationSoapIn** | Specifies the SOAP message that is sent to the server to get a user configuration object. |

Response

| Message Format | Description |
|---|---|
| **tns:GetUserConfigurationSoapOut** | Specifies the SOAP message that is sent from the server after an attempt to get a user configuration object. |

### 3.1.4.3.1 Simple Types

This specification does not define any specific XML schema simple type definitions for this operation.

### 3.1.4.3.2 Complex Types

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

*Release: Tuesday, October 26, 2010*

### 3.1.4.3.2.1   t:GetUserConfigurationResponseMessageType Complex Type

The GetUserConfigurationResponseMessageType complex type specifies user configuration objects that are returned in a response.

```
<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>
```

Child Elements

| Element | Type | Description |
|---------|------|-------------|
| UserConfiguration | t:UserConfigurationType | Specifies a single user configuration object. |

### 3.1.4.3.2.2   m:GetUserConfigurationResponseType Complex Type

The GetUserConfigurationResponseType complex type specifies the response for the GetUserConfiguration operation (section 3.1.4.3).

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

### 3.1.4.3.2.3   m:GetUserConfigurationType Complex Type

The GetUserConfigurationType complex type specifies a GetUserConfiguration operation (section 3.1.4.3) request.

```
<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>
```

Child Elements

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

### 3.1.4.3.3  Elements

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

#### 3.1.4.3.3.1  GetUserConfiguration Element

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

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

#### 3.1.4.3.3.2  GetUserConfigurationResponse Element

The GetUserConfigurationResponse element specifies a response to a GetUserConfiguration operation (section 3.1.4.3) request.

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

### 3.1.4.3.4  Attributes

This specification does not define any specific XML schema attribute definitions for this operation.

### 3.1.4.3.5  Groups

This specification does not define any specific XML schema group definitions for this operation.

### 3.1.4.3.6 Attribute Groups

This specification does not define any specific XML schema attribute group definitions for this operation.

### 3.1.4.3.7 Messages

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

#### 3.1.4.3.7.1 GetUserConfigurationSoapIn

The GetUserConfigurationSoapIn message contains four parts.

| Part Name | Element/Type | Description |
|---|---|---|
| request | tns:GetUserConfiguration | Specifies the request. |
| Impersonation | t:ExchangeImpersonation | Specifies an account to impersonate. |
| MailboxCulture | t:MailboxCulture | Specifies the culture to use for accessing the server. The cultures are defined by [RFC3066]. |
| RequestVersion | t:RequestServerVersion | Specifies the schema version for the GetUserConfiguration operation (section 3.1.4.3) request. |

#### 3.1.4.3.7.2 GetUserConfigurationSoapOut

The GetUserConfigurationSoapOut message contains two parts.

| Part Name | Element/Type | Description |
|---|---|---|
| GetUserConfigurationResult | tns:GetUserConfigurationResponse | Specifies the response. |
| ServerVersion | t:ServerVersionInfo | Specifies the server version for the response. |

### 3.1.4.4 UpdateUserConfiguration

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

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

Request

| Message Format | Description |
|---|---|
| **tns:UpdateUserConfigurationSoapIn** | Specifies the SOAP message that is sent to the server to update a user configuration object. |

Response

| Message Format | Description |
|---|---|
| **tns:UpdateUserConfigurationSoapOut** | Specifies the SOAP message that is sent from the server after an attempt to update a user configuration object. |

### 3.1.4.4.1  Simple Types

This specification does not define any specific XML schema simple type definitions for this operation.

### 3.1.4.4.2  Complex Types

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

#### 3.1.4.4.2.1  m:UpdateUserConfigurationResponseType Complex Type

The UpdateUserConfigurationResponseType complex type specifies the response object for the UpdateUserConfiguration operation (section 3.1.4.4).

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

#### 3.1.4.4.2.2  m:UpdateUserConfigurationType Complex Type

The UpdateUserConfigurationType complex type specifies an UpdateUserConfiguration operation (section 3.1.4.4) request.

```
<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>
```

Child Elements

| Element | Type | Description |
| --- | --- | --- |
| UserConfiguration | t:UserConfigurationType | Specifies the user configuration object that contains updated data. |

### 3.1.4.4.3 Elements

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

#### 3.1.4.4.3.1 UpdateUserConfiguration Element

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

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

#### 3.1.4.4.3.2 UpdateUserConfigurationResponse Element

The UpdateUserConfigurationResponse element specifies a response to an UpdateUserConfiguration operation (section 3.1.4.4) request.

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

### 3.1.4.4.4 Attributes

This specification does not define any specific XML schema attribute definitions for this operation.

### 3.1.4.4.5 Groups

This specification does not define any specific XML schema group definitions for this operation.

### 3.1.4.4.6 Attribute Groups

This specification does not define any specific XML schema attribute group definitions for this operation.

### 3.1.4.4.7 Messages

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

#### 3.1.4.4.7.1 UpdateUserConfigurationSoapIn

The UpdateUserConfigurationSoapIn message contains four parts.

| Part Name | Element/Type | Description |
| --- | --- | --- |
| request | tns:UpdateUserConfiguration | Specifies the request. |

| Part Name | Element/Type | Description |
|---|---|---|
| Impersonation | t:ExchangeImpersonation | Specifies an account to impersonate. |
| MailboxCulture | t:MailboxCulture | Specifies the culture to use for accessing the server. The cultures are defined by [RFC3066]. |
| RequestVersion | t:RequestServerVersion | Specifies the schema version for the UpdateUserConfiguration operation (section 3.1.4.4) request. |

### 3.1.4.4.7.2   UpdateUserConfigurationSoapOut

The UpdateUserConfigurationSoapOut message contains two parts.

| Part Name | Element/Type | Description |
|---|---|---|
| UpdateUserConfigurationResult | tns:UpdateUserConfigurationResponse | Specifies the response. |
| ServerVersion | t:ServerVersionInfo | Specifies the server version for the response. |

### 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.

*Release: Tuesday, October 26, 2010*

# 5   Security

## 5.1   Security Considerations for Implementers

The User Configuration Web Service protocol does not use any additional security mechanisms.

## 5.2   Index of Security Parameters

None.

# 6   Appendix A: Full WSDL

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

| File name | Description | Section |
|---|---|---|
| MS-OXWSUSRCFG.wsdl | Contains the WSDL for the implementation of this protocol. | 6.1 |
| MS-OXWSUSRCFG-messages.xsd | Contains the XML schema message definitions that are used in this protocol. | 6.2 |
| MS-OXWSUSRCFG-types.xsd | Contains the XML schema type definitions that are used in this protocol. | 6.3 |

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.

## 6.1   WSDL

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: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: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>
```

## 6.2  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 6.2. |

```
<?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:complexType>
```

```xml
        <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>
```

## 6.3  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 Protocol |
| --- | --- |
| 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>
```

# 7 Appendix B: Product Behavior

The information in this specification is applicable to the following Microsoft products:

- 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. 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 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.

# 8   Change Tracking

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

# 9 Index

*Release: Tuesday, October 26, 2010*

**V**

**W**