[MS-OXWSRULES]:
Inbox Rules Web Service Protocol Specification

Revision Summary

Date	Revision History	Revision Class	Comments
05/05/2010	0.1.0	Major	Initial Release.
08/04/2010	1.0	Major	Significantly changed the technical content.
11/03/2010	2.0	Major	Significantly changed the technical content.
03/18/2011	3.0	Major	Significantly changed the technical content.
08/05/2011	4.0	Major	Significantly changed the technical content.
10/07/2011	4.1	Minor	Clarified the meaning of the technical content.

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1   Introduction

The Inbox Rules Web Service Protocol is used to get Inbox **rules** and update Inbox rules for messages on the server.

Sections 1.8, 2, and 3 of this specification are normative and contain RFC 2119 language. Section 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]:

> **action**
> **binary large object (BLOB)**
> **client-side rule**
> **Deleted Items folder**
> **endpoint**
> **Junk E-mail folder**
> **mailbox**
> **rule**
> **S/MIME (Secure/Multipurpose Internet Mail Extensions)**
> **server-side rule**
> **SOAP action**
> **SOAP body**
> **SOAP header**
> **SOAP message**
> **store**
> **Uniform Resource Identifier (URI)**
> **Uniform Resource Locator (URL)**
> **Web Services Description Language (WSDL)**
> **WSDL message**
> **WSDL port type**
> **XML namespace**
> **XML schema**

The following terms are specific to this document:

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

1.2   References

1.2.1   Normative References

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

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

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

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

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

[MS-OXWSGTZ] Microsoft Corporation, "Get Server Time Zone 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-OXDSCLI] 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

This protocol enables clients to get and update Inbox rules, which are sets of conditions and associated **actions**. Clients use Inbox rules to automatically organize, categorize, and act on messages as the messages are delivered to a folder.

Server use rules on mailboxes and other folders to automatically execute actions on objects in the folders. Rules are used to carry out predefined or custom actions. Rules can be performed on the server **store** (**server-side rule**) or on the client (**client-side rule**).

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 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 figure.
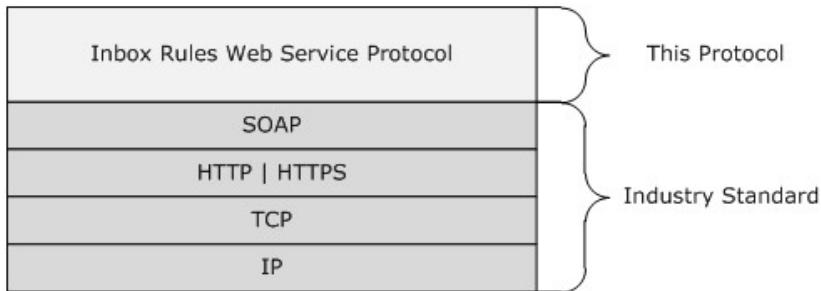
Figure 1: This protocol in relation to other protocols

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-OXDSCLI], 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

This protocol is applicable to environments that get or update the rules that are applied to a user's **mailbox**. This Web service protocol is applicable to SOAP-based clients.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses multiple transports with SOAP 1.1, as specified in section 2.1.

- **Protocol Versions:** This protocol has 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 2.2.4.8, and the version of the server responding to the request is

identified using the **t:ServerVersionInfo** element, as described in [MS-OXWSCDATA] section 2.2.4.9.

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

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

- **Capability Negotiation:** This protocol does not support version negotiation.

1.8   Vendor-Extensible Fields

None.

1.9   Standards Assignments

None.

2 Messages

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 via HTTPS, as specified in [RFC2818].

2.2 Common Message Syntax

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

2.2.1 Namespaces

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

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

2.2.2 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
RuleType	Represents a rule in the user's mailbox.

2.2.4.1 t:RuleType Complex Type

The **RuleType** complex type represents a rule in the user's mailbox.

```xml
<xs:complexType name="RuleType">
  <xs:sequence>
    <xs:element name="RuleId"
      type="xs:string"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="DisplayName"
      type="xs:string"
      maxOccurs="1"
      minOccurs="1"
     />
    <xs:element name="Priority"
      type="xs:int"
      minOccurs="1"
      maxOccurs="1"
     />
    <xs:element name="IsEnabled"
      type="xs:boolean"
      maxOccurs="1"
      minOccurs="1"
     />
    <xs:element name="IsNotSupported"
      type="xs:boolean"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="IsInError"
      type="xs:boolean"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="Conditions"
      type="t:RulePredicatesType"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="Exceptions"
      type="t:RulePredicatesType"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="Actions"
      type="t:RuleActionsType"
      minOccurs="0"
      maxOccurs="1"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element	Type	Description
RuleId	**xs:string** [XMLSCHEMA2]	The rule identifier.
DisplayName	**xs:string**	A value that contains the display name of a rule.
Priority	**xs:int** [XMLSCHEMA2]	A value that indicates the order in which a rule is to be run.
IsEnabled	**xs:boolean** [XMLSCHEMA2]	Indicates whether the rule is enabled.
IsNotSupported	**xs:boolean**	Indicates whether the rule cannot be modified with the managed code APIs.
IsInError	**xs:boolean**	Indicates whether the rule is in an error condition.
Conditions	**t:RulePredicatesType** (section 3.1.4.1.3.4)	The conditions that, when fulfilled, will trigger the rule actions for that rule.
Exceptions	**t:RulePredicatesType** (section 3.1.4.1.3.4)	The exceptions that represent all the available rule exception conditions for the inbox rule.
Actions	**t:RuleActionsType** (section 3.1.4.1.3.5)	The actions to be taken on a message when the conditions are fulfilled.

This complex type contains all required fields to represent an Inbox rule.

The **RuleType** complex type can be extended to represent other rule types.

The **CreateRuleOperationType** complex type (section 3.1.4.2.3.5) does not include a **RuleId** element in the **RuleType** complex type. The rule ID will be generated when the rule is successfully created in the server store.

2.2.5 Simple Types

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

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3   Protocol Details

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

3.1   ExchangeServicePortType Server Detail

The Inbox Rules Web Service Protocol defines a single port type with two operations. The operations enable client implementations to get, create, set, and delete rules.

3.1.1   Abstract Data Mode

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that specified in this document.

3.1.2   Timers

None.

3.1.3   Initialization

None.

3.1.4   Message Processing Events and Sequencing Rules

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

Operation name	Description
GetInboxRules	Retrieves a collection of Inbox rules in the identified user's mailbox.
UpdateInboxRules	Updates the authenticated user's Inbox rules in the server store. This operation enables the user to create, set, and delete Inbox rules.

3.1.4.1   GetInboxRules

The **GetInboxRules** operation retrieves Inbox rules in the identified user's mailbox.

The following is the WSDL port type specification of the operation.

```
<wsdl:operation name="GetInboxRules">
  <wsdl:input message="tns:GetInboxRulesSoapIn" />
  <wsdl:output message="tns:GetInboxRulesSoapOut" />
</wsdl:operation>
```

The following is the WSDL binding specification of the operation.

```
<wsdl:operation name="GetInboxRules">
```

```
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetInboxRules" />
        <wsdl:input>
            <soap:header message="tns:GetInboxRulesSoapIn" part="Impersonation" use="literal" />
            <soap:header message="tns:GetInboxRulesSoapIn" part="MailboxCulture" use="literal" />
            <soap:header message="tns:GetInboxRulesSoapIn" part="RequestVersion" use="literal" />
            <soap:header message="tns:GetInboxRulesSoapIn" part="TimeZoneContext" use="literal"
/>
            <soap:body parts="request" use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body parts="GetInboxRulesResult" use="literal" />
            <soap:header message="tns:GetInboxRulesSoapOut" part="ServerVersion" use="literal" />
        </wsdl:output>
    </wsdl:operation>
```

The protocol client sends a **GetInboxRulesSoapIn** request WSDL message and the protocol server responds with a **GetInboxRulesSoapOut** response WSDL message.

A successful **GetInboxRules** operation request returns a **GetInboxRulesResponse** element with the **ResponseClass** attribute of the **GetInboxRulesResponseType** element set to "Success". The **ResponseCode** element of the **GetInboxRulesResponse** element is set to "NoError".

3.1.4.1.1 Messages

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

Message name	Description
GetInboxRulesSoapIn	Specifies the **SOAP message** that gets the Inbox rules.
GetInboxRulesSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.1.1.1 tns:GetInboxRulesSoapIn Message

The **GetInboxRulesSoapIn** WSDL message specifies a request to get Inbox rules.

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

The **GetInboxRulesSoapIn** WSDL message is the input message for the **SOAP action** http://schemas.microsoft.com/exchange/services/2006/messages/GetInboxRules.

The five parts of the **GetInboxRulesSoapIn** message are described in the following table.

Part name	Element/type	Description
request	**tns:GetInboxRules** (section	Specifies the **SOAP body** of the request to

Part name	Element/type	Description
	3.1.4.1.2.1)	get the Inbox rules.
Impersonation	**t:ExchangeImpersonation** [MS-OXWSCDATA] section 2.2.3.27)	Specifies a **SOAP header** that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.3.36)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.8)	Specifies a SOAP header that identifies the schema version for the **GetInboxRules** operation request.
TimeZoneContext	**t:TimeZoneContext** ([MS-OXWSGTZ] section 2.2.3.4)	Specifies a time zone definition and enables the association of SOAP attributes with the definition.

3.1.4.1.1.2   tns:GetInboxRulesSoapOut Message

The **GetInboxRulesSoapOut** WSDL message specifies the server response to a request to get Inbox rules.

```
<wsdl:message name="GetInboxRulesSoapOut">
    <wsdl:part name="GetInboxRulesResult" element="tns:GetInboxRulesResponse" />
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo" />
</wsdl:message>
```

The **GetInboxRulesSoapOut** WSDL message is the output message for the SOAP action http://schemas.microsoft.com/exchange/services/2006/messages/GetInboxRules.

The two parts of the **GetInboxRulesSoapOut** WSDL message are described in the following table.

Part name	Element/type	Description
GetInboxRulesResult	**tns:GetInboxRulesResponse** (section 3.1.4.1.2.2)	Specifies the SOAP body of the response to a **GetInboxRules** operation request.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.9)	Specifies a SOAP header that identifies the server version for the response.

3.1.4.1.2   Elements

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

Element name	Description
GetInboxRules	Specifies a request to get the Inbox rules in a mailbox in the server store.
GetInboxRulesResponse	Specifies the response body content from a request to get Inbox rules.

3.1.4.1.2.1   GetInboxRules Element

The **GetInboxRules** element specifies a request message for a **GetInboxRules** operation.

```
<xs:element name="GetInboxRules"
  type="m:GetInboxRulesRequestType"
 />
```

3.1.4.1.2.2   GetInboxRulesResponse Element

The **GetInboxRulesResponse** element specifies a response message for a **GetInboxRules** operation.

```
<xs:element name="GetInboxRulesResponse"
  type="m:GetInboxRulesResponseType"
 />
```

3.1.4.1.3   Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type name	Description
GetInboxRulesRequestType	Specifies a request message for the **GetInboxRules** operation.
GetInboxRulesResponseType	Specifies a response message for the **GetInboxRules** operation.
ArrayOfRulesType	Specifies an array of **RuleType** complex type objects.
RulePredicatesType	Specifies the set of conditions and exceptions that are available for a rule.
RuleActionsType	Specifies the set of actions that are available to a rule.
RulePredicateDateRangeType	Specifies the date range in the **RulePredicatesType** complex type object.
RulePredicateSizeRangeType	Specifies the size range in the **RulePredicatesType** complex type object.

3.1.4.1.3.1   m:GetInboxRulesRequestType Complex Type

The **GetInboxRulesRequestType** complex type specifies a request message to get the Inbox rules in a server database. The **GetInboxRulesRequestType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

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

```
                 <xs:element name="MailboxSmtpAddress"
                   type="xs:string"
                   minOccurs="0"
                   maxOccurs="1"
                  />
              </xs:sequence>
            </xs:extension>
          </xs:complexContent>
       </xs:complexType>
```

The following table lists the child element of the **GetInboxRulesRequestType** complex type.

Element name	Type	Description
MailboxSmtpAddress	**xs:string** [XMLSCHEMA2]	Represents the SMTP address of the user whose Inbox rules are to be retrieved.

3.1.4.1.3.2   m:GetInboxRulesResponseType Complex Type

The **GetInboxRulesResponseType** complex type specifies the response message that is returned by the **GetInboxRules** operation. The **GetInboxRulesResponseType** complex type extends the **ResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.52).

```
  <xs:complexType name="GetInboxRulesResponseType">
    <xs:complexContent>
      <xs:extension
        base="m:ResponseMessageType"
      >
        <xs:sequence>
          <xs:element name="OutlookRuleBlobExists"
            type="xs:boolean"
            minOccurs="0"
            maxOccurs="1"
           />
          <xs:element name="InboxRules"
            type="t:ArrayOfRulesType"
            minOccurs="0"
            maxOccurs="1"
           />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

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

Element name	Type	Description
OutlookRuleBlobExists	**xs:boolean** [XMLSCHEMA2]	Specifies whether a **BLOB** that contains all rules exists in the user's mailbox. A text value of "true" indicates that the BLOB exists. This element MUST be present.

Element name	Type	Description
InboxRules	**t:ArrayOfRulesType** (section 3.1.4.1.3.3)	Represents the response message and includes an array of the rules in the user's mailbox.

3.1.4.1.3.3 t:ArrayOfRulesType Complex Type

The **ArrayOfRulesType** complex type specifies an array of **RuleType** complex type, as specified in section 2.2.4.1.

```
<xs:complexType name="ArrayOfRulesType">
  <xs:sequence>
    <xs:element name="Rule"
      type="t:RuleType"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

The following table lists the child element of the **ArrayOfRulesType** complex type.

Element name	Type	Description
Rule	**t:RuleType** (section 2.2.4.1)	The rule in the user's mailbox.

3.1.4.1.3.4 t:RulePredicatesType Complex Type

The **RulePredicatesType** complex type specifies the set of conditions and exceptions that are available for a rule.

```
<xs:complexType name="RulePredicatesType">
  <xs:sequence>
    <xs:element name="Categories"
      type="t:ArrayOfStringsType"
      minOccurs="0"
      maxOccurs="1"
    />
    <xs:element name="ContainsBodyStrings"
      type="t:ArrayOfStringsType"
      minOccurs="0"
      maxOccurs="1"
    />
    <xs:element name="ContainsHeaderStrings"
      type="t:ArrayOfStringsType"
      minOccurs="0"
      maxOccurs="1"
    />
    <xs:element name="ContainsRecipientStrings"
      type="t:ArrayOfStringsType"
      minOccurs="0"
      maxOccurs="1"
    />
    <xs:element name="ContainsSenderStrings"
```

```xml
         type="t:ArrayOfStringsType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="ContainsSubjectOrBodyStrings"
         type="t:ArrayOfStringsType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="ContainsSubjectStrings"
         type="t:ArrayOfStringsType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="FlaggedForAction"
         type="t:FlaggedForActionType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="FromAddresses"
         type="t:ArrayOfEmailAddressesType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="FromConnectedAccounts"
         type="t:ArrayOfStringsType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="HasAttachments"
         type="xs:boolean"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="Importance"
         type="t:ImportanceChoicesType"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="IsApprovalRequest"
         type="xs:boolean"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="IsAutomaticForward"
         type="xs:boolean"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="IsAutomaticReply"
         type="xs:boolean"
         minOccurs="0"
         maxOccurs="1"
        />
        <xs:element name="IsEncrypted"
         type="xs:boolean"
         minOccurs="0"
         maxOccurs="1"
        />
```

```xml
<xs:element name="IsMeetingRequest"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="IsMeetingResponse"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="IsNDR"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="IsPermissionControlled"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="IsReadReceipt"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="IsSigned"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="IsVoicemail"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="ItemClasses"
  type="t:ArrayOfStringsType"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="MessageClassifications"
  type="t:ArrayOfStringsType"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="NotSentToMe"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="SentCcMe"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
 />
<xs:element name="SentOnlyToMe"
  type="xs:boolean"
  minOccurs="0"
  maxOccurs="1"
```

```
    />
  <xs:element name="SentToAddresses"
    type="t:ArrayOfEmailAddressesType"
    minOccurs="0"
    maxOccurs="1"
   />
  <xs:element name="SentToMe"
    type="xs:boolean"
    minOccurs="0"
    maxOccurs="1"
   />
  <xs:element name="SentToOrCcMe"
    type="xs:boolean"
    minOccurs="0"
    maxOccurs="1"
   />
  <xs:element name="Sensitivity"
    type="t:SensitivityChoicesType"
    minOccurs="0"
    maxOccurs="1"
   />
  <xs:element name="WithinDateRange"
    type="t:RulePredicateDateRangeType"
    minOccurs="0"
    maxOccurs="1"
   />
  <xs:element name="WithinSizeRange"
    type="t:RulePredicateSizeRangeType"
    minOccurs="0"
    maxOccurs="1"
   />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
Categories	t:ArrayOfStringsType ([MS-OXWSCDATA] section 2.2.3.10)	The categories that an incoming message is labeled with in order for the condition or exception to apply.
ContainsBodyStrings	t:ArrayOfStringsType	The strings that appear in the body of incoming messages in order for the condition or exception to apply.
ContainsHeaderStrings	t:ArrayOfStringsType	The strings that appear in the headers of incoming messages in order for the condition or exception to apply.
ContainsRecipientStrings	t:ArrayOfStringsType	The strings that appear in

Element name	Type	Description
		either the **ToRecipients** or **CcRecipients** properties of incoming messages in order for the condition or exception to apply.
ContainsSenderStrings	**t:ArrayOfStringsType**	The strings that appear in the **From** property of incoming messages in order for the condition or exception to apply.
ContainsSubjectOrBodyStrings	**t:ArrayOfStringsType**	The strings that appear in either the body or the subject of incoming messages in order for the condition or exception to apply.
ContainsSubjectStrings	**t:ArrayOfStringsType**	The strings that appear in the subject of incoming messages in order for the condition or exception to apply.
FlaggedForAction	**t:FlaggedForActionType** (section 3.1.4.1.4.1)	The flag for action value that appears on incoming messages in order for the condition or exception to apply.
FromAddresses	**t:ArrayOfEmailAddressesType** ([MS-OXWSCDATA] section 2.2.3.5)	The e-mail addresses of the senders of incoming messages that appear in order for the condition or exception to apply.
FromConnectedAccounts	**t:ArrayOfStringsType**	The e-mail account names from which incoming messages have to have been aggregated in order for the condition or exception to apply.
HasAttachments	**xs:boolean** [XMLSCHEMA2]	A value that indicates whether incoming messages have to have attachments in order for the condition or exception to apply.
Importance	**t:ImportanceChoicesType** ([MS-OXWSCORE] section 2.2.5.2)	The importance that is stamped on incoming messages in order for the condition or exception to apply.
IsApprovalRequest	**xs:boolean**	A value that indicates whether incoming messages have to be approval

Element name	Type	Description
		requests in order for the condition or exception to apply.
IsAutomaticForward	**xs:boolean**	A value that indicates whether incoming messages have to be automatic forwards in order for the condition or exception to apply.
IsAutomaticReply	**xs:boolean**	A value that indicates whether incoming messages have to be automatic replies in order for the condition or exception to apply.
IsEncrypted	**xs:boolean**	A value that indicates whether incoming messages have to be **S/MIME** encrypted in order for the condition or exception to apply.
IsMeetingRequest	**xs:boolean**	A value that indicates whether incoming messages have to be meeting requests in order for the condition or exception to apply.
IsMeetingResponse	**xs:boolean**	A value that indicates whether incoming messages have to be meeting responses in order for the condition or exception to apply.
IsNDR	**xs:boolean**	A value that indicates whether incoming messages have to be non-delivery reports (NDRs) in order for the condition or exception to apply.
IsPermissionControlled	**xs:boolean**	A value that indicates whether incoming messages have to be permission controlled (RMS protected) in order for the condition or exception to apply.
IsReadReceipt	**xs:boolean**	A value that indicates whether incoming messages have to be read receipts in order for the condition or exception to apply.
IsSigned	**xs:boolean**	A value that indicates whether incoming messages

Element name	Type	Description
		have to be S/MIME signed in order for the condition or exception to apply.
IsVoicemail	**xs:boolean**	A value that indicates whether incoming messages have to be voice mails in order for the condition or exception to apply.
ItemClasses	**t:ArrayOfStringsType**	The item classes that have to be stamped on incoming messages in order for the condition or exception to apply.
MessageClassifications	**t:ArrayOfStringsType**	The message classifications that have to be stamped on incoming messages in order for the condition or exception to apply.
NotSentToMe	**xs:boolean**	A value that indicates whether the owner of the mailbox cannot be in the **ToRecipients** property of the incoming messages in order for the condition or exception to apply.
SentCcMe	**xs:boolean**	A value that indicates whether the owner of the mailbox has to be in the **CcRecipients** property of incoming messages in order for the condition or exception to apply.
SentOnlyToMe	**xs:boolean**	A value that indicates whether the owner of the mailbox has to be the only one in the **ToRecipients** property of incoming messages in order for the condition or exception to apply.
SentToAddresses	**t:ArrayOfEmailAddressesType**	The e-mail addresses that incoming messages have to have been sent to in order for the condition or exception to apply.
SentToMe	**xs:boolean**	A value that indicates whether the owner of the mailbox has to be in the **ToRecipients** property of incoming messages in order for the condition or

Element name	Type	Description
		exception to apply.
SentToOrCcMe	**xs:boolean**	A value that indicates whether the owner of the mailbox has to be in either a **ToRecipients** or **CcRecipients** property of incoming messages in order for the condition or exception to apply.
Sensitivity	**t:SensitivityChoicesType** ([MS-OXWSCDATA] section 2.2.2.22)	The sensitivity that has to be stamped on incoming messages in order for the condition or exception to apply.
WithinDateRange	**t:RulePredicateDateRangeType** (section 3.1.4.1.3.6)	The date range within which incoming messages have to have been received in order for the condition or exception to apply.
WithinSizeRange	**t:RulePredicateSizeRangeType** (section 3.1.4.1.3.7)	The minimum and maximum sizes that incoming messages have to have in order for the condition or exception to apply.

3.1.4.1.3.5   t:RuleActionsType Complex Type

The **RuleActionsType** complex type specifies the set of actions that are available to a rule.

```
<xs:complexType name="RuleActionsType">
  <xs:sequence>
    <xs:element name="AssignCategories"
      type="t:ArrayOfStringsType"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="CopyToFolder"
      type="t:TargetFolderIdType"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="Delete"
      type="xs:boolean"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="ForwardAsAttachmentToRecipients"
      type="t:ArrayOfEmailAddressesType"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="ForwardToRecipients"
      type="t:ArrayOfEmailAddressesType"
```

```
          minOccurs="0"
          maxOccurs="1"
        />
      <xs:element name="MarkImportance"
        type="t:ImportanceChoicesType"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="MarkAsRead"
        type="xs:boolean"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="MoveToFolder"
        type="t:TargetFolderIdType"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="PermanentDelete"
        type="xs:boolean"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="RedirectToRecipients"
        type="t:ArrayOfEmailAddressesType"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="SendSMSAlertToRecipients"
        type="t:ArrayOfEmailAddressesType"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="ServerReplyWithMessage"
        type="t:ItemIdType"
        minOccurs="0"
        maxOccurs="1"
        />
      <xs:element name="StopProcessingRules"
        type="xs:boolean"
        minOccurs="0"
        maxOccurs="1"
        />
    </xs:sequence>
  </xs:complexType>
```

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

Element name	Type	Description
AssignCategories	**t:ArrayOfStringsType** ([MS-OXWSCDATA] section 2.2.3.10)	The categories that are stamped on e-mail messages.
CopyToFolder	**t:TargetFolderIdType** ([MS-OXWSFOLD] section 2.2.4.14)	The ID of the folder that e-mail items will be

Element name	Type	Description
		copied to.
Delete	**xs:boolean** [XMLSCHEMA2]	A value that indicates whether messages are to be moved to the **Deleted Items folder**.
ForwardAsAttachmentToRecipients	**t:ArrayOfEmailAddressesType** ([MS-OXWSCDATA] section 2.2.3.5)	The e-mail addresses to which messages are to be forwarded as attachments.
ForwardToRecipients	**t:ArrayOfEmailAddressesType**	The e-mail addresses to which messages are to be forwarded.
MarkImportance	**t:ImportanceChoicesType** ([MS-OXWSCORE] section 2.2.5.2)	The importance that is to be stamped on messages.
MarkAsRead	**xs:boolean**	A value that indicates whether messages are to be marked as read.
MoveToFolder	**t:TargetFolderIdType**	The ID of the folder that e-mail items will be moved to.
PermanentDelete	**xs:boolean**	A value that indicates whether messages are to be permanently deleted and not saved to the Deleted Items folder.
RedirectToRecipients	**t:ArrayOfEmailAddressesType**	The e-mail addresses to which messages are to be redirected.
SendSMSAlertToRecipients	**t:ArrayOfEmailAddressesType**	The mobile phone numbers to which a Short Message Service (SMS) alert is to be sent.
ServerReplyWithMessage	**t:ItemIdType** ([MS-OXWSCORE] section 2.2.4.13)	The ID of the template message that is to be sent as a reply to incoming messages.
StopProcessingRules	**xs:boolean**	A value that indicates whether subsequent rules are to be evaluated.

3.1.4.1.3.6   t:RulePredicateDateRangeType Complex Type

The **RulePredicateDateRangeType** complex type specifies the date range in the
RulePredicatesType complex type.

```
<xs:complexType name="RulePredicateDateRangeType">
  <xs:sequence>
    <xs:element name="StartDateTime"
      type="xs:dateTime"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="EndDateTime"
      type="xs:dateTime"
      minOccurs="0"
      maxOccurs="1"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
StartDateTime	**xs:dateTime** [XMLSCHEMA2]	Specifies the rule time period and indicates that the rule condition is met after this value.
EndDateTime	**xs:dateTime**	Specifies the rule time period and indicates that the rule condition is met before this value.

This complex type MUST contain a **StartDateTime** or an **EndDateTime** element and can contain
both a **StartDateTime** and an **EndDateTime** element.

The time period specified by the **StartDateTime** element MUST NOT be after the time period
specified by the **EndDateTime** element.

3.1.4.1.3.7   t:RulePredicateSizeRangeType Complex Type

The **RulePredicateSizeRangeType** complex type specifies the size range in the
RulePredicatesType complex type. This complex type represents the minimum and maximum size
of a message in the rule predicate, in kilobytes.

```
<xs:complexType name="RulePredicateSizeRangeType">
  <xs:sequence>
    <xs:element name="MinimumSize"
      type="xs:int"
      minOccurs="0"
      maxOccurs="1"
     />
    <xs:element name="MaximumSize"
      type="xs:int"
      minOccurs="0"
      maxOccurs="1"
     />
  </xs:sequence>
```

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

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

Element name	Type	Description
MinimumSize	**xs:int** [XMLSCHEMA2]	The minimum size of a message for the conditions or exception to apply.
MaximumSize	**xs:int**	The maximum size of a message for the conditions or exception to apply.

This complex type can contain a **MinimumSize** and a **MaximumSize** element.

The value of the **MinimumSize** element MUST NOT be greater than value of the **MaximumSize** element. The values of the **MinimumSize** and **MaximumSize** elements MUST NOT be negative.

To disable this predicate, set both the **MinimumSize** and the **MaximumSize** element to null.

3.1.4.1.4 Simple Types

The following table summarizes the XML schema simple types that are specific to this operation.

Simple type name	Description
FlaggedForActionType	Defines the follow-up actions that can be stamped on a message.

3.1.4.1.4.1 t:FlaggedForActionType Simple Type

The **FlaggedForActionType** simple type defines the follow-up actions that can be stamped on a message.

```
<xs:simpleType name="FlaggedForActionType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="Any"
     />
    <xs:enumeration
      value="Call"
     />
    <xs:enumeration
      value="DoNotForward"
     />
    <xs:enumeration
      value="FollowUp"
     />
    <xs:enumeration
      value="FYI"
     />
    <xs:enumeration
      value="Forward"
```

```
       />
    <xs:enumeration
      value="NoResponseNecessary"
     />
    <xs:enumeration
      value="Read"
     />
    <xs:enumeration
      value="Reply"
     />
    <xs:enumeration
      value="ReplyToAll"
     />
    <xs:enumeration
      value="Review"
     />
  </xs:restriction>
</xs:simpleType>
```

The following table lists the values that are defined by the **FlaggedForActionType** simple type.

Value	Meaning
Any	The message is flagged with any action.
Call	The recipient is requested to call the sender.
DoNotForward	The recipient is requested not to forward the message.
FollowUp	The recipient is requested to follow up on the message.
FYI	The recipient received the message for information.
Forward	The recipient is requested to forward the message.
NoResponseNecessary	The recipient is informed that a response to the message is not required.
Read	The recipient is requested to read the message.
Reply	The recipient is requested to reply to the sender of the message.
ReplyToAll	The recipient is requested to reply to everyone the message was sent to.
Review	The recipient is requested to review the message.

3.1.4.2 UpdateInboxRules

The **UpdateInboxRules** operation updates the authenticated user's Inbox rules by applying the specified operations. This operation is used to create an Inbox rule, to set an Inbox rule, or to delete an Inbox rule.

The following is the WSDL port type specification of the operation.

```
<wsdl:operation name="UpdateInboxRules">
  <wsdl:input message="tns:UpdateInboxRulesSoapIn" />
  <wsdl:output message="tns:UpdateInboxRulesSoapOut" />
```

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

The following is the WSDL binding specification of the operation.

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

The protocol client sends an **UpdateInboxRulesSoapIn** request WSDL message and the protocol server responds with an **UpdateInboxRulesSoapOut** response WSDL message.

A successful **UpdateInboxRules** operation request returns an **UpdateInboxRulesResponse** element with the **ResponseClass** attribute of the **UpdateInboxRulesResponseType** element set to "Success". The **ResponseCode** element of the **UpdateInboxRulesResponse** element is set to "NoError".

3.1.4.2.1 Messages

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

Message name	Description
UpdateInboxRulesSoapIn	Specifies the SOAP message that updates the Inbox rules.
UpdateInboxRulesSoapOut	Specifies the SOAP message that is returned by the server in response.

3.1.4.2.1.1 tns:UpdateInboxRulesSoapIn Message

The **UpdateInboxRulesSoapIn** WSDL message specifies a request to update Inbox rules. The update can be to create, set, or delete the Inbox rule.

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

```
    </wsdl:message>
```

The **UpdateInboxRulesSoapIn** WSDL message is the input message for the SOAP action http://schemas.microsoft.com/exchange/services/2006/messages/UpdateInboxRules.

The five parts of the **UpdateInboxRulesSoapIn** message are described in the following table.

Part name	Element/type	Description
request	**tns:UpdateInboxRules** (section 3.1.4.2.2.1)	Specifies the SOAP body of the request to update Inbox rules.
Impersonation	**t:ExchangeImpersonation** ([MS-OXWSCDATA] section 2.2.3.27)	Specifies a SOAP header that identifies the user whom the client application is impersonating.
MailboxCulture	**t:MailboxCulture** ([MS-OXWSCDATA] section 2.2.3.36)	Specifies a SOAP header that identifies the culture to use for accessing the mailbox. The cultures are defined by [RFC3066].
RequestVersion	**t:RequestServerVersion** ([MS-OXWSCDATA] section 2.2.4.8))	Specifies a SOAP header that identifies the schema version for the **UpdateInboxRules** operation request.
TimeZoneContext	**t:TimeZoneContext** ([MS-OXWSGTZ] section 2.2.3.4)	Specifies a time zone definition and enables the association of SOAP attributes with the definition.

3.1.4.2.1.2   tns:UpdateInboxRulesSoapOut Message

The **UpdateInboxRulesSoapOut** WSDL message specifies the server response to the **UpdateInboxRules** operation request to update the Inbox rules.

```
<wsdl:message name="UpdateInboxRulesSoapOut">
    <wsdl:part name="UpdateInboxRulesResult" element="tns:UpdateInboxRulesResponse" />
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo" />
</wsdl:message>
```

The **UpdateInboxRulesSoapOut** WSDL message is the output message for the SOAP action http://schemas.microsoft.com/exchange/services/2006/messages/UpdateInboxRules.

The two parts of the **UpdateInboxRulesSoapOut** WSDL message are described in the following table.

Part name	Element/type	Description
UpdateInboxRulesResult	**tns:UpdateInboxRulesResponse** (section 3.1.4.2.2.2)	Specifies the response to an **UpdatetInboxRules** operation request.
ServerVersion	**t:ServerVersionInfo** ([MS-OXWSCDATA] section 2.2.4.9)	Specifies the server version for the response.

3.1.4.2.2   Elements

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

Element name	Description
UpdateInboxRules	Specifies a request to update the Inbox rules in a mailbox in the server store.
UpdateInboxRulesResponse	Specifies the response body content from a request to update the Inbox rules.

3.1.4.2.2.1   UpdateInboxRules Element

The **UpdateInboxRules** element specifies the request message for an **UpdateInboxRules** operation.

```
<xs:element name="UpdateInboxRules"
  type="m:UpdateInboxRulesRequestType"
 />
```

3.1.4.2.2.2   UpdateInboxRulesResponse Element

The **UpdateInboxRulesResponse** element specifies the response message for an **UpdateInboxRules** operation.

```
<xs:element name="UpdateInboxRulesResponse"
  type="m:UpdateInboxRulesResponseType"
 />
```

3.1.4.2.3   Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type name	Description
UpdateInboxRulesRequestType	Specifies the request message for the **UpdateInboxRules** operation.
UpdateInboxRulesResponseType	Specifies the response message for the **UpdateInboxRules** operation.
ArrayOfRuleOperationsType	Specifies an array of rule operations that can be performed on a rule.
RuleOperationType	Specifies the base type for rule operations and represents the rule operation to be performed.
CreateRuleOperationType	Specifies an operation to create a new rule.
SetRuleOperationType	Specifies an operation to update an existing rule.

Complex type name	Description
DeleteRuleOperationType	Specifies an operation to delete an existing rule.
ArrayOfRuleOperationErrorsType	Specifies an array of rule validation errors on each rule field that has an error.
RuleOperationErrorType	Specifies a rule operation error.
ArrayOfRuleValidationErrorsType	Specifies an array of rule validation errors.
RuleValidationErrorType	Specifies a single validation error on a particular rule property value, predicate property value, or action property value.

3.1.4.2.3.1   m:UpdateInboxRulesRequestType Complex Type

The **UpdateInboxRulesRequestType** complex type specifies a request message to update the Inbox rules in a server database. The **UpdateInboxRulesRequestType** complex type extends the **BaseRequestType** complex type ([MS-OXWSCDATA] section 2.2.3.14).

```
<xs:complexType name="UpdateInboxRulesRequestType">
  <xs:complexContent>
    <xs:extension
      base="m:BaseRequestType"
    >
      <xs:sequence>
        <xs:element name="MailboxSmtpAddress"
          type="xs:string"
          minOccurs="0"
          maxOccurs="1"
        />
        <xs:element name="RemoveOutlookRuleBlob"
          type="xs:boolean"
          minOccurs="0"
          maxOccurs="1"
        />
        <xs:element name="Operations"
          type="t:ArrayOfRuleOperationsType"
          maxOccurs="1"
          minOccurs="1"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
MailboxSmtpAddress	xs:string [XMLSCHEMA2]	Represents the SMTP address of the user whose Inbox rules are to be updated.
RemoveOutlookRuleBlob	xs:boolean [XMLSCHEMA2]	Indicates whether to remove the BLOB that contains all rules.

Element name	Type	Description
Operations	**t:ArrayOfRuleOperationsType** (section 3.1.4.2.3.3)	The operations that are to be applied to the user's Inbox rules.

The child elements of the **Operations** element are the **CreateRuleOperation**, as specified in section 3.1.4.2.3.5), the **SetRuleOperation**, as specified in section 3.1.4.2.3.6), and the **DeleteRuleOperation**, as specified in section 3.1.4.2.3.7.

3.1.4.2.3.2   m:UpdateInboxRulesResponseType Complex Type

The **UpdateInboxRulesResponseType** complex type specifies a response message that is returned by the **UpdateInboxRules** operation. The **UpdateInboxRulesResponseType** complex type extends the **ResponseMessageType** complex type ([MS-OXWSCDATA] section 2.2.3.52).

```
<xs:complexType name="UpdateInboxRulesResponseType">
  <xs:complexContent>
    <xs:extension
      base="m:ResponseMessageType"
    >
      <xs:sequence>
        <xs:element name="RuleOperationErrors"
          type="t:ArrayOfRuleOperationErrorsType"
          minOccurs="0"
          maxOccurs="1"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

The following table lists the child element of the **UpdateInboxRulesResponseType** complex type.

Element name	Type	Description
RuleOperationErrors	**t:ArrayOfRuleOperationErrorsType** (section 3.1.4.2.3.8)	Specifies a **RuleOperationErrorType** complex type (section 3.1.4.2.3.9) collection, which contains the validation errors on each rule filed that has an error.

3.1.4.2.3.3   t:ArrayOfRuleOperationsType Complex Type

The **ArrayOfRuleOperationsType** complex type specifies an array of rule operations that can be performed on a rule.

```
<xs:complexType name="ArrayOfRuleOperationsType">
  <xs:choice
    maxOccurs="unbounded"
    minOccurs="1"
  >
    <xs:element name="CreateRuleOperation"
      type="t:CreateRuleOperationType"
    />
```

```
      <xs:element name="SetRuleOperation"
        type="t:SetRuleOperationType"
       />
      <xs:element name="DeleteRuleOperation"
        type="t:DeleteRuleOperationType"
       />
    </xs:choice>
  </xs:complexType>
```

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

Element name	Type	Description
CreateRuleOperation	**t:CreateRuleOperationType** (section 3.1.4.2.3.5)	Specifies an operation to create an Inbox rule.
SetRuleOperation	**t:SetRuleOperationType** (section 3.1.4.2.3.6)	Specifies an operation to update an Inbox rule.
DeleteRuleOperation	**t:DeleteRuleOperationType** (section 3.1.4.2.3.7)	Specifies an operation to delete an Inbox rule.

3.1.4.2.3.4   t:RuleOperationType Complex Type

The **RuleOperationType** complex type is the base type for rule operations and represents the rule operation to be performed.

```
<xs:complexType name="RuleOperationType"
  abstract="true"
 />
```

The **CreateRuleOperationType** complex type, as specified in section 3.1.4.2.3.5, **SetRuleOperationType** complex type, as specified in section 3.1.4.2.3.6, and **DeleteRuleOperationType** complex type, as specified in section 3.1.4.2.3.7, extend this base type.

3.1.4.2.3.5   t:CreateRuleOperationType Complex Type

The **CreateRuleOperationType** complex type represents the operation to create a new Inbox rule. The **CreateRuleOperationType** complex type extends the **RuleOperationType** complex type, as specified in section 3.1.4.2.3.4.

```
<xs:complexType name="CreateRuleOperationType">
  <xs:complexContent>
    <xs:extension
      base="t:RuleOperationType"
    >
      <xs:sequence>
        <xs:element name="Rule"
          type="t:RuleType"
          maxOccurs="1"
          minOccurs="1"
         />
```

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

The following table lists the child element of the **CreateRuleOperationType** complex type.

Element name	Type	Description
Rule	**t:RuleType** (section 2.2.4.1)	Represents the rule to create.

The **UpdateInboxRules** operation can be used with the **CreateRuleOperationType** complex type to create a rule. When creating a rule, the **RuleType** complex type, as specified in section 2.2.4.1, MUST NOT have a **RuleId** element. The **RuleId** element of the **RuleType** complex type is generated when the rule is successfully created in the server store.

3.1.4.2.3.6   t:SetRuleOperationType Complex Type

The **SetRuleOperationType** complex type represents an operation to update an existing Inbox rule. The **SetRuleOperationType** complex type extends the **RuleOperationType** complex type, as specified in section 3.1.4.2.3.4.

```
  <xs:complexType name="SetRuleOperationType">
    <xs:complexContent>
      <xs:extension
        base="t:RuleOperationType"
      >
        <xs:sequence>
          <xs:element name="Rule"
            type="t:RuleType"
            maxOccurs="1"
            minOccurs="1"
          />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

The following table lists the child element of the **SetRuleOperationType** complex type.

Element name	Type	Description
Rule	**t:RuleType** (section 2.2.4.1)	Represents the rule to be updated.

The **UpdateInboxRules** operation can be used with the **SetRuleOperationType** complex type to modify a rule. When modifying a rule, the **RuleType** complex type, as specified in section 2.2.4.1, MUST have a **RuleId** element.

3.1.4.2.3.7   t:DeleteRuleOperationType Complex Type

The **DeleteRuleOperationType** complex type represents an operation to delete an existing Inbox rule. The **DeleteRuleOperationType** complex type extends the **RuleOperationType** complex type, as specified in section 3.1.4.2.3.4.

```
<xs:complexType name="DeleteRuleOperationType">
  <xs:complexContent>
    <xs:extension
      base="t:RuleOperationType"
    >
      <xs:sequence>
        <xs:element name="RuleId"
          type="xs:string"
          minOccurs="1"
          maxOccurs="1"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

The following table lists the child element of the **DeleteRuleOperationType** complex type.

Element name	Type	Description
RuleId	**xs:string** [XMLSCHEMA2]	Specifies the rule identifier of the Inbox rule to be deleted.

3.1.4.2.3.8   t:ArrayOfRuleOperationErrorsType Complex Type

The **ArrayOfRuleOperationErrorsType** complex type specifies an array of rule validation errors on each rule field that has an error.

```
<xs:complexType name="ArrayOfRuleOperationErrorsType">
  <xs:sequence>
    <xs:element name="RuleOperationError"
      type="t:RuleOperationErrorType"
      maxOccurs="unbounded"
      minOccurs="1"
    />
  </xs:sequence>
</xs:complexType>
```

The following table lists the child element of the **ArrayOfRuleOperationErrorsType** complex type.

Element name	Type	Description
RuleOperationError	**t:RuleOperationErrorType** (section 3.1.4.2.3.9)	Specifies a rule operation error.

3.1.4.2.3.9   t:RuleOperationErrorType Complex Type

The **RuleOperationErrorType** complex type specifies a rule operation error.

```
<xs:complexType name="RuleOperationErrorType">
  <xs:sequence>
    <xs:element name="OperationIndex"
      type="xs:int"
      maxOccurs="1"
      minOccurs="1"
     />
    <xs:element name="ValidationErrors"
      type="t:ArrayOfRuleValidationErrorsType"
      maxOccurs="1"
      minOccurs="1"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
OperationIndex	**xs:int** [XMLSCHEMA2]	Specifies the index of the operation in the request that caused the rule operation error.
ValidationErrors	**t:ArrayOfRuleValidationErrorsType** (section 3.1.4.2.3.10)	Specifies an array of rule validation errors on each rule field that has an error.

3.1.4.2.3.10   t:ArrayOfRuleValidationErrorsType Complex Type

The **ArrayOfRuleValidationErrorsType** complex type specifies an array of rule validation errors.

```
<xs:complexType name="ArrayOfRuleValidationErrorsType">
  <xs:sequence>
    <xs:element name="Error"
      type="t:RuleValidationErrorType"
      maxOccurs="unbounded"
      minOccurs="1"
     />
  </xs:sequence>
</xs:complexType>
```

The following table lists the child element of the **ArrayOfRuleValidationErrorsType** complex type.

Element name	Type	Description
Error	**t:RuleValidationErrorType** (section 3.1.4.2.3.11)	Specifies a single validation error on a particular rule property value, predicate property value, or action property value.

3.1.4.2.3.11   t:RuleValidationErrorType Complex Type

The **RuleValidationErrorType** complex type specifies a single validation error on a particular rule property value, predicate property value, or action property value.

```
<xs:complexType name="RuleValidationErrorType">
  <xs:sequence>
    <xs:element name="FieldURI"
      type="t:RuleFieldURIType"
      minOccurs="1"
      maxOccurs="1"
     />
    <xs:element name="ErrorCode"
      type="t:RuleValidationErrorCodeType"
      minOccurs="1"
      maxOccurs="1"
     />
    <xs:element name="ErrorMessage"
      type="xs:string"
      minOccurs="1"
      maxOccurs="1"
     />
    <xs:element name="FieldValue"
      type="xs:string"
      minOccurs="1"
      maxOccurs="1"
     />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
FieldURI	**t:RuleFieldURIType** (section 3.1.4.2.4.1)	Specifies the **URI** to the rule field that caused the validation error.
ErrorCode	**t:RuleValidationErrorCodeType** (section 3.1.4.2.4.2)	Specifies the error code that was triggered on the field.
ErrorMessage	**xs:string** [XMLSCHEMA2]	Specifies the reason for the validation error.
FieldValue	**xs:string**	Specifies the value of the field that caused the validation error.

3.1.4.2.4   Simple Types

The following table summarizes the XML schema simple types that are specific to this operation.

Simple type name	Description
RuleFieldURIType	Defines the rule fields that could cause a validation error.

Simple type name	Description
RuleValidationErrorCodeType	Defines what failed validation for each rule predicate or action.

3.1.4.2.4.1 t:RuleFieldURIType Simple Type

The **RuleFieldURIType** simple type defines all possible rule fields that could trigger a validation error.

```
<xs:simpleType name="RuleFieldURIType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="RuleId"
     />
    <xs:enumeration
      value="DisplayName"
     />
    <xs:enumeration
      value="Priority"
     />
    <xs:enumeration
      value="IsNotSupported"
     />
    <xs:enumeration
      value="Actions"
     />
    <xs:enumeration
      value="Condition:Categories"
     />
    <xs:enumeration
      value="Condition:ContainsBodyStrings"
     />
    <xs:enumeration
      value="Condition:ContainsHeaderStrings"
     />
    <xs:enumeration
      value="Condition:ContainsRecipientStrings"
     />
    <xs:enumeration
      value="Condition:ContainsSenderStrings"
     />
    <xs:enumeration
      value="Condition:ContainsSubjectOrBodyStrings"
     />
    <xs:enumeration
      value="Condition:ContainsSubjectStrings"
     />
    <xs:enumeration
      value="Condition:FlaggedForAction"
     />
    <xs:enumeration
      value="Condition:FromAddresses"
     />
    <xs:enumeration
      value="Condition:FromConnectedAccounts"
     />
```

```
<xs:enumeration
 value="Condition:HasAttachments"
 />
<xs:enumeration
 value="Condition:Importance"
 />
<xs:enumeration
 value="Condition:IsApprovalRequest"
 />
<xs:enumeration
 value="Condition: IsAutomaticForward"
 />
<xs:enumeration
 value="Condition:IsAutomaticReply"
 />
<xs:enumeration
 value="Condition:IsEncrypted"
 />
<xs:enumeration
 value="Condition:IsMeetingRequest"
 />
<xs:enumeration
 value="Condition:IsMeetingResponse"
 />
<xs:enumeration
 value="Condition:IsNDR"
 />
<xs:enumeration
 value="Condition:IsPermissionControlled"
 />
<xs:enumeration
 value="Condition:IsReadReceipt"
 />
<xs:enumeration
 value="Condition:IsSigned"
 />
<xs:enumeration
 value="Condition:IsVoicemail"
 />
<xs:enumeration
 value="Condition:ItemClasses"
 />
<xs:enumeration
 value="Condition:MessageClassifications"
 />
<xs:enumeration
 value="Condition:NotSentToMe"
 />
<xs:enumeration
 value="Condition:SentCcMe"
 />
<xs:enumeration
 value="Condition:SentOnlyToMe"
 />
<xs:enumeration
 value="Condition:SentToAddresses"
 />
<xs:enumeration
 value="Condition:SentToMe"
```

```
  />
<xs:enumeration
  value="Condition:SentToOrCcMe"
  />
<xs:enumeration
  value="Condition:Sensitivity"
  />
<xs:enumeration
  value="Condition:WithinDateRange"
  />
<xs:enumeration
  value="Condition:WithinSizeRange"
  />
<xs:enumeration
  value="Exception:Categories"
  />
<xs:enumeration
  value="Exception:ContainsBodyStrings"
  />
<xs:enumeration
  value="Exception:ContainsHeaderStrings"
  />
<xs:enumeration
  value="Exception:ContainsRecipientStrings"
  />
<xs:enumeration
  value="Exception:ContainsSenderStrings"
  />
<xs:enumeration
  value="Exception:ContainsSubjectOrBodyStrings"
  />
<xs:enumeration
  value="Exception:ContainsSubjectStrings"
  />
<xs:enumeration
  value="Exception:FlaggedForAction"
  />
<xs:enumeration
  value="Exception:FromAddresses"
  />
<xs:enumeration
  value="Exception:FromConnectedAccounts"
  />
<xs:enumeration
  value="Exception:HasAttachments"
  />
<xs:enumeration
  value="Exception:Importance"
  />
<xs:enumeration
  value="Exception:IsApprovalRequest"
  />
<xs:enumeration
  value="Exception:IsAutomaticForward"
  />
<xs:enumeration
  value="Exception:IsAutomaticReply"
  />
<xs:enumeration
```

```
       value="Exception:IsEncrypted"
  />
 <xs:enumeration
   value="Exception:IsMeetingRequest"
  />
 <xs:enumeration
   value="Exception:IsMeetingResponse"
  />
 <xs:enumeration
   value="Exception:IsNDR"
  />
 <xs:enumeration
   value="Exception:IsPermissionControlled"
  />
 <xs:enumeration
   value="Exception:IsReadReceipt"
  />
 <xs:enumeration
   value="Exception:IsSigned"
  />
 <xs:enumeration
   value="Exception:IsVoicemail"
  />
 <xs:enumeration
   value="Exception:ItemClasses"
  />
 <xs:enumeration
   value="Exception:MessageClassifications"
  />
 <xs:enumeration
   value="Exception:NotSentToMe"
  />
 <xs:enumeration
   value="Exception:SentCcMe"
  />
 <xs:enumeration
   value="Exception:SentOnlyToMe"
  />
 <xs:enumeration
   value="Exception:SentToAddresses"
  />
 <xs:enumeration
   value="Exception:SentToMe"
  />
 <xs:enumeration
   value="Exception:SentToOrCcMe"
  />
 <xs:enumeration
   value="Exception:Sensitivity"
  />
 <xs:enumeration
   value="Exception:WithinDateRange"
  />
 <xs:enumeration
   value="Exception:WithinSizeRange"
  />
 <xs:enumeration
   value="Action:AssignCategories"
  />
```

```
       <xs:enumeration
        value="Action:CopyToFolder"
        />
       <xs:enumeration
        value="Action:Delete"
        />
       <xs:enumeration
        value="Action:ForwardAsAttachmentToRecipients"
        />
       <xs:enumeration
        value="Action:ForwardToRecipients"
        />
       <xs:enumeration
        value="Action:MarkImportance"
        />
       <xs:enumeration
        value="Action:MarkAsRead"
        />
       <xs:enumeration
        value="Action:MoveToFolder"
        />
       <xs:enumeration
        value="Action:PermanentDelete"
        />
       <xs:enumeration
        value="Action:RedirectToRecipients"
        />
       <xs:enumeration
        value="Action:SendSMSAlertToRecipients"
        />
       <xs:enumeration
        value="Action:ServerReplyWithMessage"
        />
       <xs:enumeration
        value="Action:StopProcessingRules"
        />
       <xs:enumeration
        value="IsEnabled"
        />
       <xs:enumeration
        value="IsInError"
        />
       <xs:enumeration
        value="Conditions"
        />
       <xs:enumeration
        value="Exceptions"
        />
    </xs:restriction>
  </xs:simpleType>
```

The following table lists the values that are defined by the **RuleFieldURIType** simple type.

Value name	Meaning
RuleId	The rule ID.

Value name	Meaning
DisplayName	The rule display name.
Priority	The rule priority.
IsNotSupported	The rule is not supported.
Actions	The rule actions.
Condition:Categories	The categories condition.
Condition:ContainsBodyStrings	The body contains strings condition.
Condition:ContainsHeaderStrings	The header contains strings condition.
Condition:ContainsRecipientStrings	The recipient contains strings condition.
Condition:ContainsSenderStrings	The sender contains strings condition.
Condition:ContainsSubjectOrBodyStrings	The subject or body contains strings condition.
Condition:ContainsSubjectStrings	The subject contains strings condition.
Condition:FlaggedForAction	The flagged for action condition.
Condition:FromAddresses	The from addresses condition.
Condition:FromConnectedAccounts	The from connected accounts condition.
Condition:HasAttachments	The has attachments condition.
Condition:Importance	The importance condition property of a rule's set of conditions.
Condition:IsApprovalRequest	The approval request condition exists.
Condition: IsAutomaticForward	The automatic forward condition exists.
Condition:IsAutomaticReply	The automatic reply condition exists.
Condition:IsEncrypted	The encrypted condition exists.
Condition:IsMeetingRequest	The meeting request condition exists.
Condition:IsMeetingResponse	The meeting response condition exists.
Condition:IsNDR	The non-delivery report (NDR) condition exists.
Condition:IsPermissionControlled	The permission-controlled condition exists.
Condition:IsReadReceipt	The read condition exists.
Condition:IsSigned	The signed condition exists.
Condition:IsVoicemail	The voice mail condition exists.
Condition:ItemClasses	The item class condition.
Condition:MessageClassifications	The message classifications condition.

Value name	Meaning
Condition:NotSentToMe	The not sent to me condition.
Condition:SentCcMe	The sent Cc me condition.
Condition:SentOnlyToMe	The sent only to me condition.
Condition:SentToAddresses	The sent to addresses condition.
Condition:SentToMe	The sent to me condition.
Condition:SentToOrCcMe	The sent to or Cc me condition.
Condition:Sensitivity	The sensitivity condition.
Condition:WithinDateRange	The within date range condition.
Condition:WithinSizeRange	The within size range condition.
Exception:Categories	The categories exception.
Exception:ContainsBodyStrings	The body contains strings exception.
Exception:ContainsHeaderStrings	The header contains strings exception.
Exception:ContainsRecipientStrings	The recipient contains strings exception.
Exception:ContainsSenderStrings	The sender contains strings exception.
Exception:ContainsSubjectOrBodyStrings	The subject or body contains strings exception.
Exception:ContainsSubjectStrings	The subject contains strings exception.
Exception:FlaggedForAction	The flagged for action exception.
Exception:FromAddresses	The from addresses exception.
Exception:FromConnectedAccounts	The from connected accounts exception.
Exception:HasAttachments	The has attachments exception.
Exception:Importance	The importance exception.
Exception:IsApprovalRequest	The approval request exception exists.
Exception:IsAutomaticForward	The automatic forward exception exists
Exception:IsAutomaticReply	The automatic reply exception exists.
Exception:IsEncrypted	The encrypted exception exists.
Exception:IsMeetingRequest	The meeting request exception exists.
Exception:IsMeetingResponse	The meeting response exception exists.
Exception:IsNDR	The NDR exception exists.
Exception:IsPermissionControlled	The permission controlled exception exists.
Exception:IsReadReceipt	The read exception exists.

Value name	Meaning
Exception:IsSigned	The signed exception exists.
Exception:IsVoicemail	The voice mail exception exists.
Exception:ItemClasses	The item class exception.
Exception:MessageClassifications	The message classifications exception.
Exception:NotSentToMe	The not sent to me exception.
Exception:SentCcMe	The sent to me exception.
Exception:SentOnlyToMe	The sent only to me exception.
Exception:SentToAddresses	The sent to addresses exception.
Exception:SentToMe	The sent to me exception.
Exception:SentToOrCcMe	The sent to or Cc me exception.
Exception:Sensitivity	The sensitivity exception.
Exception:WithinDateRange	The within date range exception.
Exception:WithinSizeRange	The within size range exception.
Action:AssignCategories	The assign categories action.
Action:CopyToFolder	The copy to folder action.
Action:Delete	The delete action.
Action:ForwardAsAttachmentToRecipients	The forward as attachment to recipients action.
Action:ForwardToRecipients	The forward to recipients action.
Action:MarkImportance	The mark importance action.
Action:MarkAsRead	The mark as read action.
Action:MoveToFolder	The move to folder action.
Action:PermanentDelete	The permanent delete action.
Action:RedirectToRecipients	The redirect to recipients action.
Action:SendSMSAlertToRecipients	The send SMS alert to recipients action.
Action:ServerReplyWithMessage	The server reply with message action.
Action:StopProcessingRules	The stop processing rules action.
IsEnabled	Indicates whether the rule is enabled.
IsInError	Indicates whether the rule is in error.
Conditions	Contains all conditions of the rule.
Exceptions	Contains all the exceptions for the rule.

3.1.4.2.4.2   t:RuleValidationErrorCodeType Simple Type

The **RuleValidationErrorCodeType** simple type defines what failed validation for each rule predicate or action.

```xml
<xs:simpleType name="RuleValidationErrorCodeType">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="ADOperationFailure"
     />
    <xs:enumeration
      value="ConnectedAccountNotFound"
     />
    <xs:enumeration
      value="CreateWithRuleId"
     />
    <xs:enumeration
      value="EmptyValueFound"
     />
    <xs:enumeration
      value="DuplicatedPriority"
     />
    <xs:enumeration
      value="DuplicatedOperationOnTheSameRule"
     />
    <xs:enumeration
      value="FolderDoesNotExist"
     />
    <xs:enumeration
      value="InvalidAddress"
     />
    <xs:enumeration
      value="InvalidDateRange"
     />
    <xs:enumeration
      value="InvalidFolderId"
     />
    <xs:enumeration
      value="InvalidSizeRange"
     />
    <xs:enumeration
      value="InvalidValue"
     />
    <xs:enumeration
      value="MessageClassificationNotFound"
     />
    <xs:enumeration
      value="MissingAction"
     />
    <xs:enumeration
      value="MissingParameter"
     />
    <xs:enumeration
      value="MissingRangeValue"
     />
    <xs:enumeration
      value="NotSettable"
```

```
        />
      <xs:enumeration
        value="RecipientDoesNotExist"
        />
      <xs:enumeration
        value="RuleNotFound"
        />
      <xs:enumeration
        value="SizeLessThanZero"
        />
      <xs:enumeration
        value="StringValueTooBig"
        />
      <xs:enumeration
        value="UnsupportedAddress"
        />
      <xs:enumeration
        value="UnexpectedError"
        />
      <xs:enumeration
        value="UnsupportedRule"
        />
    </xs:restriction>
  </xs:simpleType>
```

The following table lists the values that are defined by the **RuleValidationErrorCodeType** simple type.

Value name	Meaning
ADOperationFailure	The directory service operation failed.
ConnectedAccountNotFound	The specified e-mail account was not found.
CreateWithRuleId	An attempt was made to create a rule with an ID. The IDs of new rules are generated by the server and are not provided by the client.
EmptyValueFound	The **Value** field is empty. An empty **Value** field is not allowed.
DuplicatedPriority	There are multiple rules in the same request with the same priority. A priority can have only one rule.
DuplicatedOperationOnTheSameRule	There are multiple operations against the same rule. Only one operation per rule is allowed.
FolderDoesNotExist	The folder does not exist in the user's mailbox.
InvalidAddress	The e-mail address is invalid.
InvalidDateRange	The specified date range is invalid.
InvalidFolderId	The specified folder ID is invalid.
InvalidSizeRange	The size range is invalid.
InvalidValue	The specified value is invalid.

Value name	Meaning
MessageClassificationNotFound	The message classification was not found.
MissingAction	No action was specified. At least one rule action has to be specified for validation.
MissingParameter	The required parameter is missing.
MissingRangeValue	The range value is missing.
NotSettable	The property cannot be modified.
RecipientDoesNotExist	The recipient does not exist.
RuleNotFound	The rule was not found. No rules were found that match the criteria.
SizeLessThanZero	The specified size is less than zero.
StringValueTooBig	The string value is too big.
UnsupportedAddress	The address is not supported. For example, Inbox rules do not support MAPIPDL address types.
UnexpectedError	An unexpected error occurred.
UnsupportedRule	The rule is unsupported.

When a rule is generated with the same priority as an existing rule, the server can increment the priority of the existing rule to eliminate the error that is indicated by the "DuplicatedPriority" value.

3.1.5   Timer Events

None.

3.1.6   Other Local Events

None.

4   Protocol Examples

The following examples show the request and response XML for the Inbox Rules Web Service Protocol operations.

4.1   CreateInboxRule

The following is an example of an **UpdateInboxRules** operation that creates a rule.

The client constructs the request **XML** and sends it to the server. The **CreateRuleOperation** complex type in the request contains the rule to be created. This example creates a rule that will move an e-mail message to the **Junk E-mail folder** if the e-mail subject contains a string that equals "Interesting".

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
        xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2010_SP1" />
  </soap:Header>
  <soap:Body>
    <m:UpdateInboxRules>
      <m:RemoveOutlookRuleBlob>true</m:RemoveOutlookRuleBlob>
      <m:Operations>
        <t:CreateRuleOperation>
          <t:Rule>
            <t:DisplayName>MoveInterestingToJunk</t:DisplayName>
            <t:Priority>1</t:Priority>
            <t:IsEnabled>true</t:IsEnabled>
            <t:IsInError>false</t:IsInError>
            <t:Conditions>
              <t:ContainsSubjectStrings>
                <t:String>Interesting</t:String>
              </t:ContainsSubjectStrings>
            </t:Conditions>
            <t:Exceptions />
            <t:Actions>
              <t:MoveToFolder>
                <t:DistinguishedFolderId Id="junkemail" />
              </t:MoveToFolder>
            </t:Actions>
          </t:Rule>
        </t:CreateRuleOperation>
      </m:Operations>
    </m:UpdateInboxRules>
  </soap:Body>
</soap:Envelope>
```

The server constructs the response XML and sends it to the client.

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
```

```
            <h:ServerVersionInfo MajorVersion="14"
                MinorVersion="1"
                MajorBuildNumber="139"
                MinorBuildNumber="0"
                Version="Exchange2010_SP1"
                xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
                xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
        </s:Header>
        <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xmlns:xsd="http://www.w3.org/2001/XMLSchema">
          <UpdateInboxRulesResponse ResponseClass="Success"
                xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
            <ResponseCode>NoError</ResponseCode>
          </UpdateInboxRulesResponse>
        </s:Body>
      </s:Envelope>
```

4.2 SetInboxRule

The following is an example of an **UpdateInboxRules** operation that updates an Inbox rule.

The client constructs the request XML and sends it to the server. The **SetRuleOperation** complex type contains the rule to be updated. This example updates the existing identified rule, which will search for a subject string "This is Junk". The **FolderId** attribute has been shortened to preserve readability.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
        xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2010_SP1" />
  </soap:Header>
  <soap:Body>
    <m:UpdateInboxRules>
      <m:RemoveOutlookRuleBlob>true</m:RemoveOutlookRuleBlob>
      <m:Operations>
        <t:SetRuleOperation>
          <t:Rule>
            <t:RuleId>dCsAAABjzwQ=</t:RuleId>
            <t:DisplayName>MoveInterestingToJunk</t:DisplayName>
            <t:Priority>1</t:Priority>
            <t:IsEnabled>true</t:IsEnabled>
            <t:IsInError>false</t:IsInError>
            <t:Conditions>
              <t:ContainsSubjectStrings>
                <t:String>This is Junk</t:String>
              </t:ContainsSubjectStrings>
            </t:Conditions>
            <t:Exceptions />
            <t:Actions>
              <t:MoveToFolder>
                <t:FolderId Id="AAMkAGYzZjZm=" ChangeKey="AQAAAA==" />
```

```
            </t:MoveToFolder>
          </t:Actions>
        </t:Rule>
      </t:SetRuleOperation>
    </m:Operations>
  </m:UpdateInboxRules>
 </soap:Body>
</soap:Envelope>
```

The server constructs the response XML and sends it to the client.

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <h:ServerVersionInfo MajorVersion="14"
        MinorVersion="1"
        MajorBuildNumber="139"
        MinorBuildNumber="0"
        Version="Exchange2010_SP1"
        xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <UpdateInboxRulesResponse ResponseClass="Success"
        xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseCode>NoError</ResponseCode>
    </UpdateInboxRulesResponse>
  </s:Body>
</s:Envelope>
```

4.3 DeleteInboxRule

The following is an example of an **UpdateInboxRules** operation that deletes an Inbox rule.

The client constructs the request XML and sends it to the server. The **DeleteRuleOperation** complex type contains the **RuleId** element, which contains the rule ID of the rule to be deleted.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
        xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2010_SP1" />
  </soap:Header>
  <soap:Body>
    <m:UpdateInboxRules>
      <m:RemoveOutlookRuleBlob>true</m:RemoveOutlookRuleBlob>
      <m:Operations>
        <t:DeleteRuleOperation>
          <t:RuleId>dCsAAABjzwY=</t:RuleId>
```

```
            </t:DeleteRuleOperation>
          </m:Operations>
        </m:UpdateInboxRules>
      </soap:Body>
    </soap:Envelope>
```

The server constructs the response XML and sends it to the client.

```
    <?xml version="1.0" encoding="utf-8"?>
    <s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
      <s:Header>
        <h:ServerVersionInfo MajorVersion="14"
            MinorVersion="1" MajorBuildNumber="139"
            MinorBuildNumber="0"
            Version="Exchange2010_SP1"
            xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
            xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
      </s:Header>
      <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns:xsd="http://www.w3.org/2001/XMLSchema">
        <UpdateInboxRulesResponse ResponseClass="Success"
            xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
          <ResponseCode>NoError</ResponseCode>
        </UpdateInboxRulesResponse>
      </s:Body>
    </s:Envelope>
```

4.4 GetInboxRules

The following is an example of a **GetInboxRules** operation.

The client constructs the request XML and sends it to the server. The request identifies the user in the **MailboxSmtpAddress** element. All Inbox rules for the identified user are to be returned in the response.

```
    <?xml version="1.0" encoding="utf-8"?>
    <soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
          xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
          xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
      <soap:Header>
        <t:RequestServerVersion Version="Exchange2010_SP1" />
      </soap:Header>
      <soap:Body>
        <m:GetInboxRules>
          <m:MailboxSmtpAddress>User1@Contoso.com</m:MailboxSmtpAddress>
        </m:GetInboxRules>
      </soap:Body>
    </soap:Envelope>
```

The server constructs the response XML and sends it to the client. The **FolderId** attribute has been shortened to preserve readability. In this example, there is one rule in the returned **InboxRules** collection.

```xml
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <h:ServerVersionInfo MajorVersion="14"
        MinorVersion="1" MajorBuildNumber="139"
        MinorBuildNumber="0"
        Version="Exchange2010_SP1"
        xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <GetInboxRulesResponse ResponseClass="Success"
        xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseCode>NoError</ResponseCode>
      <OutlookRuleBlobExists>true</OutlookRuleBlobExists>
      <InboxRules>
        <Rule xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
          <RuleId>dCsAAABjzvA=</RuleId>
          <DisplayName>MoveInterestingToJunk</DisplayName>
          <Priority>1</Priority>
          <IsEnabled>true</IsEnabled>
          <Conditions>
            <ContainsSubjectStrings>
              <String>Interesting</String>
            </ContainsSubjectStrings>
          </Conditions>
          <Actions>
            <MoveToFolder>
              <FolderId ChangeKey="AQAAAA==" Id="AAMkAGYzZjZm" />
            </MoveToFolder>
          </Actions>
        </Rule>
      </InboxRules>
    </GetInboxRulesResponse>
  </s:Body>
</s:Envelope>
```

4.5   RuleOperationErrorType

The following is an example of an **UpdateInboxRules** operation that results in a validation error. This example sets the **RuleId** element, which specifies the rule identifier. When creating a rule, the **Rule** element cannot include a **RuleID** element. The rule identifier is generated when the rule is successfully created in the server store.

The client constructs the request XML and sends it to the server. The **CreateRuleOperation** complex type contains the **Rule** complex type to be created. This example defines a **RuleId** element, which causes the error.

```xml
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
        xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
```

```
            <t:RequestServerVersion Version="Exchange2010_SP1" />
        </soap:Header>
        <soap:Body>
          <m:UpdateInboxRules>
            <m:RemoveOutlookRuleBlob>true</m:RemoveOutlookRuleBlob>
            <m:Operations>
              <t:CreateRuleOperation>
                <t:Rule>
                  <t:RuleId>dCsAAABjz0Q=</t:RuleId>
                  <t:DisplayName>MoveInterestingToJunk</t:DisplayName>
                  <t:Priority>1</t:Priority>
                  <t:IsEnabled>true</t:IsEnabled>
                  <t:IsInError>false</t:IsInError>
                  <t:Conditions>
                    <t:ContainsSubjectStrings>
                      <t:String>Interesting</t:String>
                    </t:ContainsSubjectStrings>
                  </t:Conditions>
                  <t:Exceptions />
                  <t:Actions>
                    <t:MoveToFolder>
                      <t:DistinguishedFolderId Id="inbox" />
                    </t:MoveToFolder>
                  </t:Actions>
                </t:Rule>
              </t:CreateRuleOperation>
            </m:Operations>
          </m:UpdateInboxRules>
        </soap:Body>
      </soap:Envelope>
```

The server constructs the response XML and sends it to the client. The **RuleValidationError**
complex type contains the information about the cause of the validation error.

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <h:ServerVersionInfo MajorVersion="14"
        MinorVersion="1"
        MajorBuildNumber="139"
        MinorBuildNumber="0"
        Version="Exchange2010_SP1"
        xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <UpdateInboxRulesResponse ResponseClass="Error"
        xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <MessageText>Validation error occurred during rule operation execution.</MessageText>
      <ResponseCode>ErrorInboxRulesValidationError</ResponseCode>
      <DescriptiveLinkKey>0</DescriptiveLinkKey>
      <RuleOperationErrors>
        <RuleOperationError
xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
```

```
            <OperationIndex>0</OperationIndex>
            <ValidationErrors>
              <Error>
                <FieldURI>RuleId</FieldURI>
                <ErrorCode>CreateWithRuleId</ErrorCode>
                <ErrorMessage>Create rule operation should not have rule ID set in
request.</ErrorMessage>
                <FieldValue>dCsAAABjz0Q=</FieldValue>
              </Error>
            </ValidationErrors>
          </RuleOperationError>
        </RuleOperationErrors>
      </UpdateInboxRulesResponse>
    </s:Body>
  </s:Envelope>
```

4.6 RuleValidationErrorType

The following is an example of an **UpdateInboxRules** operation that results in a validation error.
This example creates a **Rule** element, which specifies a MaximumSize of 9999990, which is fails
validation.

The client constructs the request XML and sends it to the server. The **CreateRuleOperation**
complex type contains the **Rule** complex type to be created. This example defines an improper **Rule**
element, which causes the error.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2010_SP1" />
  </soap:Header>
  <soap:Body>
    <m:UpdateInboxRules>
      <m:RemoveOutlookRuleBlob>true</m:RemoveOutlookRuleBlob>
      <m:Operations>
        <t:CreateRuleOperation>
          <t:Rule>
            <t:DisplayName>MoveInterestingToJunk</t:DisplayName>
            <t:Priority>1</t:Priority>
            <t:IsEnabled>true</t:IsEnabled>
            <t:IsInError>false</t:IsInError>
            <t:Conditions>
              <t:ContainsSubjectStrings>
                <t:String>Interesting</t:String>
              </t:ContainsSubjectStrings>
              <t:WithinDateRange>
                <t:StartDateTime>2011-04-26T18:05:13Z</t:StartDateTime>
                <t:EndDateTime>2011-04-26T20:05:13Z</t:EndDateTime>
              </t:WithinDateRange>
              <t:WithinSizeRange>
                <t:MinimumSize>0</t:MinimumSize>
                <t:MaximumSize>9999990</t:MaximumSize>
              </t:WithinSizeRange>
```

```
              </t:Conditions>
              <t:Exceptions />
              <t:Actions>
                <t:MoveToFolder>
                  <t:DistinguishedFolderId Id="junkemail" />
                </t:MoveToFolder>
              </t:Actions>
            </t:Rule>
          </t:CreateRuleOperation>
        </m:Operations>
      </m:UpdateInboxRules>
    </soap:Body>
  </soap:Envelope>
```

The server constructs the response XML and sends it to the client. The **RuleValidationError**
complex type contains the **Error** information about the cause of the validation error. In this
example, the **FieldValue** of 9999990 and has an **ErrorCode** stating that this is **InvalidValue**.

```
  <?xml version="1.0" encoding="utf-8"?>
  <s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
    <s:Header>
      <h:ServerVersionInfo MajorVersion="14" MinorVersion="1" MajorBuildNumber="225"
  MinorBuildNumber="42" Version="Exchange2010_SP1"
  xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
    </s:Header>
    <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
      <UpdateInboxRulesResponse ResponseClass="Error"
  xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
        <MessageText>A validation error occurred while executing the rule
  operation.</MessageText>
        <ResponseCode>ErrorInboxRulesValidationError</ResponseCode>
        <DescriptiveLinkKey>0</DescriptiveLinkKey>
        <RuleOperationErrors>
          <RuleOperationError
  xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
            <OperationIndex>0</OperationIndex>
            <ValidationErrors>
              <Error>
                <FieldURI>Condition:WithinSizeRange</FieldURI>
                <ErrorCode>InvalidValue</ErrorCode>
                <ErrorMessage>The value isn't valid.</ErrorMessage>
                <FieldValue>9999990</FieldValue>
              </Error>
            </ValidationErrors>
          </RuleOperationError>
        </RuleOperationErrors>
      </UpdateInboxRulesResponse>
    </s:Body>
  </s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6   Appendix A: Full WSDL

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

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

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

This section contains the contents of the MS-OXWSRULES.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"

targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
                  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
                  xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
  <wsdl:types>
    <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/messages"
schemaLocation="MS-OXWSRULES-messages.xsd"/>
    </xs:schema>
  </wsdl:types>

  <!-- Inbox Rules Messages -->
  <wsdl:message name="GetInboxRulesSoapIn">
    <wsdl:part name="request" element="tns:GetInboxRules" />
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation" />
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture" />
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion" />
    <wsdl:part name="TimeZoneContext" element="t:TimeZoneContext" />
  </wsdl:message>
  <wsdl:message name="GetInboxRulesSoapOut">
    <wsdl:part name="GetInboxRulesResult" element="tns:GetInboxRulesResponse" />
    <wsdl:part name="ServerVersion" element="t:ServerVersionInfo" />
  </wsdl:message>

  <wsdl:message name="UpdateInboxRulesSoapIn">
    <wsdl:part name="request" element="tns:UpdateInboxRules" />
    <wsdl:part name="Impersonation" element="t:ExchangeImpersonation" />
    <wsdl:part name="MailboxCulture" element="t:MailboxCulture" />
    <wsdl:part name="RequestVersion" element="t:RequestServerVersion" />
    <wsdl:part name="TimeZoneContext" element="t:TimeZoneContext" />
  </wsdl:message>
  <wsdl:message name="UpdateInboxRulesSoapOut">
    <wsdl:part name="UpdateInboxRulesResult" element="tns:UpdateInboxRulesResponse" />
```

```
        <wsdl:part name="ServerVersion" element="t:ServerVersionInfo" />
    </wsdl:message>

    <wsdl:portType name="ExchangeServicePortType">
      <!-- Inbox Rules -->
      <wsdl:operation name="GetInboxRules">
        <wsdl:input message="tns:GetInboxRulesSoapIn" />
        <wsdl:output message="tns:GetInboxRulesSoapOut" />
      </wsdl:operation>

      <wsdl:operation name="UpdateInboxRules">
        <wsdl:input message="tns:UpdateInboxRulesSoapIn" />
        <wsdl:output message="tns:UpdateInboxRulesSoapOut" />
      </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 transport="http://schemas.xmlsoap.org/soap/http" style="document" />

      <!-- Inbox Rules Operations -->

      <!-- GetInboxRules -->
      <wsdl:operation name="GetInboxRules">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetInboxRules" />
        <wsdl:input>
          <soap:header message="tns:GetInboxRulesSoapIn" part="Impersonation" use="literal" />
          <soap:header message="tns:GetInboxRulesSoapIn" part="MailboxCulture" use="literal" />
          <soap:header message="tns:GetInboxRulesSoapIn" part="RequestVersion" use="literal" />
          <soap:header message="tns:GetInboxRulesSoapIn" part="TimeZoneContext" use="literal"
/>
          <soap:body parts="request" use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body parts="GetInboxRulesResult" use="literal" />
          <soap:header message="tns:GetInboxRulesSoapOut" part="ServerVersion" use="literal" />
        </wsdl:output>
      </wsdl:operation>

      <!-- UpdateInboxRules -->
      <wsdl:operation name="UpdateInboxRules">
        <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/UpdateInboxRules" />
        <wsdl:input>
          <soap:header message="tns:UpdateInboxRulesSoapIn" part="Impersonation" use="literal"
/>
          <soap:header message="tns:UpdateInboxRulesSoapIn" part="MailboxCulture" use="literal"
/>
          <soap:header message="tns:UpdateInboxRulesSoapIn" part="RequestVersion" use="literal"
/>
          <soap:header message="tns:UpdateInboxRulesSoapIn" part="TimeZoneContext"
use="literal" />
          <soap:body parts="request" use="literal" />
        </wsdl:input>
        <wsdl:output>
```

```
            <soap:body parts="UpdateInboxRulesResult" use="literal" />
            <soap:header message="tns:UpdateInboxRulesSoapOut" part="ServerVersion" use="literal"
/>
        </wsdl:output>
    </wsdl:operation>

  </wsdl:binding>
</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-OXWSRULES-types.xsd or MS-OXWSRULES-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-OXWSRULES-messages.xsd file and information about additional files that this schema file requires to operate correctly.

MS-OXWSRULES-types.xsd includes the file listed in the following table. For the schema file to operate correctly, this file has to be 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:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"
schemaLocation="MS-OXWSRULES-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>

  <xs:element name="GetInboxRules" type="m:GetInboxRulesRequestType"/>

  <xs:complexType name="GetInboxRulesRequestType">
    <xs:complexContent>
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element name="MailboxSmtpAddress" type="xs:string" minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>

  <xs:element name="GetInboxRulesResponse" type="m:GetInboxRulesResponseType"/>

  <xs:complexType name="GetInboxRulesResponseType">
```

```
      <xs:complexContent>
        <xs:extension base="m:ResponseMessageType">
          <xs:sequence>
            <xs:element name="OutlookRuleBlobExists" type="xs:boolean" minOccurs="0"/>
            <xs:element name="InboxRules" type="t:ArrayOfRulesType" minOccurs="0"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>

    <xs:element name="UpdateInboxRules" type="m:UpdateInboxRulesRequestType"/>

    <xs:complexType name="UpdateInboxRulesRequestType">
      <xs:complexContent>
        <xs:extension base="m:BaseRequestType">
          <xs:sequence>
            <xs:element name="MailboxSmtpAddress" type="xs:string" minOccurs="0"/>
            <xs:element name="RemoveOutlookRuleBlob" type="xs:boolean" minOccurs="0"/>
            <xs:element name="Operations" type="t:ArrayOfRuleOperationsType"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>

    <xs:element name="UpdateInboxRulesResponse" type="m:UpdateInboxRulesResponseType"/>

    <xs:complexType name="UpdateInboxRulesResponseType">
      <xs:complexContent>
        <xs:extension base="m:ResponseMessageType">
          <xs:sequence>
            <xs:element name="RuleOperationErrors" type="t:ArrayOfRuleOperationErrorsType"
  minOccurs="0"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
  </xs:schema>
```

7.2 Types Schema

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

MS-OXWSRULES-types.xsd includes the files listed in the following table. For the schema file to operate correctly, these files have 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-types.xsd	[MS-OXWSCDATA] section 7.2
MS-OXWSCORE-types.xsd	[MS-OXWSCORE] section 7.2

```
  <?xml version="1.0" encoding="utf-8"?>
  <xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
         xmlns:tns="http://schemas.microsoft.com/exchange/services/2006/types"
         xmlns:xs="http://www.w3.org/2001/XMLSchema"
```

```
              targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
              elementFormDefault="qualified" version="Exchange2010" id="types">
  <xs:import namespace="http://www.w3.org/XML/1998/namespace"/>
  <xs:include schemaLocation="MS-OXWSCDATA-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSCORE-types.xsd"/>

  <xs:complexType name="ArrayOfRulesType">
    <xs:sequence>
      <xs:element name="Rule" type="t:RuleType" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>


  <xs:complexType name="RuleType">
    <xs:sequence>
      <xs:element name="RuleId" type="xs:string" minOccurs="0"/>
      <xs:element name="DisplayName" type="xs:string"/>
      <xs:element name="Priority" type="xs:int"/>
      <xs:element name="IsEnabled" type="xs:boolean"/>
      <xs:element name="IsNotSupported" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsInError" type="xs:boolean" minOccurs="0"/>
      <xs:element name="Conditions" type="t:RulePredicatesType" minOccurs="0"/>
      <xs:element name="Exceptions" type="t:RulePredicatesType" minOccurs="0"/>
      <xs:element name="Actions" type="t:RuleActionsType" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="RulePredicatesType">
    <xs:sequence>
      <xs:element name="Categories" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="ContainsBodyStrings" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="ContainsHeaderStrings" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="ContainsRecipientStrings" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="ContainsSenderStrings" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="ContainsSubjectOrBodyStrings" type="t:ArrayOfStringsType"
 minOccurs="0"/>
      <xs:element name="ContainsSubjectStrings" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="FlaggedForAction" type="t:FlaggedForActionType" minOccurs="0"/>
      <xs:element name="FromAddresses" type="t:ArrayOfEmailAddressesType" minOccurs="0"/>
      <xs:element name="FromConnectedAccounts" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="HasAttachments" type="xs:boolean" minOccurs="0"/>
      <xs:element name="Importance" type="t:ImportanceChoicesType" minOccurs="0"/>
      <xs:element name="IsApprovalRequest" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsAutomaticForward" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsAutomaticReply" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsEncrypted" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsMeetingRequest" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsMeetingResponse" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsNDR" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsPermissionControlled" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsReadReceipt" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsSigned" type="xs:boolean" minOccurs="0"/>
      <xs:element name="IsVoicemail" type="xs:boolean" minOccurs="0"/>
      <xs:element name="ItemClasses" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="MessageClassifications" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="NotSentToMe" type="xs:boolean" minOccurs="0"/>
      <xs:element name="SentCcMe" type="xs:boolean" minOccurs="0"/>
      <xs:element name="SentOnlyToMe" type="xs:boolean" minOccurs="0"/>
      <xs:element name="SentToAddresses" type="t:ArrayOfEmailAddressesType" minOccurs="0"/>
      <xs:element name="SentToMe" type="xs:boolean" minOccurs="0"/>
```

```xml
        <xs:element name="SentToOrCcMe" type="xs:boolean" minOccurs="0"/>
        <xs:element name="Sensitivity" type="t:SensitivityChoicesType" minOccurs="0"/>
        <xs:element name="WithinDateRange" type="t:RulePredicateDateRangeType" minOccurs="0"/>
        <xs:element name="WithinSizeRange" type="t:RulePredicateSizeRangeType" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="RuleActionsType">
    <xs:sequence>
      <xs:element name="AssignCategories" type="t:ArrayOfStringsType" minOccurs="0"/>
      <xs:element name="CopyToFolder" type="t:TargetFolderIdType" minOccurs="0"/>
      <xs:element name="Delete" type="xs:boolean" minOccurs="0"/>
      <xs:element name="ForwardAsAttachmentToRecipients" type="t:ArrayOfEmailAddressesType"
minOccurs="0"/>
      <xs:element name="ForwardToRecipients" type="t:ArrayOfEmailAddressesType"
minOccurs="0"/>
      <xs:element name="MarkImportance" type="t:ImportanceChoicesType" minOccurs="0"/>
      <xs:element name="MarkAsRead" type="xs:boolean" minOccurs="0"/>
      <xs:element name="MoveToFolder" type="t:TargetFolderIdType" minOccurs="0"/>
      <xs:element name="PermanentDelete" type="xs:boolean" minOccurs="0"/>
      <xs:element name="RedirectToRecipients" type="t:ArrayOfEmailAddressesType"
minOccurs="0"/>
      <xs:element name="SendSMSAlertToRecipients" type="t:ArrayOfEmailAddressesType"
minOccurs="0"/>
      <xs:element name="ServerReplyWithMessage" type="t:ItemIdType" minOccurs="0"/>
      <xs:element name="StopProcessingRules" type="xs:boolean" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>


  <xs:simpleType name="FlaggedForActionType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Any"/>
      <xs:enumeration value="Call"/>
      <xs:enumeration value="DoNotForward"/>
      <xs:enumeration value="FollowUp"/>
      <xs:enumeration value="FYI"/>
      <xs:enumeration value="Forward"/>
      <xs:enumeration value="NoResponseNecessary"/>
      <xs:enumeration value="Read"/>
      <xs:enumeration value="Reply"/>
      <xs:enumeration value="ReplyToAll"/>
      <xs:enumeration value="Review"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:complexType name="RulePredicateDateRangeType">
    <xs:sequence>
      <xs:element name="StartDateTime" type="xs:dateTime" minOccurs="0"/>
      <xs:element name="EndDateTime" type="xs:dateTime" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="RulePredicateSizeRangeType">
    <xs:sequence>
      <xs:element name="MinimumSize" type="xs:int" minOccurs="0"/>
      <xs:element name="MaximumSize" type="xs:int" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
```

```
<xs:complexType name="ArrayOfRuleOperationsType">
  <xs:choice maxOccurs="unbounded">
    <xs:element name="CreateRuleOperation" type="t:CreateRuleOperationType"/>
    <xs:element name="SetRuleOperation" type="t:SetRuleOperationType"/>
    <xs:element name="DeleteRuleOperation" type="t:DeleteRuleOperationType"/>
  </xs:choice>
</xs:complexType>

<xs:complexType name="CreateRuleOperationType">
  <xs:complexContent>
    <xs:extension base="t:RuleOperationType">
      <xs:sequence>
        <xs:element name="Rule" type="t:RuleType"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

<xs:complexType name="RuleOperationType" abstract="true">
</xs:complexType>

<xs:complexType name="SetRuleOperationType">
  <xs:complexContent>
    <xs:extension base="t:RuleOperationType">
      <xs:sequence>
        <xs:element name="Rule" type="t:RuleType"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

<xs:complexType name="DeleteRuleOperationType">
  <xs:complexContent>
    <xs:extension base="t:RuleOperationType">
      <xs:sequence>
        <xs:element name="RuleId" type="xs:string"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

<xs:complexType name="ArrayOfRuleOperationErrorsType">
  <xs:sequence>
    <xs:element name="RuleOperationError" type="t:RuleOperationErrorType"
maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="RuleOperationErrorType">
  <xs:sequence>
    <xs:element name="OperationIndex" type="xs:int"/>
    <xs:element name="ValidationErrors" type="t:ArrayOfRuleValidationErrorsType"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="ArrayOfRuleValidationErrorsType">
  <xs:sequence>
```

```
      <xs:element name="Error" type="t:RuleValidationErrorType" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="RuleValidationErrorType">
    <xs:sequence>
      <xs:element name="FieldURI" type="t:RuleFieldURIType"/>
      <xs:element name="ErrorCode" type="t:RuleValidationErrorCodeType"/>
      <xs:element name="ErrorMessage" type="xs:string"/>
      <xs:element name="FieldValue" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>

  <xs:simpleType name="RuleFieldURIType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="RuleId"/>
      <xs:enumeration value="DisplayName"/>
      <xs:enumeration value="Priority"/>
      <xs:enumeration value="IsNotSupported"/>
      <xs:enumeration value="Actions"/>
      <xs:enumeration value="Condition:Categories"/>
      <xs:enumeration value="Condition:ContainsBodyStrings"/>
      <xs:enumeration value="Condition:ContainsHeaderStrings"/>
      <xs:enumeration value="Condition:ContainsRecipientStrings"/>
      <xs:enumeration value="Condition:ContainsSenderStrings"/>
      <xs:enumeration value="Condition:ContainsSubjectOrBodyStrings"/>
      <xs:enumeration value="Condition:ContainsSubjectStrings"/>
      <xs:enumeration value="Condition:FlaggedForAction"/>
      <xs:enumeration value="Condition:FromAddresses"/>
      <xs:enumeration value="Condition:FromConnectedAccounts"/>
      <xs:enumeration value="Condition:HasAttachments"/>
      <xs:enumeration value="Condition:Importance"/>
      <xs:enumeration value="Condition:IsApprovalRequest"/>
      <xs:enumeration value="Condition:IsAutomaticForward"/>
      <xs:enumeration value="Condition:IsAutomaticReply"/>
      <xs:enumeration value="Condition:IsEncrypted"/>
      <xs:enumeration value="Condition:IsMeetingRequest"/>
      <xs:enumeration value="Condition:IsMeetingResponse"/>
      <xs:enumeration value="Condition:IsNDR"/>
      <xs:enumeration value="Condition:IsPermissionControlled"/>
      <xs:enumeration value="Condition:IsReadReceipt"/>
      <xs:enumeration value="Condition:IsSigned"/>
      <xs:enumeration value="Condition:IsVoicemail"/>
      <xs:enumeration value="Condition:ItemClasses"/>
      <xs:enumeration value="Condition:MessageClassifications"/>
      <xs:enumeration value="Condition:NotSentToMe"/>
      <xs:enumeration value="Condition:SentCcMe"/>
      <xs:enumeration value="Condition:SentOnlyToMe"/>
      <xs:enumeration value="Condition:SentToAddresses"/>
      <xs:enumeration value="Condition:SentToMe"/>
      <xs:enumeration value="Condition:SentToOrCcMe"/>
      <xs:enumeration value="Condition:Sensitivity"/>
      <xs:enumeration value="Condition:WithinDateRange"/>
      <xs:enumeration value="Condition:WithinSizeRange"/>
      <xs:enumeration value="Exception:Categories"/>
      <xs:enumeration value="Exception:ContainsBodyStrings"/>
      <xs:enumeration value="Exception:ContainsHeaderStrings"/>
      <xs:enumeration value="Exception:ContainsRecipientStrings"/>
      <xs:enumeration value="Exception:ContainsSenderStrings"/>
```

```xml
            <xs:enumeration value="Exception:ContainsSubjectOrBodyStrings"/>
            <xs:enumeration value="Exception:ContainsSubjectStrings"/>
            <xs:enumeration value="Exception:FlaggedForAction"/>
            <xs:enumeration value="Exception:FromAddresses"/>
            <xs:enumeration value="Exception:FromConnectedAccounts"/>
            <xs:enumeration value="Exception:HasAttachments"/>
            <xs:enumeration value="Exception:Importance"/>
            <xs:enumeration value="Exception:IsApprovalRequest"/>
            <xs:enumeration value="Exception:IsAutomaticForward"/>
            <xs:enumeration value="Exception:IsAutomaticReply"/>
            <xs:enumeration value="Exception:IsEncrypted"/>
            <xs:enumeration value="Exception:IsMeetingRequest"/>
            <xs:enumeration value="Exception:IsMeetingResponse"/>
            <xs:enumeration value="Exception:IsNDR"/>
            <xs:enumeration value="Exception:IsPermissionControlled"/>
            <xs:enumeration value="Exception:IsReadReceipt"/>
            <xs:enumeration value="Exception:IsSigned"/>
            <xs:enumeration value="Exception:IsVoicemail"/>
            <xs:enumeration value="Exception:ItemClasses"/>
            <xs:enumeration value="Exception:MessageClassifications"/>
            <xs:enumeration value="Exception:NotSentToMe"/>
            <xs:enumeration value="Exception:SentCcMe"/>
            <xs:enumeration value="Exception:SentOnlyToMe"/>
            <xs:enumeration value="Exception:SentToAddresses"/>
            <xs:enumeration value="Exception:SentToMe"/>
            <xs:enumeration value="Exception:SentToOrCcMe"/>
            <xs:enumeration value="Exception:Sensitivity"/>
            <xs:enumeration value="Exception:WithinDateRange"/>
            <xs:enumeration value="Exception:WithinSizeRange"/>
            <xs:enumeration value="Action:AssignCategories"/>
            <xs:enumeration value="Action:CopyToFolder"/>
            <xs:enumeration value="Action:Delete"/>
            <xs:enumeration value="Action:ForwardAsAttachmentToRecipients"/>
            <xs:enumeration value="Action:ForwardToRecipients"/>
            <xs:enumeration value="Action:MarkImportance"/>
            <xs:enumeration value="Action:MarkAsRead"/>
            <xs:enumeration value="Action:MoveToFolder"/>
            <xs:enumeration value="Action:PermanentDelete"/>
            <xs:enumeration value="Action:RedirectToRecipients"/>
            <xs:enumeration value="Action:SendSMSAlertToRecipients"/>
            <xs:enumeration value="Action:ServerReplyWithMessage"/>
            <xs:enumeration value="Action:StopProcessingRules"/>
            <xs:enumeration value="IsEnabled"/>
            <xs:enumeration value="IsInError"/>
            <xs:enumeration value="Conditions"/>
            <xs:enumeration value="Exceptions"/>
        </xs:restriction>
    </xs:simpleType>

    <xs:simpleType name="RuleValidationErrorCodeType">
        <xs:restriction base="xs:string">
            <xs:enumeration value="ADOperationFailure"/>
            <xs:enumeration value="ConnectedAccountNotFound"/>
            <xs:enumeration value="CreateWithRuleId"/>
            <xs:enumeration value="EmptyValueFound"/>
            <xs:enumeration value="DuplicatedPriority"/>
            <xs:enumeration value="DuplicatedOperationOnTheSameRule"/>
            <xs:enumeration value="FolderDoesNotExist"/>
            <xs:enumeration value="InvalidAddress"/>
```

```
        <xs:enumeration value="InvalidDateRange"/>
        <xs:enumeration value="InvalidFolderId"/>
        <xs:enumeration value="InvalidSizeRange"/>
        <xs:enumeration value="InvalidValue"/>
        <xs:enumeration value="MessageClassificationNotFound"/>
        <xs:enumeration value="MissingAction"/>
        <xs:enumeration value="MissingParameter"/>
        <xs:enumeration value="MissingRangeValue"/>
        <xs:enumeration value="NotSettable"/>
        <xs:enumeration value="RecipientDoesNotExist"/>
        <xs:enumeration value="RuleNotFound"/>
        <xs:enumeration value="SizeLessThanZero"/>
        <xs:enumeration value="StringValueTooBig"/>
        <xs:enumeration value="UnsupportedAddress"/>
        <xs:enumeration value="UnexpectedError"/>
        <xs:enumeration value="UnsupportedRule"/>
      </xs:restriction>
    </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 Service Pack 1 (SP1)

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

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

9 Change Tracking

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

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

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

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

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

▪ The removal of a document from the documentation set.

▪ Changes made for template compliance.

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

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

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

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

▪ New content added.

▪ Content updated.

▪ Content removed.

▪ New product behavior note added.

▪ Product behavior note updated.

▪ Product behavior note removed.

▪ New protocol syntax added.

▪ Protocol syntax updated.

▪ Protocol syntax removed.

▪ New content added due to protocol revision.

▪ Content updated due to protocol revision.

▪ Content removed due to protocol revision.

▪ New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.

- Protocol syntax removed due to protocol revision.

- New content added for template compliance.

- Content updated for template compliance.

- Content removed for template compliance.

- Obsolete document removed.

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

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

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

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

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

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
6 Appendix A: Full WSDL	Updated the name of an imported schema.	N	Content updated.
6 Appendix A: Full WSDL	Updated the name of an imported schema.	N	Content updated.
7.1 Messages Schema	Updated the name of an imported schema.	N	Content updated.

10 Index