

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

---

## Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft's Open Specification Promise (available here: <http://www.microsoft.com/interop/osp>) or the Community Promise (available here: <http://www.microsoft.com/interop/cp/default.mspx>). If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting [iplg@microsoft.com](mailto:iplg@microsoft.com).
- **Trademarks.** The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights.
- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

**Reservation of Rights.** All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

**Tools.** The Open Specifications do not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them. Certain Open Specifications are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

## 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.

# Contents

<b>1 Introduction .....</b>	<b>5</b>
1.1 Glossary .....	5
1.2 References .....	5
1.2.1 Normative References .....	5
1.2.2 Informative References .....	6
1.3 Overview .....	6
1.4 Relationship to Other Protocols .....	6
1.5 Prerequisites/Preconditions .....	7
1.6 Applicability Statement .....	7
1.7 Versioning and Capability Negotiation .....	7
1.8 Vendor-Extensible Fields .....	7
1.9 Standards Assignments .....	7
<b>2 Messages.....</b>	<b>8</b>
2.1 Transport .....	8
2.2 Common Message Syntax .....	8
2.2.1 Namespaces .....	8
2.2.2 Messages .....	8
2.2.3 Elements .....	8
2.2.4 Complex Types .....	8
2.2.4.1 t:RuleType Complex Type .....	8
2.2.5 Simple Types .....	10
2.2.6 Attributes .....	10
2.2.7 Groups .....	10
2.2.8 Attribute Groups .....	10
<b>3 Protocol Details.....</b>	<b>11</b>
3.1 ExchangeServicePortType Server Detail .....	11
3.1.1 Abstract Data Mode .....	11
3.1.2 Timers .....	11
3.1.3 Initialization .....	11
3.1.4 Message Processing Events and Sequencing .....	11
3.1.4.1 GetInboxRules .....	11
3.1.4.1.1 GetInboxRules Messages .....	12
3.1.4.1.1.1 tns:GetInboxRulesSoapIn Message .....	12
3.1.4.1.1.2 tns:GetInboxRulesSoapOut Message .....	12
3.1.4.1.2 GetInboxRules Elements .....	13
3.1.4.1.2.1 GetInboxRules Element .....	13
3.1.4.1.2.2 GetInboxRulesResponse Element .....	13
3.1.4.1.3 GetInboxRules Complex Types .....	13
3.1.4.1.3.1 m:GetInboxRulesRequestType Complex Type .....	14
3.1.4.1.3.2 m:GetInboxRulesResponseType Complex Type .....	14
3.1.4.1.3.3 t:ArrayOfRulesType Complex Type .....	15
3.1.4.1.3.4 t:RulePredicatesType Complex Type .....	15
3.1.4.1.3.5 t:RuleActionsType Complex Type .....	21
3.1.4.1.3.6 t:RulePredicateDateRangeType Complex Type .....	24
3.1.4.1.3.7 t:RulePredicateSizeRangeType Complex Type .....	24
3.1.4.1.4 GetInboxRules Simple Types .....	25
3.1.4.1.4.1 t:FlaggedForActionType Simple Type .....	25
3.1.4.2 UpdateInboxRules .....	26

3.1.4.2.1	UpdateInboxRules Messages.....	27
3.1.4.2.1.1	tns:UpdateInboxRulesSoapIn Message .....	27
3.1.4.2.1.2	tns:UpdateInboxRulesSoapOut Message .....	28
3.1.4.2.2	UpdateInboxRules Elements .....	28
3.1.4.2.2.1	UpdateInboxRules Element .....	28
3.1.4.2.2.2	UpdateInboxRulesResponse Element.....	28
3.1.4.2.3	UpdateInboxRules Complex Types.....	28
3.1.4.2.3.1	m:UpdateInboxRulesRequestType Complex Type.....	29
3.1.4.2.3.2	m:UpdateInboxRulesResponseType Complex Type.....	30
3.1.4.2.3.3	t:ArrayOfRuleOperationsType Complex Type .....	31
3.1.4.2.3.4	t:RuleOperationType Complex Type .....	31
3.1.4.2.3.5	t>CreateRuleOperationType Complex Type .....	31
3.1.4.2.3.6	t:SetRuleOperationType Complex Type .....	32
3.1.4.2.3.7	t>DeleteRuleOperationType Complex Type .....	33
3.1.4.2.3.8	t:ArrayOfRuleOperationErrorsType Complex Type .....	33
3.1.4.2.3.9	t:RuleOperationErrorType Complex Type .....	33
3.1.4.2.3.10	t:ArrayOfRuleValidationErrorsType Complex Type .....	34
3.1.4.2.3.11	t:RuleValidationErrorResponseType Complex Type .....	34
3.1.4.2.4	UpdateInboxRules Simple Types .....	35
3.1.4.2.4.1	t:RuleFieldURIType Simple Type .....	35
3.1.4.2.4.2	t:RuleValidationErrorCodeType Simple Type.....	44
3.1.5	Timer Events .....	46
3.1.6	Other Local Events .....	46
<b>4</b>	<b>Protocol Examples.....</b>	<b>47</b>
4.1	CreateInboxRule Example .....	47
4.2	SetInboxRule Example .....	48
4.3	DeleteInboxRule Example .....	49
4.4	GetInboxRules Example.....	50
4.5	RuleOperationErrorType Example.....	51
<b>5</b>	<b>Security.....</b>	<b>54</b>
5.1	Security Considerations for Implementers.....	54
5.2	Index of Security Parameters .....	54
<b>6</b>	<b>Appendix A: Full WSDL.....</b>	<b>55</b>
6.1	WSDL.....	55
6.2	Types Schema.....	57
6.3	Messages Schema.....	63
<b>7</b>	<b>Appendix B: Product Behavior.....</b>	<b>65</b>
<b>8</b>	<b>Change Tracking.....</b>	<b>66</b>
<b>9</b>	<b>Index .....</b>	<b>68</b>

# 1 Introduction

This document specifies the Inbox Rules Web Service protocol, which is responsible for getting Inbox rules and updating Inbox rules for messages on the server.

## 1.1 Glossary

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

**action**  
**binary large object (BLOB)**  
**client-side rule**  
**condition**  
**Deleted Items folder**  
**Hypertext Transfer Protocol (HTTP)**  
**Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**  
**Junk E-mail folder**  
**mailbox**  
**message**  
**rule**  
**server-side rule**  
**S/MIME**  
**store**  
**Uniform Resource Identifier (URI)**  
**Web Services Description Language (WSDL)**  
**WSDL message**  
**WSDL port type**  
**XML**  
**XML namespace**  
**XML schema**

The following terms are specific to this document:

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

## 1.2 References

### 1.2.1 Normative References

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

[MS-OXWSCDATA] Microsoft Corporation, "[Common Web Service Data Types](#)", July 2009.

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

[MS-OXWSGTZ] Microsoft Corporation, "[Get Server Time Zone Web Service Protocol Specification](#)", July 2009.

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

[RFC3066] Alvestrand, H., "Tags for the Identification of Languages", BCP 47, RFC 3066, January 2001, <http://www.ietf.org/rfc/rfc3066.txt>

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

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

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

[XMLSHEMA1] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>

[XMLSHEMA2] Biron, P., and Malhotra, A., Eds., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

## 1.2.2 Informative References

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

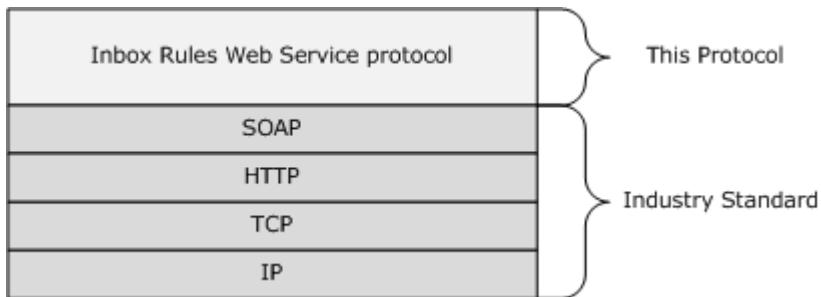
## 1.3 Overview

Inbox rules are sets of conditions and associated actions that enable clients to automatically organize, categorize, and act on messages as the messages are delivered to a folder.

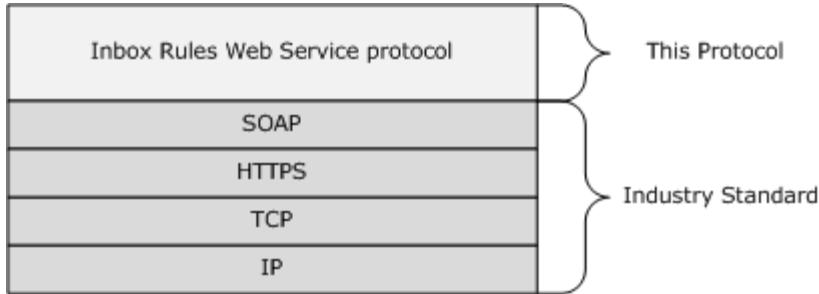
The server uses rules on mailboxes and other folders to automatically execute actions on objects in the folders. You can use rules to develop applications that carry out predefined or custom actions. Rules can be performed on the server store (**server-side rule**) or on the client (**client-side rule**).

## 1.4 Relationship to Other Protocols

The Inbox Rules Web Service protocol uses SOAP over **HTTP** and SOAP over **HTTPS**, as shown in the following figures.



**Figure 1: SOAP over HTTP**



**Figure 2: SOAP over HTTPS**

## 1.5 Prerequisites/Preconditions

None.

## 1.6 Applicability Statement

The 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 [\[SOAP1.1\]](#).

## 1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses SOAP 1.1, as specified in section [2.1](#).
- **Protocol Versions:** This protocol specifies only one **WSDL port type** version.
- **Security and Authentication Methods:** This protocol relies on the Web server that is hosting it to perform authentication.
- **Localization:** This protocol includes text strings in various **messages**. Localization considerations for such strings are specified in section [3.1.4](#).
- **Capability Negotiation:** None.

## 1.8 Vendor-Extensible Fields

None.

## 1.9 Standards Assignments

None.

## 2 Messages

### 2.1 Transport

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

### 2.2 Common Message Syntax

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

#### 2.2.1 Namespaces

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

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

#### 2.2.2 Messages

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

#### 2.2.3 Elements

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

#### 2.2.4 Complex Types

The following XML schema complex types are specific to this operation.

ComplexType	Description
<a href="#">t:RuleType</a>	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.

```
<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>

```

## Child Elements

Element	Type	Description
RuleId	xs:string	The rule identifier.
DisplayName	xs:string	A value that contains the display name of a rule.

Element	Type	Description
Priority	xs:int	A value that indicates the order in which a rule is to be run.
IsEnabled	xs:boolean	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	<a href="#">t:RulePredicatesType</a>	The conditions that, when fulfilled, will trigger the rule actions for that rule.
Exceptions	t:RulePredicatesType	The exceptions that represent all the available rule exception conditions for the nbox rule.
Actions	<a href="#">t:RuleActionsType</a>	The actions to be taken on a message when the conditions are fulfilled.

This 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](#)) not have a rule ID in the **RuleType**. 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 includes two operations to manipulate rules.

Operation	Description
<a href="#">GetInboxRules</a>	Retrieves a collection of Inbox rules that are associated with the authenticated user.
<a href="#">UpdateInboxRules</a>	Updates the authenticated user's Inbox rules by applying the specified operations.

##### 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

This protocol includes the operations that are listed in the following table.

Operation	Description
<a href="#">GetInboxRules</a> (section <a href="#">3.1.4.1</a> )	Retrieves a collection of Inbox rules in the identified user's mailbox.
<a href="#">UpdateInboxRules</a> (section <a href="#">3.1.4.2</a> )	Updates the authenticated user's Inbox rules by applying the specified operations.

###### 3.1.4.1 GetInboxRules

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

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

Request

Message Format	Description
<a href="#">tns:GetInboxRulesSoapIn</a>	Specifies the <b>SOAP message</b> that retrieves the Inbox rules.

Response

Message Format	Description
<a href="#">tns:GetInboxRulesSoapOut</a>	Specifies the SOAP message that is returned by the server in response.

### 3.1.4.1.1 GetInboxRules Messages

The following table lists the **WSDL message** definitions that are specific to this operation.

Message	Description
<a href="#">GetInboxRulesSoapIn</a> (section <a href="#">3.1.4.1.1.1</a> )	The request that gets the Inbox rules.
<a href="#">GetInboxRulesSoapOut</a> (section <a href="#">3.1.4.1.1.2</a> )	The response from a get Inbox rules request.

#### 3.1.4.1.1.1 tns:GetInboxRulesSoapIn Message

The **GetInboxRulesSoapIn** message contains five parts, as described in the following table.

Part name	Element/type	Description
request	<GetInboxRules> (section <a href="#">3.1.4.1.2.1</a> )	Specifies the request.
Impersonation	<ExchangeImpersonation> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.2)	The identifier of the account to impersonate.
MailboxCulture	<MailboxCulture> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.5)	Specifies the culture to use for accessing the server. The cultures are defined by <a href="#">[RFC3066]</a> .
RequestVersion	<RequestServerVersion> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.7)	Specifies the schema version for the <b>GetInboxRules</b> operation (section <a href="#">3.1.4.1</a> ).
TimeZoneContext	<TimeZoneContext> ( <a href="#">[MS-OXWSGTZ]</a> section 2.2.4.4)	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** message contains two parts, as described in the following table.

Part name	Element/type	Description
GetInboxRulesResult	<GetInboxRulesResponse> (section <a href="#">3.1.4.1.2.2</a> )	Specifies the response.
ServerVersion	<ServerVersionInfo> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.8)	Specifies the server version for the response.

### 3.1.4.1.2 GetInboxRules Elements

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

Element	Description
<GetInboxRules> (section <a href="#">3.1.4.1.2.1</a> )	Defines a request to get the Inbox rules in a mailbox in the server <b>store</b> .
<GetInboxRulesResponse> (section <a href="#">3.1.4.1.2.2</a> )	Defines a response to a <b>GetInboxRules</b> operation (section <a href="#">3.1.4.1</a> ) request.

#### 3.1.4.1.2.1 GetInboxRules Element

The <GetInboxRules> element defines a request to get the Inbox rules in a mailbox in the server store.

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

#### 3.1.4.1.2.2 GetInboxRulesResponse Element

The <GetInboxRulesResponse> element defines a response to a **GetInboxRules** operation (section [3.1.4.1](#)) request.

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

### 3.1.4.1.3 GetInboxRules Complex Types

The following table lists the XML schema complex types that are specific to this operation.

Type	Description
<b>GetInboxRulesRequestType</b> complex type (section <a href="#">3.1.4.1.3.1</a> )	Represents an operation to get the Inbox rules in a server database.
<b>GetInboxRulesResponseType</b> complex type (section <a href="#">3.1.4.1.3.2</a> )	Represents a response to a <b>GetInboxRules</b> operation (section <a href="#">3.1.4.1</a> ).
<b>ArrayOfRulesType</b> complex type (section <a href="#">3.1.4.1.3.3</a> )	An array of <b>RuleType</b> complex type <a href="#">2.2.4.1</a> objects.
<b>RulePredicatesType</b> complex type (section <a href="#">3.1.4.1.3.4</a> ).	Represents the set of conditions and exceptions available for a rule.
<b>RuleActionsType</b> complex type (section <a href="#">3.1.4.1.3.5</a> ).	Represents the set of actions that are available to a rule.
<b>RulePredicateDateRangeType</b> complex type	Represents the date range in the

Type	Description
(section <a href="#">3.1.4.1.3.6</a> ).	<b>RulePredicatesType</b> complex type <a href="#">3.1.4.1.3.4</a> object.
<b>RulePredicateSizeRangeType</b> complex type (section <a href="#">3.1.4.1.3.7</a> ).	Represents the size range in the <b>RulePredicatesType</b> complex type <a href="#">3.1.4.1.3.4</a> object.

### 3.1.4.1.3.1 m:GetInboxRulesRequestType Complex Type

The **GetInboxRulesRequestType** complex type represents an operation to get the Inbox rules in a server database.

```
<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>
```

#### Child Elements

Element	Type	Description
MailboxSmtpAddress	xs:string	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 represents a response to a **GetInboxRules** operation.

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

```

        minOccurs="0"
        maxOccurs="1"
    />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
```

#### Child Elements

Element	Type	Description
OutlookRuleBlobExists	<a href="#">xs:boolean</a>	Specifies whether a <b>BLOB</b> that contains all rules exists in the user's mailbox. A text value of <b>true</b> indicates that the BLOB exists. This element MUST be present. The <b>xs:boolean</b> type is specified in <a href="#">[XMLSCHEMA2]</a> .
InboxRules	<a href="#">t:ArrayOfRulesType</a>	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 is an array of **RuleType** complex type (section [2.2.4.1](#)) objects.

```

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

#### Child Elements

Element	Type	Description
Rule	<a href="#">t:RuleType</a>	The rule in the user's mailbox.

#### 3.1.4.1.3.4 t:RulePredicatesType Complex Type

The **RulePredicatesType** complex type represents 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"
    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"
/>
<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>
```

## Child Elements

Element	Type	Description
Categories	<a href="#">t:ArrayOfStringsType</a>	The categories that an incoming message is labeled with in order for

<b>Element</b>	<b>Type</b>	<b>Description</b>
		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 either the <b>ToRecipients</b> or <b>CcRecipients</b> properties of incoming messages in order for the condition or exception to apply.
ContainsSenderStrings	t:ArrayOfStringsType	The strings that appears in the <b>From</b> 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	<a href="#">t:FlaggedForActionType</a>	The flag for action value that appears on incoming messages in order for the condition or exception to apply.
FromAddresses	<a href="#">t:ArrayOfEmailAddressesType</a>	The e-mail addresses of the senders of incoming messages 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	A value that indicates whether incoming messages have to have attachments in order for the condition or exception to apply.
Importance	<a href="#">t:ImportanceChoicesType</a>	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 must be approval requests in order for the condition or exception to apply.
IsAutomaticForward	xs:boolean	A value that indicates whether

Element	Type	Description
		incoming messages must be automatic forwards in order for the condition or exception to apply.
IsAutomaticReply	xs:boolean	A value that indicates whether incoming messages must be automatic replies in order for the condition or exception to apply.
IsEncrypted	xs:boolean	A value that indicates whether incoming messages must be <b>S/MIME</b> encrypted in order for the condition or exception to apply.
IsMeetingRequest	xs:boolean	A value that indicates whether incoming messages must be meeting requests in order for the condition or exception to apply.
IsMeetingResponse	xs:boolean	A value that indicates whether incoming messages must be meeting responses in order for the condition or exception to apply.
IsNDR	xs:boolean	A value that indicates whether incoming messages must be non-delivery reports (NDRs) in order for the condition or exception to apply.
IsPermissionControlled	xs:boolean	A value that indicates whether incoming messages must be permission controlled (RMS protected) in order for the condition or exception to apply.
IsReadReceipt	xs:boolean	A value that indicates whether incoming messages must be read receipts in order for the condition or exception to apply
IsSigned	xs:boolean	A value that indicates whether incoming messages must be S/MIME signed in order for the condition or exception to apply.
IsVoicemail	xs:boolean	A value that indicates whether incoming messages must be voice mails in order for the condition or exception to apply.
ItemClasses	t:ArrayOfStringsType	The item classes that must be stamped on incoming messages in order for the condition or exception to apply.
MessageClassifications	t:ArrayOfStringsType	The message classifications that must be stamped on incoming messages in order for the condition or exception to

Element	Type	Description
		apply.
NotSentToMe	xs:boolean	A value that indicates whether the owner of the mailbox cannot be in the <b>ToRecipients</b> 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 <b>CcRecipients</b> 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 <b>ToRecipients</b> 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 <b>ToRecipients</b> property of incoming messages in order for the condition or exception to apply.
SentToOrCcMe	xs:boolean	A value that indicates whether the owner of the mailbox has to be in either a <b>ToRecipients</b> or <b>CcRecipients</b> property of incoming messages in order for the condition or exception to apply
Sensitivity	<a href="#">t:SensitivityChoicesType</a>	The sensitivity that must be stamped on incoming messages in order for the condition or exception to apply.
WithinDateRange	<a href="#">t:RulePredicateDateRangeType</a>	The date range within which incoming messages have to have been received in order for the condition or exception to apply.
WithinSizeRange	<a href="#">t:RulePredicateSizeRangeType</a>	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 represents 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>
```

## Child Elements

Element	Type	Description
AssignCategories	<a href="#">t:ArrayOfStringsType</a>	The categories that are stamped on e-mail messages.
CopyToFolder	<a href="#">t:TargetFolderIdType</a>	The ID of the folder that e-mail items will be copied to.
Delete	xs:boolean	A value that indicates whether messages are to be moved to the Deleted Items folder.
ForwardAsAttachmentToRecipients	<a href="#">t:ArrayOfEmailAddressesType</a>	The e-mail addresses to which messages are to be forwarded as attachments.
ForwardToRecipients	<a href="#">t:ArrayOfEmailAddressesType</a>	The e-mail addresses to which messages are to be forwarded.
MarkImportance	<a href="#">t:ImportanceChoicesType</a>	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	<a href="#">t:TargetFolderIdType</a>	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	<a href="#">t:ArrayOfEmailAddressesType</a>	The e-mail addresses to which messages are to be redirected.
SendSMSAlertToRecipients	<a href="#">t:ArrayOfEmailAddressesType</a>	The mobile phone numbers to which a Short Message Service (SMS) alert is to be sent.
ServerReplyWithMessage	<a href="#">t:ItemIdType</a>	The ID of the template message that is to be sent as a reply to incoming messages.

Element	Type	Description
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 represents the date range in the **RulePredicatesType** complex type (section [3.1.4.1.3.4](#)) object.

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

#### Child Elements

Element	Type	Description
StartTime	xs:dateTime	Specifies the rule time period and indicates that the rule condition is met after this value.
EndTime	xs:dateTime	Specifies the rule time period and indicates that the rule condition is met before this value.

This complex type MUST contain a <StartTime> or an <EndTime> and MAY contain both a <StartTime> and an <EndTime>.

The <StartTime> MUST NOT be after the <EndTime>.

### 3.1.4.1.3.7 t:RulePredicateSizeRangeType Complex Type

The **RulePredicateSizeRangeType** complex type represents the size range in the **RulePredicatesType** complex type (section [3.1.4.1.3.4](#)) object.

```
<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>
```

#### Child Elements

Element	Type	Description
MinimumSize	xs:int	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 MAY contain a <MinimumSize> and a <MaximumSize>.

<MinimumSize> MUST NOT be greater than <MaximumSize>.

To disable this predicate, set both <MinimumSize> and <MaximumSize> elements to null.

#### 3.1.4.1.4 GetInboxRules Simple Types

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

Type	Description
<b>FlaggedForActionType</b> (section <a href="#">3.1.4.1.4.1</a> )	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="Forward"
        />
    </xs:restriction>
</xs:simpleType>
```

```

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

```

## Enumeration

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

<b>Value</b>	<b>Description</b>
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.
Forward	The recipient is requested to forward the message.
FYI	The recipient received the message for information.
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. **UpdateInboxRules** is used to create an Inbox rule, to set an Inbox rule, or to delete an Inbox rule.

```

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

```

## Request

Message Format	Description
<a href="#">tns:UpdateInboxRulesSoapIn</a>	Specifies the SOAP message that updates the Inbox rules.

## Response

Message Format	Description
<a href="#">tns:UpdateInboxRulesSoapOut</a>	Specifies the SOAP message that is returned by the server in response.

### 3.1.4.2.1 UpdateInboxRules Messages

The following table lists the WSDL message definitions that are specific to this operation.

Messages	Description
<a href="#">UpdateInboxRulesSoapIn</a> (section <a href="#">3.1.4.2.1.1</a> )	The request that updates the Inbox rules.
<a href="#">UpdateInboxRulesSoapOut</a> (section <a href="#">3.1.4.2.1.2</a> )	The response from an <b>UpdateInboxRules</b> operation (section <a href="#">3.1.4.2</a> ) request.

#### 3.1.4.2.1.1 tns:UpdateInboxRulesSoapIn Message

The **UpdateInboxRulesSoapIn** message contains five parts, as described in the following table.

Part name	Element/type	Description
request	<UpdateInboxRules> (section <a href="#">3.1.4.2.2.1</a> )	Specifies the request.
Impersonation	<ExchangeImpersonation> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.2)	The identifier of the account to impersonate.
MailboxCulture	<MailboxCulture> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.5)	Specifies the culture to use for accessing the server. The cultures are defined by <a href="#">[RFC3066]</a> .
RequestVersion	<RequestServerVersion> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.7)	Specifies the schema version for the <b>UpdateInboxRules</b> operation (section <a href="#">3.1.4.2</a> ).
TimeZoneContext	<TimeZoneContext> ( <a href="#">[MS-OXWSGTZ]</a> section 2.2.4.4)	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** message contains two parts, as described in the following table.

Part name	Element/type	Description
UpdateInboxRulesResult	<UpdateInboxRulesResponse>(section <a href="#">3.1.4.2.2.2</a> )	Specifies the response.
ServerVersion	<ServerVersionInfo> ( <a href="#">[MS-OXWSCDATA]</a> section 2.2.4.8)	Specifies the server version for the response.

### 3.1.4.2.2 UpdateInboxRules Elements

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

Element	Description
<UpdateInboxRules> (section <a href="#">3.1.4.2.2.1</a> )	Defines a request to update the Inbox rules in a mailbox in the server store.
<UpdateInboxRulesResponse> (section <a href="#">3.1.4.2.2.2</a> )	Defines a response to an <b>UpdateInboxRules</b> operation (section <a href="#">3.1.4.2</a> ) request.

#### 3.1.4.2.2.1 UpdateInboxRules Element

The <UpdateInboxRules> element defines a request to update the Inbox rules in a mailbox in the server store.

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

#### 3.1.4.2.2.2 UpdateInboxRulesResponse Element

The <UpdateInboxRulesResponse> element defines a response to a **UpdateInboxRules** operation (section [3.1.4.2](#)).

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

#### 3.1.4.2.3 UpdateInboxRules Complex Types

The following XML schema complex types are specific to this operation.

Type	Description
<b>UpdateInboxRulesRequestType</b> complex type (section <a href="#">3.1.4.2.3.1</a> )	Represents an operation to update the Inbox rules in a server database.

Type	Description
<b>UpdateInboxRulesResponseType</b> complex type (section <a href="#">3.1.4.2.3.2</a> )	Represents a response to an <b>UpdateInboxRules</b> operation (section <a href="#">3.1.4.2</a> ).
<b>ArrayOfRuleOperationsType</b> complex type (section <a href="#">3.1.4.2.3.3</a> )	An array of rule operations that can be performed on a rule.
<b>RuleOperationType</b> complex type (section <a href="#">3.1.4.2.3.4</a> )	The base type for rule operations and represents the rule operation to be performed.
<b>CreateRuleOperationType</b> complex type (section <a href="#">3.1.4.2.3.5</a> )	Represents an operation to create a new rule.
<b>SetRuleOperationType</b> complex type (section <a href="#">3.1.4.2.3.6</a> )	Represents an operation to update an existing rule.
<b>DeleteRuleOperationType</b> complex type (section <a href="#">3.1.4.2.3.7</a> )	Represents an operation to delete an existing rule.
<b>ArrayOfRuleOperationErrorsType</b> complex type (section <a href="#">3.1.4.2.3.8</a> )	An array of rule validation errors on each rule field that has an error.
<b>RuleOperationErrorType</b> complex type (section <a href="#">3.1.4.2.3.9</a> )	Represents a rule operation error.
<b>ArrayOfRuleValidationErrorsType</b> complex type (section <a href="#">3.1.4.2.3.10</a> )	Represents an array of rule validation errors.
<b>RuleValidationErrorType</b> complex type (section <a href="#">3.1.4.2.3.11</a> )	Represents 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 represents an operation to update the Inbox rules in a server database.

```

<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>

```

```

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

#### Child Elements

Element	Type	Description
MailboxSmtpAddress	<a href="#">xs:string</a>	The SMTP address of the user whose Inbox rules are to be updated. The <b>xs:string</b> type is specified in <a href="#">[XMLSCHEMA2]</a> .
RemoveOutlookRuleBlob	<a href="#">xs:boolean</a>	Indicates whether to remove the BLOB that contains all rules. The <b>xs:boolean</b> type is specified in <a href="#">[XMLSCHEMA2]</a> .
Operations	<a href="#">t:ArrayOfRuleOperationsType</a>	The operations that are to be applied to the user's Inbox rules.

#### 3.1.4.2.3.2 m:UpdateInboxRulesResponseType Complex Type

The **UpdateInboxRulesResponseType** complex type represents a response to an **UpdateInboxRules** operation (section [3.1.4.2](#)).

```

<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>
```

#### Child Elements

Element	Type	Description
RuleOperationErrors	<a href="#">t:ArrayOfRuleOperationErrorsType</a>	A <b>RuleOperationErrorType</b> complex type (section <a href="#">3.1.4.2.3.9</a> ) collection.

### 3.1.4.2.3.3 t:ArrayOfRuleOperationsType Complex Type

The **ArrayOfRuleOperationsType** complex type is 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>
```

#### Child Elements

Element	Type	Description
CreateRuleOperation	<a href="#">t:CreateRuleOperationType</a>	An operation to create an Inbox rule.
SetRuleOperation	<a href="#">t:SetRuleOperationType</a>	An operation to update an Inbox rule.
DeleteRuleOperation	<a href="#">t:DeleteRuleOperationType</a>	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 (section [3.1.4.2.3.5](#)), **SetRuleOperationType** complex type (section [3.1.4.2.3.6](#)), and **DeleteRuleOperationType** complex type [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 rule.

```
<xs:complexType name="CreateRuleOperationType">
  <xs:complexContent>
    <xs:extension
```

```

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

```

#### Child Elements

Element	Type	Description
Rule	<a href="#">t:RuleType</a>	The rule to create.

A create operation rule argument must not have a rule ID in the **RuleType** complex type (section [2.2.4.1](#)). The rule ID will be 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 operation to the update an existing Inbox rule.

```

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

```

#### Child Elements

Element	Type	Description
Rule	<a href="#">t:RuleType</a>	Represents the update rule operation to be performed.

An update operation rule argument must have a rule ID.

### 3.1.4.2.3.7 t:DeleteRuleOperationType Complex Type

The **DeleteRuleOperationType** complex type represents the operation to delete an existing Inbox rule.

```
<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>
```

#### Child Elements

Element	Type	Description
RuleId	xs:string	The rule ID of the Inbox rule to be deleted.

### 3.1.4.2.3.8 t:ArrayOfRuleOperationErrorsType Complex Type

The **ArrayOfRuleOperationErrorsType** complex type is 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>
```

#### Child Elements

Element	Type	Description
RuleOperationError	<a href="#">t:RuleOperationErrorType</a>	Represents a rule operation error.

### 3.1.4.2.3.9 t:RuleOperationErrorType Complex Type

The **RuleOperationErrorType** complex type represents 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>

```

#### Child Elements

Element	Type	Description
OperationIndex	xs:int	The index of the operation in the request that caused the rule operation error.
ValidationErrors	<a href="#">t:ArrayOfRuleValidationErrorsType</a>	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 represents 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>

```

#### Child Elements

Element	Type	Description
Error	<a href="#">t:RuleValidationErrorType</a>	Represents 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 represents 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>

```

#### Child Elements

Element	Type	Description
FieldURI	<a href="#">t:RuleFieldURIType</a>	Specifies the <b>URI</b> to the rule field that caused the validation error.
ErrorCode	<a href="#">t:RuleValidationErrorCodeType</a>	The error code that was triggered on the field.
ErrorMessage	xs:string	The reason for the validation error.
FieldValue	xs:string	The value of the field that caused the validation error.

#### 3.1.4.2.4 UpdateInboxRules Simple Types

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

Type	Description
<b>RuleFieldURIType</b> (section <a href="#">3.1.4.2.4.1</a> )	Defines the rule fields that could cause a validation error.
<b>RuleValidationErrorCodeType</b> (section <a href="#">3.1.4.2.4.2</a> )	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>
```

## Enumeration

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

Value	Description
RuleId	The rule ID.
DisplayName	The rule display name.
Priority	The rule priority.
IsNotSupported	The rule is not supported.
Actions	The rule actions.

<b>Value</b>	<b>Description</b>
Condition:Categories	The categories condition.
Condition:ContainsBodyStrings	The contains body strings condition.
Condition:ContainsHeaderStrings	The contains header strings condition.
Condition:ContainsRecipientStrings	The contains recipient strings condition.
Condition:ContainsSenderStrings	The contains sender strings condition.
Condition:ContainsSubjectOrBodyStrings	The contains subject or body strings condition.
Condition:ContainsSubjectStrings	The contains subject 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 is approval request condition.
Condition: IsAutomaticForward	The is automatic forward condition.
Condition: IsAutomaticReply	The is automatic reply condition.
Condition: IsEncrypted	The is encrypted condition.
Condition: IsMeetingRequest	The is meeting request condition.
Condition: IsMeetingResponse	The is meeting response condition.
Condition: IsNDR	The non-delivery report (NDR) condition.
Condition: IsPermissionControlled	The is permission controlled condition.
Condition: IsReadReceipt	The is read condition.
Condition: IsSigned	The is signed condition.
Condition: IsVoicemail	The is voicemail condition.
Condition: ItemClasses	The item class condition.
Condition: MessageClassifications	The message classifications condition.
Condition: NotSentToMe	The not sent to me condition.
Condition: SentCcMe	The sent Cc me condition.
Condition: SentOnlyToMe	The sent only to me condition.

<b>Value</b>	<b>Description</b>
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 contains body strings exception.
Exception:ContainsHeaderStrings	The contains header strings exception.
Exception:ContainsRecipientStrings	The contains recipient strings exception.
Exception:ContainsSenderStrings	The contains sender strings exception.
Exception:ContainsSubjectOrBodyStrings	The contains subject or body strings exception.
Exception:ContainsSubjectStrings	The contains subject 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 is approval request exception.
Exception:IsAutomaticForward	The is automatic forward exception
Exception:IsAutomaticReply	The is automatic reply exception.
Exception:IsEncrypted	The is encrypted exception.
Exception:IsMeetingRequest	The is meeting request exception.
Exception:IsMeetingResponse	The is meeting response exception.
Exception:IsNDR	The NDR exception.
Exception:IsPermissionControlled	The is permission controlled exception.
Exception:IsReadReceipt	The is read exception.
Exception:IsSigned	The is signed exception.
Exception:IsVoicemail	The is voice mail exception.

<b>Value</b>	<b>Description</b>
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.

```
<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>

```

## Enumeration

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

<b>Value</b>	<b>Description</b>
ADOperationFailure	The Active Directory 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 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.

<b>Value</b>	<b>Description</b>
InvalidValue	The specified value is invalid.
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.

### 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 to perform the specific operations.

### 4.1 CreateInboxRule Example

The following is an example of a **CreateRuleOperationType** complex type (section [3.1.4.2.3.5](#)) with the **UpdateInboxRules** operation (section [3.1.4.2](#)).

The client constructs the request XML and sends it to the server. The **CreateRuleOperationType** complex type contains the rule to be created. This example builds 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 Example

The following is an example of a **SetRuleOperationType** complex type (section [3.1.4.2.3.6](#)) with the **UpdateInboxRules** operation ([3.1.4.2](#)).

The client constructs the request XML and sends it to the server. The **SetRuleOperationType** 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 Example

The following is an example of a **DeleteRuleOperationType** complex type (section [3.1.4.2.3.7](#)) with the **UpdateInboxRules** operation (section [3.1.4.2](#)).

The client constructs the request XML and sends it to the server. The **<DeleteRuleOperation>** element 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 Example

The following is an example of a **GetInboxRules** operation (section [3.1.4.1](#)).

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 **ArrayOfRulesType** complex type (section [3.1.4.1.3.3](#)) collection.

```
<?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 Example

The following is an example of a **CreateRuleOperationType** complex type (section [3.1.4.2.3.5](#)) with the **UpdateInboxRules** operation (section [3.1.4.2](#)). This example sets the <RuleId> element, the rule identifier. A create operation rule argument must not have a rule ID. The rule ID will be generated when the rule is successfully created in the server store. To specify a rule identifier will cause a validation error.

The client constructs the request XML and sends it to the server. The **CreateRuleOperationType** complex type contains the **RuleType** complex type (section [2.2.4.1](#)) to be created. This example defines a <RuleId> 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: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 **RuleValidationErrorResponseType** complex type (section [3.1.4.2.3.11](#)) contains the information about the error that caused 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>ErrorInboxRulesValidation</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>
```

## **5 Security**

### **5.1 Security Considerations for Implementers**

The Inbox Rules Web Service protocol does not use any additional security mechanisms.

### **5.2 Index of Security Parameters**

None.

## 6 Appendix A: Full WSDL

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

File name	Description	Section
MS-OXWSRULES.wsdl	Contains the WSDL for the implementation of this protocol.	<a href="#">6.1</a>
MS-OXWSRULES-types.xsd	Contains the XML schema type definitions that are used in this protocol.	<a href="#">6.2</a>
MS-OXWSRULES-messages.xsd	Contains the XML schema message definitions that are used in this protocol.	<a href="#">6.3</a>

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

### 6.1 WSDL

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>
        <xsschema xmlns:xs="http://www.w3.org/2001/XMLSchema">
            <xss:import namespace="http://schemas.microsoft.com/exchange/services/2006/messages"
            schemaLocation="messages.xsd"/>
        </xsschema>
    </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>
<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" />
        />
    </wsdl:input>

```

```

        <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>

```

## 6.2 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 need 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	<a href="#">[MS-OXWSCDATA]</a> section 6.3
MS-OXWScore-types.xsd	<a href="#">[MS-OXWScore]</a> section 6.2

```

<?xml version="1.0" encoding="utf-8"?>
<xss: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">
<xss:import namespace="http://www.w3.org/XML/1998/namespace"/>
<xss:include schemaLocation="MS-OXWSCDATA-types.xsd"/>
<xss:include schemaLocation="MS-OXWScore-types.xsd"/>

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

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

<xss: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"/>
    <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="ArrayOfEmailAddressesType">
  <xs:sequence>
    <xs:element name="Address" type="t:EmailAddressType" minOccurs="0"
maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

<xs:simpleType name="SensitivityChoicesType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Normal"/>
    <xs:enumeration value="Personal"/>
    <xs:enumeration value="Private"/>
    <xs:enumeration value="Confidential"/>
  </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: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"/>
<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>

```

### 6.3 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 needs 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	<a href="#">[MS-OXWSCDATA]</a> section 6.3

```

<?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-OXWSFOLD-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: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 Appendix B: Product Behavior

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

- Microsoft® Exchange Server 2010 Service Pack 1 (SP1)

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

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

## 8 Change Tracking

This section identifies changes that were made to the [MS-OXWSRULES] protocol document between the August 2010 and November 2010 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.
- Changes made for template compliance.
- Removal of a document from the documentation set.

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 revision type descriptions are defined as follows:

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

The changes made to this document are listed in the following table. For more information, please contact [protocol@microsoft.com](mailto:protocol@microsoft.com).

<b>Section</b>	<b>Tracking number (if applicable) and description</b>	<b>Major change (Y or N)</b>	<b>Change Type</b>
<a href="#">1.1 Glossary</a>	Removed the term and definition for "Outlook Rule Blob".	N	Content updated.
<a href="#">3.1.4.1.3.2 m:GetInboxRulesResponseType Complex Type</a>	Changed "Outlook Rule Blob" to "BLOB".	N	Editorially updated.
<a href="#">7 Appendix B: Product Behavior</a>	Removed Microsoft® Office Outlook® 2003, Microsoft® Office Outlook® 2007, and Microsoft® Outlook® 2010 from the list of applicable products.	Y	Content updated.

## 9 Index

### A

[Applicability](#) 7

### C

[Capability negotiation](#) 7

[Change tracking](#) 66

### F

[Full WSDL](#) 55

### G

[Glossary](#) 5

### I

[Introduction](#) 5

### M

Messages

[overview](#) 8

[syntax](#) 8

[transport](#) 8

### N

[Normative references](#) 5

### O

[Overview \(synopsis\)](#) 6

### P

[Preconditions](#) 7

[Prerequisites](#) 7

[Product behavior](#) 65

### R

References

[normative](#) 5

[Relationship to other protocols](#) 6

### S

Security

[implementer considerations](#) 54

[overview](#) 54

[parameter index](#) 54

Server

[abstract data model](#) 11

[initialization](#) 11

[local events](#) 46

[message processing](#) 11

[overview](#) 11

[sequencing rules](#) 11

[timer events](#) 46

[timers](#) 11

[Standards assignments](#) 7

### T

[Tracking changes](#) 66

### V

[Vendor-extensible fields](#) 7

[Versioning](#) 7