

[MS-OXWSADISC]: Autodiscover Publishing and Lookup SOAP-Based 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.
- **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
07/15/2009	1.0	Major	Initial Availability.
11/04/2009	2.0.0	Major	Updated and revised the technical content.
02/10/2010	3.0.0	Major	Updated and revised the technical content.
05/05/2010	4.0.0	Major	Updated and revised the technical content.
08/04/2010	5.0	Major	Significantly changed the technical content.
11/03/2010	6.0	Major	Significantly changed the technical content.

Contents

1 Introduction	7
1.1 Glossary	7
1.2 References	7
1.2.1 Normative References	7
1.2.2 Informative References	8
1.3 Overview	8
1.4 Relationship to Other Protocols	11
1.5 Prerequisites/Preconditions	12
1.6 Applicability Statement	12
1.7 Versioning and Capability Negotiation	12
1.8 Vendor Extensible Fields	12
1.9 Standards Assignments	12
2 Messages	13
2.1 Transport	13
2.2 Common Message Syntax	13
2.2.1 Namespaces	13
2.2.2 Messages	14
2.2.3 Elements	14
2.2.3.1 ServerVersionInfo Element	14
2.2.3.2 Domains Element	14
2.2.4 Complex Types	14
2.2.4.1 tns:ServerVersionInfo Complex Type	15
2.2.4.2 tns:Domains Complex Type	15
2.2.5 Simple Types	16
2.2.6 Attributes	16
2.2.7 Groups	16
2.2.8 Attribute Groups	16
3 Protocol Details	17
3.1 Autodiscover Server Details	17
3.1.1 Abstract Data Model	17
3.1.2 Timers	17
3.1.3 Initialization	17
3.1.4 Message Processing Events and Sequencing Rules	17
3.1.4.1 GetDomainSettings	17
3.1.4.1.1 Messages	18
3.1.4.1.1.1 tns:GetDomainSettingsRequestMessage	18
3.1.4.1.1.2 tns:GetDomainSettingsRequestMessage_Headers	19
3.1.4.1.1.3 tns:GetDomainSettingsResponseMessage	19
3.1.4.1.1.4 tns:GetDomainSettingsResponseMessage_Headers	20
3.1.4.1.2 Elements	20
3.1.4.1.2.1 GetDomainSettingsRequestMessage Element	21
3.1.4.1.2.2 GetDomainSettingsResponseMessage Element	21
3.1.4.1.2.3 GetDomainSettingsRequest Element	22
3.1.4.1.2.4 GetDomainSettingsResponse Element	22
3.1.4.1.2.5 ArrayOfDomainResponse Element	22
3.1.4.1.2.6 DomainResponse Element	22
3.1.4.1.2.7 DomainSettingErrors Element	22
3.1.4.1.2.8 DomainSettingError Element	23

3.1.4.1.2.9	DomainSettings Element	23
3.1.4.1.2.10	DomainSetting Element	23
3.1.4.1.2.11	DomainStringSetting Element.....	23
3.1.4.1.3	Complex Types	24
3.1.4.1.3.1	tns:GetDomainSettingsRequest Complex Type	24
3.1.4.1.3.2	tns:GetDomainSettingsResponse Complex Type	25
3.1.4.1.3.3	tns:ArrayOfDomainResponse Complex Type.....	26
3.1.4.1.3.4	tns:DomainResponse Complex Type	26
3.1.4.1.3.5	tns:DomainSettingErrors Complex Type	27
3.1.4.1.3.6	tns:DomainSettingError Complex Type.....	27
3.1.4.1.3.7	tns:DomainSettings Complex Type	28
3.1.4.1.3.8	tns:DomainSetting Complex Type.....	28
3.1.4.1.3.9	tns:DomainStringSetting Complex Type	29
3.1.4.2	GetFederationInformation	29
3.1.4.2.1	Messages	31
3.1.4.2.1.1	tns:GetFederationInformationRequestMessage	31
3.1.4.2.1.2	tns:GetFederationInformationRequestMessage_Headers.....	31
3.1.4.2.1.3	tns:GetFederationInformationResponseMessage	32
3.1.4.2.1.4	tns:GetFederationInformationResponseMessage_Headers.....	32
3.1.4.2.2	Elements.....	32
3.1.4.2.2.1	GetFederationInformationRequestMessage Element	33
3.1.4.2.2.2	GetFederationInformationResponseMessage Element	33
3.1.4.2.2.3	GetFederationInformationRequest Element	34
3.1.4.2.2.4	GetFederationInformationResponse Element	34
3.1.4.2.3	Complex Types	34
3.1.4.2.3.1	tns:GetFederationInformationRequest Complex Type	35
3.1.4.2.3.2	tns:GetFederationInformationResponse Complex Type	35
3.1.4.2.3.3	tns:TokenIssuer Complex Type	36
3.1.4.2.3.4	tns:TokenIssuers Complex Type	37
3.1.4.3	GetOrganizationRelationshipSettings	37
3.1.4.3.1	Messages	38
3.1.4.3.1.1	tns:GetOrganizationRelationshipSettingsRequestMessage	38
3.1.4.3.1.2	tns:GetOrganizationRelationshipSettingsRequestMessage_Headers.....	39
3.1.4.3.1.3	tns:GetOrganizationRelationshipSettingsResponseMessage	39
3.1.4.3.1.4	tns:GetOrganizationRelationshipSettingsResponseMessage_Headers....	39
3.1.4.3.2	Elements.....	40
3.1.4.3.2.1	GetOrganizationRelationshipSettingsRequestMessage Element	40
3.1.4.3.2.2	GetOrganizationRelationshipSettingsRequest Element	41
3.1.4.3.2.3	GetOrganizationRelationshipSettingsResponseMessage Element	41
3.1.4.3.2.4	GetOrganizationRelationshipSettingsResponse Element	41
3.1.4.3.2.5	OrganizationRelationshipSettingsCollection Element.....	42
3.1.4.3.3	Complex Types	42
3.1.4.3.3.1	tns:GetOrganizationRelationshipSettingsRequest Complex Type	42
3.1.4.3.3.2	tns:GetOrganizationRelationshipSettingsResponse Complex Type	43
3.1.4.3.3.3	tns:OrganizationRelationshipSettingsCollection Complex Type	43
3.1.4.3.3.4	tns:OrganizationRelationshipSettings Complex Type	44
3.1.4.4	GetUserSettings	45
3.1.4.4.1	Messages	46
3.1.4.4.1.1	tns:GetUserSettingsRequestMessage	46
3.1.4.4.1.2	tns:GetUserSettingsRequestMessage_Headers	47
3.1.4.4.1.3	tns:GetUserSettingsResponseMessage	47
3.1.4.4.1.4	tns:GetUserSettingsResponseMessage_Headers	47
3.1.4.4.2	Elements.....	48

3.1.4.4.2.1	GetUserSettingsRequestMessage Element.....	49
3.1.4.4.2.2	GetUserSettingsResponseMessage Element.....	50
3.1.4.4.2.3	GetUserSettingsRequest Element.....	50
3.1.4.4.2.4	GetUserSettingsResponse Element.....	50
3.1.4.4.2.5	AutodiscoverRequest Element	51
3.1.4.4.2.6	Users Element.....	51
3.1.4.4.2.7	User Element	51
3.1.4.4.2.8	RequestedSettings Element	51
3.1.4.4.2.9	RequestedServerVersion Element	51
3.1.4.4.2.10	AutodiscoverResponse Element	52
3.1.4.4.2.11	ErrorCode Element.....	52
3.1.4.4.2.12	ArrayOfUserResponse Element	52
3.1.4.4.2.13	UserResponse Element	52
3.1.4.4.2.14	UserSettingErrors Element.....	52
3.1.4.4.2.15	UserSettingError Element	53
3.1.4.4.2.16	UserSettings Element	53
3.1.4.4.2.17	UserSetting Element	53
3.1.4.4.2.18	StringSetting Element	53
3.1.4.4.2.19	WebClientUrlCollectionSetting Element	54
3.1.4.4.2.20	WebClientUrls Element	54
3.1.4.4.2.21	WebClientUrl Element.....	54
3.1.4.4.2.22	ProtocolConnectionCollectionSetting Element	54
3.1.4.4.2.23	ProtocolConnections Element	54
3.1.4.4.2.24	ProtocolConnection Element.....	55
3.1.4.4.2.25	AlternateMailboxCollectionSetting Element.....	55
3.1.4.4.2.26	AlternateMailboxes Element	55
3.1.4.4.2.27	AlternateMailbox Element	55
3.1.4.4.3	Complex Types	55
3.1.4.4.3.1	tns:GetUserSettingsRequest Complex Type.....	57
3.1.4.4.3.2	tns:AutodiscoverRequest Complex Type	58
3.1.4.4.3.3	tns:Users Complex Type.....	58
3.1.4.4.3.4	tns:User Complex Type	58
3.1.4.4.3.5	tns:RequestedSettings Complex Type	59
3.1.4.4.3.6	tns:GetUserSettingsResponse Complex Type	62
3.1.4.4.3.7	tns:AutodiscoverResponse Complex Type	62
3.1.4.4.3.8	tns:UserResponse Complex Type.....	63
3.1.4.4.3.9	tns:UserSettingErrors Complex Type.....	64
3.1.4.4.3.10	tns:ArrayOfUserResponse Complex Type	64
3.1.4.4.3.11	tns:UserSettingError Complex Type	65
3.1.4.4.3.12	tns:UserSettings Complex Type	65
3.1.4.4.3.13	tns:UserSetting Complex Type	66
3.1.4.4.3.14	tns:StringSetting Complex Type	66
3.1.4.4.3.15	tns:WebClientUrlCollectionSetting Complex Type	67
3.1.4.4.3.16	tns:WebClientUrls Complex Type	67
3.1.4.4.3.17	tns:WebClientUrl Complex Type.....	68
3.1.4.4.3.18	tns:ProtocolConnectionCollectionSetting Complex Type	68
3.1.4.4.3.19	tns:ProtocolConnections Complex Type	69
3.1.4.4.3.20	tns:ProtocolConnection Complex Type	69
3.1.4.4.3.21	tns:AlternateMailboxCollectionSetting Complex Type.....	70
3.1.4.4.3.22	tns:AlternateMailboxes Complex Type	71
3.1.4.4.3.23	tns:AlternateMailbox Complex Type	71
3.1.4.4.4	Simple Types.....	72
3.1.4.4.4.1	tns:ExchangeVersion Simple Type	72

3.1.4.4.4.2 tns:ErrorCode Simple Type	73
3.1.5 Timer Events	74
3.1.6 Other Local Events	74
4 Protocol Examples	75
4.1 GetDomainSettings_Example	75
4.2 GetFederationInformation_Example	76
4.3 GetUserSettings_Example.....	77
5 Security	80
5.1 Security Considerations for Implementers	80
5.2 Index of Security Parameters	80
6 Appendix A: Full WSDL	81
6.1 WSDL.....	81
6.2 Messages XSD.....	84
6.3 Types XSD	92
7 Appendix B: Product Behavior	93
8 Change Tracking.....	96
9 Index	100

1 Introduction

This document specifies the Autodiscover Publishing and Lookup SOAP-Based Web Service protocol, which is used to send request-response messages for retrieving user settings configuration information. Clients use this protocol and the Autodiscover service (autodiscovery) to obtain specific configuration settings by passing in their e-mail addresses as simple strings.

The Autodiscover service can then be used to discover and configure internal and external URLs for the server's Web services during profile setup and later sessions with the computer that has the Client Access server role installed.

1.1 Glossary

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

Active Directory distinguished name (DN)
endpoint (2)
fully qualified domain name (FQDN)
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
Internet Message Access Protocol – Version 4 (IMAP4)
legacy DN
mailbox
offline address book (OAB)
Post Office Protocol - Version 3 (POP3)
Simple Mail Transfer Protocol (SMTP)
SOAP header
SOAP message
Secure Sockets Layer (SSL)
security token service (STS)
Unified Messaging
Uniform Resource Identifier (URI)
Uniform Resource Locator (URL)
Web Services Description Language (WSDL)
WSDL message
XML
XML namespace
XML schema

The following terms are specific to this document:

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

1.2 References

1.2.1 Normative References

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

[MS-OXDSCLI] Microsoft Corporation, "[Autodiscover Publishing and Lookup Protocol Specification](#)", April 2008.

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

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

[WSA10] "WS-Addressing 1.0 Namespace: <http://www.w3.org/2005/08/addressing>", <http://www.w3.org/2005/08/addressing/>

[WSADDRCORE] Gudgin, M., Hadley, M., Rogers, T., Eds., "Web Services Addressing 1.0 – Core", W3C Recommendation, May 2006, <http://www.w3.org/TR/2006/REC-ws-addr-core-20060509/>

[WSADDR-Metadata] Gudgin, M., Hadley, M., Rogers, T., and Yalçinalp, Ü., Eds., "Web Services Addressing 1.0 – Metadata", W3C Recommendation, September 2007, <http://www.w3.org/TR/ws-addr-metadata/>

[WSAddressing] Box, D., Ed., Christensen, E., Curbera, F., Ed., et al., "Web Services Addressing (WS-Addressing)", W3C Member Submission, August 2004, <http://www.w3.org/Submission/ws-addressing/>

[WS-MetadataExchange] "Web Services Metadata Exchange (WS-MetadataExchange)", August 2006, <http://schemas.xmlsoap.org/ws/2004/09/mex/>

[WS-Policy] "Web Services Policy Framework (WS-Policy) and Web Services Policy Attachment (WS-PolicyAttachment)", March 2006, <http://specs.xmlsoap.org/ws/2004/09/policy/>

[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>

[WSDLSOAP] Angelov, D., Ballinger, K., Butek, R., et al., "WSDL 1.1 Binding Extension for SOAP 1.2", W3C Member Submission, April 2006, <http://www.w3.org/Submission/wsdl11soap12>

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

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

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

1.2.2 Informative References

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

1.3 Overview

The Autodiscover Publishing and Lookup SOAP-Based Web Service protocol enables clients to ascertain e-mail configuration settings for specific e-mail addresses. This protocol includes four

operations for requesting specific configuration settings: **GetDomainSetting** (section [3.1.4.1](#)), **GetFederationInformation** (section [3.1.4.2](#)), **GetOrganizationRelationshipSettings** (section [3.1.4.3](#)), and **GetUserSettings** (section [3.1.4.4](#)). If the user configuration settings listed and described in the following table are implemented by the server, they are then included in valid server responses.

Configuration setting	Description
UserDisplayName	The user's display name.
UserDN	The user's legacy DN .
UserDeploymentId	The user's deployment identifier.
InternalMailboxServer	The fully qualified domain name (FQDN) of the mailbox server.
InternalRpcClientServer	The FQDN of the RPC client server.
InternalMailboxServerDN	The legacy DN of the mailbox server.
InternalEcpUrl	The internal Uniform Resource Locator (URL) of the server's control panel.
InternalEcpVoicemailUrl	The internal URL of the server's control panel for voicemail customization.
InternalEcpEmailSubscriptionsUrl	The internal URL of the server's control panel for e-mail subscriptions.
InternalEcpTextMessagingUrl	The internal URL of the server's control panel for text messaging.
InternalEcpDeliveryReportUrl	The internal URL of the server's control panel for delivery reports.
InternalEcpRetentionPolicyTagsUrl	The internal URL of the server's control panel for retention policy tags. <1>
InternalEcpPublishingUrl	The internal URL of the server's control panel for publishing. <2>
InternalEwsUrl	The internal URL of the server's Web services.
InternalOABUrl	The internal URL of the offline address book (OAB) .
InternalUMUrl	The internal URL of the Unified Messaging services.
InternalWebClientUrls	A collection of the internal URLs of the server's Web client.
MailboxDN	The distinguished name (DN) of the mailbox database of the user's mailbox.
PublicFolderServer	The name of the Public Folders server.
ActiveDirectoryServer	The name of the Active Directory (directory service) server.
ExternalMailboxServer	The name of the RPC over HTTP server.

Configuration setting	Description
ExternalMailboxServerRequiresSSL	A value that indicates whether the RPC over HTTP server requires Secure Sockets Layer (SSL) .
ExternalMailboxServerAuthenticationMethods	The authentication methods supported by the RPC over HTTP server.
EcpVoicemailUrlFragment	The URL fragment of the server's control panel for voice mail customization.
EcpEmailSubscriptionsUrlFragment	The URL fragment of the server's control panel for e-mail subscriptions.
EcpTextMessagingUrlFragment	The URL fragment of the server's control panel for text messaging.
EcpDeliveryReportUrlFragment	The URL fragment of the server's control panel for delivery reports.
EcpRetentionPolicyTagsUrlFragment	The URL fragment of the server's control panel for retention policy tags. <3>
EcpPublishingUrlFragment	The URL fragment of the server's control panel for publishing. <4>
ExternalEcpUrl	The external URL of the server's control panel.
ExternalEcpVoicemailUrl	The external URL of the server's control panel for voice mail customization.
ExternalEcpEmailSubscriptionsUrl	The external URL of the server's control panel for e-mail subscriptions.
ExternalEcpTextMessagingUrl	The external URL of the server's control panel for text messaging.
ExternalEcpDeliveryReportUrl	The external URL of the server's control panel for delivery reports.
ExternalEcpRetentionPolicyTagsUrl	The external URL of the server's control panel for retention policy tags. <5>
ExternalEcpPublishingUrl	The external URL of the server's control panel for publishing. <6>
ExternalEwsUrl	The external URL of the server's Web services.
ExternalOABUrl	The external URL of the OAB.
ExternalUMUrl	The external URL of the Unified Messaging services.
ExternalWebClientUrls	The external URLs of the server's Web client.
CrossOrganizationSharingEnabled	A value indicating that cross-organization sharing is enabled.
AlternateMailboxes	A collection of alternate mailboxes.
CasVersion	The version of the Client Access server that is serving the

Configuration setting	Description
	specified request (for example, 14.XX.YYY.ZZZ).
EwsSupportedSchemas	A comma-separated list of schema versions supported by the server's Web services.
InternalPop3Connections	The internal connection settings list for POP3 protocol connections.
ExternalPop3Connections	The external connection settings list for POP3 protocol connections.
InternalImap4Connections	The internal connection settings list for IMAP4 protocol connections.
ExternalImap4Connections	The external connection settings list for IMAP4 protocol connections.
InternalSmtplibConnections	The internal connection settings list for SMTP connections.
ExternalSmtplibConnections	The external connection settings list for SMTP connections.
ExchangeRpcUrl	The URL that used for Remote Procedure Calls. This URL is internal to the server and is not to be used by clients. <7>
ExternalEwsVersion	The version of the Web services server that is delivering the specified request. <8>
MobileMailboxPolicy	The mobile mailbox policy settings. <9>

1.4 Relationship to Other Protocols

The Autodiscover Publishing and Lookup SOAP-Based Web Service protocol uses SOAP over HTTP and SOAP over **HTTPS**, as shown in the following figures.

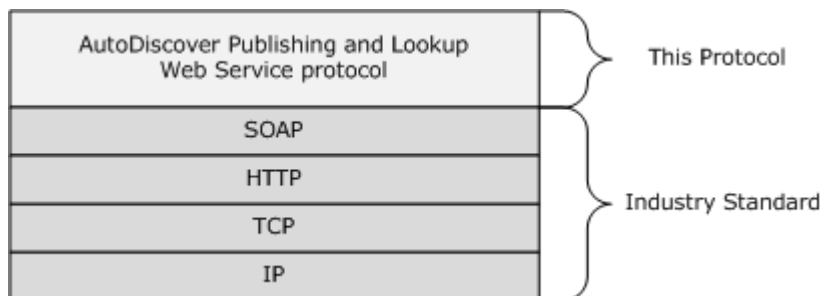


Figure 1: Autodiscover Publishing and Lookup SOAP-Based Web Service protocol HTTP stack

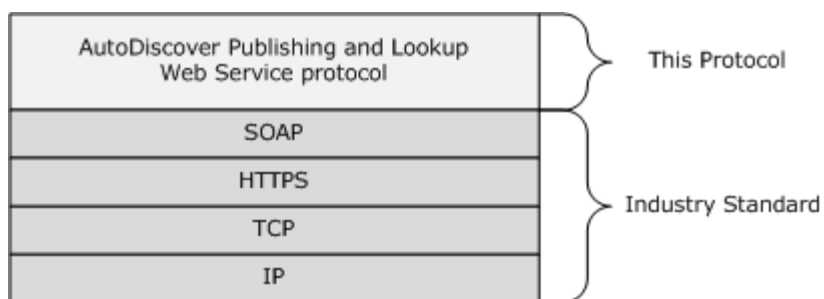


Figure 2: Autodiscover Publishing and Lookup SOAP-Based Web Service protocol HTTPS stack

1.5 Prerequisites/Preconditions

None.

1.6 Applicability Statement

The Autodiscover Publishing and Lookup SOAP-Based Web Service protocol is applicable to environments in which a client can perform an autodiscovery of a user's configuration data by providing the user's e-mail address and using the server's Web services.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses SOAP 1.1.
- **Protocol Versions:** This protocol has only one **WSDL port type** version.
- **Security and Authentication Methods:** This protocol relies on the Web server that hosts the application to perform authentication. The server will not allow unauthenticated clients to access the Voice Mail Settings Web Service protocol operations.
- **Capability Negotiation:** This protocol does not perform explicit capability negotiation. This protocol relies on the Autodiscover Publishing and Lookup protocol [\[MS-OXDCLI\]](#) to identify the protocol versions and service **endpoint** that are applicable to a particular client.

1.8 Vendor Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

Messages are transported by using SOAP version 1.1. For details, see [\[SOAP1.1\]](#).

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

2.2 Common Message Syntax

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

2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
wsu	http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd	
soapenc	http://schemas.xmlsoap.org/soap/encoding/	[SOAP1.1]
wsam	http://www.w3.org/2007/05/addressing/metadata	[WSADDR-Metadata]
tns	http://schemas.microsoft.com/exchange/2010/Autodiscover	
wsa	http://schemas.xmlsoap.org/ws/2004/08/addressing	[WSAddressing]
wsp	http://schemas.xmlsoap.org/ws/2004/09/policy	[WS-Policy]
wsap	http://schemas.xmlsoap.org/ws/2004/08/addressing/policy	Not implemented.
xsd	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] , [XMLSCHEMA2]
msc	http://schemas.microsoft.com/ws/2005/12/wsdl/contract	Not implemented.
wsaw	http://www.w3.org/2006/05/addressing/wsdl	[WSADDRCORE]
soap12	http://schemas.xmlsoap.org/wsdl/soap12	[WSDLSOAP]
wsa10	http://www.w3.org/2005/08/addressing	[WSA10]
wsx	http://schemas.xmlsoap.org/ws/2004/09/mex	[WS-MetadataExchange]
targetNamespace	http://schemas.microsoft.com/exchange/2010/Autodiscover	

Prefix	Namespace URI	Reference
wSDL	http://schemas.xmlsoap.org/wSDL/	[WSDL]

2.2.2 Messages

This specification does not define any common **WSDL message** definitions.

2.2.3 Elements

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

Element	Description
<ServerVersionInfo>	The message server's version number, including the major and minor version numbers and the major and minor build numbers.
<Domains>	A list of domains discovered by the Autodiscover service.

2.2.3.1 ServerVersionInfo Element

The <ServerVersionInfo> element represents the message server's version number, including the major and minor version numbers and the major and minor build numbers.

```
<xs:element name="ServerVersionInfo"
  type="tns:ServerVersionInfo"
  nillable="true"
/>
```

2.2.3.2 Domains Element

The <Domains> element represents a list of domains to be discovered by the client.

```
<xs:element name="Domains"
  type="tns:Domains"
  nillable="true"
/>
```

2.2.4 Complex Types

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

Complex type	Description
ServerVersionInfo	The message server version. This type is returned in the SOAP header of a Web services response message.
Domains	A collection of domain names to be used in autodiscovery.

2.2.4.1 tns:ServerVersionInfo Complex Type

The **ServerVersionInfo** complex type represents the message server version. This type is returned in the SOAP header of a Web services response message.

```
<xs:complexType name="ServerVersionInfo">
  <xs:sequence>
    <xs:element name="MajorVersion"
      type="xs:int"
      minOccurs="0"
    />
    <xs:element name="MinorVersion"
      type="xs:int"
      minOccurs="0"
    />
    <xs:element name="MajorBuildNumber"
      type="xs:int"
      minOccurs="0"
    />
    <xs:element name="MinorBuildNumber"
      type="xs:int"
      minOccurs="0"
    />
    <xs:element name="Version"
      type="xs:string"
      minOccurs="0"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

Element	Type	Description
MajorVersion	xs:int	The major version number for the server.
MinorVersion	xs:int	The minor version number for the server.
MajorBuildNumber	xs:int	The major build number for the server.
MinorBuildNumber	xs:int	The minor build number for the server.
Version	xs:string	The server product version.

This type specifies the version of the Autodiscover service.

2.2.4.2 tns:Domains Complex Type

The **Domains** complex type represents a collection of domain names to be used in autodiscovery.

```
<xs:complexType name="Domains">
  <xs:sequence>
    <xs:element name="Domain"
      type="xs:string"
    />
  </xs:sequence>
</xs:complexType>
```

```
        maxOccurs="unbounded"
        minOccurs="0"
        nillable="true"
      />
    </xs:sequence>
</xs:complexType>
```

Child Elements

Element	Type	Description
Domain	xs:string	The user's domain (the location of the e-mail server).

This type is submitted in a request message.

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 Autodiscover Server Details

The Autodiscovery Publishing and Lookup SOAP-Based Web Service protocol enables the user to determine specific user configuration settings by submitting e-mail addresses.

Operation	Description
GetUserSettings	Performs an autodiscovery for the specified user and returns the requested configuration settings.

3.1.1 Abstract Data Model

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

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

This protocol includes the operations listed and described in the following table.

Operation	Description
GetDomainSettings	Gets the domain data for a specified domain.
GetFederationInformation	Gets the configuration data for the security token service (STS) .
GetOrganizationRelationshipSettings	Gets the settings from all matching organization relationships that have at least one domain that maps to at least one e-mail address claim in the token.
GetUserSettings	Gets the specified configurations settings for the e-mail user.

3.1.4.1 GetDomainSettings

The **GetDomainSettings** operation retrieves the specified domain settings for the user.

```

<wsdl:operation name="GetDomainSettings">
  <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetDomainSettings"
    name="GetDomainSettingsRequestMessage"
    message="tns:GetDomainSettingsRequestMessage" />
  <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetDomainSettingsResponse"
    name="GetDomainSettingsResponseMessage"
    message="tns:GetDomainSettingsResponseMessage" />
</wsdl:operation>

```

Request

Message Format	Description
tns:GetDomainSettingsRequestMessage	Specifies the SOAP message that requests the user's domain configuration settings.

Response

Message Format	Description
tns:GetDomainSettingsResponseMessage	Specifies the SOAP message that is returned by the server in response.

3.1.4.1.1 Messages

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

Messages	Description
GetDomainSettingsRequestMessage	Retrieves the specified settings for a domain.
GetDomainSettingsRequestMessage_Headers	Specifies the SOAP header for a GetDomainSettingsRequest operation (section 3.1.4.1.2.3).
GetDomainSettingsResponseMessage	Represents the response to a GetDomainSettings call (section 3.1.4.1) for a specified domain.
GetDomainSettingsResponseMessage_Headers	Specifies the SOAP header for a GetDomainSettingsResponse operation (section 3.1.4.1.2.4).

3.1.4.1.1.1 tns:GetDomainSettingsRequestMessage

The **GetDomainSettingsRequestMessage** WSDL message specifies the SOAP message that represents a request to get the specified settings for a domain.

```

<wsdl:message name="GetDomainSettingsRequestMessage">
  <wsdl:part name="parameters" element="tns:GetDomainSettingsRequestMessage" />

```

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

The **GetDomainSettingsRequestMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	<GetDomainSettingsRequestMessage> element (section 3.1.4.1.2.1)	The parameters of a call to a GetDomainSettings operation (section 3.1.4.1) request.

3.1.4.1.1.2 tns:GetDomainSettingsRequestMessage_Headers

The **GetDomainSettingsRequestMessage_Headers Message** WSDL message specifies the SOAP header for a **GetDomainSettings** operation (section [3.1.4.1](#)).

```
<wsdl:message name="GetDomainSettingsRequestMessage_Headers">  
  <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />  
</wsdl:message>
```

The **GetDomainSettingsRequestMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
RequestedServerVersion	<RequestedServerVersion> element (section 3.1.4.4.2.9)	Specifies the server version that the GetDomainSettings operation (section 3.1.4.1) request targets.

3.1.4.1.1.3 tns:GetDomainSettingsResponseMessage

The **GetDomainSettingsResponseMessage** WSDL message specifies the SOAP message that represents the response to a **GetDomainSettings** operation (section [3.1.4.1](#)) for an individual domain.

```
<wsdl:message name="GetDomainSettingsResponseMessage">  
  <wsdl:part name="parameters" element="tns:GetDomainSettingsResponseMessage" />  
</wsdl:message>
```

The **GetDomainSettingsResponseMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	<GetDomainSettingsResponseMessage> element (section 3.1.4.1.2.2)	A response to a GetDomainSettings operation (section 3.1.4.1).

3.1.4.1.1.4 tns:GetDomainSettingsResponseMessage_Headers

The **GetDomainSettingsResponseMessage_Headers Message** WSDL message specifies the SOAP header for a **GetDomainSettings** operation (section [3.1.4.1](#)).

```
<wsdl:message name="GetDomainSettingsResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
```

The **GetDomainSettingsResponseMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
ServerVersionInfo	ServerVersionInfo ([MS-OXWSCDATA] section 2.2.4.8)	Contains the server version that processed the GetDomainSettings operation (section 3.1.4.1) request.

3.1.4.1.2 Elements

The following table summarizes the set of XML schema element definitions that are specific to the **GetDomainSettings** operation (section [3.1.4.1](#)).

Element	Description
<GetDomainSettingsRequestMessage>	Prepares a call to the server, requesting configuration settings for the user's domain. The GetDomainSettingsResponseMessage (section 3.1.4.1.2.2) response contains the domain settings requested in this call.
<GetDomainSettingsResponseMessage>	Returns to the caller the user's configuration settings that were requested in the GetDomainSettingsResponseMessage call.
<GetDomainSettingsRequest>	Represents the parameters of a call to a GetDomainSettings operation (section 3.1.4.1.2.2).
<GetDomainSettingsResponse>	Represents the response to a GetDomainSettings operation for a domain, and returns the domain settings.
<ArrayOfDomainResponse>	Represents an array of <DomainResponse> elements (section 3.1.4.1.2.6). Each <DomainResponse> element contains the requested settings for the specified user.
<DomainResponse>	Contains the requested settings for the specified domain.
<DomainSettingErrors>	Contains error information for settings that could not be returned.
<DomainSettingError>	Represents an error that occurred while retrieving a domain setting in response to a GetDomainSettings request.
<DomainSettings>	Represents the domain settings that were submitted in a request or returned by an Autodiscover response.
<DomainSetting>	Represents the base class for all domain settings returned by the GetDomainSettings request.

Element	Description
<DomainStringSetting>	Represents a domain setting whose value is of type string .

3.1.4.1.2.1 GetDomainSettingsRequestMessage Element

The <GetDomainSettingsRequestMessage> element prepares a call to the server, requesting configuration settings for the user's domain. The [GetDomainSettingsResponseMessage](#) response contains the domain settings requested in this call.

```
<xs:element name="GetDomainSettingsRequestMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Request"
        type="tns:GetDomainSettingsRequest"
        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Child Elements

Element	Type	Description
Request	tns:GetDomainSettingsRequest	A GetDomainSettings request.

3.1.4.1.2.2 GetDomainSettingsResponseMessage Element

The <GetDomainSettingsResponseMessage> element returns to the caller the user's configuration settings that were requested in a [GetDomainSettingsRequestMessage](#) call.

The name-value pairs for each returned domain setting are included in the response. The [GetDomainSettings](#) call returns only the requested configuration settings.

```
<xs:element name="GetDomainSettingsResponseMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Response"
        type="tns:GetDomainSettingsResponse"
        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Child Elements

Element	Type	Description
Response	tns:GetDomainSettingsResponse	The response to a GetDomainSettings call for a specified domain.

3.1.4.1.2.3 GetDomainSettingsRequest Element

The <GetDomainSettingsRequest> element represents the parameters of a [GetDomainSettings](#) call.

```
<xs:element name="GetDomainSettingsRequest"
  type="tns:GetDomainSettingsRequest"
  nillable="true"
/>
```

3.1.4.1.2.4 GetDomainSettingsResponse Element

The <GetDomainSettingsResponse> element represents the response to a [GetDomainSettings](#) operation for a domain. This response contains the domain settings.

```
<xs:element name="GetDomainSettingsResponse"
  type="tns:GetDomainSettingsResponse"
  nillable="true"
/>
```

3.1.4.1.2.5 ArrayOfDomainResponse Element

The <ArrayOfDomainResponse> element represents an array of [DomainResponse](#) elements. Each DomainResponse element contains the requested settings for the specified user.

```
<xs:element name="ArrayOfDomainResponse"
  type="tns:ArrayOfDomainResponse"
  nillable="true"
/>
```

3.1.4.1.2.6 DomainResponse Element

The <DomainResponse> element contains the requested settings for the specified domain.

```
<xs:element name="DomainResponse"
  type="tns:DomainResponse"
  nillable="true"
/>
```

3.1.4.1.2.7 DomainSettingErrors Element

The <DomainSettingErrors> element contains error information for settings that could not be returned.

```
<xs:element name="DomainSettingErrors"
  type="tns:DomainSettingErrors"
  nillable="true"
/>
```

3.1.4.1.2.8 DomainSettingError Element

The <DomainSettingError> element represents an error that occurred while retrieving a domain setting in response to a [GetDomainSettings](#) request.

```
<xs:element name="DomainSettingError"
  type="tns:DomainSettingError"
  nillable="true"
/>
```

3.1.4.1.2.9 DomainSettings Element

The <DomainSettings> element represents the domain settings that were submitted in a request or returned by an Autodiscover response.

```
<xs:element name="DomainSettings"
  type="tns:DomainSettings"
  nillable="true"
/>
```

3.1.4.1.2.10 DomainSetting Element

The <DomainSetting> element represents the base class for all domain settings returned by the [GetDomainSettings](#) request.

```
<xs:element name="DomainSetting"
  type="tns:DomainSettings"
  nillable="true"
/>
```

3.1.4.1.2.11 DomainStringSetting Element

The <DomainStringSetting> element represents a domain setting whose value is of type **string**.

```
<xs:element name="DomainStringSetting"
  type="tns:DomainStringSetting"
  nillable="true"
/>
```

3.1.4.1.3 Complex Types

The following table summarizes the set of XML schema complex type definitions that are specific to the **GetDomainSettings** operation (section [3.1.4.1](#)).

Complex type	Description
GetDomainSettingsRequest	Retrieves the specified setting for a domain.
GetDomainSettingsResponse	Contains an array of domain settings. The domain response contains the configuration settings for the specified domain. This type represents the response to a GetDomainSettings operation (section 3.1.4.1) call for a specified domain.
ArrayOfDomainResponse	Represents an array of DomainResponse (section 3.1.4.1.3.4) objects.
DomainResponse	Represents a response to a GetDomainSettings operation call for an individual domain. The returned DomainResponse object contains the requested settings for the specified domain.
DomainSettingErrors	Represents a collection of DomainSettingError (section 3.1.4.1.3.6) objects containing error information for settings that could not be returned.
DomainSettingError	Represents an error that occurred while retrieving a domain setting in response to a GetDomainSettings operation request.
DomainSettings	Represents a collection of DomainSetting (section 3.1.4.1.3.8) objects, the base class for all domain settings returned by the GetDomainSettings operation.
DomainSetting	Represents the domain settings to be returned by the GetDomainSettings operation.
DomainStringSetting	Represents a domain setting whose value is of type string .

3.1.4.1.3.1 tns:GetDomainSettingsRequest Complex Type

The **GetDomainSettingsRequest** complex type retrieves the specified setting for a domain. The **GetDomainSettingsRequest** complex type contains the domain for which autodiscovery is to be performed and the settings that are to be returned by the server. The **GetDomainSettingsRequest** complex type represents a **GetDomainSettings** operation (section [3.1.4.1](#)) request. The **GetDomainSettingsRequest** complex type returns a **DomainResponse** complex type (section [3.1.4.1.3.4](#)) object that contains the requested settings for the specified domain.

```
<xs:complexType name="GetDomainSettingsRequest"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverRequest"
    >
      <xs:sequence>
        <xs:element name="Domains"

```



```

        type="tns:Domains"
        nillable="true"
    />
    <xs:element name="RequestedSettings"
        type="tns:RequestedSettings"
        nillable="true"
    />
    <xs:element name="RequestedVersion"
        type="tns:ExchangeVersion"
        nillable="true"
    />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
Domains	tns:Domains	The domains for which autodiscovery is to be performed.
RequestedSettings	tns:RequestedSettings	The configuration settings being requested.
RequestedVersion	tns:ExchangeVersion	The specific server version the provider would like to use. <10>

3.1.4.1.3.2 tns:GetDomainSettingsResponse Complex Type

The **GetDomainSettingsResponse** complex type contains an array of domain settings. The domain response contains the configuration settings for the specified domain. This type represents the response to a **GetDomainSettings** operation (section [3.1.4.1](#)) call for an individual domain.

```

<xs:complexType name="GetDomainSettingsResponse"
    mixed="false"
>
    <xs:complexContent
        mixed="false"
    >
        <xs:extension
            base="tns:AutodiscoverResponse"
        >
            <xs:sequence>
                <xs:element name="DomainResponses"
                    type="tns:ArrayOfDomainResponse"
                    nillable="true"
                    minOccurs="0"
                />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
DomainResponses	tns:ArrayOfDomainResponse	The response for each specified domain.

3.1.4.1.3.3 tns:ArrayOfDomainResponse Complex Type

The **ArrayOfDomainResponse** complex type represents an array of **DomainResponse** complex types (section [3.1.4.1.3.4](#)). Each **DomainResponse** complex type contains a **DomainSettings** complex type (section [3.1.4.1.3.7](#)) for the specified domain.

```
<xs:complexType name="ArrayOfDomainResponse">
  <xs:sequence>
    <xs:element name="DomainResponse"
      type="tns:DomainResponse"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

Element	Type	Description
DomainResponse	tns:DomainResponse	The DomainSettingErrors complex type (section 3.1.4.1.3.5), the DomainSettings complex type , and the <RedirectTarget> element for the specified domain.

3.1.4.1.3.4 tns:DomainResponse Complex Type

The **DomainResponse** complex type represents a response to a **GetDomainSettings** operation (section [3.1.4.1](#)) call for a specified domain. The **DomainResponse** complex type object contains the requested settings for the specified domain.

```
<xs:complexType name="DomainResponse"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverResponse"
    >
      <xs:sequence>
        <xs:element name="DomainSettingErrors"
          type="tns:DomainSettingErrors"
          nillable="true"
          minOccurs="0"
        />
        <xs:element name="DomainSettings"
          type="tns:DomainSettings"
          nillable="true"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

    />
    <xs:element name="RedirectTarget"
      type="xs:string"
      nillable="true"
      minOccurs="0"
    />
  </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
DomainSettingErrors	tns:DomainSettingErrors	The error information for settings that could not be returned.
DomainSettings	tns:DomainSettings	The requested settings for the specified domain.
RedirectTarget	xs:string	The redirection target (URL or e-mail address).

3.1.4.1.3.5 tns:DomainSettingErrors Complex Type

The **DomainSettingErrors** complex type represents a collection of **DomainSettingError** complex type (section [3.1.4.1.3.6](#)) objects containing error information for settings that could not be returned.

```

<xs:complexType name="DomainSettingErrors">
  <xs:sequence>
    <xs:element name="DomainSettingError"
      type="tns:DomainSettingError"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
DomainSettingError	tns:DomainSettingError	An error from a GetDomainSettings request.

3.1.4.1.3.6 tns:DomainSettingError Complex Type

The **DomainSettingError** complex type represents an error that occurred while retrieving a domain setting in response to a **GetDomainSettings** operation (section [3.1.4.1](#)) request.

```

<xs:complexType name="DomainSettingError">
  <xs:sequence>

```

```

<xs:element name="ErrorCode"
  type="tns:ErrorCode"
/>
<xs:element name="ErrorMessage"
  type="xs:string"
  nillable="true"
/>
<xs:element name="SettingName"
  type="xs:string"
  nillable="true"
/>
</xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
ErrorCode	tns:ErrorCode	The error code associated with the specified request.
ErrorMessage	xs:string	The error message associated with the specified request.
SettingName	xs:string	The name of the setting.

3.1.4.1.3.7 tns:DomainSettings Complex Type

The **DomainSettings** complex type represents a collection of **DomainSetting** objects (section [3.1.4.1.2.10](#)), the base class for all domain settings returned by the [GetDomainSettings](#) method.

```

<xs:complexType name="DomainSettings">
  <xs:sequence>
    <xs:element name="DomainSetting"
      type="tns:DomainSetting"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
DomainSetting	tns:DomainSetting	The base class for all domain settings returned by the GetDomainSettings method.

3.1.4.1.3.8 tns:DomainSetting Complex Type

The **DomainSetting** complex type represents the domain settings to be returned by the **GetDomainSettings** operation (section [3.1.4.1](#)) call.

```

<xs:complexType name="DomainSetting">
  <xs:sequence>
    <xs:element name="Name"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
Name	xs:string	The name of the setting to be returned.

3.1.4.1.3.9 tns:DomainStringSetting Complex Type

The **DomainStringSetting** complex type represents a domain setting whose value is of type **string**.

```

<xs:complexType name="DomainStringSetting"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:DomainSetting"
    >
      <xs:sequence>
        <xs:element name="Value"
          type="xs:string"
          nillable="true"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
Value	xs:string	The value of the setting.

3.1.4.2 GetFederationInformation

The **GetFederationInformation** operation provides information about the federation status of the specified organization, such as the target **URI** to be used when requesting tokens targeted at this organization, and the other domains that the organization has also federated. When the caller doesn't know the URL to use to communicate with the server that hosts the domain of interest, the

caller MUST execute either of the following two means to reach the server that can provide the information.

Direct attempt:

- Compose URLs for Autodiscover endpoints, where {0} is the domain of interest, in the following order:

U1: <https://autodiscover.{0}/autodiscover/autodiscover.svc>

U2: <https://{0}/autodiscover/autodiscover.svc>

- Call the **GetFederationInformation** method at the Autodiscover endpoints U1 and U2. Use the results from the first discovered URL that provides a successful response.
- Follow HTTP 302 redirects only to HTTPS URLs.

Indirect attempt:

- Probe for an HTTP 302 redirect on a non-Secure Sockets Layer (SSL) endpoint.
- Compose the URL for an Autodiscover endpoint, where {0} is the domain of interest:

<http://autodiscover.{0}/autodiscover/autodiscover.xml>

The response MUST be an HTTP 302 redirect. The redirect URL in response MUST start with <https://> and end with </autodiscover/autodiscover.xml>.

- Parse the host element of the URL and compose the following URL, where {0} is the host element of the previous URL:

<https://{0}/autodiscover/autodiscover.svc>

- Call the **GetFederationInformation** method at the Autodiscover endpoint.
- Follow HTTP 302 redirects only to HTTPS URLs.

The following example shows the result of a **GetFederationInformation** operation.

```
<wsdl:operation name="GetFederationInformation">
  <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetFederationInformation"
    name="GetFederationInformationRequestMessage"
    message="tns:GetFederationInformationRequestMessage" />
  <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetFederationInformationResponse"
    name="GetFederationInformationResponseMessage"
    message="tns:GetFederationInformationResponseMessage" />
</wsdl:operation>
```

Request

Message Format	Description
tns:GetFederationInformationRequestMessage Messages	Specifies the SOAP message that requests the server federation information.

Response

Message Format	Description
tns:GetFederationInformationResponseMessage Messages	Specifies the SOAP message that is returned by the server in response.

3.1.4.2.1 Messages

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

Message	Description
GetFederationInformationRequestMessage	Retrieves the federation status of an organization.
GetFederationInformationRequestMessage_Headers	Specifies the SOAP header for a GetFederationInformationRequest operation (section 3.1.4.2.2.3).
GetFederationInformationResponseMessage	Represents the response to a GetFederationInformation operation (section 3.1.4.2) for a specified domain.
GetFederationInformationResponseMessage_Headers	Specifies the SOAP header for a GetFederationInformationResponse operation (section 3.1.4.2.2.4).

3.1.4.2.1.1 tns:GetFederationInformationRequestMessage

The **GetFederationInformationRequestMessage** WSDL message specifies the SOAP message that represents a request to get the federation status of an organization.

```
<wsdl:message name="GetFederationInformationRequestMessage">  
  <wsdl:part name="parameters" element="tns:GetFederationInformationRequestMessage" />  
</wsdl:message>
```

The **GetFederationInformationRequestMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	GetFederationInformationRequestMessage element (section 3.1.4.2.2.1)	Specifies the request.

3.1.4.2.1.2 tns:GetFederationInformationRequestMessage_Headers

The **GetFederationInformationRequestMessage_Headers** WSDL message specifies the SOAP header for a **GetFederationInformation** operation (section [3.1.4.2](#)).

```
<wsdl:message name="GetFederationInformationRequestMessage_Headers">  
  <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />  
</wsdl:message>
```

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

The **GetFederationInformationRequestMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
RequestedServerVersion	RequestedServerVersion element (section 3.1.4.4.2.9)	Specifies the server version that the GetFederationInformation operation (section 3.1.4.2) request targets.

3.1.4.2.1.3 tns:GetFederationInformationResponseMessage

The **GetFederationInformationResponseMessage** WSDL message specifies the SOAP message that represents the response to a **GetFederationInformation** operation (section [3.1.4.2](#)) for a specified domain.

```
<wsdl:message name="GetFederationInformationResponseMessage">  
  <wsdl:part name="parameters" element="tns:GetFederationInformationResponseMessage" />  
</wsdl:message>
```

The **GetFederationInformationResponseMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	GetFederationInformationResponseMessage element (section 3.1.4.2.2.2)	Specifies the response.

3.1.4.2.1.4 tns:GetFederationInformationResponseMessage_Headers

The **GetFederationInformationResponseMessage_Headers** WSDL message specifies the SOAP header for a **GetFederationInformation** operation (section [3.1.4.2](#)).

```
<wsdl:message name="GetFederationInformationResponseMessage_Headers">  
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />  
</wsdl:message>
```

The **GetFederationInformationResponseMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
ServerVersionInfo	ServerVersionInfo (IMS-OXWSCDATA section 2.2.4.8)	Specifies the server version that processed the GetFederationInformation operation (section 3.1.4.2) request.

3.1.4.2.2 Elements

The following table summarizes the set of XML schema element definitions that are specific to the **GetFederationInformation** operation.

Element	Description
<GetFederationInformationRequestMessage>	Prepares a call to the server, requesting configuration data for the security token service (STS).
<GetFederationInformationResponseMessage>	Returns to the caller the specified federation configuration settings that were requested in the <GetFederationInformationRequestMessage> element (section 3.1.4.2.2.1).
<GetFederationInformationRequest>	Represents the parameters of a call to a <GetFederationInformation> operation (section 3.1.4.2).
<GetFederationInformationResponse>	Represents the response to a GetFederationInformationRequest element (section 3.1.4.2.2.3).

3.1.4.2.2.1 GetFederationInformationRequestMessage Element

The <GetFederationInformationRequestMessage> element prepares a call to the server, requesting configuration data for the security token service (STS). The **GetFederationInformationResponseMessage** element (section [3.1.4.2.2.2](#)) contains the federation settings.

```
<xs:element name="GetFederationInformationRequestMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Request"
        type="tns:GetFederationInformationRequest"
        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Child Elements

Element	Type	Description
Request	tns:GetFederationInformationRequest	A <GetFederationInformation> operation (section 3.1.4.2) request.

3.1.4.2.2.2 GetFederationInformationResponseMessage Element

The <GetFederationInformationResponseMessage> element returns to the caller the specified federation configuration settings that were requested in the <GetFederationInformationRequestMessage> element (section [3.1.4.2.2.1](#)).

The security token service (STS) is specified in the response message.

```
<xs:element name="GetFederationInformationResponseMessage">
  <xs:complexType>
```

```

<xs:sequence>
  <xs:element name="Response"
    type="tns:GetFederationInformationResponse"
    nillable="true"
    minOccurs="0"
  />
</xs:sequence>
</xs:complexType>
</xs:element>

```

Child Elements

Element	Type	Description
Response	tns:GetFederationInformationResponse	A <GetFederationInformation> operation (section 3.1.4.2) request.

3.1.4.2.2.3 GetFederationInformationRequest Element

The <GetFederationInformationRequest> element represents the parameters of a call to a <GetFederationInformation> operation (section [3.1.4.2](#)).

```

<xs:element name="GetFederationInformationRequest"
  type="tns:GetFederationInformationRequest"
  nillable="true"
/>

```

3.1.4.2.2.4 GetFederationInformationResponse Element

The <GetFederationInformationResponse> element represents the response to a **GetFederationInformationRequest** element (section [3.1.4.2.2.3](#)).

```

<xs:element name="GetFederationInformationResponse"
  type="tns:GetFederationInformationResponse"
  nillable="true"
/>

```

3.1.4.2.3 Complex Types

The following table summarizes the set of XML schema complex type definitions that are specific to the **GetFederationInformation** operation.

Complex type	Description
GetFederationInformationRequest	Retrieves the specified federation settings for a user and contains the federation information (including federated domain names) from an external server. The requester provides the domain name that enables the server to return the federation settings.

Complex type	Description
GetFederationInformationResponse	Returns to the caller the federation information that was requested in the GetFederationInformationRequest complex type complex type (section 3.1.4.2.3.1).
TokenIssuer	Specifies the URI and Endpoint (2) for the security token service (STS).
TokenIssuers	Represents a collection of TokenIssuer complex types (section 3.1.4.2.3.3) to be used in the autodiscovery.

3.1.4.2.3.1 tns:GetFederationInformationRequest Complex Type

The **GetFederationInformationRequest** complex type retrieves the specified federation settings for a user. This complex type contains the federation information (including federated domain names) from an external server. The requester provides the domain name that enables the server to return the federation settings.

```
<xs:complexType name="GetFederationInformationRequest"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverRequest"
    >
      <xs:sequence>
        <xs:element name="Domain"
          type="xs:string"
          nillable="true"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Child Elements

Element	Type	Description
Domain	xs:string	The domain that contains the federation trust.

3.1.4.2.3.2 tns:GetFederationInformationResponse Complex Type

The **GetFederationInformationResponse** complex type returns to the caller the federation information that was requested in the **GetFederationInformationRequest** complex type (section [3.1.4.2.3.1](#)).

```
<xs:complexType name="GetFederationInformationResponse"
  mixed="false"
>
  <xs:complexContent
```

```

    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverResponse"
    >
      <xs:sequence>
        <xs:element name="ApplicationUri"
          type="xs:anyURI"
          nillable="true"
          minOccurs="0"
        />
        <xs:element name="TokenIssuers"
          type="tns:TokenIssuers Type"
          minOccurs="0"
          nillable="true"
        />
        <xs:element name="Domains"
          type="tns:Domains"
          nillable="true"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
ApplicationUri	xs:anyURI	The value used by the caller in the AppliesTo/EndpointReference/Address of the Request Security Token message to the security token service (STS).
TokenIssuers	tns:TokenIssuers Type	A collection of TokenIssuer complex types (section 3.1.4.2.3.3) to be used in the autodiscovery.
Domains	tns:Domains	Additional returned domains (besides the one specified in the request) that the organization has federated. These are domains that this server uses in the EmailAddress claim when it makes requests to other servers outside its organization, including the caller's domain.

3.1.4.2.3.3 tns:TokenIssuer Complex Type

The **TokenIssuer** complex type specifies the URI and Endpoint (2) for the security token service (STS).

```

<xs:complexType name="TokenIssuer">
  <xs:sequence>
    <xs:element name="Uri"
      type="xs:anyURI"
      minOccurs="0"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

```

<xs:element name="Endpoint"
  type="xs:anyURI"
  minOccurs="0"
  nillable="true"
/>
</xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
Uri	xs:anyURI	The URI of the STS that issued the security token.
Endpoint	xs:anyURI	The Web service Endpoint (2) URI.

3.1.4.2.3.4 tns:TokenIssuers Complex Type

The **TokenIssuers** complex type represents a collection of **TokenIssuer** complex types (section [3.1.4.2.3.3](#)) to be used in autodiscovery.

```

<xs:complexType name="TokenIssuers">
  <xs:sequence>
    <xs:element name="TokenIssuer"
      type="tns:TokenIssuer Type"
      minOccurs="0"
      maxOccurs="unbounded"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
TokenIssuer	tns:TokenIssuer Type	The URI and Endpoint (2) of the security token service (STS) that issued the security token.

3.1.4.3 GetOrganizationRelationshipSettings

The **GetOrganizationRelationshipSettings** operation retrieves the settings from all matching organization relationships that have at least one domain in the **DomainNames** element that maps to at least one EmailAddress claim in the token. The **GetOrganizationRelationshipSetting** operation is for internal use only. This operation is not used by clients. [<11>](#)

```

<wsdl:operation name="GetOrganizationRelationshipSettings">
  <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetOrganizationRelationshipSettings"
    name="GetOrganizationRelationshipSettingsRequestMessage"
    message="tns:GetOrganizationRelationshipSettingsRequestMessage" />
  <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/Autodiscover/

```

```

Autodiscover/GetOrganizationRelationshipSettingsResponse"
name="GetOrganizationRelationshipSettingsResponseMessage"
message="tns:GetOrganizationRelationshipSettingsResponseMessage" />
</wsdl:operation>

```

Request

Message Format	Description
tns:GetOrganizationRelationshipSettingsRequestMessage	Specifies the SOAP message that requests the user's organization relationship settings.

Response

Message Format	Description
tns:GetOrganizationRelationshipSettingsResponseMessage	Specifies the SOAP message that is returned by the server in response to the request.

3.1.4.3.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).

Message	Description
GetOrganizationRelationshipSettingsRequestMessage	Retrieves the organization relationship settings.
GetOrganizationRelationshipSettingsRequestMessage_Headers	Specifies the SOAP header for a GetOrganizationRelationshipSettings operation (section 3.1.4.3).
GetOrganizationRelationshipSettingsResponseMessage Messages	Represents a response to a GetOrganizationRelationshipSettings operation call. <12>
GetOrganizationRelationshipSettingsResponseMessage_Headers	Specifies the SOAP header for a GetOrganizationRelationshipSettingsResponse operation (section 3.1.4.3.2.4).

3.1.4.3.1.1 tns:GetOrganizationRelationshipSettingsRequestMessage

The **GetOrganizationRelationshipSettingsRequestMessage** WSDL message specifies the SOAP message that retrieves the organization relationship settings. [<13>](#)

```

<wsdl:message name="GetOrganizationRelationshipSettingsRequestMessage">
  <wsdl:part name="parameters"
  element="tns:GetOrganizationRelationshipSettingsRequestMessage" />
</wsdl:message>

```

The **GetOrganizationRelationshipSettingsRequestMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	GetOrganizationRelationshipSettingsRequestMessage element (section 3.1.4.3.2.1)	The parameters of a call to a GetOrganizationRelationshipSettings operation (section 3.1.4.3) request.

3.1.4.3.1.2 tns:GetOrganizationRelationshipSettingsRequestMessage_Headers

The **GetOrganizationRelationshipSettingsRequestMessage_Headers** WSDL message specifies the SOAP header for the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3.2.2](#)). This message contains one part.[<14>](#)

Part name	Element/type	Description
RequestedServerVersion	tns:RequestedServerVersion	Specifies the server version that the GetOrganizationRelationshipSettingsRequest operation (section 3.1.4.3.2.2) request targets.

3.1.4.3.1.3 tns:GetOrganizationRelationshipSettingsResponseMessage

The **GetOrganizationRelationshipSettingsResponseMessage** WSDL message specifies the SOAP message that represents a response to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).

```
<wsdl:message name="GetOrganizationRelationshipSettingsResponseMessage">
  <wsdl:part name="parameters"
    element="tns:GetOrganizationRelationshipSettingsResponseMessage" />
</wsdl:message>
```

The **GetOrganizationRelationshipSettingsResponseMessage** WSDL message contains one part, as described in the following table.[<15>](#)

Part name	Element/type	Description
parameters	GetOrganizationRelationshipSettingsResponseMessage element (section 3.1.4.3.2.3).	A response to a GetOrganizationRelationshipSettings operation call.

3.1.4.3.1.4 tns:GetOrganizationRelationshipSettingsResponseMessage_Headers

The **GetOrganizationRelationshipSettingsResponseMessage_Headers** WSDL message specifies the SOAP header for the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).[<16>](#)

```
<wsdl:message name="GetOrganizationRelationshipSettingsResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
```

</wsdl:message>

The **GetOrganizationRelationshipSettingsResponseMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
ServerVersionInfo	ServerVersionInfo (IMS-OXWSCDATA section 2.2.4.8)	Contains the server version that processed the GetOrganizationRelationshipSettings request.

3.1.4.3.2 Elements

The following table summarizes the set of XML schema element definitions that are specific to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).<17>

Element	Description
<GetOrganizationRelationshipSettingsRequestMessage>	Prepares a call to the server, requesting the organization relationship settings for the specified user.
<GetOrganizationRelationshipSettingsRequest>	Represents the parameters of a call to the GetOrganizationRelationshipSettings operation (section 3.1.4.3).
<GetOrganizationRelationshipSettingsResponseMessage>	Returns to the caller the organization relationship settings that were requested in the <GetOrganizationRelationshipSettingsRequestMessage> element (section 3.1.4.3.2.1) call.
<GetOrganizationRelationshipSettingsResponse>	Represents the response to the GetOrganizationRelationshipSettings operation (section 3.1.4.3).
<OrganizationRelationshipSettingsCollection>	Represents a list of organization relationships that match the request.

3.1.4.3.2.1 GetOrganizationRelationshipSettingsRequestMessage Element

The <GetOrganizationRelationshipSettingsRequestMessage> element prepares a call to the server, requesting the organization relationship settings for the specified user.<18>

```
<xs:element name="GetOrganizationRelationshipSettingsRequestMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Request"
        type="tns:GetOrganizationRelationshipSettingsRequest"
        minOccurs="0"
        nillable="true"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```


Child Elements

Element	Type	Description
Request	tns:GetOrganizationRelationshipSettingsRequest	A GetOrganizationRelationshipSettings operation request.

3.1.4.3.2.2 GetOrganizationRelationshipSettingsRequest Element

The <GetOrganizationRelationshipSettingsRequest> element represents the parameters of a call to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).<19>

```
<xs:element name="GetOrganizationRelationshipSettingsRequest"
  type="tns:GetOrganizationRelationshipSettingsRequest"
  nillable="true"
/>
```

3.1.4.3.2.3 GetOrganizationRelationshipSettingsResponseMessage Element

The <GetOrganizationRelationshipSettingsResponseMessage> element returns to the caller the organization relationship settings that were requested in the <GetOrganizationRelationshipSettingsRequestMessage> element (section [3.1.4.3.2.1](#)) call.<20>

```
<xs:element name="GetOrganizationRelationshipSettingsResponseMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Response"
        type="tns:GetOrganizationRelationshipSettingsResponse"
        minOccurs="0"
        nillable="true"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Child Elements

Element	Type	Description
Response	tns:GetOrganizationRelationshipSettingsResponse	The response to the GetOrganizationRelationshipSettings operation.

3.1.4.3.2.4 GetOrganizationRelationshipSettingsResponse Element

The <GetOrganizationRelationshipSettingsResponse> element represents the response to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).<21>

```
<xs:element name="GetOrganizationRelationshipSettingsResponse"
  type="tns:GetOrganizationRelationshipSettingsResponse"
/>
```

3.1.4.3.2.5 OrganizationRelationshipSettingsCollection Element

The <OrganizationRelationshipSettingsCollection> element represents a list of organization relationships that match the query. [<22>](#)

```
<xs:element name="OrganizationRelationshipSettingsCollection"
  type="tns:OrganizationRelationshipSettingsCollection Type"
/>
```

3.1.4.3.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)) operation. [<23>](#)

Complex type	Description
GetOrganizationRelationshipSettingsRequest	The parameters of a call to the GetOrganizationRelationshipSettings operation.
GetOrganizationRelationshipSettingsResponse	A response to a call to a GetOrganizationRelationshipSettings operation.
OrganizationRelationshipSettingsCollection	A list of organization relationships that match the query.
OrganizationRelationshipSettings	The list of organization relationships for the specified organization and SMTP addresses.

3.1.4.3.3.1 tns:GetOrganizationRelationshipSettingsRequest Complex Type

The **GetOrganizationRelationshipSettingsRequest** complex type represents the parameters of a call to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)). The **GetOrganizationRelationshipSettingsRequest** complex type returns a **GetOrganizationRelationshipSettingsResponse** complex type (section [3.1.4.3.3.2](#)) object that contains the requested domain settings. [<24>](#)

```
<xs:complexType name="GetOrganizationRelationshipSettingsRequest">
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverRequest"
    >
      <xs:sequence>
        <xs:element name="Domains"
          type="tns:Domains"
          nillable="true"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

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

```

Child Elements

Element	Type	Description
Domains	tns:Domains	The domains for which the Autodiscover service is to be run and that are to be used in a query.

3.1.4.3.3.2 tns:GetOrganizationRelationshipSettingsResponse Complex Type

The **GetOrganizationRelationshipSettingsResponse** complex type represents a response to a call to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3.3.1](#)).[<25>](#)

```

<xs:complexType name="GetOrganizationRelationshipSettingsResponse">
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverResponse"
    >
      <xs:sequence>
        <xs:element name="OrganizationRelationshipSettingsCollection"
          type="tns:OrganizationRelationshipSettingsCollection Type"
          minOccurs="0"
          nillable="true"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
OrganizationRelationshipSettingsCollection	tns:OrganizationRelationshipSettingsCollection Type	A list of organization relationships that match the query.

3.1.4.3.3.3 tns:OrganizationRelationshipSettingsCollection Complex Type

The **OrganizationRelationshipSettingsCollection** complex type represents a list of organization relationships that match the query.[<26>](#)

```

<xs:complexType name="OrganizationRelationshipSettingsCollection">
  <xs:sequence>

```

```

    <xs:element name="OrganizationRelationshipSettings"
      type="tns:OrganizationRelationshipSettings"
      minOccurs="0"
      maxOccurs="unbounded"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
OrganizationRelationshipSettings	tns:OrganizationRelationshipSettings	The organization relationships.

3.1.4.3.3.4 tns:OrganizationRelationshipSettings Complex Type

The **OrganizationRelationshipSettings** complex type represents the list of organization relationships for the specified organization and SMTP addresses. [<27>](#)

```

<xs:complexType name="OrganizationRelationshipSettings">
  <xs:sequence>
    <xs:element name="DeliveryReportEnabled"
      type="xs:boolean"
    />
    <xs:element name="DomainNames"
      type="tns:Domains"
      nillable="true"
    />
    <xs:element name="FreeBusyAccessEnabled"
      type="xs:boolean"
    />
    <xs:element name="FreeBusyAccessLevel"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="MailTipsAccessEnabled"
      type="xs:boolean"
    />
    <xs:element name="MailTipsAccessLevel"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="MailboxMoveEnabled"
      type="xs:boolean"
    />
    <xs:element name="Name"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="TargetApplicationUri"
      type="xs:anyURI"
      nillable="true"
    />
    <xs:element name="TargetAutodiscoverEpr"

```

```

        type="xs:anyURI"
        nillable="true"
      />
    <xs:element name="TargetSharingEpr"
      type="xs:anyURI"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
DeliveryReportEnabled	xs:boolean	The DeliveryReportEnabled flag.
DomainNames	tns:Domains	The domain names collection.
FreeBusyAccessEnabled	xs:boolean	The FreeBusyAccessEnabled flag.
FreeBusyAccessLevel	xs:string	The FreeBusyAccessLevel property.
MailTipsAccessEnabled	xs:boolean	The MailTipsAccessEnabled flag.
MailTipsAccessLevel	xs:string	The MailTipsAccessLevel property.
MailboxMoveEnabled	xs:boolean	The MailboxMoveEnabled flag.
Name	xs:string	The name of the organization relationship.
TargetApplicationUri	xs:anyURI	The target application URI.
TargetAutodiscoverEpr	xs:anyURI	The TargetAutodiscoverEpr property.
TargetSharingEpr	xs:anyURI	The TargetSharingEpr property.

3.1.4.4 GetUserSettings

The **GetUserSettings** operation retrieves the specified settings for a specified user.

```

<wsdl:operation name="GetUserSettings">
  <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetUserSettings"
    name="GetUserSettingsRequestMessage"
    message="tns:GetUserSettingsRequestMessage" />
  <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetUserSettingsResponse"
    name="GetUserSettingsResponseMessage"
    message="tns:GetUserSettingsResponseMessage" />
</wsdl:operation>

```

Request

Message Format	Description
tns:GetUserSettingsRequestMessage	Specifies the [SOAP] message that requests the user's configuration settings.

Response

Message Format	Description
tns:GetUserSettingsResponseMessage	Specifies the [SOAP] message returned by the server in response to the request.

The [GetUserSettings](#) operation enables the client to request specific user configuration settings by passing in the user names as simple strings, and to receive results as a simple dictionary of string name/value pairs.

3.1.4.4.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to the **GetUserSettings** (section [3.1.4.4](#)) operation.

Message	Description
GetUserSettingsRequestMessage	Retrieves the specified settings for a particular user.
GetUserSettingsRequestMessage_Headers	Specifies the SOAP header for a GetUserSettingsRequest (section 3.1.4.4.2.3) operation. This message contains one part.
GetUserSettingsResponseMessage	Represents the response to a GetUserSettings (section 3.1.4.4) call for a specified user.
GetUserSettingsResponseMessage_Headers	Specifies the SOAP header for a GetUserSettingsResponse (section 3.1.4.4.2.4) operation.

3.1.4.4.1.1 tns:GetUserSettingsRequestMessage

The **GetUserSettingsRequestMessage** WSDL message specifies the SOAP message that represents a request to get the specified settings for a particular user.

```
<wsdl:message name="GetUserSettingsRequestMessage">
  <wsdl:part name="parameters" element="tns:GetUserSettingsRequestMessage" />
</wsdl:message>
```

The **GetUserSettingsRequestMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	<GetUserSettingsRequestMessage> element (section 3.1.4.4.2.1)	The parameters of a call to a GetUserSettings operation (section 3.1.4.4) request.

3.1.4.4.1.2 tns:GetUserSettingsRequestMessage_Headers

The **GetUserSettingsRequestMessage_Headers** WSDL message specifies the SOAP header for a **GetUserSettings** call (section [3.1.4.4](#)).

```
<wsdl:message name="GetUserSettingsRequestMessage_Headers">
  <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />
</wsdl:message>
```

The **GetUserSettingsRequestMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
RequestedServerVersion	RequestedServerVersion element (section 3.1.4.4.2.9)	The server version that the GetUserSettings operation (section 3.1.4.4) request targets.

3.1.4.4.1.3 tns:GetUserSettingsResponseMessage

The **GetUserSettingsResponseMessage** WSDL message specifies the SOAP message that represents the response to a **GetUserSettings** call (section [3.1.4.4](#)) for a specified user.

```
<wsdl:message name="GetUserSettingsResponseMessage">
  <wsdl:part name="parameters" element="tns:GetUserSettingsResponseMessage" />
</wsdl:message>
```

The **GetUserSettingsResponseMessage** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
parameters	GetUserSettingsResponseMessage element (section 3.1.4.4.2.2)	A response to a GetUserSettings operation (section 3.1.4.4).

3.1.4.4.1.4 tns:GetUserSettingsResponseMessage_Headers

The **GetUserSettingsResponseMessage_Headers** WSDL message specifies the SOAP header for a **GetUserSettings** operation (section [3.1.4.4](#)).

```
<wsdl:message name="GetUserSettingsResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
```

The **GetUserSettingsResponseMessage_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
ServerVersionInfo	ServerVersionInfo ([MS-OXWSCDATA] section 2.2.4.8)	The server version that processed the GetUserSettings operation (section 3.1.4.4) request.

3.1.4.4.2 Elements

The following table summarizes the set of XML schema element definitions that are specific to the **GetUserSettings** operation (section [3.1.4.4](#)).

Element	Description
<GetUserSettingsRequestMessage>	Prepares a call to the server, specifying the configuration settings to be returned along with the e-mail address of the user whose settings are to be retrieved. The GetUserSettingsResponseMessage element (section 3.1.4.4.2.2) contains the setting requested in this call.
<GetUserSettingsResponseMessage>	Returns to the caller the user's configuration settings that were requested in the <GetUserSettingsRequestMessage> element (section 3.1.4.4.2.1) call.
<GetUserSettingsRequest>	Represents the parameters of a call to a GetUserSettings operation (section 3.1.4.4).
<GetUserSettingsResponse>	Represents the response to a GetUserSettings operation (section 3.1.4.4) for a specified user.
<AutodiscoverRequest>	Represents the base element of all Autodiscover requests.
<Users>	Represents a list of <User> elements (section 3.1.4.4.2.7). Each <User> element includes an e-mail address.
<User>	Represents the user.
<RequestedSettings>	Represents the configuration settings to be returned in the autodiscovery.
<RequestedServerVersion>	Specifies the server version that an Autodiscover operation targets.
<AutodiscoverResponse>	Represents the base class for all responses returned by the Autodiscover service. The <AutodiscoverResponse> element introduces the ErrorCode simple type (section 3.1.4.4.4.2) and <ErrorMessage> elements.
<ErrorCode>	Defines the error codes that can be returned by the Autodiscover service.
<ArrayOfUserResponse>	Contains an array of <UserResponse> elements (section 3.1.4.4.2.13). Each <UserResponse> element contains the requested settings for the specified user.
<UserResponse>	Contains the requested settings for the specified user.
<UserSettingErrors>	Contains error information for settings that could not be returned.
<UserSettingError>	Represents an error that occurred while retrieving a user setting in response to a GetUserSettings operation (section 3.1.4.4) request.
<UserSettings>	Represents the base class for all user settings returned by the GetUserSettings operation (section 3.1.4.4) request.

Element	Description
<UserSetting>	Represents the base class for all user settings returned by the GetUserSettings operation (section 3.1.4.4).
<StringSetting>	Represents a user setting whose value is of type string .
<WebClientUrlCollectionSetting>	Represents a user setting whose value is a collection of Web client URLs.
<WebClientUrls>	Represents the internal and external URLs of a Web client.
<WebClientUrl>	Represents a URL of a Web client.
<ProtocolConnectionCollectionSetting>	Represents a collection of server protocol connection settings.
<ProtocolConnections>	Represents a collection of protocol connections.
<ProtocolConnection>	Represents the e-mail protocol connection settings for POP, IMAP, and SMTP protocols.
<AlternateMailboxCollectionSetting>	Represents a collection of alternate mailbox settings.
<AlternateMailboxes>	Represents a collection of alternate mailboxes.
<AlternateMailbox>	Represents an alternate mailbox, such as an archived mailbox.

3.1.4.4.2.1 GetUserSettingsRequestMessage Element

The <GetUserSettingsRequestMessage> element prepares a call to the server, specifying the configuration settings to be returned along with the e-mail address of the user whose settings are to be retrieved. The **GetUserSettingsResponseMessage** element (section [3.1.4.4.2.2](#)) contains the setting requested in this call.

```
<xs:element name="GetUserSettingsRequestMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Request"
        type="tns:GetUserSettingsRequest"
        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Child Elements

Element	Type	Description
Request	tns:GetUserSettingsRequest	A GetUserSettings request.

3.1.4.4.2.2 GetUserSettingsResponseMessage Element

The <GetUserSettingsResponseMessage> element returns to the caller the user's configuration settings that were requested in the <GetUserSettingsRequestMessage> element (section [3.1.4.4.2.1](#)) call.

The name/value pair for each returned user setting is included in the response. The <GetUserSettings> element (section [3.1.4.4](#)) returns only the requested configuration settings if they exist on the server.

```
<xs:element name="GetUserSettingsResponseMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Response"
        type="tns:GetUserSettingsResponse"
        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Child Elements

Element	Type	Description
Response	tns:GetUserSettingsResponse	The response to a <GetUserSettings> element (section 3.1.4.4) call for a specified user.

3.1.4.4.2.3 GetUserSettingsRequest Element

The <GetUserSettingsRequest> element represents the parameters of a call to a **GetUserSettings** operation (section [3.1.4.4](#)).

```
<xs:element name="GetUserSettingsRequest"
  type="tns:GetUserSettingsRequest"
  nillable="true"
/>
```

3.1.4.4.2.4 GetUserSettingsResponse Element

The <GetUserSettingsResponse> element represents the response to a **GetUserSettings** operation (section [3.1.4.4](#)) for a specified user.

```
<xs:element name="GetUserSettingsResponse"
  type="tns:GetUserSettingsResponse"
  nillable="true"
/>
```

3.1.4.4.2.5 AutodiscoverRequest Element

The <AutodiscoverRequest> element represents the base element of all Autodiscover requests.

```
<xs:element name="AutodiscoverRequest"
  type="tns:AutodiscoverRequest"
  nillable="true"
/>
```

3.1.4.4.2.6 Users Element

The <Users> element represents a list of <User> elements (section [3.1.4.4.2.7](#)), each of which includes an e-mail address.

```
<xs:element name="Users"
  type="tns:Users"
  nillable="true"
/>
```

3.1.4.4.2.7 User Element

The <User> element represents the user.

```
<xs:element name="User"
  type="tns:User"
  nillable="true"
/>
```

3.1.4.4.2.8 RequestedSettings Element

The <RequestedSettings> element represents the configuration settings to be returned in an autodiscovery.

```
<xs:element name="RequestedSettings"
  type="tns:RequestedSettings"
  nillable="true"
/>
```

3.1.4.4.2.9 RequestedServerVersion Element

The <RequestedServerVersion> element specifies the server version that an Autodiscover method call targets.

```
<xs:element name="RequestedServerVersion">
  <xs:simpleType>
    <xs:restriction
      base="tns:ExchangeVersion"
    />
  />
```

```
</xs:simpleType>
</xs:element>
```

3.1.4.4.2.10 AutodiscoverResponse Element

The <AutodiscoverResponse> element represents the base class for all responses returned by the Autodiscover service. The <AutodiscoverResponse> element introduces the **ErrorCode** simple type (section [3.1.4.4.4.2](#)) and the <ErrorMessage> element.

```
<xs:element name="AutodiscoverResponse"
  type="tns:AutodiscoverResponse"
  nillable="true"
/>
```

3.1.4.4.2.11 ErrorCode Element

The <ErrorCode> element defines the error codes that can be returned by the Autodiscover service.

```
<xs:element name="ErrorCode"
  type="tns:ErrorCode"
  nillable="true"
/>
```

3.1.4.4.2.12 ArrayOfUserResponse Element

The <ArrayOfUserResponse> element contains an array of <UserResponse> elements (section [3.1.4.4.2.13](#)), each of which contains the requested settings for a specified user.

```
<xs:element name="ArrayOfUserResponse"
  type="tns:ArrayOfUserResponse"
  nillable="true"
/>
```

3.1.4.4.2.13 UserResponse Element

The <UserResponse> element contains the requested settings for a specified user.

```
<xs:element name="UserResponse"
  type="tns:UserResponse"
  nillable="true"
/>
```

3.1.4.4.2.14 UserSettingErrors Element

The <UserSettingErrors> element contains error information for settings that could not be returned.

```
<xs:element name="UserSettingErrors"
  type="tns:UserSettingErrors"
  nillable="true"
/>
```

3.1.4.4.2.15 UserSettingError Element

The <UserSettingError> element represents an error that occurred while retrieving a user setting in response to a **GetUserSettings** operation (section [3.1.4.4](#)) request.

```
<xs:element name="UserSettingError"
  type="tns:UserSettingError"
  nillable="true"
/>
```

3.1.4.4.2.16 UserSettings Element

The <UserSettings> element represents a collection of [tns:UserSetting](#) elements returned by the **GetUserSettings** operation (section [3.1.4.4](#)) request.

```
<xs:element name="UserSettings"
  type="tns:UserSettings"
  nillable="true"
/>
```

3.1.4.4.2.17 UserSetting Element

The <UserSetting> element represents the user setting returned by the **GetUserSettings** operation (section [3.1.4.4](#)).

```
<xs:element name="UserSetting"
  type="tns:UserSetting"
  nillable="true"
/>
```

3.1.4.4.2.18 StringSetting Element

The <StringSetting> element represents a user setting whose value is of type **string**.

```
<xs:element name="StringSetting"
  type="tns:StringSetting"
  nillable="true"
/>
```

3.1.4.4.2.19 WebClientUrlCollectionSetting Element

The <WebClientUrlCollectionSetting> element represents a user setting whose value is a collection of Web client URLs.

```
<xs:element name="WebClientUrlCollectionSetting"
  type="tns:WebClientUrlCollectionSetting"
  nillable="true"
/>
```

3.1.4.4.2.20 WebClientUrls Element

The <WebClientUrls> element represents the internal and external URLs of a Web client.

```
<xs:element name="WebClientUrls"
  type="tns:WebClientUrls"
  nillable="true"
/>
```

3.1.4.4.2.21 WebClientUrl Element

The <WebClientUrl> element represents a URL of a Web client.

```
<xs:element name="WebClientUrl"
  type="tns:WebClientUrl"
  nillable="true"
/>
```

3.1.4.4.2.22 ProtocolConnectionCollectionSetting Element

The <ProtocolConnectionCollectionSetting> element represents a collection of server protocol connection settings.

```
<xs:element name="ProtocolConnectionCollectionSetting"
  type="tns:ProtocolConnectionCollectionSetting"
  nillable="true"
/>
```

3.1.4.4.2.23 ProtocolConnections Element

The <ProtocolConnections> element represents the collection of protocol connections.

```
<xs:element name="ProtocolConnections"
  type="tns:ProtocolConnections"
  nillable="true"
/>
```

3.1.4.4.2.24 ProtocolConnection Element

The <ProtocolConnection> element represents the e-mail protocol connection settings for POP, IMAP, and SMTP protocols.

```
<xs:element name="ProtocolConnection"
  type="tns:ProtocolConnection"
  nillable="true"
/>
```

3.1.4.4.2.25 AlternateMailboxCollectionSetting Element

The <AlternateMailboxCollectionSetting> element represents a collection of alternate mailbox settings.

```
<xs:element name="AlternateMailboxCollectionSetting"
  type="tns:AlternateMailboxCollectionSetting"
  nillable="true"
/>
```

3.1.4.4.2.26 AlternateMailboxes Element

The <AlternateMailboxes> element represents a collection of alternate mailboxes.

```
<xs:element name="AlternateMailboxes"
  type="tns:AlternateMailboxes"
  nillable="true"
/>
```

3.1.4.4.2.27 AlternateMailbox Element

The <AlternateMailbox> element represents an alternate mailbox, such as an archived mailbox.

```
<xs:element name="AlternateMailbox"
  type="tns:AlternateMailbox"
  nillable="true"
/>
```

An alternate mailbox corresponds to an external mailbox of the user's, such as a personal POP/IMAP account, a Webmail account, or an archived account.

3.1.4.4.3 Complex Types

The following table summarizes the set of XML schema complex type definitions that are specific to the **GetUserSettings** operation.

Complex type	Description
GetUserSettingsRequest	Retrieves the specified settings for one or more users.
AutodiscoverRequest	Represents the base class for all requests made to the Autodiscover service.
Users	Represents a collection of User elements (section 3.1.4.4.2.7) denoting users whose settings are to be retrieved.
User	Represents a user whose settings are to be retrieved. The user is identified by SMTP address or legacy DN.
RequestedSettings	Specifies the configuration settings to be returned by the server for the GetUserSettings operation (section 3.1.4.4).
GetUserSettingsResponse	Represents a response that contains an array of user responses.
AutodiscoverResponse	Represents the base class for all responses returned by the Autodiscover service. This type introduces the <ErrorCode> and <ErrorMessage> properties.
UserResponse	Represents a response to a GetUserSettings operation (section 3.1.4.4) for a specified user. The server returns only the configuration settings requested by the client.
UserSettingErrors	Represents a collection of UserSettingError elements (section 3.1.4.4.2.17) that contains error information for settings that could not be returned.
ArrayOfUserResponse	Represents an array of UserResponse elements (section 3.1.4.4.2.13) that contains the responses for each specified user.
UserSettingError	Represents a user setting error that resulted from a GetUserSettings operation (section 3.1.4.4) request.
UserSettings	Represents a collection of UserSetting elements (section 3.1.4.4.2.17), the base class for all user settings returned by the GetUserSettings operation (section 3.1.4.4).
UserSetting	Represents the user settings to be returned by the GetUserSettings operation (section 3.1.4.4).
StringSetting	Represents a user setting whose value is of type string .
WebClientUrlCollectionSetting	Represents a collection of WebClientUrls elements (section 3.1.4.4.2.20).
WebClientUrls	Represents a collection of WebClientUrl elements (section 3.1.4.4.2.21), denoting the server's Web clients.
WebClientUrl	Represents the URL of the server's Web client.
ProtocolConnectionCollectionSetting	Represents a collection of ProtocolConnection elements (section 3.1.4.4.2.24).
ProtocolConnections	Represents a collection of <ProtocolConnection> elements (section 3.1.4.4.2.24), denoting the internal and external

Complex type	Description
	protocol connections for the server's Web client.
ProtocolConnection	Represents the e-mail protocol connection settings for POP, IMAP, and SMTP protocols.
AlternateMailboxCollectionSetting	Represents a collection of AlternateMailboxes elements (section 3.1.4.4.2.26).
AlternateMailboxes	Represents a collection of AlternateMailbox elements (section 3.1.4.4.2.27).
AlternateMailbox	Represents an alternate mailbox.

3.1.4.4.3.1 tns:GetUserSettingsRequest Complex Type

The **GetUserSettingsRequest** complex type retrieves the specified settings for one or more users. This type contains the e-mail addresses for the specified users, and for each such user it returns a **UserResponse** complex type (section [3.1.4.4.3.8](#)) object that contains the requested settings.

```

<xs:complexType name="GetUserSettingsRequest"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverRequest"
    >
      <xs:sequence>
        <xs:element name="Users"
          type="tns:Users"
          nillable="true"
        />
        <xs:element name="RequestedSettings"
          type="tns:RequestedSettings"
          nillable="true"
        />
        <xs:element name="RequestedVersion"
          type="tns:ExchangeVersion"
          nillable="true"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
Users	tns:Users	The e-mail addresses of the users whose settings are to be retrieved.
RequestedSettings	tns:RequestedSettings	The configuration settings being requested.

Element	Type	Description
RequestedVersion	tns:ExchangeVersion	The specific server version that the provider would prefer to use.

3.1.4.4.3.2 tns:AutodiscoverRequest Complex Type

The **AutodiscoverRequest** complex type represents the base class for all requests made to the Autodiscover service.

```
<xs:complexType name="AutodiscoverRequest">
  <xs:sequence />
</xs:complexType>
```

The [GetUserSettingsRequest Type](#), [GetDomainSettingsRequest Type](#), and [GetFederationInformationRequest Type](#) types extend the **AutodiscoverRequest** complex type.

3.1.4.4.3.3 tns:Users Complex Type

The **Users** complex type represents a collection of **User** elements (section [3.1.4.4.2.7](#)) denoting users whose settings are to be retrieved.

```
<xs:complexType name="Users">
  <xs:sequence>
    <xs:element name="User"
      type="tns:User"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

Element	Type	Description
User	tns:User	The user whose settings are to be retrieved.

3.1.4.4.3.4 tns:User Complex Type

The **User** complex type represents a user whose settings are to be retrieved. The user is identified by SMTP address or legacy DN.

```
<xs:complexType name="User">
  <xs:sequence>
    <xs:element name="Mailbox"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
```

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

Child Elements

Element	Type	Description
Mailbox	xs:string	The e-mail address of the user whose settings are to be retrieved.

The [GetUserSettings](#) method uses the specified user's e-mail address to discover that user's mailbox. The <User> element MUST be present.

3.1.4.4.3.5 tns:RequestedSettings Complex Type

The **RequestedSettings** complex type specifies the configuration settings to be returned by the server for the **GetUserSettings** operation (section [3.1.4.4](#)).

```
<xs:complexType name="RequestedSettings">  
  <xs:sequence>  
    <xs:element name="Setting"  
      type="xs:string"  
      nillable="true"  
      minOccurs="0"  
      maxOccurs="unbounded"  
    />  
  </xs:sequence>  
</xs:complexType>
```

Child Elements

Element	Type	Description
Setting	xs:string	The configuration settings to be returned.

If the user configuration settings listed and described in the following table are implemented by the server, they are then included in valid server responses.

Configuration setting	Description
UserDisplayName	The user's display name.
UserDN	The user's legacy DN.
UserDeploymentId	The user's deployment identifier.
InternalMailboxServer	The fully qualified domain name (FQDN) of the mailbox server.
InternalRpcClientServer	The FQDN of the RPC client server.
InternalMailboxServerDN	The legacy DN of the mailbox server.
InternalEcpUrl	The internal Uniform Resource Locator (URL) of the

Configuration setting	Description
	server's control panel.
InternalEcpVoicemailUrl	The internal URL of the server's control panel for voice-mail customization.
InternalEcpEmailSubscriptionsUrl	The internal URL of the server's control panel for e-mail subscriptions.
InternalEcpTextMessagingUrl	The internal URL of the server's control panel for text messaging.
InternalEcpDeliveryReportUrl	The internal URL of the server's control panel for delivery reports.
InternalEcpRetentionPolicyTagsUrl	The internal URL of the server's control panel for retention policy tags. <28>
InternalEcpPublishingUrl	The internal URL of the server's control panel for publishing. <29>
InternalEwsUrl	The internal URL of the server's Web services.
InternalOABUrl	The internal URL of the offline address book (OAB).
InternalUMUrl	The internal URL of the Unified Messaging services.
InternalWebClientUrls	A collection of the internal URLs of the server's Web client.
MailboxDN	The distinguished name (DN) of the mailbox database of the user's mailbox.
PublicFolderServer	The name of the Public Folders server.
ActiveDirectoryServer	The name of the Active Directory (directory service) server.
ExternalMailboxServer	The name of the RPC over HTTP server.
ExternalMailboxServerRequiresSSL	A value that indicates whether the RPC over HTTP server requires Secure Sockets Layer (SSL).
ExternalMailboxServerAuthenticationMethods	The authentication methods supported by the RPC over HTTP server.
EcpVoicemailUrlFragment	The URL fragment of the server's control panel for voice-mail customization.
EcpEmailSubscriptionsUrlFragment	The URL fragment of the server's control panel for e-mail subscriptions.
EcpTextMessagingUrlFragment	The URL fragment of the server's control panel for text messaging.
EcpDeliveryReportUrlFragment	The URL fragment of the server's control panel for delivery reports.
EcpRetentionPolicyTagsUrlFragment	The URL fragment of the server's control panel for retention policy tags. <30>

Configuration setting	Description
EcpPublishingUrlFragment	The URL fragment of the server's control panel for publishing. <31>
ExternalEcpUrl	The external URL of the server's control panel.
ExternalEcpVoicemailUrl	The external URL of the server's control panel for voice-mail customization.
ExternalEcpEmailSubscriptionsUrl	The external URL of the server's control panel for e-mail subscriptions.
ExternalEcpTextMessagingUrl	The external URL of the server's control panel for text messaging.
ExternalEcpDeliveryReportUrl	The external URL of the server's control panel for delivery reports.
ExternalEcpRetentionPolicyTagsUrl	The external URL of the server's control panel for retention policy tags. <32>
ExternalEcpPublishingUrl	The external URL of the server's control panel for publishing. <33>
ExternalEwsUrl	The external URL of the server's Web services.
ExternalOABUrl	The external URL of the OAB.
ExternalUMUrl	The external URL of the Unified Messaging services.
ExternalWebClientUrls	The external URLs of the server's Web client.
CrossOrganizationSharingEnabled	A value indicating that cross-organization sharing is enabled.
AlternateMailboxes	A collection of alternate mailboxes.
CasVersion	The version of the Client Access server that is serving the specified request (for example, 14.XX.YYY.ZZZ).
EwsSupportedSchemas	A comma-separated list of schema versions supported by the server's Web services.
InternalPop3Connections	The internal connection settings list for POP3 protocol connections.
ExternalPop3Connections	The external connection settings list for POP3 protocol connections.
InternalImap4Connections	The internal connection settings list for IMAP4 protocol connections.
ExternalImap4Connections	The external connection settings list for IMAP4 protocol connections.
InternalSmtpConnections	The internal connection settings list for SMTP connections.
ExternalSmtpConnections	The external connection settings list for SMTP connections.

Configuration setting	Description
ExchangeRpcUrl	The URL that's used for remote procedure calls (RPCs). This URL is internal to the server and is not to be used by clients. <34>
ExternalEwsVersion	The version of the Web services server that is delivering the specified request. <35>
MobileMailboxPolicy	The mobile mailbox policy settings. <36>

3.1.4.4.3.6 tns:GetUserSettingsResponse Complex Type

The **GetUserSettingsResponse** complex type represents a response that contains an array of user responses. A single user response contains the configuration settings for a specific user. The **GetUserSettingsResponse** complex type returns to the caller the user's configuration settings that were requested in the **GetUserSettingRequest** complex type (section [3.1.4.4.3.1](#)).

The name-value pairs for each returned user setting are included in the response. The **GetUserSettings** operation (section [3.1.4.4](#)) returns only the requested configuration settings, if they exist on the server.

```
<xs:complexType name="GetUserSettingsResponse"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverResponse"
    >
      <xs:sequence>
        <xs:element name="UserResponses"
          type="tns:ArrayOfUserResponse"
          nillable="true"
          minOccurs="0"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Child Elements

Element	Type	Description
UserResponses	tns:ArrayOfUserResponse	The response for each user.

3.1.4.4.3.7 tns:AutodiscoverResponse Complex Type

The **AutodiscoverResponse** complex type represents the base class for all responses returned by the Autodiscover service. It introduces the **ErrorCode** and **ErrorMessage** properties.

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

```

<xs:sequence>
  <xs:element name="ErrorCode"
    type="tns:ErrorCode"
    minOccurs="0"
  />
  <xs:element name="ErrorMessage"
    type="xs:string"
    nillable="true"
    minOccurs="0"
  />
</xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
ErrorCode	tns:ErrorCode	The error code associated with this response.
ErrorMessage	xs:string	The error message associated with this response.

The **GetUserSettingsResponse** complex type (section [3.1.4.4.3.6](#)), **UserResponse** complex type (section [3.1.4.4.3.8](#)), **GetDomainSettingsResponse** complex type (section [3.1.4.1.3.2](#)), **DomainResponse** complex type (section [3.1.4.1.3.4](#)), and the **GetFederationInformationResponse** complex type (section [3.1.4.2.3.2](#)) extend the **AutodiscoverResponse** complex type.

3.1.4.4.3.8 tns:UserResponse Complex Type

The **UserResponse** complex type represents a response to a **GetUserSettings** operation (section [3.1.4.4](#)) for a specified user. The server returns only the configuration settings requested by the client.

```

<xs:complexType name="UserResponse"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:AutodiscoverResponse"
    >
      <xs:sequence>
        <xs:element name="RedirectTarget"
          type="xs:string"
          nillable="true"
          minOccurs="0"
        />
        <xs:element name="UserSettingErrors"
          type="tns:UserSettingErrors"
          nillable="true"
          minOccurs="0"
        />
        <xs:element name="UserSettings"
          type="tns:UserSettings"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
RedirectTarget	xs:string	The target of the redirection (URL or e-mail address).
UserSettingErrors	tns:UserSettingErrors	Error information for settings that could not be returned.
UserSettings	tns:UserSettings	The requested settings for the user.

3.1.4.4.3.9 tns:UserSettingErrors Complex Type

The **UserSettingErrors** complex type represents a collection of **UserSettingError** elements (section [3.1.4.4.2.17](#)) that contains error information for settings that could not be returned.

```

<xs:complexType name="UserSettingErrors">
  <xs:sequence>
    <xs:element name="UserSettingError"
      type="tns:UserSettingError"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
UserSettingError	tns:UserSettingError	An error from a GetUserSettings request.

3.1.4.4.3.10 tns:ArrayOfUserResponse Complex Type

The **ArrayOfUserResponse** complex type represents an array of **UserResponse** elements (section [3.1.4.4.2.13](#)) that contains the responses for the specified user.

```

<xs:complexType name="ArrayOfUserResponse">
  <xs:sequence>
    <xs:element name="UserResponse"
      type="tns:UserResponse"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```



```

    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
UserResponse	tns:UserResponse	A response to a GetUserSettings operation (section 3.1.4.4) for a specified user.

3.1.4.4.3.11 tns:UserSettingError Complex Type

The **UserSettingError** complex type represents an error that resulted from a **GetUserSettings** operation (section [3.1.4.4](#)) request.

```

<xs:complexType name="UserSettingError">
  <xs:sequence>
    <xs:element name="ErrorCode"
      type="tns:ErrorCode"
    />
    <xs:element name="ErrorMessage"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="SettingName"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
ErrorCode	tns:ErrorCode	The error code associated with the specified request.
ErrorMessage	xs:string	The error message associated with the specified request.
SettingName	xs:string	The name of the specified setting.

3.1.4.4.3.12 tns:UserSettings Complex Type

The **UserSettings** complex type represents a collection of **UserSetting** elements (section [3.1.4.4.2.17](#)), the base class for all user settings returned by the **GetUserSettings** operation (section [3.1.4.4](#)).

```

<xs:complexType name="UserSettings">
  <xs:sequence>
    <xs:element name="UserSetting"
      type="tns:UserSetting"
    />
  </xs:sequence>
</xs:complexType>

```

```

        nillable="true"
        minOccurs="0"
        maxOccurs="unbounded"
      />
    </xs:sequence>
  </xs:complexType>

```

Child Elements

Element	Type	Description
UserSetting	tns:UserSetting	The base class for all user settings returned by the GetUserSettings operation.

3.1.4.4.3.13 tns:UserSetting Complex Type

The **UserSetting** complex type represents the user settings to be returned by the **GetUserSettings** operation (section [3.1.4.4](#)).

```

<xs:complexType name="UserSetting">
  <xs:sequence>
    <xs:element name="Name"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
Name	xs:string	The name of the specified setting.

The **ProtocolConnectionCollectionSetting** complex type (section [3.1.4.4.3.18](#)), **StringSetting** complex type (section [3.1.4.4.2.18](#)), **WebClientUrlCollectionSetting** complex type (section [3.1.4.4.3.15](#)), and **AlternateMailboxCollectionSetting** complex type (section [3.1.4.4.3.21](#)) extend the **UserSetting** complex type.

3.1.4.4.3.14 tns:StringSetting Complex Type

The **StringSetting** complex type represents a user setting whose value is of type **string**.

```

<xs:complexType name="StringSetting"
  mixed="false">
  >
  <xs:complexContent
    mixed="false">
    >
    <xs:extension
      base="tns:UserSetting"
    />
  >

```

```

    <xs:sequence>
      <xs:element name="Value"
        type="xs:string"
        nillable="true"
        minOccurs="0"
      />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
Value	xs:string	The value of the specified setting.

3.1.4.4.3.15 tns:WebClientUrlCollectionSetting Complex Type

The **WebClientUrlCollectionSetting** complex type represents a collection of **WebClientUrls** elements (section [3.1.4.4.2.20](#)).

```

<xs:complexType name="WebClientUrlCollectionSetting"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:UserSetting"
    >
      <xs:sequence>
        <xs:element name="WebClientUrls"
          type="tns:WebClientUrls"
          nillable="true"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
WebClientUrls	tns:WebClientUrls	The Web client URLs.

3.1.4.4.3.16 tns:WebClientUrls Complex Type

The **WebClientUrls** complex type represents a collection of **WebClientUrl** elements (section [3.1.4.4.2.21](#)) that specify the internal and external URLs of the server's Web client.

```

<xs:complexType name="WebClientUrls">
  <xs:sequence>
    <xs:element name="WebClientUrl"
      type="tns:WebClientUrl"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
WebClientUrl	tns:WebClientUrl	The URL of the server's Web client.

3.1.4.4.3.17 tns:WebClientUrl Complex Type

The **WebClientUrl** complex type represents the URL of the server's Web client.

```

<xs:complexType name="WebClientUrl">
  <xs:sequence>
    <xs:element name="AuthenticationMethods"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="Url"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
AuthenticationMethods	xs:string	The authentication methods.
Url	xs:string	The URL of the server's Web client.

The **WebClientUrl** can be used for retrieving data from a Web service.

3.1.4.4.3.18 tns:ProtocolConnectionCollectionSetting Complex Type

The **ProtocolConnectionCollectionSetting** complex type represents a collection of **ProtocolConnection** elements (section [3.1.4.4.2.24](#)).

```

<xs:complexType name="ProtocolConnectionCollectionSetting"
  mixed="false"
>

```

```

<xs:complexContent
  mixed="false"
>
  <xs:extension
    base="tns:UserSetting"
  >
    <xs:sequence>
      <xs:element name="ProtocolConnections"
        type="tns:ProtocolConnections"
        nillable="true"
      />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
ProtocolConnections	tns:ProtocolConnections	The protocol connections.

3.1.4.4.3.19 tns:ProtocolConnections Complex Type

The **ProtocolConnections** complex type represents a collection of <ProtocolConnection> elements (section [3.1.4.4.2.24](#)) that specify the internal and external protocol connection of the server's Web client.

```

<xs:complexType name="ProtocolConnections">
  <xs:sequence>
    <xs:element name="ProtocolConnection"
      type="tns:ProtocolConnection"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
ProtocolConnection	tns:ProtocolConnection	The protocol connection of the server's Web client.

3.1.4.4.3.20 tns:ProtocolConnection Complex Type

The **ProtocolConnection** complex type represents the e-mail protocol connection settings for POP, IMAP, and SMTP protocols.

```

<xs:complexType name="ProtocolConnection">
  <xs:sequence>

```

```

<xs:element name="Hostname"
  type="xs:string"
  nillable="true"
/>
<xs:element name="Port"
  type="xs:int"
/>
<xs:element name="EncryptionMethod"
  type="xs:string"
  nillable="true"
/>
</xs:sequence>
</xs:complexType>

```

Child Elements

Element	Type	Description
Hostname	xs:string	The host name portion of the computer's full name.
Port	xs:int	The port number to be used for the specified protocol.
EncryptionMethod	xs:string	The cryptographic method to be used for the specified protocol.

3.1.4.4.3.21 tns:AlternateMailboxCollectionSetting Complex Type

The **AlternateMailboxCollectionSetting** complex type represents a collection of **AlternateMailboxes** elements (section [3.1.4.4.2.26](#)).

```

<xs:complexType name="AlternateMailboxCollectionSetting"
  mixed="false"
>
  <xs:complexContent
    mixed="false"
  >
    <xs:extension
      base="tns:UserSetting"
    >
      <xs:sequence>
        <xs:element name="AlternateMailboxes"
          type="tns:AlternateMailboxes"
          nillable="true"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

Child Elements

Element	Type	Description
AlternateMailboxes	tns:AlternateMailboxes	A collection of alternate mailboxes.

3.1.4.4.3.22 tns:AlternateMailboxes Complex Type

The **AlternateMailboxes** complex type represents a collection of **AlternateMailbox** elements (section [3.1.4.4.2.27](#)).

```
<xs:complexType name="AlternateMailboxes">
  <xs:sequence>
    <xs:element name="AlternateMailbox"
      type="tns:AlternateMailbox"
      nillable="true"
      minOccurs="0"
      maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

Element	Type	Description
AlternateMailbox	tns:AlternateMailbox	An alternate mailbox.

3.1.4.4.3.23 tns:AlternateMailbox Complex Type

The **AlternateMailbox** complex type represents an alternate mailbox.

```
<xs:complexType name="AlternateMailbox">
  <xs:sequence>
    <xs:element name="Type"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="DisplayName"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="LegacyDN"
      type="xs:string"
      nillable="true"
    />
    <xs:element name="Server"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>
```

Child Elements

Element	Type	Description
Type	xs:string	The alternate mailbox type.

Element	Type	Description
DisplayName	xs:string	The alternate mailbox display name.
LegacyDN	xs:string	The alternate mailbox legacy DN.
Server	xs:string	The alternate mailbox server.

An alternate mailbox corresponds to a user's external mailbox, such as a personal POP/IMAP account, a Webmail account, or an archived account.

3.1.4.4.4 Simple Types

The following table summarizes the set of XML schema simple type definitions that are specific to the **GetUserSettings** operation (section [3.1.4.4](#)).

Simple type	Description
ExchangeVersion	Represents an enumeration that defines the server versions used with this protocol.
ErrorCode	Specifies the error codes that can be returned by the Autodiscover service.

3.1.4.4.4.1 tns:ExchangeVersion Simple Type

The **ExchangeVersion** simple type represents an enumeration that defines the server versions that are used with this protocol.

```
<xs:simpleType name="ExchangeVersion">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="Exchange2010"
    />
    <xs:enumeration
      value="Exchange2010_SP1"
    />
  </xs:restriction>
</xs:simpleType>
```

Enumeration

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

Value	Description
Exchange2010	Specifies the first version of the target Web service schema. <37> The xs:string type is specified in [XMLSCHEMA2] .
Exchange2010_SP1	Specifies the second version of the target Web service schema. <38>

3.1.4.4.2 tns:ErrorCode Simple Type

The **ErrorCode** simple type specifies the error codes that can be returned by the Autodiscover service.

```
<xs:simpleType name="ErrorCode">
  <xs:restriction
    base="xs:string"
  >
    <xs:enumeration
      value="NoError"
    />
    <xs:enumeration
      value="RedirectAddress"
    />
    <xs:enumeration
      value="RedirectUrl"
    />
    <xs:enumeration
      value="InvalidUser"
    />
    <xs:enumeration
      value="InvalidRequest"
    />
    <xs:enumeration
      value="InvalidSetting"
    />
    <xs:enumeration
      value="SettingIsNotAvailable"
    />
    <xs:enumeration
      value="ServerBusy"
    />
    <xs:enumeration
      value="InvalidDomain"
    />
    <xs:enumeration
      value="NotFederated"
    />
    <xs:enumeration
      value="InternalServerError"
    />
  </xs:restriction>
</xs:simpleType>
```

Enumeration

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

Value	Description
NoError	Indicates that there was no error.
RedirectAddress	Indicates that the caller must follow the e-mail address redirection that was returned by the Autodiscover service.

Value	Description
RedirectUrl	Indicates that the caller must follow the URL redirection that was returned by the Autodiscover service.
InvalidUser	Indicates that the user name that was passed in the request is invalid.
InvalidRequest	Indicates that the request is invalid.
InvalidSetting	Indicates that the specified setting is invalid.
SettingIsNotAvailable	A specified setting is not available.
ServerBusy	The server is too busy to process the request.
InvalidDomain	The requested domain is not valid.
NotFederated	The organization is not federated.
InternalServerError	The internal server error.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

The code examples provided in the following subsections are examples of an autodiscovery request and response, using the **GetDomainSettings** (section 3.1.4.1), **GetFederationInformation** (section 3.1.4.2), and **GetUserSettings** (section 3.1.4.4) operations, respectively. Note that in the **GetDomainSettings** and **GetUserSettings** examples, only the specified settings are returned to the client.

4.1 GetDomainSettings_Example

The two examples in this section show how to construct the request XML and response XML for the **GetDomainSettings** (section 3.1.4.1) operation.

To retrieve the specified domain settings, the client constructs the Autodiscover request XML and sends it to the server, as shown in the following example.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:a="http://schemas.microsoft.com/exchange/2010/Autodiscover"
  xmlns:wsa="http://www.w3.org/2005/08/addressing"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Header>
    <a:RequestedServerVersion>Exchange2010</a:RequestedServerVersion>
    <wsa:Action>http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodi
discover/GetDomainSettings</wsa:Action>
    <wsa:To>https://autodiscover.exchange.microsoft.com/autodiscover/autodisco
ver.svc</wsa:To>
  </soap:Header>
  <soap:Body>
    <a:GetDomainSettingsRequestMessage xmlns:a="http://schemas.microsoft.com/e
xchange/2010/Autodiscover">
      <a:Request>
        <a:Domains>
          <a:Domain>Redmond</a:Domain>
        </a:Domains>
        <a:RequestedSettings>
          <a:Setting>ExternalEwsUrl</a:Setting>
        </a:RequestedSettings>
      </a:Request>
    </a:GetDomainSettingsRequestMessage>
  </soap:Body>
</soap:Envelope>
</EwsLogEntry>
```

The server then constructs the Autodiscover response XML and sends it to the client, as shown in the following example.

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/" xmlns:a="http:
//www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://schemas.microsoft.com/exchange/2010/
Autodiscover/Autodiscover/GetDomainSettingsResponse</a:Action>
    <h:ServerVersionInfo xmlns:h="http://schemas.microsoft.com/exchange/2010/A
utodiscover" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <h:MajorVersion>14</h:MajorVersion>
      <h:MinorVersion>0</h:MinorVersion>
    </h:ServerVersionInfo>
  </s:Header>
  <s:Body>
    <a:Response>
      <a:Settings>
        <a:Setting>ExternalEwsUrl</a:Setting>
      </a:Settings>
    </a:Response>
  </s:Body>
</s:Envelope>
```

```

    <h:MajorBuildNumber>639</h:MajorBuildNumber>
    <h:MinorBuildNumber>20</h:MinorBuildNumber>
    <h:Version>Exchange2010</h:Version>
  </h:ServerVersionInfo>
</s:Header>
<s:Body>
  <GetDomainSettingsResponseMessage xmlns="http://schemas.microsoft.com/exchange/2010/Autodiscover">
    <Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <ErrorCode>NoError</ErrorCode>
      <ErrorMessage />
      <DomainResponses>
        <DomainResponse>
          <ErrorCode>NoError</ErrorCode>
          <ErrorMessage>No error.</ErrorMessage>
          <DomainSettingErrors />
          <DomainSettings>
            <DomainSetting i:type="DomainStringSetting">
              <Name>ExternalEwsUrl</Name>
              <Value>https://emea.mail.microsoft.com/EWS/Exchange.asmx</Value>
            </DomainSetting>
          </DomainSettings>
          <RedirectTarget i:nil="true" />
        </DomainResponse>
      </DomainResponses>
    </Response>
  </GetDomainSettingsResponseMessage>
</s:Body>
</s:Envelope>

```

4.2 GetFederationInformation_Example

The two examples in this section show how to construct the request XML and response XML for the **GetFederationInformation** (section [3.1.4.2](#)) operation.

In the request, the caller is requesting domain information for domain "contoso.com", as shown in the following example.

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:exm="http://schemas.microsoft.com/exchange/services/2006/messages"
  xmlns:ext="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns:a="http://www.w3.org/2005/08/addressing"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Header>
    <a:MessageID>urn:uuid:6389558d-9e05-465e-ade9-aae14c4bcd10</a:MessageID>
    <a:Action
  soap:mustUnderstand="1">http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/
  GetFederationInformation</a:Action>
    <a:To soap:mustUnderstand="1">https://autodiscover.byfcx-
  dom.extest.microsoft.com/autodiscover/autodiscover.svc</a:To>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
  </soap:Header>

```

```

    <soap:Body>
      <GetFederationInformationRequestMessage
        xmlns="http://schemas.microsoft.com/exchange/2010/Autodiscover">
        <Request>
          <Domain>contoso.com</Domain>
        </Request>
      </GetFederationInformationRequestMessage>
    </soap:Body>
  </soap:Envelope>

```

The server then constructs the response XML and sends it to the client, as shown in the following example.

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
      s:mustUnderstand="1">http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/Get
      FederationInformationResponse</a:Action>
    <a:RelatesTo>urn:uuid:6389558d-9e05-465e-ade9-aae14c4bcd10</a:RelatesTo>
  </s:Header>
  <s:Body>
    <GetFederationInformationResponseMessage
      xmlns="http://schemas.microsoft.com/exchange/2010/Autodiscover">
      <Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <ErrorCode>NoError</ErrorCode>
        <ErrorMessage/>
        <ApplicationUri>BYFCXU-DOM.EXTEST.MICROSOFT.COM</ApplicationUri>
        <Domains>
          <Domain>contoso.com</Domain>
          <Domain>europe.contoso.com</Domain>
          <Domain>americas.contoso.com</Domain>
          <Domain>contosolive.com</Domain>
        </Domains>
      </Response>
    </GetFederationInformationResponseMessage>
  </s:Body>
</s:Envelope>

```

4.3 GetUserSettings_Example

The two examples in this section show how to construct the request XML and response XML for the **GetUserSettings** (section [3.1.4.4](#)) operation.

To retrieve the requested user settings, the client constructs the Autodiscover request XML and sends it to the server, as shown in the following example.

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:a="http://schemas.microsoft.com/exchange/2010/Autodiscover"
  xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <
    <soap:Header>
      <a:RequestedServerVersion>Exchange2010</a:RequestedServerVersion>
    </

```

```

    <wsa:Action>http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodi
discover/GetUserSettings</wsa:Action>
    <wsa:To>https://autodiscover.exchange.microsoft.com/autodiscover/autodisco
ver.svc</wsa:To>
  </soap:Header>
  <soap:Body>
    <a:GetUserSettingsRequestMessage xmlns:a="http://schemas.microsoft.com/exc
hange/2010/Autodiscover">
      <a:Request>
        <a:Users>
          <a:User>
            <a:Mailbox>tadam@exchange.microsoft.com</a:Mailbox>
          </a:User>
        </a:Users>
        <a:RequestedSettings>
          <a:Setting>UserDisplayName</a:Setting>
          <a:Setting>UserDN</a:Setting>
          <a:Setting>UserDeploymentId</a:Setting>
          <a:Setting>InternalMailboxServer</a:Setting>
          <a:Setting>MailboxDN</a:Setting>
          <a:Setting>PublicFolderServer</a:Setting>
          <a:Setting>ActiveDirectoryServer</a:Setting>
          <a:Setting>ExternalEwsUrl</a:Setting>
          <a:Setting>CasVersion</a:Setting>
          <a:Setting>EwsSupportedSchemas</a:Setting>
        </a:RequestedSettings>
      </a:Request>
    </a:GetUserSettingsRequestMessage>
  </soap:Body>
</soap:Envelope>

```

The server then constructs the Autodiscover response XML and sends it to the client, as shown in the following example.

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/" xmlns:a="http:
//www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://schemas.microsoft.com/exchange/2010/
Autodiscover/Autodiscover/GetUserSettingsResponse</a:Action>
    <h:ServerVersionInfo xmlns:h="http://schemas.microsoft.com/exchange/2010/A
utodiscover" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <h:MajorVersion>14</h:MajorVersion>
      <h:MinorVersion>1</h:MinorVersion>
      <h:MajorBuildNumber>63</h:MajorBuildNumber>
      <h:MinorBuildNumber>0</h:MinorBuildNumber>
      <h:Version>Exchange2010_SP1</h:Version>
    </h:ServerVersionInfo>
  </s:Header>
  <s:Body>
    <GetUserSettingsResponseMessage xmlns="http://schemas.microsoft.com/exchan
ge/2010/Autodiscover">
      <Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <ErrorCode>NoError</ErrorCode>
        <ErrorMessage />
        <UserResponses>
          <UserResponse>
            <ErrorCode>NoError</ErrorCode>

```

```

<ErrorMessage>No error.</ErrorMessage>
<RedirectTarget i:nil="true" />
<UserSettingErrors />
<UserSettings>
  <UserSetting i:type="StringSetting">
    <Name>UserDisplayName</Name>
    <Value>Terry Adams</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>UserDN</Name>
    <Value>/o=microsoft/ou=Exchange Administrative Group (FYDIBOHF
23SPDLT)/cn=Recipients/cn=tadam</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>UserDeploymentId</Name>
    <Value>649d50b8-alce-4bac-8ace-2321e463f701</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>CasVersion</Name>
    <Value>14.01.0063.000</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>EwsSupportedSchemas</Name>
    <Value>Exchange2007, Exchange2007_SP1, Exchange2010,
Exchange2010_SP1</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>InternalMailboxServer</Name>
    <Value>DF-M14-05.Contoso.com</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>ActiveDirectoryServer</Name>
    <Value>CO1-EXCH-DC-05.Contoso.com</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>MailboxDN</Name>
    <Value>/o=microsoft/ou=Exchange Administrative Group (FYDIBOHF
23SPDLT)/cn=Configuration/cn=Servers/cn=outlookbeta.exchange.corp.microsoft.com/
cn=Microsoft Private MDB</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>PublicFolderServer</Name>
    <Value>DF-P14-01.Contoso.com</Value>
  </UserSetting>
  <UserSetting i:type="StringSetting">
    <Name>ExternalEwsUrl</Name>
    <Value>https://mail.Contoso.com/EWS/Exchange.asmx</
Value>
  </UserSetting>
</UserSettings>
</UserResponse>
</UserResponses>
</Response>
</GetUserSettingsResponseMessage>
</s:Body>
</s:Envelope>

```

5 Security

5.1 Security Considerations for Implementers

Autodiscovery uses this protocol over Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS) (Hypertext Transfer Protocol (HTTP) with Secure Sockets Layer (SSL)). Not providing SSL will seriously affect the functionality of this protocol. The server will not answer Autodiscover queries unless the Autodiscover client has first authenticated with the Autodiscover server.

The **GetFederationInformation** (section [3.1.4.2](#)) operation should be anonymous. The intent of **GetFederationInformation** is to provide information to other organizations with the security token service (STS) in common, instructing them on how to request tokens to authenticate against other services. Therefore, the caller needs to have access to the federation information without the need to authenticate first.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

The Autodiscover service contains a WSDL and an XSD file (messages.xsd). These two **XML** files, which are listed and described in the following table, are required for implementing the functionality specified in this document. The entire contents of both of these files are included in this section.

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

These files have to be placed in a common folder; otherwise, the WSDL won't validate and operate properly. Also, any schema files that are included in or imported into the MS-OXWSADISC-types.xsd or MS-OXWSADISC-messages.xsd schemas have to be placed in the same folder as these files.

6.1 WSDL

For a specification of the Web Service Description Language (WSDL), see [\[WSDL\]](#).

For ease of implementation, the full WSDL is included in this section.

```
<?xml version="1.0" encoding="utf-8"?>
  <wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
utility-1.0.xsd"
    xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
    xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
    xmlns:tns="http://schemas.microsoft.com/exchange/2010/Autodiscover"
    xmlns:wsa="http://schemas.xmlsoap.org/ws/2004/08/addressing"
    xmlns:wsp="http://schemas.xmlsoap.org/ws/2004/09/policy"
    xmlns:wsap="http://schemas.xmlsoap.org/ws/2004/08/addressing/policy"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:misc="http://schemas.microsoft.com/ws/2005/12/wsdl/contract"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
    xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
    xmlns:wsa10="http://www.w3.org/2005/08/addressing"
    xmlns:wsx="http://schemas.xmlsoap.org/ws/2004/09/mex"
    targetNamespace="http://schemas.microsoft.com/exchange/2010/Autodiscover"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xsd:schema
targetNamespace="http://schemas.microsoft.com/exchange/2010/Autodiscover/Imports">
      <xsd:import namespace="http://schemas.microsoft.com/exchange/2010/Autodiscover"
location="messages.xsd" />
    </xsd:schema>
  </wsdl:types>
  <wsdl:message name="GetUserSettingsRequestMessage">
    <wsdl:part name="parameters" element="tns:GetUserSettingsRequestMessage" />
  </wsdl:message>
  <wsdl:message name="GetUserSettingsRequestMessage_Headers">
    <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />
  </wsdl:message>
  <wsdl:message name="GetUserSettingsResponseMessage">
    <wsdl:part name="parameters" element="tns:GetUserSettingsResponseMessage" />
  </wsdl:message>
```

```

<wsdl:message name="GetUserSettingsResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
<wsdl:message name="GetDomainSettingsRequestMessage">
  <wsdl:part name="parameters" element="tns:GetDomainSettingsRequestMessage" />
</wsdl:message>
<wsdl:message name="GetDomainSettingsRequestMessage_Headers">
  <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />
</wsdl:message>
<wsdl:message name="GetDomainSettingsResponseMessage">
  <wsdl:part name="parameters" element="tns:GetDomainSettingsResponseMessage" />
</wsdl:message>
<wsdl:message name="GetDomainSettingsResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
<wsdl:message name="GetFederationInformationRequestMessage">
  <wsdl:part name="parameters" element="tns:GetFederationInformationRequestMessage" />
</wsdl:message>
<wsdl:message name="GetFederationInformationRequestMessage_Headers">
  <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />
</wsdl:message>
<wsdl:message name="GetFederationInformationResponseMessage">
  <wsdl:part name="parameters" element="tns:GetFederationInformationResponseMessage" />
</wsdl:message>
<wsdl:message name="GetFederationInformationResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
<wsdl:message name="GetOrganizationRelationshipSettingsRequestMessage">
  <wsdl:part name="parameters"
element="tns:GetOrganizationRelationshipSettingsRequestMessage" />
</wsdl:message>
<wsdl:message name="GetOrganizationRelationshipSettingsRequestMessage_Headers">
  <wsdl:part name="RequestedServerVersion" element="tns:RequestedServerVersion" />
</wsdl:message>
<wsdl:message name="GetOrganizationRelationshipSettingsResponseMessage">
  <wsdl:part name="parameters"
element="tns:GetOrganizationRelationshipSettingsResponseMessage" />
</wsdl:message>
<wsdl:message name="GetOrganizationRelationshipSettingsResponseMessage_Headers">
  <wsdl:part name="ServerVersionInfo" element="tns:ServerVersionInfo" />
</wsdl:message>
<wsdl:portType name="Autodiscover">
  <wsdl:operation name="GetUserSettings">
    <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
Autodiscover/Autodiscover/GetUserSettings"
name="GetUserSettingsRequestMessage"
message="tns:GetUserSettingsRequestMessage" />
    <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/Autodiscover/
Autodiscover/GetUserSettingsResponse"
name="GetUserSettingsResponseMessage"
message="tns:GetUserSettingsResponseMessage" />
  </wsdl:operation>
  <wsdl:operation name="GetDomainSettings">
    <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
Autodiscover/Autodiscover/GetDomainSettings"
name="GetDomainSettingsRequestMessage"
message="tns:GetDomainSettingsRequestMessage" />
    <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/Autodiscover/
Autodiscover/GetDomainSettingsResponse"

```

```

        name="GetDomainSettingsResponseMessage"
        message="tns:GetDomainSettingsResponseMessage" />
</wsdl:operation>
<wsdl:operation name="GetFederationInformation">
  <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/
    Autodiscover/Autodiscover/GetFederationInformation"
    name="GetFederationInformationRequestMessage"
    message="tns:GetFederationInformationRequestMessage" />
  <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/Autodiscover/
    Autodiscover/GetFederationInformationResponse"
    name="GetFederationInformationResponseMessage"
    message="tns:GetFederationInformationResponseMessage" />
</wsdl:operation>
<wsdl:operation name="GetOrganizationRelationshipSettings">
  <wsdl:input wsaw:Action="http://schemas.microsoft.com/exchange/2010/Autodiscover/
    Autodiscover/GetOrganizationRelationshipSettings"
    name="GetOrganizationRelationshipSettingsRequestMessage"
    message="tns:GetOrganizationRelationshipSettingsRequestMessage" />
  <wsdl:output wsaw:Action="http://schemas.microsoft.com/exchange/2010/Autodiscover/
    Autodiscover/GetOrganizationRelationshipSettingsResponse"
    name="GetOrganizationRelationshipSettingsResponseMessage"
    message="tns:GetOrganizationRelationshipSettingsResponseMessage" />
</wsdl:operation>
</wsdl:portType>
<wsdl:binding name="DefaultBinding_Autodiscover" type="tns:Autodiscover">
  <soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
  <wsdl:operation name="GetUserSettings">
    <soap:operation soapAction="http://schemas.microsoft.com/exchange/2010/Autodiscover/
      Autodiscover/GetUserSettings" style="document" />
    <wsdl:input name="GetUserSettingsRequestMessage">
      <soap:header message="tns:GetUserSettingsRequestMessage_Headers"
        part="RequestedServerVersion" use="literal" />
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output name="GetUserSettingsResponseMessage">
      <soap:header message="tns:GetUserSettingsResponseMessage_Headers"
        part="ServerVersionInfo" use="literal" />
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetDomainSettings">
    <soap:operation soapAction="http://schemas.microsoft.com/exchange/2010/Autodiscover/
      Autodiscover/GetDomainSettings" style="document" />
    <wsdl:input name="GetDomainSettingsRequestMessage">
      <soap:header message="tns:GetDomainSettingsRequestMessage_
        Headers" part="RequestedServerVersion" use="literal" />
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output name="GetDomainSettingsResponseMessage">
      <soap:header message="tns:GetDomainSettingsResponseMessage_
        Headers" part="ServerVersionInfo" use="literal" />
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetFederationInformation">
    <soap:operation soapAction="http://schemas.microsoft.com/exchange/2010/Autodiscover/
      Autodiscover/GetFederationInformation" style="document" />
    <wsdl:input name="GetFederationInformationRequestMessage">
      <soap:header message="tns:GetFederationInformationRequestMessage_Headers"

```

```

        part="RequestedServerVersion" use="literal" />
    <soap:body use="literal" />
</wsdl:input>
<wsdl:output name="GetFederationInformationResponseMessage">
    <soap:header message="tns:GetFederationInformationResponseMessage_Headers"
        part="ServerVersionInfo" use="literal" />
    <soap:body use="literal" />
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetOrganizationRelationshipSettings">
    <soap:operation soapAction="http://schemas.microsoft.com/exchange/2010/Autodiscover/
        Autodiscover/GetOrganizationRelationshipSettings" style="document" />
    <wsdl:input name="GetOrganizationRelationshipSettingsRequestMessage">
        <soap:header message="tns:GetOrganizationRelationshipSettingsRequestMessage_
            Headers" part="RequestedServerVersion" use="literal" />
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output name="GetOrganizationRelationshipSettingsResponseMessage">
        <soap:header message="tns:GetOrganizationRelationshipSettingsResponseMessage_
            Headers" part="ServerVersionInfo" use="literal" />
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
</wsdl:binding>
</wsdl:definitions>

```

6.2 Messages XSD

For a specification of the XML schema definition (XSD), see [\[XMLSCHEMA1\]](#).

For ease of implementation, the messages.xsd file is included in this section.

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:tns="http://schemas.microsoft.com/exchange/2010/Autodiscover"
    elementFormDefault="qualified"
        targetNamespace="http://schemas.microsoft.com/exchange/2010/Autodiscover"
        xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="GetUserSettingsRequestMessage">
        <xs:complexType>
            <xs:sequence>
                <xs:element minOccurs="0" name="Request" nillable="true"
                    type="tns:GetUserSettingsRequest" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:complexType name="GetUserSettingsRequest">
        <xs:complexContent mixed="false">
            <xs:extension base="tns:AutodiscoverRequest">
                <xs:sequence>
                    <xs:element name="Users" nillable="true" type="tns:Users" />
                    <xs:element name="RequestedSettings" nillable="true" type="tns:RequestedSettings"
                        />
                </xs:sequence>
            </xs:extension>
        </xs:complexContent>
    </xs:complexType>
    <xs:element name="RequestedVersion" nillable="true" type="tns:ExchangeVersion" />

```

```

    </xs:complexType>
    <xs:element name="GetUserSettingsRequest" nillable="true" type="tns:GetUserSettingsRequest"
  />
  <xs:complexType name="AutodiscoverRequest">
    <xs:sequence />
  </xs:complexType>
  <xs:element name="AutodiscoverRequest" nillable="true" type="tns:AutodiscoverRequest" />
  <xs:complexType name="Users">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="User" nillable="true"
type="tns:User" />
    </xs:sequence>
  </xs:complexType>
  <xs:element name="Users" nillable="true" type="tns:Users" />
  <xs:complexType name="User">
    <xs:sequence>
      <xs:element name="Mailbox" nillable="true" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:element name="User" nillable="true" type="tns:User" />
  <xs:complexType name="RequestedSettings">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="Setting" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:element name="RequestedSettings" nillable="true" type="tns:RequestedSettings" />
  <xs:simpleType name="ExchangeVersion">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Exchange2010" />
      <xs:enumeration value="Exchange2010_SP1" />
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="RequestedServerVersion">
    <xs:simpleType>
      <xs:restriction base="tns:ExchangeVersion" />
    </xs:simpleType>
  </xs:element>
  <xs:element name="GetUserSettingsResponseMessage">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="Response" nillable="true"
type="tns:GetUserSettingsResponse" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="GetUserSettingsResponse">
    <xs:complexContent mixed="false">
      <xs:extension base="tns:AutodiscoverResponse">
        <xs:sequence>
          <xs:element minOccurs="0" name="UserResponses" nillable="true"
type="tns:ArrayOfUserResponse" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetUserSettingsResponse" nillable="true"
type="tns:GetUserSettingsResponse" />
  <xs:complexType name="AutodiscoverResponse">

```

```

<xs:sequence>
  <xs:element minOccurs="0" name="ErrorCode" type="tns:ErrorCode" />
  <xs:element minOccurs="0" name="ErrorMessage" nillable="true" type="xs:string" />
</xs:sequence>
</xs:complexType>
<xs:element name="AutodiscoverResponse" nillable="true" type="tns:AutodiscoverResponse" />
<xs:simpleType name="ErrorCode">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NoError" />
    <xs:enumeration value="RedirectAddress" />
    <xs:enumeration value="RedirectUrl" />
    <xs:enumeration value="InvalidUser" />
    <xs:enumeration value="InvalidRequest" />
    <xs:enumeration value="InvalidSetting" />
    <xs:enumeration value="SettingIsNotAvailable" />
    <xs:enumeration value="ServerBusy" />
    <xs:enumeration value="InvalidDomain" />
    <xs:enumeration value="NotFederated" />
    <xs:enumeration value="InternalServerError" />
  </xs:restriction>
</xs:simpleType>
<xs:element name="ErrorCode" nillable="true" type="tns:ErrorCode" />
<xs:complexType name="ArrayOfUserResponse">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="UserResponse"
      nillable="true" type="tns:UserResponse" />
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfUserResponse" nillable="true"
  type="tns:ArrayOfUserResponse" />
<xs:complexType name="UserResponse">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:AutodiscoverResponse">
      <xs:sequence>
        <xs:element minOccurs="0" name="RedirectTarget" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="UserSettingErrors" nillable="true"
type="tns:UserSettingErrors" />
        <xs:element minOccurs="0" name="UserSettings" nillable="true"
type="tns:UserSettings" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="UserResponse" nillable="true" type="tns:UserResponse" />
<xs:complexType name="UserSettingErrors">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="UserSettingError"
      nillable="true" type="tns:UserSettingError" />
  </xs:sequence>
</xs:complexType>
<xs:element name="UserSettingErrors" nillable="true" type="tns:UserSettingErrors" />
<xs:complexType name="UserSettingError">
  <xs:sequence>
    <xs:element name="ErrorCode" type="tns:ErrorCode" />
    <xs:element name="ErrorMessage" nillable="true" type="xs:string" />
    <xs:element name="SettingName" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:element name="UserSettingError" nillable="true" type="tns:UserSettingError" />

```

```

<xs:complexType name="UserSettings">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="UserSetting"
      nillable="true" type="tns:UserSetting" />
  </xs:sequence>
</xs:complexType>
<xs:element name="UserSettings" nillable="true" type="tns:UserSettings" />
<xs:complexType name="UserSetting">
  <xs:sequence>
    <xs:element name="Name" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:element name="UserSetting" nillable="true" type="tns:UserSetting" />
<xs:complexType name="ProtocolConnectionCollectionSetting">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:UserSetting">
      <xs:sequence>
        <xs:element name="ProtocolConnections" nillable="true"
type="tns:ProtocolConnections" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="ProtocolConnectionCollectionSetting" nillable="true"
  type="tns:ProtocolConnectionCollectionSetting" />
<xs:complexType name="ProtocolConnections">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ProtocolConnection"
      nillable="true" type="tns:ProtocolConnection" />
  </xs:sequence>
</xs:complexType>
<xs:element name="ProtocolConnections" nillable="true" type="tns:ProtocolConnections" />
<xs:complexType name="ProtocolConnection">
  <xs:sequence>
    <xs:element name="Hostname" nillable="true" type="xs:string" />
    <xs:element name="Port" type="xs:int" />
    <xs:element name="EncryptionMethod" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:element name="ProtocolConnection" nillable="true" type="tns:ProtocolConnection" />
<xs:complexType name="StringSetting">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:UserSetting">
      <xs:sequence>
        <xs:element minOccurs="0" name="Value" nillable="true" type="xs:string" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="StringSetting" nillable="true" type="tns:StringSetting" />
<xs:complexType name="WebClientUrlCollectionSetting">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:UserSetting">
      <xs:sequence>
        <xs:element name="WebClientUrls" nillable="true" type="tns:WebClientUrls" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

<xs:element name="WebClientUrlCollectionSetting" nillable="true"
  type="tns:WebClientUrlCollectionSetting" />
<xs:complexType name="WebClientUrls">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="WebClientUrl"
      nillable="true" type="tns:WebClientUrl" />
  </xs:sequence>
</xs:complexType>
<xs:element name="WebClientUrls" nillable="true" type="tns:WebClientUrls" />
<xs:complexType name="WebClientUrl">
  <xs:sequence>
    <xs:element name="AuthenticationMethods" nillable="true" type="xs:string" />
    <xs:element name="Url" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:element name="WebClientUrl" nillable="true" type="tns:WebClientUrl" />
<xs:complexType name="AlternateMailboxCollectionSetting">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:UserSetting">
      <xs:sequence>
        <xs:element name="AlternateMailboxes" nillable="true" type="tns:AlternateMailboxes"
          />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="AlternateMailboxCollectionSetting" nillable="true"
  type="tns:AlternateMailboxCollectionSetting" />
<xs:complexType name="AlternateMailboxes">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AlternateMailbox"
      nillable="true" type="tns:AlternateMailbox" />
  </xs:sequence>
</xs:complexType>
<xs:element name="AlternateMailboxes" nillable="true" type="tns:AlternateMailboxes" />
<xs:complexType name="AlternateMailbox">
  <xs:sequence>
    <xs:element name="Type" nillable="true" type="xs:string" />
    <xs:element name="DisplayName" nillable="true" type="xs:string" />
    <xs:element name="LegacyDN" nillable="true" type="xs:string" />
    <xs:element name="Server" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:element name="AlternateMailbox" nillable="true" type="tns:AlternateMailbox" />
<xs:complexType name="ServerVersionInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="MajorVersion" type="xs:int" />
    <xs:element minOccurs="0" name="MinorVersion" type="xs:int" />
    <xs:element minOccurs="0" name="MajorBuildNumber" type="xs:int" />
    <xs:element minOccurs="0" name="MinorBuildNumber" type="xs:int" />
    <xs:element minOccurs="0" name="Version" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
<xs:element name="ServerVersionInfo" nillable="true" type="tns:ServerVersionInfo" />
<xs:element name="GetDomainSettingsRequestMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="Request" nillable="true"
        type="tns:GetDomainSettingsRequest" />
    </xs:sequence>
  </xs:complexType>

```



```

        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:complexType name="GetDomainSettingsRequest">
    <xs:complexContent mixed="false">
        <xs:extension base="tns:AutodiscoverRequest">
            <xs:sequence>
                <xs:element name="Domains" nillable="true" type="tns:Domains" />
                <xs:element name="RequestedSettings" nillable="true" type="tns:RequestedSettings"
/>
                <xs:element name="RequestedVersion" nillable="true" type="tns:ExchangeVersion" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:element name="GetDomainSettingsRequest" nillable="true"
type="tns:GetDomainSettingsRequest" />
<xs:complexType name="Domains">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="Domain"
nillable="true" type="xs:string" />
    </xs:sequence>
</xs:complexType>
<xs:element name="Domains" nillable="true" type="tns:Domains" />
<xs:element name="GetDomainSettingsResponseMessage">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="Response" nillable="true"
type="tns:GetDomainSettingsResponse" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:complexType name="GetDomainSettingsResponse">
    <xs:complexContent mixed="false">
        <xs:extension base="tns:AutodiscoverResponse">
            <xs:sequence>
                <xs:element minOccurs="0" name="DomainResponses" nillable="true"
type="tns:ArrayOfDomainResponse" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:element name="GetDomainSettingsResponse" nillable="true"
type="tns:GetDomainSettingsResponse" />
<xs:complexType name="ArrayOfDomainResponse">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="DomainResponse"
nillable="true" type="tns:DomainResponse" />
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfDomainResponse" nillable="true"
type="tns:ArrayOfDomainResponse" />
<xs:complexType name="DomainResponse">
    <xs:complexContent mixed="false">
        <xs:extension base="tns:AutodiscoverResponse">
            <xs:sequence>
                <xs:element minOccurs="0" name="DomainSettingErrors" nillable="true"
type="tns:DomainSettingErrors" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>

```

```

        <xs:element minOccurs="0" name="DomainSettings" nillable="true"
type="tns:DomainSettings" />
        <xs:element minOccurs="0" name="RedirectTarget" nillable="true" type="xs:string" />
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:element name="DomainResponse" nillable="true" type="tns:DomainResponse" />
<xs:complexType name="DomainSettingErrors">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="DomainSettingError"
nillable="true" type="tns:DomainSettingError" />
    </xs:sequence>
</xs:complexType>
<xs:element name="DomainSettingErrors" nillable="true" type="tns:DomainSettingErrors" />
<xs:complexType name="DomainSettingError">
    <xs:sequence>
        <xs:element name="ErrorCode" type="tns:ErrorCode" />
        <xs:element name="ErrorMessage" nillable="true" type="xs:string" />
        <xs:element name="SettingName" nillable="true" type="xs:string" />
    </xs:sequence>
</xs:complexType>
<xs:element name="DomainSettingError" nillable="true" type="tns:DomainSettingError" />
<xs:complexType name="DomainSettings">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="DomainSetting"
nillable="true" type="tns:DomainSetting" />
    </xs:sequence>
</xs:complexType>
<xs:element name="DomainSettings" nillable="true"
type="tns:DomainSettings" />
<xs:complexType name="DomainSetting">
    <xs:sequence>
        <xs:element name="Name" nillable="true" type="xs:string" />
    </xs:sequence>
</xs:complexType>
<xs:element name="DomainSetting" nillable="true"
type="tns:DomainSetting" />
<xs:complexType name="DomainStringSetting">
    <xs:complexContent mixed="false">
        <xs:extension base="tns:DomainSetting">
            <xs:sequence>
                <xs:element minOccurs="0" name="Value" nillable="true" type="xs:string" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:element name="DomainStringSetting" nillable="true"
type="tns:DomainStringSetting" />
<xs:element name="GetFederationInformationRequestMessage">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="Request" nillable="true"
type="tns:GetFederationInformationRequest" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:complexType name="GetFederationInformationRequest">
    <xs:complexContent mixed="false">

```

```

    <xs:extension base="tns:AutodiscoverRequest">
      <xs:sequence>
        <xs:element name="Domain" nillable="true" type="xs:string" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="GetFederationInformationRequest" nillable="true"
  type="tns:GetFederationInformationRequest" />
<xs:element name="GetFederationInformationResponseMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="Response" nillable="true"
        type="tns:GetFederationInformationResponse" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:complexType name="GetFederationInformationResponse">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:AutodiscoverResponse">
      <xs:sequence>
        <xs:element minOccurs="0" name="ApplicationUri" nillable="true" type="xs:anyURI" />
        <xs:element minOccurs="0" name="Domains" nillable="true" type="tns:Domains" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="GetFederationInformationResponse" nillable="true"
  type="tns:GetFederationInformationResponse" />
<xs:element name="GetOrganizationRelationshipSettingsRequestMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="Request" nillable="true"
        type="tns:GetOrganizationRelationshipSettingsRequest" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:complexType name="GetOrganizationRelationshipSettingsRequest">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:AutodiscoverRequest">
      <xs:sequence>
        <xs:element name="Domains" nillable="true" type="tns:Domains" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="GetOrganizationRelationshipSettingsRequest"
  nillable="true" type="tns:GetOrganizationRelationshipSettingsRequest" />
<xs:element name="GetOrganizationRelationshipSettingsResponseMessage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="Response" nillable="true"
        type="tns:GetOrganizationRelationshipSettingsResponse" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:complexType name="GetOrganizationRelationshipSettingsResponse">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:AutodiscoverResponse">

```

```

    <xs:sequence>
      <xs:element minOccurs="0" name="OrganizationRelationshipSettingsCollection"
        nillable="true" type="tns:OrganizationRelationshipSettingsCollection" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:element name="GetOrganizationRelationshipSettingsResponse" nillable="true"
  type="tns:GetOrganizationRelationshipSettingsResponse" />
<xs:complexType name="OrganizationRelationshipSettingsCollection">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="OrganizationRelationshipSettings"
      nillable="true" type="tns:OrganizationRelationshipSettings" />
  </xs:sequence>
</xs:complexType>
<xs:element name="OrganizationRelationshipSettingsCollection" nillable="true"
  type="tns:OrganizationRelationshipSettingsCollection" />
<xs:complexType name="OrganizationRelationshipSettings">
  <xs:sequence>
    <xs:element name="DeliveryReportEnabled" type="xs:boolean" />
    <xs:element name="DomainNames" nillable="true" type="tns:Domains" />
    <xs:element name="FreeBusyAccessEnabled" type="xs:boolean" />
    <xs:element name="FreeBusyAccessLevel" nillable="true" type="xs:string" />
    <xs:element name="MailTipsAccessEnabled" type="xs:boolean" />
    <xs:element name="MailTipsAccessLevel" nillable="true" type="xs:string" />
    <xs:element name="MailboxMoveEnabled" type="xs:boolean" />
    <xs:element name="Name" nillable="true" type="xs:string" />
    <xs:element name="TargetApplicationUri" nillable="true" type="xs:anyURI" />
    <xs:element name="TargetAutodiscoverEpr" nillable="true" type="xs:anyURI" />
    <xs:element name="TargetSharingEpr" nillable="true" type="xs:anyURI" />
  </xs:sequence>
</xs:complexType>
<xs:element name="OrganizationRelationshipSettings" nillable="true"
  type="tns:OrganizationRelationshipSettings" />
</xs:schema>

```

6.3 Types XSD

This protocol does not define a types XSD file.

7 Appendix B: Product Behavior

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

- Microsoft® Exchange Server 2010
- 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.

[<1> Section 1.3](#): Exchange 2010 does not include the **InternalEcpRetentionPolicyTagsUrl** enumerated value.

[<2> Section 1.3](#): Exchange 2010 does not include the **InternalEcpPublishingUrl** enumerated value.

[<3> Section 1.3](#): Exchange 2010 does not include the **EcpRetentionPolicyTagsUrlFragment** enumerated value.

[<4> Section 1.3](#): Exchange 2010 does not include the **EcpPublishingUrlFragment** enumerated value.

[<5> Section 1.3](#): Exchange 2010 does not include the **ExternalEcpRetentionPolicyTagsUrl** enumerated value.

[<6> Section 1.3](#): Exchange 2010 does not include the **ExternalEcpPublishingUrl** enumerated value.

[<7> Section 1.3](#): Exchange 2010 does not include the **ExchangeRpcUrl** enumerated value.

[<8> Section 1.3](#): Exchange 2010 does not include the **ExternalEwsVersion** enumerated value.

[<9> Section 1.3](#): Exchange 2010 does not include the **MobileMailboxPolicy** enumerated value.

[<10> Section 3.1.4.1.3.1](#): Exchange 2010 does not include the `<RequestedVersion>` element.

[<11> Section 3.1.4.3](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettings** operation.

[<12> Section 3.1.4.3.1](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettings** operation.

[<13> Section 3.1.4.3.1.1](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettingsRequestMessage** message.

[<14> Section 3.1.4.3.1.2](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettingsRequestMessage_Headers** message.

[<15> Section 3.1.4.3.1.3](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettingsResponseMessage** message.

<16> [Section 3.1.4.3.1.4](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettingsResponseMessage_Headers** message.

<17> [Section 3.1.4.3.2](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettings** operation.

<18> [Section 3.1.4.3.2.1](#): Exchange 2010 does not include the <GetOrganizationRelationshipSettingsRequestMessage> element.

<19> [Section 3.1.4.3.2.2](#): Exchange 2010 does not include the <GetOrganizationRelationshipSettingsRequest> element.

<20> [Section 3.1.4.3.2.3](#): Exchange 2010 does not include the <GetOrganizationRelationshipSettingsResponseMessage> element.

<21> [Section 3.1.4.3.2.4](#): Exchange 2010 does not include the <OrganizationRelationshipSettingsCollection> element.

<22> [Section 3.1.4.3.2.5](#): Exchange 2010 does not include the <OrganizationRelationshipSettingsCollection> element.

<23> [Section 3.1.4.3.3](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettings** operation.

<24> [Section 3.1.4.3.3.1](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettingsRequest** complex type.

<25> [Section 3.1.4.3.3.2](#): Exchange 2010 does not include the **GetOrganizationRelationshipSettingsResponse** complex type.

<26> [Section 3.1.4.3.3.3](#): Exchange 2010 does not include the **OrganizationRelationshipSettingsCollection** complex type.

<27> [Section 3.1.4.3.3.4](#): Exchange 2010 does not include the **OrganizationRelationshipSettings** complex type.

<28> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **InternalEcpRetentionPolicyTagsUrl** enumerated value.

<29> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **InternalEcpPublishingUrl** enumerated value.

<30> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **EcpRetentionPolicyTagsUrlFragment** enumerated value.

<31> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **EcpPublishingUrlFragment** enumerated value.

<32> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **ExternalEcpRetentionPolicyTagsUrl** enumerated value.

<33> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **ExternalEcpPublishingUrl** enumerated value.

<34> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **ExchangeRpcUrl** enumerated value.

<35> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **ExternalEwsVersion** enumerated value.

<36> [Section 3.1.4.4.3.5](#): Exchange 2010 does not include the **MobileMailboxPolicy** enumerated value.

<37> [Section 3.1.4.4.4.1](#): Exchange 2010 includes only the target schema that is identified by the Exchange2010 enumeration value.

<38> [Section 3.1.4.4.4.1](#): Exchange 2010 does not include the Exchange2010_SP1 value.

8 Change Tracking

This section identifies changes that were made to the [MS-OXWSADISC] 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.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change Type
1 Introduction	Added an introductory statement on the potential use of the Autodiscover service.	N	New content added.
1.1 Glossary	58393 Added "Hypertext Transfer Protocol (HTTP)", "Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)", "Secure Sockets Layer (SSL)", and "security token service (STS)" to the list of terms that are defined in [MS-OXGLOS].	Y	New content added.
1.2.1 Normative References	58075 Added [MS-OXDCLI] as a normative reference.	N	Content updated.
1.2.1 Normative References	Added [RFC2818] as a normative reference.	N	Content updated.
1.2.1 Normative References	Removed [MS-OXWSLVID] as a normative reference.	Y	Content

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change Type
			updated.
1.3 Overview	Added MobileMailboxPolicy enumerated value.	Y	New content added.
1.3 Overview	56036 Added product behavior information.	Y	Content updated.
1.7 Versioning and Capability Negotiation	58075 Updated information throughout the topic, including cross-reference text.	Y	Content updated.
3 Protocol Details	55416 Moved content from section 3.2 to this section.	N	New content added.
3.1.4 Message Processing Events and Sequencing Rules	Added GetOrganizationRelationshipSettings to the table.	Y	New content added.
3.1.4.3 GetOrganizationRelationshipSettings	Added text clarifying that this operation is for internal use only and is not used by clients.	Y	Product behavior note updated.
3.1.4.3.1.4 tns:GetOrganizationRelationshipSettingsResponseMessage Headers	56036 Added a product behavior note.	Y	New product behavior note added.
3.1.4.3.2.4 GetOrganizationRelationshipSettingsResponse Element	Added new section.	Y	New content added.
3.1.4.3.2.4 GetOrganizationRelationshipSettingsResponse Element	56036 Added a product behavior note.	Y	Product behavior note updated.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change Type
3.1.4.3.2.5 OrganizationRelationshipSettingsCollection Element	56036 Added a product behavior note.	Y	Product behavior note updated.
3.1.4.4.3.4 tns:User Complex Type	Updated the description to indicate that the user is identified by an SMTP address or a legacy DN. Added information about how the GetUserSettings method discovers the mailbox and the <User> element requirement.	N	Content updated.
3.1.4.4.3.5 tns:RequestedSettings Complex Type	56036 Added product behavior information.	Y	Content updated.
3.1.4.4.3.5 tns:RequestedSettings Complex Type	Updated the table of configuration settings.	Y	Content updated.
6 Appendix A: Full WSDL	Added a table that describes the schema and WSDL files that are used for this protocol.	Y	Content updated.

9 Index

A

[Applicability](#) 12

C

[Capability negotiation](#) 12

[Change tracking](#) 96

F

[Full WSDL](#) 81

G

[Glossary](#) 7

I

[Introduction](#) 7

M

Messages

[overview](#) 13

[syntax](#) 13

[transport](#) 13

O

[Overview \(synopsis\)](#) 8

P

[Preconditions](#) 12

[Prerequisites](#) 12

[Product behavior](#) 93

R

[Relationship to other protocols](#) 11

S

Security

[implementer considerations](#) 80

[overview](#) 80

[parameter index](#) 80

Server

[abstract data model](#) 17

[initialization](#) 17

[local events](#) 74

[message processing](#) 17

[overview](#) 17

[sequencing rules](#) 17

[timer events](#) 74

[timers](#) 17

[Standards assignments](#) 12

T

[Tracking changes](#) 96

V

[Vendor-extensible fields](#) 12

[Versioning](#) 12