

## [MS-OXWSADISC]:

# Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol

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Preliminary

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Preliminary

# 1 Introduction

The Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol 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 **email 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.

Sections 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

## 1.1 Glossary

This document uses the following terms:

**address book:** A collection of Address Book objects, each of which are contained in any number of address lists.

**Autodiscover client:** A client that queries for a set of server locations where setup and configuration information for an [\[RFC2821\]](#)-compliant email address is stored.

**Autodiscover server:** A server in a managed environment that makes setup and configuration information available to **Autodiscover clients**. The location of Autodiscover servers is made available via the Autodiscover HTTP Service Protocol, as described in [\[MS-OXDISCO\]](#).

**delivery receipt:** A report message that is generated and sent by a client or server to the sender of a message or another designated recipient when an email message is received by an intended recipient.

**display name:** A text string that is used to identify a principal or other object in the user interface. Also referred to as title.

**distinguished name (DN):** In the Active Directory directory service, the unique identifier of an object in Active Directory, as described in [\[MS-ADTS\]](#) and [\[RFC2251\]](#).

**email address:** A string that identifies a user and enables the user to receive Internet messages.

**endpoint:** (1) A network-specific address of a remote procedure call (RPC) server process for remote procedure calls. The actual name and type of the endpoint depends on the **RPC** protocol sequence that is being used. For example, for RPC over TCP (RPC Protocol Sequence `ncacn_ip_tcp`), an endpoint might be TCP port 1025. For RPC over Server Message Block (RPC Protocol Sequence `ncacn_np`), an endpoint might be the name of a named pipe. For more information, see [\[C706\]](#).

(2) A communication port that is exposed by an application server for a specific shared service and to which messages can be addressed.

**free/busy status:** A property of an appointment that indicates how an appointment on the calendar of an attendee or resource affects their availability.

**fully qualified domain name (FQDN):** An unambiguous domain name that gives an absolute location in the Domain Name System's (DNS) hierarchy tree, as defined in [\[RFC1035\]](#) section 3.1 and [\[RFC2181\]](#) section 11.

**Global Address List (GAL):** An address list that conceptually represents the default address list for an **address book**.



**Hypertext Transfer Protocol (HTTP):** An application-level protocol for distributed, collaborative, hypermedia information systems (text, graphic images, sound, video, and other multimedia files) on the World Wide Web.

**Hypertext Transfer Protocol Secure (HTTPS):** An extension of HTTP that securely encrypts and decrypts web page requests. In some older protocols, "Hypertext Transfer Protocol over Secure Sockets Layer" is still used (Secure Sockets Layer has been deprecated). For more information, see [\[SSL3\]](#) and [\[RFC5246\]](#).

**Internet Message Access Protocol - Version 4 (IMAP4):** A protocol that is used for accessing email and news items from mail servers, as described in [\[RFC3501\]](#).

**mail tip:** A note that is presented to the author of a message when the author is composing the message. A mail tip provides information about the recipients of a message and issues that might impact delivery of the message, such as moderation or delivery restrictions.

**mailbox:** A message store that contains email, calendar items, and other Message objects for a single recipient.

**offline address book (OAB):** A collection of address lists that are stored in a format that a client can save and use locally.

**Post Office Protocol - Version 3 (POP3):** A protocol that is used for accessing email from mail servers, as described in [\[RFC1939\]](#).

**public folder:** A Folder object that is stored in a location that is publicly available.

**remote procedure call (RPC):** A communication protocol used primarily between client and server. The term has three definitions that are often used interchangeably: a runtime environment providing for communication facilities between computers (the RPC runtime); a set of request-and-response message exchanges between computers (the RPC exchange); and the single message from an RPC exchange (the RPC message). For more information, see [\[C706\]](#).

**Secure Sockets Layer (SSL):** A security protocol that supports confidentiality and integrity of messages in client and server applications that communicate over open networks. SSL supports server and, optionally, client authentication using X.509 certificates [\[X509\]](#) and [\[RFC5280\]](#). SSL is superseded by Transport Layer Security (TLS). TLS version 1.0 is based on SSL version 3.0 [\[SSL3\]](#).

**security token:** An opaque message or data packet produced by a Generic Security Services (GSS)-style authentication package and carried by the application protocol. The application has no visibility into the contents of the token.

**security token service (STS):** A web service that issues claims and packages them in encrypted security tokens.

**Simple Mail Transfer Protocol (SMTP):** A member of the TCP/IP suite of protocols that is used to transport Internet messages, as described in [\[RFC5321\]](#).

**SOAP:** A lightweight protocol for exchanging structured information in a decentralized, distributed environment. **SOAP** uses **XML** technologies to define an extensible messaging framework, which provides a message construct that can be exchanged over a variety of underlying protocols. The framework has been designed to be independent of any particular programming model and other implementation-specific semantics. SOAP 1.2 supersedes SOAP 1.1. See [\[SOAP1.2-1/2003\]](#).

**SOAP action:** The HTTP request header field used to indicate the intent of the **SOAP** request, using a **URI** value. See [\[SOAP1.1\]](#) section 6.1.1 for more information.

**SOAP body:** A container for the payload data being delivered by a **SOAP message** to its recipient. See [\[SOAP1.2-1/2007\]](#) section 5.3 for more information.

**SOAP header:** A mechanism for implementing extensions to a **SOAP message** in a decentralized manner without prior agreement between the communicating parties. See [\[SOAP1.2-1/2007\]](#) section 5.2 for more information.

**SOAP message:** An **XML** document consisting of a mandatory SOAP envelope, an optional **SOAP header**, and a mandatory **SOAP body**. See [\[SOAP1.2-1/2007\]](#) section 5 for more information.

**Unified Messaging:** A set of components and services that enable voice, fax, and email messages to be stored in a user's **mailbox** and accessed from a variety of devices.

**Uniform Resource Identifier (URI):** A string that identifies a resource. The URI is an addressing mechanism defined in Internet Engineering Task Force (IETF) Uniform Resource Identifier (URI): Generic Syntax [\[RFC3986\]](#).

**Uniform Resource Locator (URL):** A string of characters in a standardized format that identifies a document or resource on the World Wide Web. The format is as specified in [\[RFC1738\]](#).

**web server:** A server computer that hosts websites and responds to requests from applications.

**web service:** A unit of application logic that provides data and services to other applications and can be called by using standard Internet transport protocols such as **HTTP**, **Simple Mail Transfer Protocol (SMTP)**, or File Transfer Protocol (FTP). Web services can perform functions that range from simple requests to complicated business processes.

**Web Services Description Language (WSDL):** An XML format for describing network services as a set of endpoints that operate on messages that contain either document-oriented or procedure-oriented information. The operations and messages are described abstractly and are bound to a concrete network protocol and message format in order to define an endpoint. Related concrete endpoints are combined into abstract endpoints, which describe a network service. WSDL is extensible, which allows the description of endpoints and their messages regardless of the message formats or network protocols that are used.

**WSDL message:** An abstract, typed definition of the data that is communicated during a **WSDL operation** [\[WSDL\]](#). Also, an element that describes the data being exchanged between web service providers and clients.

**WSDL operation:** A single action or function of a web service. The execution of a WSDL operation typically requires the exchange of messages between the service requestor and the service provider.

**WSDL port type:** A named set of logically-related, abstract **Web Services Description Language (WSDL)** operations and messages.

**XML:** The Extensible Markup Language, as described in [\[XML1.0\]](#).

**XML namespace:** A collection of names that is used to identify elements, types, and attributes in XML documents identified in a URI reference [\[RFC3986\]](#). A combination of XML namespace and local name allows XML documents to use elements, types, and attributes that have the same names but come from different sources. For more information, see [\[XMLNS-2ED\]](#).

**XML namespace prefix:** An abbreviated form of an **XML namespace**, as described in [\[XML\]](#).

**XML schema:** A description of a type of XML document that is typically expressed in terms of constraints on the structure and content of documents of that type, in addition to the basic syntax constraints that are imposed by **XML** itself. An XML schema provides a view of a document type at a relatively high level of abstraction.

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

## 1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the [Errata](#).

### 1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information.

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

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

## 1.2.2 Informative References

None.

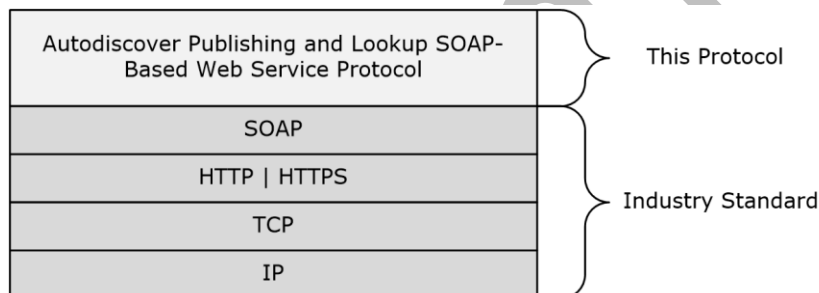
## 1.3 Overview

The Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol enables clients to ascertain email configuration settings for specific **email 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.

If the user configuration settings listed and described in the second table in section [2.2.4.3](#) are implemented by the server, they are then included in valid server responses.

## 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 layering diagram.



**Figure 1: This protocol in relation to other protocols**

For conceptual background information and overviews of the relationships and interactions between this and other protocols, see [\[MS-OXPROTO\]](#).

## 1.5 Prerequisites/Preconditions

When the caller doesn't know the **URL** to use to communicate with the server that hosts the domain of interest, the caller performs one of the following two procedures to reach the server that can provide the information.

### To reach the server by using a direct attempt:

1. Compose URLs for Autodiscover **endpoints (2)**, where {0} is the domain of interest, in the following order:

U1: `https://autodiscover.{0}/autodiscover/autodiscover.svc`

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

2. Call the **GetFederationInformation** (section [3.1.4.2](#)) operation at the Autodiscover endpoints (2) U1 and U2. Use the results from the first discovered URL that provides a successful response.
3. Follow **HTTP** 302 redirects only to **HTTPS** URLs.

#### To reach the server by using an indirect attempt:

1. Probe for an HTTP 302 redirect on a non-**Secure Sockets Layer (SSL)** endpoint (2).
2. Compose the URL for an Autodiscover endpoint (2), where {0} is the domain of interest:

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

The response is an HTTP 302 redirect. The redirect URL in response starts with https:// and ends with /autodiscover/autodiscover.xml.

3. 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

4. Call the **GetFederationInformation** operation at the Autodiscover endpoint (2).
5. Follow HTTP 302 redirects only to HTTPS URLs.

## 1.6 Applicability Statement

The Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol is applicable to **SOAP**-based clients in which a client can perform an autodiscovery of a user's configuration data by providing the user's email 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 multiple transports with SOAP 1.1, as specified in section [2.1](#).
- **Protocol Versions:** This protocol has only one **WSDL port type** version. The **WSDL** version of the request is identified by using the **RequestedServerVersion** element, as described in section [3.1.4.4.2.8](#), and the version of the server responding to the request is identified using the **ServerVersionInfo** element, as described in section [2.2.3.1](#).
- **Security and Authentication Methods:** This protocol relies on the **web server** that hosts the application to perform authentication.
- **Capability Negotiation:** This protocol does not support version negotiation.

## 1.8 Vendor-Extensible Fields

None.

## 1.9 Standards Assignments

None.

## 2 Messages

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

### 2.1 Transport

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

This protocol relies on the **web server** that hosts the application to perform authentication. This protocol **MUST** support SOAP over **HTTP**, as specified in [\[RFC2616\]](#). 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
<b>soap</b>	<a href="http://schemas.xmlsoap.org/wsdl/soap/">http://schemas.xmlsoap.org/wsdl/soap/</a>	<a href="#">[SOAP1.1]</a>
<b>wsu</b>	<a href="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd</a>	
<b>soapenc</b>	<a href="http://schemas.xmlsoap.org/soap/encoding/">http://schemas.xmlsoap.org/soap/encoding/</a>	<a href="#">[SOAP1.1]</a>
<b>wsam</b>	<a href="http://www.w3.org/2007/05/addressing/metadata">http://www.w3.org/2007/05/addressing/metadata</a>	<a href="#">[WSADDR-Metadata]</a>
<b>tns</b>	<a href="http://schemas.microsoft.com/exchange/2010/Autodiscover">http://schemas.microsoft.com/exchange/2010/Autodiscover</a>	
<b>wsa</b>	<a href="http://schemas.xmlsoap.org/ws/2004/08/addressing">http://schemas.xmlsoap.org/ws/2004/08/addressing</a>	<a href="#">[WSAddressing]</a>
<b>wsp</b>	<a href="http://schemas.xmlsoap.org/ws/2004/09/policy">http://schemas.xmlsoap.org/ws/2004/09/policy</a>	<a href="#">[WSPOLICY]</a>
<b>wsap</b>	<a href="http://schemas.xmlsoap.org/ws/2004/08/addressing/policy">http://schemas.xmlsoap.org/ws/2004/08/addressing/policy</a>	
<b>xsd</b>	<a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>	<a href="#">[XMLSCHEMA1]</a> , <a href="#">[XMLSCHEMA2]</a>
<b>msc</b>	<a href="http://schemas.microsoft.com/ws/2005/12/wsdl/contract">http://schemas.microsoft.com/ws/2005/12/wsdl/contract</a>	
<b>wsaw</b>	<a href="http://www.w3.org/2006/05/addressing/wsdl">http://www.w3.org/2006/05/addressing/wsdl</a>	<a href="#">[WSADDRCORE]</a>
<b>soap12</b>	<a href="http://schemas.xmlsoap.org/wsdl/soap12">http://schemas.xmlsoap.org/wsdl/soap12</a>	<a href="#">[WSDLSOAP]</a>
<b>wsa10</b>	<a href="http://www.w3.org/2005/08/addressing">http://www.w3.org/2005/08/addressing</a>	<a href="#">[WSA10]</a>

Prefix	Namespace URI	Reference
<b>wsx</b>	http://schemas.xmlsoap.org/ws/2004/09/mex	<a href="#">[WS-MetadataExchangeDir]</a>
<b>wSDL</b>	http://schemas.xmlsoap.org/wSDL/	<a href="#">[WSDL]</a>
<b>xs</b>	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

## 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 name	Description
<b>ServerVersionInfo</b>	Specifies the message server's version number, including the major and minor version numbers and the major and minor build numbers.
<b>Domains</b>	Specifies a list of domains discovered by the Autodiscover service.
<b>RequestedSettings</b>	Specifies the configuration settings to be returned in an autodiscovery.

### 2.2.3.1 ServerVersionInfo Element

The **ServerVersionInfo** element specifies 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 specifies a list of domains to be discovered by the client.

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

### 2.2.3.3 tns:RequestedSettings Element

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

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

### 2.2.4 Complex Types

The following table summarizes the set of common **XML schema** complex type definitions that are specific to this operation. XML schema complex type definitions that are specific to a particular operation are defined with the operation.

Complex type name	Description
<b>ServerVersionInfo</b>	Represents the message server version. This complex type is returned in the <b>SOAP header</b> of a <b>web services</b> response message.
<b>Domains</b>	Represents a collection of domain names to be used in autodiscovery.
<b>RequestedSettings</b>	Represents the configuration settings to be returned by the server.

#### 2.2.4.1 tns:ServerVersionInfo Complex Type

The **ServerVersionInfo** complex type represents the message server version. This complex 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>
```



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

Element name	Type	Description
<b>MajorVersion</b>	<b>xs:int</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the major version number for the server.
<b>MinorVersion</b>	<b>xs:int</b>	Specifies the minor version number for the server.
<b>MajorBuildNumber</b>	<b>xs:int</b>	Specifies the major build number for the server.
<b>MinorBuildNumber</b>	<b>xs:int</b>	Specifies the minor build number for the server.
<b>Version</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the server product version.

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

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

Element name	Type	Description
<b>Domain</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the user's domain (the location of the email server).

The **Domains** complex type is submitted in a request message.

### 2.2.4.3 tns:RequestedSettings Complex Type

The **RequestedSettings** complex type specifies the configuration settings to be returned by the server for the **GetUserSettings** operation, as described in section [3.1.4.4](#), and the **GetDomainSettings** operation, as described in section [3.1.4.1](#).

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

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

Element name	Type	Description
<b>Setting</b>	xs:string <a href="#">[XMLSCHEMA2]</a>	Specifies 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 name	Description
<b>UserDisplayName</b>	The user's <b>display name</b> .
<b>UserDN</b>	The user's legacy <b>DN</b> .
<b>UserDeploymentId</b>	The user's deployment identifier.
<b>InternalMailboxServer</b>	The <b>fully qualified domain name (FQDN)</b> of the <b>mailbox server</b> .
<b>InternalRpcClientServer</b>	The FQDN of the RPC client server.
<b>InternalMailboxServerDN</b>	The legacy DN of the mailbox server.
<b>InternalEcpUrl</b>	The internal <b>URL</b> of the server's control panel.
<b>InternalEcpVoicemailUrl</b>	The internal URL of the server's control panel for voice mail customization.
<b>InternalEcpEmailSubscriptionsUrl</b>	The internal URL of the server's control panel for email subscriptions.
<b>InternalEcpTextMessagingUrl</b>	The internal URL of the server's control panel for text messaging.
<b>InternalEcpDeliveryReportUrl</b>	The internal URL of the server's control panel for delivery reports.
<b>InternalEcpRetentionPolicyTagsUrl</b>	The internal URL of the server's control panel for retention policy tags. <1>
<b>InternalEcpPublishingUrl</b>	The internal URL of the server's control panel for publishing. <2>
<b>InternalEwsUrl</b>	The internal URL of the server's <b>web services</b> .
<b>InternalOABUrl</b>	The internal URL of the <b>OAB</b> .
<b>InternalUMUrl</b>	The internal URL of the <b>Unified Messaging</b> services.
<b>InternalWebClientUrls</b>	A collection of the internal URLs of the server's web client.
<b>MailboxDN</b>	The DN of the mailbox database of the user's mailbox.
<b>PublicFolderServer</b>	The name of the <b>public folders</b> server.
<b>ActiveDirectoryServer</b>	The name of the directory service server.
<b>ExternalMailboxServer</b>	The name of the RPC over <b>HTTP</b> server.
<b>ExternalMailboxServerRequiresSSL</b>	A value that indicates whether the <b>RPC</b> over HTTP server <b>SSL</b> .
<b>ExternalMailboxServerAuthenticationMethods</b>	The authentication methods supported by the RPC over

Configuration setting name	Description
	HTTP server.
<b>EcpVoicemailUrlFragment</b>	The URL fragment of the server's control panel for voice mail customization.
<b>EcpEmailSubscriptionsUrlFragment</b>	The URL fragment of the server's control panel for email subscriptions.
<b>EcpTextMessagingUrlFragment</b>	The URL fragment of the server's control panel for text messaging.
<b>EcpDeliveryReportUrlFragment</b>	The URL fragment of the server's control panel for delivery reports.
<b>EcpRetentionPolicyTagsUrlFragment</b>	The URL fragment of the server's control panel for retention policy tags. <a href="#">&lt;3&gt;</a>
<b>EcpPublishingUrlFragment</b>	The URL fragment of the server's control panel for publishing. <a href="#">&lt;4&gt;</a>
<b>ExternalEcpUrl</b>	The external URL of the server's control panel.
<b>ExternalEcpVoicemailUrl</b>	The external URL of the server's control panel for voice mail customization.
<b>ExternalEcpEmailSubscriptionsUrl</b>	The external URL of the server's control panel for email subscriptions.
<b>ExternalEcpTextMessagingUrl</b>	The external URL of the server's control panel for text messaging.
<b>ExternalEcpDeliveryReportUrl</b>	The external URL of the server's control panel for delivery reports.
<b>ExternalEcpRetentionPolicyTagsUrl</b>	The external URL of the server's control panel for retention policy tags. <a href="#">&lt;5&gt;</a>
<b>ExternalEcpPublishingUrl</b>	The external URL of the server's control panel for publishing. <a href="#">&lt;6&gt;</a>
<b>ExternalEwsUrl</b>	The external URL of the server's web services.
<b>ExternalOABUrl</b>	The external URL of the OAB.
<b>ExternalUMUrl</b>	The external URL of the Unified Messaging services.
<b>ExternalWebClientUrls</b>	The external URLs of the server's web client.
<b>CrossOrganizationSharingEnabled</b>	A value that indicates that cross-organization sharing is enabled.
<b>AlternateMailboxes</b>	A collection of alternate mailboxes.
<b>CasVersion</b>	The version of the mailbox server that is serving the specified request (for example, 14.XX.YYY.ZZZ).
<b>EwsSupportedSchemas</b>	A comma-separated list of schema versions supported by the server's web services.
<b>InternalPop3Connections</b>	The internal connection settings list for <b>POP3</b> connections.
<b>ExternalPop3Connections</b>	The external connection settings list for POP3 connections.

Configuration setting name	Description
<b>InternalImap4Connections</b>	The internal connection settings list for <b>IMAP4</b> connections.
<b>ExternalImap4Connections</b>	The external connection settings list for IMAP4 connections.
<b>InternalSmtpConnections</b>	The internal connection settings list for <b>SMTP</b> connections.
<b>ExternalSmtpConnections</b>	The external connection settings list for SMTP connections.
<b>InternalServerExclusiveConnect</b>	The internal server exclusive connect flag. If this is set to "Off", clients SHOULD NOT connect to the server by means of this protocol.<7>
<b>ExternalServerExclusiveConnect</b>	The external server exclusive connect flag. If this is set to "On", clients SHOULD connect to the server by means of this protocol.<8>
<b>ExchangeRpcUrl</b>	The URL that is used for remote procedure calls (RPCs). This URL is internal to the server and is not to be used by clients.<9>
<b>ShowGalAsDefaultView</b>	A Boolean value that indicates whether the <b>GAL</b> is shown as the <b>address book</b> . A text value of "true" indicates that the GAL is to be shown by default. A text value of "false" indicates that the contact list is to be shown.<10>
<b>AutoDiscoverSMTPAddress</b>	The AutoDiscover primary SMTP address for the user. This is the proxy address to be used instead of the user's <b>email address</b> , if a proxy address exists.<11>
<b>InteropExternalEwsUrl</b>	The external URL of the server's web service <b>endpoint (2)</b> . This is the URL for a server that can serve mailboxes hosted on a server that does not have the web services.<12>
<b>ExternalEwsVersion</b>	The version of the web services server that is delivering the specified request.<13>
<b>InteropExternalEwsVersion</b>	The version of the server that the <b>InteropExternalEwsUrl</b> configuration setting points to.<14>
<b>MobileMailboxPolicy</b>	The mobile mailbox policy settings.<15>

### 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 Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol enables the user to determine specific user configuration settings by submitting **email addresses**.

#### 3.1.1 Abstract Data Model

None.

#### 3.1.2 Timers

None.

#### 3.1.3 Initialization

None.

#### 3.1.4 Message Processing Events and Sequencing Rules

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

Operation name	Description
<b>GetDomainSettings</b>	Retrieves the domain settings for the domain.
<b>GetFederationInformation</b>	Gets the configuration data for the <b>security token service (STS)</b> .
<b>GetOrganizationRelationshipSettings</b>	Gets the settings from all matching organization relationships that have at least one domain that maps to at least one email address claim in the <b>security token</b> .
<b>GetUserSettings</b>	Gets the specified configurations settings for the email user.

##### 3.1.4.1 GetDomainSettings

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

The following is the **WSDL port type** specification of the 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>
```

The following is the **WSDL** binding specification of the 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>
```

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

### 3.1.4.1.1 Messages

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

Message name	Description
<b>GetDomainSettingsRequestMessage</b>	Retrieves the specified settings for a domain.
<b>GetDomainSettingsRequestMessage_Headers</b>	Specifies the <b>SOAP header</b> for a <b>GetDomainSettings</b> operation request.
<b>GetDomainSettingsResponseMessage</b>	Represents the response to a <b>GetDomainSettings</b> operation for a specified domain.
<b>GetDomainSettingsResponseMessage_Headers</b>	Specifies the <b>SOAP header</b> for a <b>GetDomainSettings</b> operation response.

#### 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** is the input message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetDomainSettings>.

The one part of the **GetDomainSettingsRequestMessage** message is described in the following table.

Part name	Element/type	Description
parameters	<b>tns:GetDomainSettingsRequestMessage</b> element (section <a href="#">3.1.4.1.2.1</a> )	Specifies the <b>SOAP body</b> (the parameters) of a call to a <b>GetDomainSettings</b> operation request.

### 3.1.4.1.1.2 tns:GetDomainSettingsRequestMessage\_Headers

The **GetDomainSettingsRequestMessage\_Headers Message WSDL message** specifies the **SOAP header** for a **GetDomainSettings** operation.

```
<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
<b>RequestedServerVersion</b>	<b>tns:RequestedServerVersion</b> element (section <a href="#">3.1.4.4.2.8</a> )	Specifies the server version that the <b>GetDomainSettings</b> operation request targets.

### 3.1.4.1.1.3 tns:GetDomainSettingsResponseMessage

The **GetDomainSettingsResponseMessage WSDL message** specifies the **SOAP message** that represents the server response to a **GetDomainSettings** operation for an individual domain.

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

The **GetDomainSettingsResponseMessage WSDL message** is the response message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetDomainSettingsResponse>.

The one part of the **GetDomainSettingsResponseMessage WSDL message** is described in the following table.

Part name	Element/type	Description
parameters	<b>tns:GetDomainSettingsResponseMessage</b> element (section <a href="#">3.1.4.1.2.2</a> )	Specifies the <b>SOAP body</b> of the response to a <b>GetDomainSettings</b> operation.

### 3.1.4.1.1.4 tns:GetDomainSettingsResponseMessage\_Headers

The **GetDomainSettingsResponseMessage\_Headers Message WSDL message** specifies the **SOAP header** for a **GetDomainSettings** operation response.

```
<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
<b>ServerVersionInfo</b>	<b>tns:ServerVersionInfo</b> (section <a href="#">2.2.3.1</a> )	Contains the server version that processed the <b>GetDomainSettings</b> operation 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.

Element name	Description
<b>GetDomainSettingsRequestMessage</b>	Specifies a call to the server, requesting configuration settings for the user's domain. The <b>GetDomainSettingsResponseMessage</b> element (section <a href="#">3.1.4.1.2.2</a> ) response contains the domain settings requested in this call.
<b>GetDomainSettingsResponseMessage</b>	Returns to the caller the user's configuration settings that were requested in the <b>GetDomainSettingsRequestMessage</b> element (section <a href="#">3.1.4.1.2.1</a> ).
<b>GetDomainSettingsRequest</b>	Represents the parameters of a call to a <b>GetDomainSettings</b> operation.
<b>GetDomainSettingsResponse</b>	Represents the response to a <b>GetDomainSettings</b> operation for a domain, and returns the domain settings.
<b>ArrayOfDomainResponse</b>	Represents an array of <b>DomainResponse</b> elements (section <a href="#">3.1.4.1.2.6</a> ). Each <b>DomainResponse</b> element contains the requested settings for the specified user.
<b>DomainResponse</b>	Contains the requested settings for the specified domain.
<b>DomainSettingErrors</b>	Contains error information for settings that could not be returned.
<b>DomainSettingError</b>	Represents an error that occurred while retrieving a domain setting in response to a <b>GetDomainSettings</b> operation request.
<b>DomainSettings</b>	Represents the domain settings that were submitted in a request or returned by an Autodiscover response.
<b>DomainSetting</b>	Represents the base class for all domain settings returned by the <b>GetDomainSettings</b> request.

#### 3.1.4.1.2.1 tns:GetDomainSettingsRequestMessage Element



The **GetDomainSettingsRequestMessage** element specifies 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>
```

The following table lists the child elements of the **GetDomainSettingsRequestMessage** element.

Element name	Type	Description
<b>Request</b>	<b>tns:GetDomainSettingsRequest</b> (section <a href="#">3.1.4.1.3.1</a> )	Specifies the <b>GetDomainSettings</b> operation request.

### 3.1.4.1.2.2 tns:GetDomainSettingsResponseMessage Element

The **GetDomainSettingsResponseMessage** element returns to the caller the user's configuration settings that were requested in a **GetDomainSettingsRequestMessage** element, as specified in section [3.1.4.1.2.1](#).

The name-value pairs for each returned domain setting are included in the response. The **GetDomainSettings** operation 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>
```

The following table lists the child elements of the **GetDomainSettingsResponseMessage** element.

Element name	Type	Description
<b>Response</b>	<b>tns:GetDomainSettingsResponse</b> (section <a href="#">3.1.4.1.3.2</a> )	Specifies the response to a <b>GetDomainSettings</b> operation request for a specified domain.

### 3.1.4.1.2.3 tns:GetDomainSettingsRequest Element

The **GetDomainSettingsRequest** element represents the parameters of a call to a **GetDomainSettings** operation.

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

### 3.1.4.1.2.4 tns: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 tns: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 tns: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 tns: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 tns:DomainSettingError Element

The **DomainSettingError** element represents an error that occurred while retrieving a domain setting in response to a **GetDomainSettings** operation.

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

### 3.1.4.1.2.9 tns: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 tns:DomainSetting Element

The **DomainSetting** element represents the base class for all domain settings that are returned by the **GetDomainSettings** operation.

```
<xs:element name="DomainSetting"
  type="tns:DomainSettings"
  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.

Complex type name	Description
<b>GetDomainSettingsRequest</b>	Retrieves the specified setting for a domain.
<b>GetDomainSettingsResponse</b>	Contains an array of domain settings. The domain response contains the configuration settings for the specified domain. This complex type represents the response to a <b>GetDomainSettings</b> operation for a specified domain.
<b>ArrayOfDomainResponse</b>	Represents an array of <b>DomainResponse</b> complex type (section <a href="#">3.1.4.1.3.4</a> ) objects.
<b>DomainResponse</b>	Represents a response to a <b>GetDomainSettings</b> operation for an individual domain. The returned <b>DomainResponse</b> object contains the requested settings for the specified domain.
<b>DomainSettingErrors</b>	Represents a collection of <b>DomainSettingError</b> element (section <a href="#">3.1.4.1.3.6</a> ) objects that contain error information for settings that could not be returned.
<b>DomainSettingError</b>	Represents an error that occurred while retrieving a domain setting in response to a <b>GetDomainSettings</b> operation request.
<b>DomainSettings</b>	Represents a collection of <b>DomainSetting</b> complex type (section <a href="#">3.1.4.1.3.8</a> ) objects, the base class for all domain settings returned by the

Complex type name	Description
	<b>GetDomainSettings</b> operation.
<b>DomainSetting</b>	Represents the domain settings to be returned by the <b>GetDomainSettings</b> operation.
<b>DomainStringSetting</b>	Represents a domain setting whose value is of type <b>string</b> .

### 3.1.4.1.3.1 tns:GetDomainSettingsRequest Complex Type

The **GetDomainSettingsRequest** complex type retrieve 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 request. The **GetDomainSettingsRequest** complex type returns a **DomainResponse** complex type, as specified in section [3.1.4.1.3.4](#) object that contains the requested settings for the specified domain.

The **GetDomainSettingsRequest** complex type extends the **AutodiscoverRequest** complex type, as specified in section [3.1.4.4.3.2](#).

```
<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>
```

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

Element name	Type	Description
<b>Domains</b>	<b>tns:Domains</b> (section <a href="#">2.2.4.2</a> )	Specifies the domains for which autodiscovery is to be performed.
<b>RequestedSettings</b>	<b>tns:RequestedSettings</b> (section <a href="#">2.2.4.3</a> )	Specifies the configuration settings being requested.
<b>RequestedVersion</b>	<b>tns:ExchangeVersion</b> (section <a href="#">2.2.4.3</a> )	Specifies the specific server version the provider

Element name	Type	Description
	<a href="#">3.1.4.4.4.1</a> )	would like to use. <16>

### 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 complex type represents the response to a **GetDomainSettings** operation request for an individual domain.

The **GetDomainSettingsResponse** complex type extends the **AutodiscoverResponse** complex type, as specified in section [3.1.4.4.3.6](#).

```
<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>
```

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

Element name	Type	Description
<b>DomainResponses</b>	<b>tns:ArrayOfDomainResponse</b> (section <a href="#">3.1.4.1.3.3</a> )	Specifies an array of <b>DomainResponse</b> elements, a response for each specified domain.

### 3.1.4.1.3.3 tns:ArrayOfDomainResponse Complex Type

The **ArrayOfDomainResponse** complex type represents an array of **DomainResponse** elements, as specified in section [3.1.4.1.2.6](#). Each **DomainResponse** complex type contains a **DomainSettings** complex type, as specified in 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>
```

```

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

```

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

Element name	Type	Description
<b>DomainResponse</b>	<b>tns:DomainResponse</b> (section <a href="#">3.1.4.1.3.4</a> )	Specifies a response message from a <b>GetDomainSettings</b> operation for a specified domain.

### 3.1.4.1.3.4 tns:DomainResponse Complex Type

The **DomainResponse** complex type represents a response to a **GetDomainSettings** operation for a specified domain. The **DomainResponse** complex type object contains the requested settings for the specified domain. The **DomainResponse** complex type extends the **AutodiscoverResponse** complex type (section [3.1.4.4.3.6](#)).

```

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

```

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

Element name	Type	Description
<b>DomainSettingErrors</b>	<b>tns:DomainSettingErrors</b> (section <a href="#">3.1.4.1.3.5</a> )	Specifies the error information for settings that could not be returned.
<b>DomainSettings</b>	<b>tns:DomainSettings</b> (section <a href="#">3.1.4.1.3.7</a> )	Specifies the requested settings for the specified domain.

Element name	Type	Description
<b>RedirectTarget</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the redirection target ( <b>URL</b> or <b>email address</b> ).

### 3.1.4.1.3.5 tns:DomainSettingErrors Complex Type

The **DomainSettingErrors** complex type represents a collection of **DomainSettingError** elements, as specified in section [3.1.4.1.2.7](#), that contain 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>
```

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

Element name	Type	Description
<b>DomainSettingError</b>	<b>tns:DomainSettingError</b> (section <a href="#">3.1.4.1.3.6</a> )	Specifies an error from a <b>GetDomainSettings</b> operation 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 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>
```

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

Element name	Type	Description
<b>ErrorCode</b>	<b>tns:ErrorCode</b> (section <a href="#">3.1.4.4.2</a> )	Specifies the error code that is associated with the specified request.
<b>ErrorMessage</b>	<b>xs:string</b> [ <a href="#">XMLSCHEMA2</a> ]	Specifies the error message that is associated with the specified request.
<b>SettingName</b>	<b>xs:string</b>	Specifies the name of the setting.

### 3.1.4.1.3.7 tns:DomainSettings Complex Type

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

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

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

Element name	Type	Description
<b>DomainSetting</b>	<b>tns:DomainSetting</b> (section <a href="#">3.1.4.1.3.8</a> )	Specifies the domain settings returned by the <b>GetDomainSettings</b> operation.

### 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 call.

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

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



Element name	Type	Description
<b>Name</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the name of the setting to be returned.

The **DomainStringSetting** complex type, as specified in section [3.1.4.1.3.9](#), extends this base type.

### 3.1.4.1.3.9 tns:DomainStringSetting Complex Type

The **DomainStringSetting** complex type represents a domain setting the value of which is of type **string**. The **DomainStringSetting** complex type extends the **DomainSetting** complex type, as specified in section [3.1.4.1.3.8](#).

```

<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>

```

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

Element name	Type	Description
<b>Value</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the value of the specified setting.

#### 3.1.4.1.4 Simple Types

None.

#### 3.1.4.1.5 Attributes

None.

#### 3.1.4.1.6 Groups

None.

#### 3.1.4.1.7 Attribute Groups

None.

### 3.1.4.2 GetFederationInformation

The **GetFederationInformation** operation provides information about the federation status of the specified organization, such as the target **URI** to be used when requesting **security tokens** targeted at this organization, and the other domains that the organization has also federated.

The following is the **WSDL port type** specification of the 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>
```

The following is the **WSDL binding** specification of the 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>
```

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

#### 3.1.4.2.1 Messages

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

Message name	Description
<b>GetFederationInformationRequestMessage</b>	Retrieves the federation status of an organization.
<b>GetFederationInformationRequestMessage_Headers</b>	Specifies the <b>SOAP header</b> for a <b>GetFederationInformation</b> operation request.
<b>GetFederationInformationResponseMessage</b>	Represents the response to a <b>GetFederationInformation</b> operation for a specified domain.
<b>GetFederationInformationResponseMessage_Headers</b>	Specifies the SOAP header for a <b>GetFederationInformation</b> operation response.

### 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 is the input message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetFederationInformation>.

The one part of the **GetFederationInformationRequestMessage** message is described in the following table.

Part name	Element/type	Description
parameters	tns:GetFederationInformationRequestMessage element (section <a href="#">3.1.4.2.2.1</a> )	Specifies the <b>SOAP body</b> the parameters) of a call to a <b>GetFederationInformation</b> operation request.

### 3.1.4.2.1.2 tns:GetFederationInformationRequestMessage\_Headers

The **GetFederationInformationRequestMessage\_Headers** WSDL message specifies the **SOAP header** for a **GetFederationInformation** operation.

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

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

Part name	Element/type	Description
RequestedServerVersion	tns:RequestedServerVersion element (section <a href="#">3.1.4.4.2.8</a> )	Specifies the server version that the <b>GetFederationInformation</b> operation request targets.

### 3.1.4.2.1.3 tns:GetFederationInformationResponseMessage

The **GetFederationInformationResponseMessage** WSDL message specifies the **SOAP message** that represents the server response to a **GetFederationInformation** operation for a specified domain.

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

The **GetFederationInformationResponsetMessage** WSDL message is the response message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetFederationInformationResponse>.

The one part of the **GetFederationInformationResponseMessage** WSDL message is described in the following table.

Part name	Element/type	Description
parameters	<b>tns:GetFederationInformationResponseMessage</b> element (section <a href="#">3.1.4.2.2.2</a> )	Specifies the <b>SOAP body</b> of the response to <b>GetFederationInformation</b> operation.

#### 3.1.4.2.1.4 tns:GetFederationInformationResponseMessage\_Headers

The **GetFederationInformationResponseMessage\_Headers** WSDL message specifies the **SOAP header** for a **GetFederationInformation** operation response.

```
<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	<b>tns:ServerVersionInfo</b> (section <a href="#">2.2.3.1</a> )	Contains the server version that processed the <b>GetFederationInformation</b> operation 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 name	Description
<b>GetFederationInformationRequestMessage</b>	Specifies a call to the server to request configuration data for the <b>STS</b> .
<b>GetFederationInformationResponseMessage</b>	Returns to the caller the specified federation configuration settings that were requested in the <b>GetFederationInformationRequestMessage</b> element.
<b>GetFederationInformationRequest</b>	Represents the parameters of a call to a <b>GetFederationInformation</b> operation.
<b>GetFederationInformationResponse</b>	Represents the response to a <b>GetFederationInformation</b> operation.

### 3.1.4.2.2.1 tns:GetFederationInformationRequestMessage Element

The **GetFederationInformationRequestMessage** element specifies a call to the server to request configuration data for the **STS**. The **GetFederationInformationResponseMessage** element (section [3.1.4.2.2.2](#)) contains the federation settings requested in this call.

```
<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>
```

The following table lists the child elements of the **GetFederationInformationRequestMessage** element.

Element name	Type	Description
<b>Request</b>	<b>tns:GetFederationInformationRequest</b> (section <a href="#">3.1.4.2.3.1</a> )	Specifies the <b>GetFederationInformation</b> operation request.

### 3.1.4.2.2.2 tns:GetFederationInformationResponseMessage Element

The **GetFederationInformationResponseMessage** element returns to the caller the specified federation configuration settings that were requested in the **GetFederationInformationRequestMessage** element.

The **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>
```

The following table lists the child elements of the **GetFederationInformationResponseMessage** element.

Element name	Type	Description
<b>Response</b>	<b>tns:GetFederationInformationResponse</b> (section <a href="#">3.1.4.2.3.2</a> )	Specifies the response to a <b>GetFederationInformation</b> operation request.

### 3.1.4.2.2.3 tns:GetFederationInformationRequest Element

The **GetFederationInformationRequest** element represents the parameters of a call to a **GetFederationInformation** operation.

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

### 3.1.4.2.2.4 tns:GetFederationInformationResponse Element

The **GetFederationInformationResponse** element represents the response to a **GetFederationInformation** operation. The response contains the federation settings.

```
<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 name	Description
<b>GetFederationInformationRequest</b>	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.
<b>GetFederationInformationResponse</b>	Returns to the caller the federation information that was requested in the <b>GetFederationInformationRequest</b> complex type.
<b>TokenIssuer</b>	Specifies the <b>URI</b> and <b>endpoint (2)</b> for the <b>STS</b> .
<b>TokenIssuers</b>	Represents a collection of <b>TokenIssuer</b> complex types 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. The **GetFederationInformationRequest** complex type extends the **AutodiscoverRequest** complex type, as specified in section [3.1.4.4.3.2](#).

```
<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>

```

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

Element name	Type	Description
<b>Domain</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies 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, as specified in section [3.1.4.2.3.1](#). The **GetFederationInformationResponse** complex type extends the **AutodiscoverResponse** complex type, as specified in section [3.1.4.4.3.6](#).

```

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

```

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

Element name	Type	Description
<b>ApplicationUri</b>	<b>xs:anyURI</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the value used by the caller in the AppliesTo/EndpointReference/Address of the Request Security Token message to the <b>STS</b> .
<b>TokenIssuers</b>	<b>tns:TokenIssuers</b> (section <a href="#">3.1.4.2.3.4</a> )	Specifies a collection of <b>TokenIssuer</b> complex types (section <a href="#">3.1.4.2.3.3</a> ) to be used in the autodiscovery.
<b>Domains</b>	<b>tns:Domains</b> (section <a href="#">2.2.4.2</a> )	Specifies the additional returned domains (besides the one specified in the request) that the organization has federated. These are domains that this server uses in the email address 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 (1)** for the **STS**.

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

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

Element name	Type	Description
<b>Uri</b>	<b>xs:anyURI</b> <a href="#">[XMLSCHEMA2]</a>	The URI of the STS that issued the <b>security token</b> .
<b>Endpoint</b>	<b>xs:anyURI</b>	The <b>web service</b> endpoint (2) URI.

### 3.1.4.2.3.4 tns:TokenIssuers Complex Type

The **TokenIssuers** complex type represents a collection of **TokenIssuer** complex types, as specified in 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"
      minOccurs="0"
    />
  </xs:sequence>
</xs:complexType>
```



```

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

```

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

Element name	Type	Description
<b>TokenIssuer</b>	<b>tns:TokenIssuer</b> (section 3.1.4.2.3.3)	The <b>URI</b> and <b>endpoint (2)</b> of the <b>STS</b> that issued the <b>security token</b> .

### 3.1.4.2.4 Simple Types

None.

### 3.1.4.2.5 Attributes

None.

### 3.1.4.2.6 Groups

None.

### 3.1.4.2.7 Attribute Groups

None.

### 3.1.4.3 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 email address claim in the **security token**. The **GetOrganizationRelationshipSetting** operation is for internal use only. This operation is not used by clients. [<17>](#)

The following is the **WSDL port type** specification of the 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>

```

The following is the **WSDL binding** specification of the operation

```

<wsdl:operation name="GetOrganizationRelationshipSettings">

```

```

    <soap:operation
    soapAction="http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetOrganizat
    ionRelationshipSettings" 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>

```

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

### 3.1.4.3.1 Messages

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

Message name	Description
<b>GetOrganizationRelationshipSettingsRequestMessage</b>	Retrieves the organization relationship settings.
<b>GetOrganizationRelationshipSettingsRequestMessage_Headers</b>	Specifies the <b>SOAP header</b> for a <b>GetOrganizationRelationshipSettings</b> operation request.
<b>GetOrganizationRelationshipSettingsResponseMessage</b>	Represents a response to a <b>GetOrganizationRelationshipSettings</b> operation.
<b>GetOrganizationRelationshipSettingsResponseMessage_Headers</b>	Specifies the SOAP header for a <b>GetOrganizationRelationshipSettingsResponse</b> operation response.

#### 3.1.4.3.1.1 tns:GetOrganizationRelationshipSettingsRequestMessage

The **GetOrganizationRelationshipSettingsRequestMessage** **WSDL message** specifies the **SOAP message** that represents a request to get the organization relationship settings. [<18>](#)

```

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

```

The **GetOrganizationRelationshipSettingsRequestMessage** WSDL message is the input message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetOrganizationRelationshipSettings>.

The one part of the **GetOrganizationRelationshipSettingsRequestMessage** message is described in the following table.

Part name	Element/type	Description
parameters	tns:GetOrganizationRelationshipSettingsRequestMessage element (section <a href="#">3.1.4.3.2.1</a> )	Specifies the <b>SOAP body</b> (the parameters) of a call to a <b>GetOrganizationRelationshipSettings</b> operation request.

### 3.1.4.3.1.2 tns:GetOrganizationRelationshipSettingsRequestMessage\_Headers

The **GetOrganizationRelationshipSettingsRequestMessage\_Headers** **WSDL message** specifies the **SOAP header** for the **GetOrganizationRelationshipSettings** operation. [<19>](#)

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

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

Part name	Element/type	Description
RequestedServerVersion	tns:RequestedServerVersion (section <a href="#">3.1.4.4.2.8</a> )	Specifies the server version that the <b>GetOrganizationRelationshipSettings</b> operation request targets.

### 3.1.4.3.1.3 tns:GetOrganizationRelationshipSettingsResponseMessage

The **GetOrganizationRelationshipSettingsResponseMessage** **WSDL message** specifies the **SOAP message** that represents the server response to the **GetOrganizationRelationshipSettings** operation. [<20>](#)

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

The **GetOrganizationRelationshipSettingsResponseMessage** WSDL message is the response message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetOrganizationRelationshipSettingsResponse>.

The one part of the **GetOrganizationRelationshipSettingsResponseMessage** WSDL message is described in the following table.

Part name	Element/type	Description
parameters	tns:GetOrganizationRelationshipSettingsResponseMessage element (section <a href="#">3.1.4.3.2.3</a> ).	Specifies the SOAP body of the response to a <b>GetOrganizationRelationshipSettings</b> operation.

#### 3.1.4.3.1.4 tns:GetOrganizationRelationshipSettingsResponseMessage\_Headers

The **GetOrganizationRelationshipSettingsResponseMessage\_Headers** WSDL message specifies the **SOAP header** for a **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)) response. [<21>](#)

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

The **GetOrganizationRelationshipSettingsResponseMessage\_Headers** WSDL message contains one part, as described in the following table.

Part name	Element/type	Description
ServerVersionInfo	tns:ServerVersionInfo (section <a href="#">2.2.3.1</a> )	Contains the server version that processed the <b>GetOrganizationRelationshipSettings</b> operation 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.

Element name	Description
<b>GetOrganizationRelationshipSettingsRequestMessage</b>	Specifies a call to the server to request the organization relationship settings for the specified user. The <b>GetOrganizationRelationshipSettingsResponseMessage</b> response message contains the organizational settings requested in this call.
<b>GetOrganizationRelationshipSettingsRequest</b>	Represents the parameters of a call to the <b>GetOrganizationRelationshipSettings</b> operation.
<b>GetOrganizationRelationshipSettingsResponseMessage</b>	Returns to the caller the organization relationship settings that were requested in the <b>GetOrganizationRelationshipSettingsRequestMessage</b> element call.
<b>GetOrganizationRelationshipSettingsResponse</b>	Represents the response to the <b>GetOrganizationRelationshipSettings</b> operation request.
<b>OrganizationRelationshipSettingsCollection</b>	Represents a list of organization relationships that match the request.
<b>OrganizationRelationshipSettings</b>	Represents the organizational relationship returned by the <b>GetOrganizationalRelationshipSettings</b> operation request.

#### 3.1.4.3.2.1 tns:GetOrganizationRelationshipSettingsRequestMessage Element

The **GetOrganizationRelationshipSettingsRequestMessage** element specifies a call to the server to request the organization relationship settings for the specified user. [<22>](#) The

**GetOrganizationRelationshipSettingsResponseMessage** element, as specified in section [3.1.4.3.2.3](#), response contains the organizational settings requested in this call.

```
<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>
```

The following table lists the child elements of the **GetOrganizationRelationshipSettingsRequestMessage** element.

Element name	Type	Description
<b>Request</b>	<b>tns:GetOrganizationRelationshipSettingsRequest</b> (section <a href="#">3.1.4.3.3.1</a> )	Specifies the <b>GetOrganizationRelationshipSettings</b> operation request.

### 3.1.4.3.2.2 tns:GetOrganizationRelationshipSettingsRequest Element

The **GetOrganizationRelationshipSettingsRequest** element represents the parameters of a call to the **GetOrganizationRelationshipSettings** operation. [<23>](#)

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

### 3.1.4.3.2.3 tns:GetOrganizationRelationshipSettingsResponseMessage Element

The **GetOrganizationRelationshipSettingsResponseMessage** element returns to the caller the organization relationship settings that were requested in the **GetOrganizationRelationshipSettingsRequestMessage** element, as specified in section [3.1.4.3.2.1](#), call. [<24>](#)

```
<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>
```

The following table lists the child elements of the **GetOrganizationRelationshipSettingsResponseMessage** element.

Element name	Type	Description
<b>Response</b>	<b>tns:GetOrganizationRelationshipSettingsResponse</b> (section <a href="#">3.1.4.3.3.2</a> )	Specifies the response to a <b>GetOrganizationRelationshipSettings</b> operation request.

#### 3.1.4.3.2.4 tns:GetOrganizationRelationshipSettingsResponse Element

The **GetOrganizationRelationshipSettingsResponse** element represents the response to the **GetOrganizationRelationshipSettings** operation (section [3.1.4.3](#)).<25>

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

#### 3.1.4.3.2.5 tns:OrganizationRelationshipSettingsCollection Element

The **OrganizationRelationshipSettingsCollection** element represents a list of organization relationships that match the query.<26>

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

#### 3.1.4.3.2.6 tns:OrganizationRelationshipSettings Element

The **OrganizationRelationshipSettings** element represents the organizational relationship that is returned by the **GetOrganizationalRelationShipSettings** operation request.

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

### 3.1.4.3.3 Complex Types

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

Complex type name	Description
<b>GetOrganizationRelationshipSettingsRequest</b>	Retrieves the specified settings for the organization relationship and contains the parameters of a call to the <b>GetOrganizationRelationshipSettings</b> operation (section <a href="#">3.1.4.3</a> ).
<b>GetOrganizationRelationshipSettingsResponse</b>	Contains a response to a call to a

Complex type name	Description
	<b>GetOrganizationRelationshipSettings</b> operation (section 3.1.4.3).
<b>OrganizationRelationshipSettingsCollection</b>	Represents a list of organization relationships that match the query.
<b>OrganizationRelationshipSettings</b>	Represents a list of organization relationships for the specified organization and <b>SMTP</b> 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. The **GetOrganizationRelationshipSettingsRequest** complex type returns a **GetOrganizationRelationshipSettingsResponse** complex type, as specified in section [3.1.4.3.3.2](#), object that contains the requested domain settings. [<27>](#) The **GetOrganizationRelationshipSettingsRequest** complex type extends the **AutodiscoverRequest** complex type, as specified in section [3.1.4.4.3.2](#).

```
<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>
```

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

Element name	Type	Description
<b>Domains</b>	<b>tns:Domains</b> (section <a href="#">2.2.4.2</a> )	Specifies 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. [<28>](#) The **GetOrganizationRelationshipSettingsResponse** complex type extends the **AutodiscoverResponse** complex type, as specified in section [3.1.4.4.3.6](#).

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

```

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

```

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

Element name	Type	Description
<b>OrganizationRelationshipSettingsCollection</b>	<b>tns:OrganizationRelationshipSettingsCollection</b> (section <a href="#">3.1.4.3.3.3</a> )	Specifies 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. [<29>](#)

```

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

```

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

Element name	Type	Description
<b>OrganizationRelationshipSettings</b>	<b>tns:OrganizationRelationshipSettings</b> (section <a href="#">3.1.4.3.3.4</a> )	Represents 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. <30>

```
<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>
```

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

Element name	Type	Description
<b>DeliveryReportEnabled</b>	<b>xs:boolean</b> <a href="#">[XMLSCHEMA2]</a>	Specifies whether <b>delivery receipt</b> is enabled.
<b>DomainNames</b>	<b>tns:Domains</b> (section <a href="#">2.2.4.2</a> )	Specifies the domain names collection.
<b>FreeBusyAccessEnabled</b>	<b>xs:boolean</b>	Specifies whether <b>free/busy status</b> is shared.

Element name	Type	Description
<b>FreeBusyAccessLevel</b>	<b>xs:string</b> [XMLSCHEMA2]	Specifies the free/busy status level that can be shared out of the organization. MUST be one of the following values, "None": No calendar sharing with free/busy status. "AvailabilityOnly": Calendar sharing with free/busy status. "LimitedDetails": Calendar sharing with free/busy status plus subject and location.
<b>MailTipsAccessEnabled</b>	<b>xs:boolean</b>	Specifies whether <b>mail tips</b> is shared.
<b>MailTipsAccessLevel</b>	<b>xs:string</b>	Specifies the mail tips access level that can be shared out of the organization. MUST be one of the following values, "None": No mail tips access. "Limited": Limited mail tips access. "All": All mail tips.
<b>MailboxMoveEnabled</b>	<b>xs:boolean</b>	Specifies whether <b>mailbox</b> move is enabled.
<b>Name</b>	<b>xs:string</b>	Specifies the name of the organization relationship.
<b>TargetApplicationUri</b>	<b>xs:anyURI</b> [XMLSCHEMA2]	Specifies the target application <b>URI</b> .
<b>TargetAutodiscoverEpr</b>	<b>xs:anyURI</b>	Specifies the endpoint reference to this protocol in the partner organization.
<b>TargetSharingEpr</b>	<b>xs:anyURI</b>	Specifies the endpoint reference to the partner organization.

### 3.1.4.3.4 Simple Types

None.

### 3.1.4.3.5 Attributes

None.

### 3.1.4.3.6 Groups

None.

### 3.1.4.3.7 Attribute Groups

None.

### 3.1.4.4 GetUserSettings

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

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

```
<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>

```

The following is the **WSDL** binding specification of the operation

```

<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>

```

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

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** operation.

Message name	Description
<b>GetUserSettingsRequestMessage</b>	Retrieves the specified settings for a particular user.
<b>GetUserSettingsRequestMessage_Headers</b>	Specifies the <b>SOAP header</b> for a <b>GetUserSettings</b> operation request.
<b>GetUserSettingsResponseMessage</b>	Represents the response to a <b>GetUserSettings</b> operation call for a specified user.
<b>GetUserSettingsResponseMessage_Headers</b>	Specifies the <b>SOAP header</b> for a <b>GetUserSettings</b> operation response.

#### 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 is the input message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetUserSettings>.

The one part of the **GetUserSettingsRequestMessage** message is described in the following table.

Part name	Element/type	Description
parameters	<b>tns:GetUserSettingsRequestMessage</b> element (section <a href="#">3.1.4.4.2.1</a> )	Specifies the <b>SOAP body</b> (the parameters) of a call to a <b>GetUserSettings</b> operation request.

### 3.1.4.4.1.2 tns:GetUserSettingsRequestMessage\_Headers

The **GetUserSettingsRequestMessage\_Headers** WSDL message specifies the **SOAP header** for a **GetUserSettings** operation.

```
<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	<b>tns:RequestedServerVersion</b> element (section <a href="#">3.1.4.4.2.8</a> )	Specifies the server version that the <b>GetUserSettings</b> operation request targets.

### 3.1.4.4.1.3 tns:GetUserSettingsResponseMessage

The **GetUserSettingsResponseMessage** WSDL message specifies the **SOAP message** that represents the server response to a **GetUserSettings** operation for a specified user.

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

The **GetUserSettingsResponseMessage** WSDL message is the response message for the **SOAP action** <http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/GetUserSettingsResponse>.

The one part of the **GetUserSettingsResponseMessage** WSDL message is described in the following table.

Part name	Element/type	Description
parameters	<b>tns:GetUserSettingsResponseMessage</b> element (section <a href="#">3.1.4.4.2.2</a> )	Specifies the response to a <b>GetUserSettings</b> operation.

#### 3.1.4.4.1.4 tns:GetUserSettingsResponseMessage\_Headers

The **GetUserSettingsResponseMessage\_Headers** WSDL message specifies the **SOAP header** for a **GetUserSettings** operation response.

```
<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
<b>ServerVersionInfo</b>	<b>tns:ServerVersionInfo</b> (section <a href="#">2.2.3.1</a> )	Contains the server version that processed the <b>GetUserSettings</b> operation 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.

Element name	Description
<b>GetUserSettingsRequestMessage</b>	Specifies a call to the server, specifying the configuration settings to be returned along with the <b>email address</b> of the user whose settings are to be retrieved.
<b>GetUserSettingsResponseMessage</b>	Returns to the caller the user's configuration settings that were requested in the <b>GetUserSettingsRequestMessage</b> element call.
<b>GetUserSettingsRequest</b>	Represents the parameters of a call to a <b>GetUserSettings</b> operation.
<b>GetUserSettingsResponse</b>	Represents the response to a <b>GetUserSettings</b> operation for a specified user.
<b>AutodiscoverRequest</b>	Represents the base element of all Autodiscover requests.
<b>Users</b>	Represents a list of <b>User</b> elements.
<b>User</b>	Represents the user.
<b>RequestedServerVersion</b>	Specifies the server version that an Autodiscover operation targets.
<b>AutodiscoverResponse</b>	Represents the base class for all responses returned by the Autodiscover service.
<b>ErrorCode</b>	Defines the error codes that can be returned by the Autodiscover service.
<b>ArrayOfUserResponse</b>	Contains an array of <b>UserResponse</b> elements.
<b>UserResponse</b>	Contains the requested settings for the specified user.
<b>UserSettingErrors</b>	Contains error information for settings that could not be returned.

Element name	Description
<b>UserSettingError</b>	Represents an error that occurred while retrieving a user setting in response to a <b>GetUserSettings</b> operation request.
<b>UserSettings</b>	Represents the base class for all user settings returned by the <b>GetUserSettings</b> operation request.
<b>UserSetting</b>	Represents the base class for all user settings returned by the <b>GetUserSettings</b> operation.
<b>WebClientUrls</b>	Represents the internal and external <b>URLs</b> of a web client.
<b>WebClientUrl</b>	Represents a URL of a web client.
<b>ProtocolConnections</b>	Represents a collection of protocol connections.
<b>ProtocolConnection</b>	Represents the email protocol connection settings for <b>POP3</b> , <b>IMAP4</b> , and <b>SMTP</b> .
<b>AlternateMailboxes</b>	Represents a collection of alternate <b>mailboxes</b> .
<b>AlternateMailbox</b>	Represents an alternate mailbox, such as an archived mailbox which is a secondary mailbox that is associated with a user and is used to manage email storage limits.
<b>ArrayOfFileExtension</b>	Represents a list of valid file extensions for a document sharing location. <a href="#">&lt;31&gt;</a>
<b>DocumentSharingLocation</b>	Represents a document sharing location and provides metadata for the location. <a href="#">&lt;32&gt;</a>
<b>DocumentSharingLocationCollectionSetting</b>	Represents a collection of document sharing location settings. <a href="#">&lt;33&gt;</a>
<b>DocumentSharingLocations</b>	Represents a list of document sharing locations. <a href="#">&lt;34&gt;</a>

### 3.1.4.4.2.1 tns:GetUserSettingsRequestMessage Element

The **GetUserSettingsRequestMessage** element prepares a call to the server, specifying the configuration settings to be returned along with the **email address** of the user whose settings are to be retrieved. The **GetUserSettingsResponseMessage** element, as specified in section [3.1.4.4.2.2](#), response contains the settings 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>
```

The following table lists the child elements of the **GetUserSettingsRequestMessage** element.

Element name	Type	Description
<b>Request</b>	<b>tns:GetUserSettingsRequest</b> (section <a href="#">3.1.4.4.3.1</a> )	Specifies the <b>GetUserSettings</b> operation request.

### 3.1.4.4.2.2 tns:GetUserSettingsResponseMessage Element

The **GetUserSettingsResponseMessage** element returns to the caller the user's configuration settings that were requested in the **GetUserSettingsRequestMessage** element, as specified in section [3.1.4.4.2.1](#).

The name/value pair for each returned user setting is included in the response. The **GetUserSettings** operation, as specified in 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>
```

The following table lists the child elements of the **GetUserSettingsResponseMessage** element.

Element name	Type	Description
<b>Response</b>	<b>tns:GetUserSettingsResponse</b> (section <a href="#">3.1.4.4.3.5</a> )	Specifies the response to a <b>GetUserSettings</b> operation request.

### 3.1.4.4.2.3 tns:GetUserSettingsRequest Element

The **GetUserSettingsRequest** element represents the parameters of a call to a **GetUserSettings** operation.

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

### 3.1.4.4.2.4 tns:GetUserSettingsResponse Element

The **GetUserSettingsResponse** element represents the response to the **GetUserSettings** operation for a specified user.

```
<xs:element name="GetUserSettingsResponse"
```

```
    type="tns:GetUserSettingsResponse"
    nillable="true"
  />
```

#### 3.1.4.4.2.5 tns: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 tns:Users Element

The **Users** element represents a list of **User** elements, as specified in section [3.1.4.4.2.7](#), each of which includes an **email address**.

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

#### 3.1.4.4.2.7 tns:User Element

The **User** element represents the user.

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

#### 3.1.4.4.2.8 tns: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>
```

#### 3.1.4.4.2.9 tns:AutodiscoverResponse Element

The **AutodiscoverResponse** element represents the base class for all responses returned by the Autodiscover service. The **AutodiscoverResponse** element includes the **ErrorCode** simple type, as specified in section [3.1.4.4.4.2](#), and the **ErrorMessage** element.



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

#### 3.1.4.4.2.10 tns: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"
/>
```

#### 3.1.4.4.2.11 tns:ArrayOfUserResponse Element

The **ArrayOfUserResponse** element contains an array of **UserResponse** elements, as specified in section [3.1.4.4.2.12](#), each of which contains the requested settings for a specified user.

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

#### 3.1.4.4.2.12 tns:UserResponse Element

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

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

#### 3.1.4.4.2.13 tns:UserSettingErrors Element

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

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

#### 3.1.4.4.2.14 tns:UserSettingError Element

The **UserSettingError** element represents an error that occurred while retrieving a user setting in response to a **GetUserSettings** operation request.

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

#### 3.1.4.4.2.15 tns:UserSettings Element

The **UserSettings** element represents a collection of **UserSetting** elements, as specified in section [3.1.4.4.2.16](#), that are returned by the **GetUserSettings** operation request.

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

#### 3.1.4.4.2.16 tns:UserSetting Element

The **UserSetting** element represents the user setting that is returned by the **GetUserSettings** operation.

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

#### 3.1.4.4.2.17 tns:WebClientUrls Element

The **WebClientUrls** element represents the internal and external **URLs** of a web client.

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

#### 3.1.4.4.2.18 tns:WebClientUri Element

The **WebClientUri** element represents a **URL** of a web client.

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

#### 3.1.4.4.2.19 tns:ProtocolConnections Element

The **ProtocolConnections** element represents the collection of protocol connections.

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

#### 3.1.4.4.2.20 tns:ProtocolConnection Element

The **ProtocolConnection** element represents the email protocol connection settings for **POP3**, **IMAP4**, and **SMTP**.

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

#### 3.1.4.4.2.21 tns:AlternateMailboxes Element

The **AlternateMailboxes** element represents a collection of alternate **mailboxes**.

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

#### 3.1.4.4.2.22 tns: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 **POP3/IMAP4** account, a webmail account, or an archived account.

#### 3.1.4.4.2.23 tns:ArrayOfFileExtension Element

The **ArrayOfFileExtension** element represents a list of file extensions that are valid in a document sharing location. [<35>](#)

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

#### 3.1.4.4.2.24 tns:DocumentSharingLocation Element

The **DocumentSharingLocation** element represents a document sharing location and provides configuration information for the location. [<36>](#)

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

#### 3.1.4.4.2.25 tns:DocumentSharingLocationCollectionSetting Element

The **DocumentSharingLocationCollectionSetting** element represents a user setting, the value for which is a collection of sharing locations for documents. [<37>](#)

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

### 3.1.4.4.2.26 tns:DocumentSharingLocations Element

The **DocumentSharingLocations** element represents a list of sharing locations. [<38>](#)

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

### 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 name	Description
<b>GetUserSettingsRequest</b>	Specifies a request message for the <b>GetUserSettings</b> operation. Retrieves the specified settings for one or more users.
<b>AutodiscoverRequest</b>	Represents the base class for all requests made to the Autodiscover service.
<b>Users</b>	Represents a collection of <b>User</b> elements denoting users whose settings are to be retrieved.
<b>User</b>	Represents a user whose settings are to be retrieved. The user is identified by <b>SMTP</b> address or legacy <b>DN</b> .
<b>GetUserSettingsResponse</b>	Represents a response that contains an array of user responses.
<b>AutodiscoverResponse</b>	Represents the base class for all responses returned by the Autodiscover service.
<b>UserResponse</b>	Represents a response to a <b>GetUserSettings</b> operation for a specified user. The server returns only the configuration settings requested by the client.
<b>UserSettingErrors</b>	Represents a collection of <b>UserSettingError</b> elements that contains error information for settings that could not be returned.
<b>ArrayOfUserResponse</b>	Represents an array of <b>UserResponse</b> elements that contains the responses for each specified user.
<b>UserSettingError</b>	Represents a user setting error that resulted from a <b>GetUserSettings</b> operation request.
<b>UserSettings</b>	Represents a collection of <b>UserSetting</b> elements (section <a href="#">3.1.4.4.2.16</a> ) all user settings that are returned by the <b>GetUserSettings</b> operation.
<b>UserSetting</b>	Represents the user settings to be returned by the <b>GetUserSettings</b> operation.

Complex type name	Description
<b>StringSetting</b>	Represents a user setting value.
<b>WebClientUrlCollectionSetting</b>	Represents a collection of <b>WebClientUrls</b> elements.
<b>WebClientUrls</b>	Represents a collection of <b>WebClientUrl</b> elements that denote the server's web clients.
<b>WebClientUrl</b>	Represents the <b>URL</b> of the server's web client.
<b>ProtocolConnectionCollectionSetting</b>	Represents a collection of <b>ProtocolConnection</b> elements.
<b>ProtocolConnections</b>	Represents a collection of <b>ProtocolConnection</b> elements that denote the internal and external protocol connections for the server's web client.
<b>ProtocolConnection</b>	Represents the email protocol connection settings for <b>POP3</b> , <b>IMAP4</b> , and SMTP protocols.
<b>AlternateMailboxCollectionSetting</b>	Represents a collection of <b>AlternateMailboxes</b> elements.
<b>AlternateMailboxes</b>	Represents a collection of <b>AlternateMailbox</b> elements.
<b>AlternateMailbox</b>	Represents an alternate <b>mailbox</b> .
<b>ArrayOfFileExtension</b>	Represents a list of valid file extensions for a document sharing location. <a href="#">&lt;39&gt;</a>
<b>DocumentSharingLocation</b>	Represents a document sharing location and provides metadata for the location. <a href="#">&lt;40&gt;</a>
<b>DocumentSharingLocationCollectionSetting</b>	Represents a collection of document sharing location settings. <a href="#">&lt;41&gt;</a>
<b>DocumentSharingLocations</b>	Represents a list of document sharing locations. <a href="#">&lt;42&gt;</a>

### 3.1.4.4.3.1 tns:GetUserSettingsRequest Complex Type

The **GetUserSettingsRequest** complex type retrieves the specified settings for one or more users. This complex type contains the **email addresses** for the specified users, and for each such user it returns a **UserResponse** complex type, as specified in section [3.1.4.4.3.7](#), object that contains the requested settings. The **GetUserSettingsRequest** complex type extends the **AutodiscoverRequest** complex type, as specified in section [3.1.4.4.3.2](#).

```

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

```

```

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

```

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

Element name	Type	Description
<b>Users</b>	<b>tns:Users</b> (section <a href="#">3.1.4.4.3.3</a> )	Specifies the email addresses of the users whose settings are to be retrieved.
<b>RequestedSettings</b>	<b>tns:RequestedSettings</b> (section <a href="#">2.2.4.3</a> )	Specifies the configuration settings being requested.
<b>RequestedVersion</b>	<b>tns:ExchangeVersion</b> (section <a href="#">3.1.4.4.4.1</a> )	Specifies 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 **GetDomainSettingsRequest** complex type, as specified in section [3.1.4.1.3.1](#), **GetUserSettingsRequest** complex type, as specified in section [3.1.4.4.3.1](#), **GetOrganizationRelationshipSettingsRequest** complex type, as specified in section [3.1.4.3.3.1](#), and **GetFederationInformationRequest** complex type, as specified in section [3.1.4.2.3.1](#), 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, as specified in section [3.1.4.4.2.7](#), that denote 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>

```

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

Element name	Type	Description
<b>User</b>	<b>tns:User</b> (section <a href="#">3.1.4.4.3.4</a> )	Specifies 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>
```

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

Element name	Type	Description
<b>Mailbox</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the <b>email address</b> of the user whose settings are to be retrieved.

The **GetUserSettings** operation uses the specified user's email address to discover that user's **mailbox**. The **User** element **MUST** be present.

#### 3.1.4.4.3.5 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, as specified in section [3.1.4.4.3.1](#). The **GetUserSettingsResponse** complex type extends the **AutodiscoverResponse** complex type, as specified in section [3.1.4.4.3.6](#).

The name-value pairs for each returned user setting are included in the response. The **GetUserSettings** operation 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>

```

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

Element name	Type	Description
<b>UserResponses</b>	<b>tns:ArrayOfUserResponse</b> (section <a href="#">3.1.4.4.3.9</a> )	Specifies the response for each user.

### 3.1.4.4.3.6 tns:AutodiscoverResponse Complex Type

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

```

<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>

```

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

Element name	Type	Description
<b>ErrorCode</b>	<b>tns:ErrorCode</b> (section <a href="#">3.1.4.4.4.2</a> )	Specifies the error code that is associated with this response.
<b>ErrorMessage</b>	<b>xs:string</b> [ <a href="#">XMLSCHEMA2</a> ]	Specifies the error message that is associated with this response.

The **GetUserSettingsResponse** complex type, as specified in section [3.1.4.4.3.5](#), **UserResponse** complex type, as specified in section [3.1.4.4.3.7](#), **GetDomainSettingsResponse** complex type, as specified in section [3.1.4.1.3.2](#), **DomainResponse** complex type, as specified in section [3.1.4.1.3.4](#), **GetOrganizationRelationshipSettingsResponse** complex type, as specified in section [3.1.4.3.3.2](#), and **GetFederationInformationResponse** complex type, as specified in section [3.1.4.2.3.2](#) extend the **AutodiscoverResponse** complex type.



### 3.1.4.4.3.7 tns:UserResponse Complex Type

The **UserResponse** complex type represents a response to a **GetUserSettings** operation for a specified user. The server returns only the configuration settings requested by the client. The **UserResponse** complex type extends the **AutodiscoverResponse** complex type, as specified in section [3.1.4.4.3.6](#).

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

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

Element name	Type	Description
<b>RedirectTarget</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the target of the redirection <b>URL</b> or <b>email address</b> .
<b>UserSettingErrors</b>	<b>tns:UserSettingErrors</b> (section <a href="#">3.1.4.4.3.8</a> )	Specifies the error information for settings that could not be returned.
<b>UserSettings</b>	<b>tns:UserSettings</b> (section <a href="#">3.1.4.4.3.11</a> )	Specifies the requested settings for the user.

### 3.1.4.4.3.8 tns:UserSettingErrors Complex Type

The **UserSettingErrors** complex type represents a collection of **UserSettingError** elements, as specified in section [3.1.4.4.2.16](#), that contains error information for settings that could not be returned.

```
<xs:complexType name="UserSettingErrors">
  <xs:sequence>
    <xs:element name="UserSettingError"
      type="tns:UserSettingError"
    />
  </xs:sequence>
</xs:complexType>
```

```

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

```

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

Element name	Type	Description
<b>UserSettingError</b>	<b>tns:UserSettingError</b> (section <a href="#">3.1.4.4.3.10</a> )	Specifies an error from a <b>GetUserSettings</b> operation request.

### 3.1.4.4.3.9 tns:ArrayOfUserResponse Complex Type

The **ArrayOfUserResponse** complex type represents an array of **UserResponse** elements, as specified in section [3.1.4.4.2.12](#), 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>

```

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

Element name	Type	Description
<b>UserResponse</b>	<b>tns:UserResponse</b> (section <a href="#">3.1.4.4.3.7</a> )	Specifies a response from a <b>GetUserSettings</b> operation for a specified user.

### 3.1.4.4.3.10 tns:UserSettingError Complex Type

The **UserSettingError** complex type represents an error that occurred while retrieving a user setting in response to a **GetUserSettings** operation 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>

```

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

Element name	Type	Description
<b>ErrorCode</b>	<b>tns:ErrorCode</b> (section <a href="#">3.1.4.4.4.2</a> )	Specifies the error code that is associated with the specified request.
<b>ErrorMessage</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the error message that is associated with the specified request.
<b>SettingName</b>	<b>xs:string</b>	Specifies the name of the specified setting.

### 3.1.4.4.3.11 tns:UserSettings Complex Type

The **UserSettings** complex type represents a collection of **UserSetting** elements, as specified in section [3.1.4.4.2.16](#), for all user settings returned by the **GetUserSettings** operation.

```

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

```

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

Element name	Type	Description
<b>UserSetting</b>	<b>tns:UserSetting</b> (section <a href="#">3.1.4.4.3.12</a> )	Specifies the user settings that are returned by the <b>GetUserSettings</b> operation.

### 3.1.4.4.3.12 tns:UserSetting Complex Type

The **UserSetting** complex type represents the user settings to be returned by the **GetUserSettings** operation.

```

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

```

```

        nillable="true"
      />
    </xs:sequence>
  </xs:complexType>

```

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

Element name	Type	Description
<b>Name</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the name of the specified setting.

The **ProtocolConnectionCollectionSetting** complex type, as specified in section [3.1.4.4.3.17](#), **StringSetting** complex type, as specified in section [3.1.4.4.3.13](#), **WebClientUrlCollectionSetting** complex type, as specified in section [3.1.4.4.3.14](#), **AlternateMailboxCollectionSetting** complex type, as specified in section [3.1.4.4.3.20](#), and **DocumentSharingLocationCollectionSetting** complex type, as specified in section [3.1.4.4.3.25](#), extend the **UserSetting** complex type.

### 3.1.4.4.3.13 tns:StringSetting Complex Type

The **StringSetting** complex type represents a user setting value. The **StringSetting** complex type extends the **UserSetting** complex type, as specified in section [3.1.4.4.3.4](#).

```

<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>

```

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

Element name	Type	Description
<b>Value</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the value of the specified setting.

### 3.1.4.4.3.14 tns:WebClientUrlCollectionSetting Complex Type

The **WebClientUrlCollectionSetting** complex type represents a collection of **WebClientUrls** elements, as specified in section [3.1.4.4.2.17](#). The **WebClientUrlCollectionSetting** complex type extends the **UserSetting** complex type, as specified in section [3.1.4.4.3.12](#).

```

<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>

```

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

Element name	Type	Description
<b>WebClientUrls</b>	<b>tns:WebClientUrls</b> (section <a href="#">3.1.4.4.3.15</a> )	Specifies the web client <b>URLs</b> .

### 3.1.4.4.3.15 tns:WebClientUrls Complex Type

The **WebClientUrls** complex type represents a collection of **WebClientUrl** elements, as specified in section [3.1.4.4.2.18](#), 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>

```

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

Element name	Type	Description
<b>WebClientUrl</b>	<b>tns:WebClientUrl</b> (section <a href="#">3.1.4.4.3.16</a> )	Specifies the URL of the server's web client.

### 3.1.4.4.3.16 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"
    />
  </xs:sequence>
</xs:complexType>

```

```

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

```

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

Element name	Type	Description
<b>AuthenticationMethods</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the authentication methods.
<b>Url</b>	<b>xs:string</b>	Specifies the URL of the server's web client.

The **WebClientUrl** can be used to retrieve data from a **web service**.

### 3.1.4.4.3.17 tns:ProtocolConnectionCollectionSetting Complex Type

The **ProtocolConnectionCollectionSetting** complex type represents a collection of **ProtocolConnection** elements, as specified in section [3.1.4.4.2.20](#). The **ProtocolConnectionCollectionSetting** complex type extends the **UserSetting** complex type, as specified in section [3.1.4.4.3.4](#).

```

<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>

```

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

Element name	Type	Description
<b>ProtocolConnections</b>	<b>tns:ProtocolConnections</b> (section <a href="#">3.1.4.4.3.18</a> )	Specifies the protocol connections.

### 3.1.4.4.3.18 tns:ProtocolConnections Complex Type

The **ProtocolConnections** complex type represents a collection of **ProtocolConnection** elements, as specified in section [3.1.4.4.2.20](#), 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>
```

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

Element name	Type	Description
<b>ProtocolConnection</b>	<b>tns:ProtocolConnection</b> (section <a href="#">3.1.4.4.3.19</a> )	Specifies the protocol connection of the server's web client.

### 3.1.4.4.3.19 tns:ProtocolConnection Complex Type

The **ProtocolConnection** complex type represents the email protocol connection settings for **POP3**, **IMAP4**, and **SMTP**.

```
<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>
```

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

Element name	Type	Description
<b>Hostname</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the host name portion of the computer's full name.
<b>Port</b>	<b>xs:int</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the port number to be used for the specified protocol.
<b>EncryptionMethod</b>	<b>xs:string</b>	Specifies the cryptographic method to be used for the specified protocol.

### 3.1.4.4.3.20 tns:AlternateMailboxCollectionSetting Complex Type

The **AlternateMailboxCollectionSetting** complex type represents a collection of **AlternateMailboxes** elements, as specified in section [3.1.4.4.2.21](#). The **AlternateMailboxCollectionSetting** complex type extends the **UserSetting** complex type, as specified in section [3.1.4.4.3.12](#).

```
<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>
```

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

Element name	Type	Description
<b>AlternateMailboxes</b>	<b>tns:AlternateMailboxes</b> (section <a href="#">3.1.4.4.3.21</a> )	Represents a collection of alternate mailboxes.

### 3.1.4.4.3.21 tns:AlternateMailboxes Complex Type

The **AlternateMailboxes** complex type represents a collection of **AlternateMailbox** elements, as specified in section [3.1.4.4.2.22](#).

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

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

Element name	Type	Description
<b>AlternateMailbox</b>	<b>tns:AlternateMailbox</b> (section <a href="#">3.1.4.4.3.22</a> )	Specifies an alternate <b>mailbox</b> .



### 3.1.4.4.3.22 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:element name="SmtpAddress"
      type="xs:string"
      nillable="true"
    />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
<b>Type</b>	<b>xs:string</b> <a href="#">[XMLSCHEMA2]</a>	Specifies the alternate mailbox type.
<b>DisplayName</b>	<b>xs:string</b>	Specifies the alternate mailbox <b>display name</b> .
<b>LegacyDN</b>	<b>xs:string</b>	Specifies the alternate mailbox legacy <b>DN</b> .
<b>Server</b>	<b>xs:string</b>	Specifies the alternate mailbox server.
<b>SmtpAddress</b>	<b>xs:string</b>	Specifies the alternate mailbox <b>SMTP</b> address.

An alternate mailbox corresponds to a user's external mailbox, such as a personal **POP3/IMAP4** account, a webmail account, or an archived account.

### 3.1.4.4.3.23 tns:ArrayOfFileExtension Complex Type

The **ArrayOfFileExtension** complex type represents a list of file extensions for a document sharing location. [<43>](#)

```
<xs:complexType name="ArrayOfFileExtension">
  <xs:sequence>
    <xs:element name="FileExtension"
      minOccurs="1" maxOccurs="unbounded"
      type="xs:string"
    />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
<b>FileExtension</b>	<b>xs:string</b> [XMLSCHEMA2]	Specifies the file extension.

### 3.1.4.4.3.24 tns:DocumentSharingLocation Complex Type

The **DocumentSharingLocation** complex type specifies location and metadata information for a document sharing location. <44>

```
<xs:complexType name="DocumentSharingLocation">
  <xs:sequence>
    <xs:element name="ServiceUrl" type="xs:string" />
    <xs:element name="LocationUrl" type="xs:string" />
    <xs:element name="DisplayName" type="xs:string" />
    <xs:element name="SupportedFileExtensions" type="tns:ArrayOfFileExtension" />
    <xs:element name="ExternalAccessAllowed" type="xs:boolean" />
    <xs:element name="AnonymousAccessAllowed" type="xs:boolean" />
    <xs:element name="CanModifyPermissions" type="xs:boolean" />
    <xs:element name="IsDefault" type="xs:boolean" />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
<b>ServiceUrl</b>	<b>xs:string</b> [XMLSCHEMA2]	Specifies the <b>URL</b> of the document sharing <b>web service</b> .
<b>LocationUrl</b>	<b>xs:string</b>	Specifies the URL of the document sharing location.
<b>DisplayName</b>	<b>xs:string</b>	Specifies the name of the document sharing location to use in the user interface.
<b>SupportedFileExtensions</b>	<b>tns:ArrayOfFileExtension</b> (section 3.1.4.4.3.23)	Specifies the file extensions that can be stored in the document sharing location.
<b>ExternalAccessAllowed</b>	<b>xs:boolean</b> [XMLSCHEMA2]	Specifies whether the document sharing location is available to outside connections.
<b>AnonymousAccessAllowed</b>	<b>xs:boolean</b>	Specifies whether access to the sharing location requires an authenticated user.
<b>CanModifyPermissions</b>	<b>xs:boolean</b>	Specifies whether the user can modify access permissions to the document sharing location.
<b>IsDefault</b>	<b>xs:boolean</b>	Specifies whether the document sharing location is the user's default sharing location.

### 3.1.4.4.3.25 tns:DocumentSharingLocationCollectionSetting Complex Type

The **DocumentSharingLocationCollectionSetting** complex type represents a collection of **DocumentSharingLocations** elements, as specified in section [3.1.4.4.2.26](#). The **DocumentSharingLocationCollectionSetting** complex type extends the **UserSetting** complex type, as specified in section [3.1.4.4.3.12](#).<45>

```
<xs:complexType name="DocumentSharingLocationCollectionSetting">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:UserSetting">
      <xs:sequence>
        <xs:element name="DocumentSharingLocations"
          type="tns:DocumentSharingLocations"
        />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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

Element name	Type	Description
<b>DocumentSharingLocations</b>	<b>tns:DocumentSharingLocations</b> (section <a href="#">3.1.4.4.3.26</a> )	Specifies the location and metadata for a list of document sharing locations.

### 3.1.4.4.3.26 tns:DocumentSharingLocations Complex Type

The **DocumentSharingLocations** complex type specifies a list of **DocumentSharingLocation** elements, as specified in section [3.1.4.4.2.24](#).<46>

```
<xs:complexType name="DocumentSharingLocations">
  <xs:sequence>
    <xs:element name="DocumentSharingLocation"
      type="tns:DocumentSharingLocation"
      minOccurs="0" maxOccurs="unbounded"
    />
  </xs:sequence>
</xs:complexType>
```

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

Element name	Type	Description
<b>DocumentSharingLocation</b>	<b>tns:DocumentSharingLocation</b> (section <a href="#">3.1.4.4.3.24</a> )	Specifies the location and metadata for a document sharing location.

### 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.

Simple type name	Description
<b>ExchangeVersion</b>	Defines the server versions used with this protocol.

Simple type name	Description
<b>ErrorCode</b>	Specifies the error codes that can be returned by the Autodiscover service.

### 3.1.4.4.1 tns:ExchangeVersion Simple Type

The **ExchangeVersion** simple type 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:enumeration
      value="Exchange2010_SP2"
    />
    <xs:enumeration
      value="Exchange2013"
    />
    <xs:enumeration
      value="Exchange2013 SP1"
    />
    <xs:enumeration
      value="Exchange2016"
    />
  </xs:restriction>
</xs:simpleType>
```

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

Value	Meaning
<b>Exchange2010</b>	Specifies a version of the target <b>web service</b> schema.
<b>Exchange2010_SP1</b>	Specifies a version of the target web service schema. <a href="#">.&lt;47&gt;</a>
<b>Exchange2010_SP2</b>	Specifies a version of the target web service schema. <a href="#">.&lt;48&gt;</a>
<b>Exchange2013</b>	Specifies a version of the target web service schema. <a href="#">.&lt;49&gt;</a>
<b>Exchange2013_SP1</b>	Specifies a version of the target web service schema. <a href="#">.&lt;50&gt;</a>
<b>Exchange2016</b>	Specifies a version of the target web service schema. <a href="#">.&lt;51&gt;</a>

### 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>

```

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

Value	Meaning
<b>NoError</b>	Indicates that there was no error.
<b>RedirectAddress</b>	Indicates that the caller is to follow the <b>email address</b> redirection that was returned by the Autodiscover service.
<b>RedirectUrl</b>	Indicates that the caller is to follow the <b>URL</b> redirection that was returned by the Autodiscover service.
<b>InvalidUser</b>	Indicates that the user name that was passed in the request is invalid.
<b>InvalidRequest</b>	Indicates that the request is invalid.
<b>InvalidSetting</b>	Indicates that the specified setting is invalid.
<b>SettingIsNotAvailable</b>	Indicates that a specified setting is not available.
<b>ServerBusy</b>	Indicates that the server is too busy to process the request.
<b>InvalidDomain</b>	Indicates that the requested domain is not valid.
<b>NotFederated</b>	Indicates that the organization is not federated.
<b>InternalServerError</b>	Indicates that there is an internal server error.

#### **3.1.4.4.5 Attributes**

None.

#### **3.1.4.4.6 Groups**

None.

#### **3.1.4.4.7 Attribute Groups**

None.

#### **3.1.5 Timer Events**

None.

#### **3.1.6 Other Local Events**

None.

Preliminary

## 4 Protocol Examples

The examples in the following subsections show an autodiscovery request and response, using the **GetDomainSettings**, **GetFederationInformation**, and **GetUserSettings** operations, respectively. In the **GetDomainSettings** and **GetUserSettings** examples, only the specified settings are returned to the client.

### 4.1 GetDomainSettings Operation

The two examples in this section show how to construct the request XML and response XML for the **GetDomainSettings** 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/Autodiscover/GetDomainSettings</wsa:Action>
    <wsa:To>https://autodiscover.exchange.microsoft.com/autodiscover/autodiscover.svc</wsa:To>
  </soap:Header>
  <soap:Body>
    <a:GetDomainSettingsRequestMessage xmlns:a="http://schemas.microsoft.com/exchange/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/Autodiscover" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <h:MajorVersion>14</h:MajorVersion>
      <h:MinorVersion>0</h:MinorVersion>
      <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">
```

```

e>
    <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</Valu
e>
            </DomainSetting>
          </DomainSettings>
          <RedirectTarget i:nil="true" />
        </DomainResponse>
      </DomainResponses>
    </Response>
  </GetDomainSettingsResponseMessage>
</s:Body>
</s:Envelope>

```

## 4.2 GetFederationInformation Operation

The two examples in this section show how to construct the request **XML** and response XML for the **GetFederationInformation** operation.

In the request, the caller is requesting domain information for the 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:RequestedServerVersion>Exchange2010</a:RequestedServerVersion>
    <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.byfcxu-
  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
      xmlns:h="http://schemas.microsoft.com/exchange/2010/Autodiscover/Autodiscover/Get
      FederationInformationResponse">
      <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:MajorBuildNumber>639</h:MajorBuildNumber>
        <h:MinorBuildNumber>20</h:MinorBuildNumber>
        <h:Version>Exchange2010</h:Version>
      </h:ServerVersionInfo>
    </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 Operation

The two examples in this section show how to construct the request **XML** and response XML for the **GetUserSettings** 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/Autodiscover/GetUserSettings</wsa:Action>
    <wsa:To>https://autodiscover.exchange.microsoft.com/autodiscover/autodiscover.svc</wsa:To>
  </soap:Header>
  <soap:Body>
    <a:GetUserSettingsRequestMessage xmlns:a="http://schemas.microsoft.com/exchange/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:RequestedSettings>
      </a:Request>
    </a:GetUserSettingsRequestMessage>
  </soap:Body>
</soap:Envelope>

```

```

    <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/Autodiscover" 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/exchange/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 (FYDIBOHF23SPDLT)/cn=Recipients/cn=tadam</Value>
              </UserSetting>
              <UserSetting i:type="StringSetting">
                <Name>UserDeploymentId</Name>
                <Value>649d50b8-a1ce-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>
            </UserSettings>
          </UserResponse>
        </UserResponses>
      </Response>
    </GetUserSettingsResponseMessage>
  </s:Body>
</s:Envelope>

```

```

        <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>

```

Preliminary

## 5 Security

### 5.1 Security Considerations for Implementers

This protocol requires **HTTPS**. 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** operation has to be anonymous. The intent of the **GetFederationInformation** operation is to provide information to other organizations with the **STS** in common and instruct them as to how to request **security 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

For ease of implementation, the full WSDL and schema are provided in this appendix.

```
<?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:msc="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"
        schemalocation="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" />
    </wsdl:output>
  </wsdl:operation>

```

```

    <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>

```



## 7 Appendix B: Full XML Schema

For ease of implementation, the following section provides the full XML schema for this protocol.

This file has to be placed in a common folder in order for the WSDL to validate and operate. Also, any schema files that are included in or imported into the messages.xsd schema have to be placed in the common folder.

```
<?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="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:enumeration value="Exchange2010_SP2" />
      <xs:enumeration value="Exchange2013" />
      <xs:enumeration value="Exchange2013_SP1" />
      <xs:enumeration value="Exchange2016" />
    </xs:restriction>
  </xs:simpleType>

```



```

    </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: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: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: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:sequence>
    </xs:extension>
</xs:complexContent>
</xs:complexType>
<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="AlternateMailboxes" nillable="true" type="tns:AlternateMailboxes" />
<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:element name="SmtpAddress" nillable="true" type="xs:string" />
    </xs:sequence>
</xs:complexType>
<xs:element name="AlternateMailbox" nillable="true" type="tns:AlternateMailbox" />
<xs:complexType name="DocumentSharingLocationCollectionSetting">
    <xs:complexContent mixed="false">
        <xs:extension base="tns:UserSetting">
            <xs:sequence>
                <xs:element name="DocumentSharingLocations" type="tns:DocumentSharingLocations" />
            </xs:sequence>
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:element name="DocumentSharingLocationCollectionSetting"
type="tns:DocumentSharingLocationCollectionSetting" />
<xs:complexType name="DocumentSharingLocations">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="DocumentSharingLocation"
type="tns:DocumentSharingLocation" />
    </xs:sequence>
</xs:complexType>
<xs:element name="DocumentSharingLocations" type="tns:DocumentSharingLocations" />
<xs:complexType name="DocumentSharingLocation">
    <xs:sequence>
        <xs:element name="ServiceUrl" type="xs:string" />
        <xs:element name="LocationUrl" type="xs:string" />
        <xs:element name="DisplayName" type="xs:string" />
        <xs:element name="SupportedFileExtensions" type="tns:ArrayOfFileExtension" />
    </xs:sequence>
</xs:complexType>

```

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        <xs:element name="ExternalAccessAllowed" type="xs:boolean" />
        <xs:element name="AnonymousAccessAllowed" type="xs:boolean" />
        <xs:element name="CanModifyPermissions" type="xs:boolean" />
        <xs:element name="IsDefault" type="xs:boolean" />
    </xs:sequence>
</xs:complexType>
<xs:element name="DocumentSharingLocation" type="tns:DocumentSharingLocation" />
<xs:complexType name="ArrayOfFileExtension">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="unbounded" name="FileExtension" type="xs:string"
    />
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfFileExtension" type="tns:ArrayOfFileExtension" />
<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: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: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: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: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="GetFederationInformationRequestMessage">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="Request" nillable="true"
type="tns:GetFederationInformationRequest" />
      </xs:sequence>
    </xs:complexType>
  </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="TokenIssuers" nillable="true"
type="tns:TokenIssuers" />
          <xs:element minOccurs="0" name="Domains" nillable="true" type="tns:Domains" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="TokenIssuers">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="TokenIssuer" nillable="true"
type="tns:TokenIssuer" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TokenIssuer">
    <xs:sequence>
      <xs:element minOccurs="0" name="Uri" nillable="true" type="xs:anyURI" />
      <xs:element minOccurs="0" name="Endpoint" nillable="true" type="xs:anyURI" />
    </xs:sequence>
  </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>

```

PRE

## 8 Appendix C: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include updates to those products.

- Microsoft Exchange Server 2010
- Microsoft Exchange Server 2013
- Microsoft Exchange Server 2016
- Microsoft Exchange Server 2019 Preview
- Microsoft Lync Server 2013
- Microsoft SharePoint Server 2013
- Microsoft Skype for Business Server 2015
- Microsoft Skype for Business Server 2019 Preview
- Microsoft SharePoint Server 2016

Exceptions, if any, are noted in this section. If an update version, service pack or Knowledge Base (KB) number appears with a product name, the behavior changed in that update. The new behavior also applies to subsequent updates unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

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

<1> [Section 2.2.4.3](#): The initial release version of Exchange 2010 does not include the **InternalEcpRetentionPolicyTagsUrl** enumerated value.

<2> [Section 2.2.4.3](#): The initial release version of Exchange 2010 does not include the **InternalEcpPublishingUrl** enumerated value.

<3> [Section 2.2.4.3](#): The initial release version of Exchange 2010 does not include the **EcpRetentionPolicyTagsUrlFragment** enumerated value.

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Preliminary

## 9 Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as Major, Minor, or None.

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.
- A document revision that captures changes to protocol functionality.

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 **None** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the relevant technical content is identical to the last released version.

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

Section	Description	Revision class
All	Updated supported products throughout document.	Major
<a href="#">8</a> Appendix C: Product Behavior	Updated list of products.	Major

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