[MS-UGS]:

UserGroup Web Service Protocol

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Revision Summary

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6/27/2008	1.0	Major	Revised and edited the technical content
12/12/2008	1.01	Editorial	Revised and edited the technical content
7/13/2009	1.02	Major	Revised and edited the technical content
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Date	Revision History	Revision Class	Comments
			technical content.
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3/16/2015	4.0	Major	Significantly changed the technical content.
2/26/2016	5.0	Major	Significantly changed the technical content.
7/15/2016	5.0	None	No changes to the meaning, language, or formatting of the technical content.
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7/24/2018	6.0	Major	Significantly changed the technical content.
10/1/2018	7.0	Major	Significantly changed the technical content.
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6/18/2019	8.0	None	No changes to the meaning, language, or formatting of the technical content.
4/22/2021	9.0	Major	Significantly changed the technical content.
7/20/2021	10.0	Major	Significantly changed the technical content.

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1 Introduction

The UserGroup Web Service Protocol enables the definition, modification, and retrieval of information about users, groups, and roles.

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:

Active Directory account creation mode: A type of account creation mode that retrieves and uses user accounts in a specific Active Directory Domain Services (AD DS) organizational unit.

Active Directory Domain Services (AD DS): A directory service (DS) implemented by a domain controller (DC). The DS provides a data store for objects that is distributed across multiple DCs. The DCs interoperate as peers to ensure that a local change to an object replicates correctly across DCs. AD DS is a deployment of Active Directory [MS-ADTS].

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

domain group: A container for security and distribution groups. A domain group can also contain other domain groups.

domain user: A user with an account in the domain's user account database.

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

folder: A file system construct. File systems organize a volume's data by providing a hierarchy of objects, which are referred to as folders or directories, that contain files and can also contain other folders.

group: A named collection of users who share similar access permissions or roles.

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].

list: A container within a SharePoint site that stores list items. A list has a customizable schema that is composed of one or more fields.

login name: A string that is used to identify a user or entity to an operating system, directory service, or distributed system. For example, in Windows-integrated authentication, a login name uses the form "DOMAIN\username".

owner: A **security principal** who has the requisite permission to manage a security group.

parent site: The site that is above the current site in the hierarchy of the site collection.

permission: A rule that is associated with an object and that regulates which users can gain access to the object and in what manner. See also rights.

permission level: A set of permissions that can be granted to principals or SharePoint groups on an entity such as a site, list, folder, item, or document.

role: A symbolic name that defines a class of users for a set of components. A role defines which users can call interfaces on a component.

role definition: A named set of permissions for a SharePoint site. See also **permission level**.

role type: A predefined role definition. Typical values include Guest, Reader, and Administrator.

security identifier (SID): An identifier for **security principals** that is used to identify an account or a group. Conceptually, the **SID** is composed of an account authority portion (typically a domain) and a smaller integer representing an identity relative to the account authority, termed the relative identifier (RID). The **SID** format is specified in [MS-DTYP] section 2.4.2; a string representation of **SIDs** is specified in [MS-DTYP] section 2.4.2 and [MS-AZOD] section 1.1.1.2.

security principal: An identity that can be used to regulate access to resources. A security principal can be a user, a computer, or a group that represents a set of users.

site: A group of related pages and data within a SharePoint site collection. The structure and content of a site is based on a site definition. Also referred to as SharePoint site and web site.

site collection: A set of websites that are in the same content database, have the same owner, and share administration settings. A site collection can be identified by a GUID or the **URL** of the top-level site for the site collection. Each site collection contains a top-level site, can contain one or more subsites, and can have a shared navigational structure.

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 fault: A container for error and status information within a SOAP message. See [SOAP1.2-1/2007] section 5.4 for more information.

subsite: A complete website that is stored in a named subdirectory of another website. The parent website can be the top-level site of a site collection or another subsite. Also referred to as subweb.

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 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.

XML element: An XML structure that typically consists of a start tag, an end tag, and the information between those tags. Elements can have attributes and can contain other elements.

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.

XML schema definition (XSD): The World Wide Web Consortium (W3C) standard language that is used in defining XML schemas. Schemas are useful for enforcing structure and constraining the types of data that can be used validly within other XML documents. XML schema definition refers to the fully specified and currently recommended standard for use in authoring **XML schemas**.

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. We will assist you in finding the relevant information.

[MS-DWSS] Microsoft Corporation, "Document Workspace Web Service Protocol".

[MS-WSSFO2] Microsoft Corporation, "Windows SharePoint Services (WSS): File Operations Database Communications Version 2 Protocol".

[MS-WSSFO3] Microsoft Corporation, "Windows SharePoint Services (WSS): File Operations Database Communications Version 3 Protocol".

[MS-WSSFO] Microsoft Corporation, "Windows SharePoint Services (WSS): File Operations Database Communications Protocol".

[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

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, http://www.rfc-editor.org/rfc/rfc2616.txt

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.rfc-editor.org/rfc/rfc2818.txt

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

[SOAP1.2-1/2007] Gudgin, M., Hadley, M., Mendelsohn, N., et al., "SOAP Version 1.2 Part 1: Messaging Framework (Second Edition)", W3C Recommendation, April 2007, http://www.w3.org/TR/2007/REC-soap12-part1-20070427/

[SOAP1.2-2/2007] Gudgin, M., Hadley, M., Mendelsohn, N., et al., "SOAP Version 1.2 Part 2: Adjuncts (Second Edition)", W3C Recommendation, April 2007, http://www.w3.org/TR/2007/REC-soap12-part2-20070427

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

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, http://www.w3.org/TR/2009/REC-xml-names-20091208/

[XMLSCHEMA1/2] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-1-20041028/

[XMLSCHEMA2/2] Biron, P., and Malhotra, A., Eds., "XML Schema Part 2: Datatypes Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/

1.2.2 Informative References

None.

1.3 Overview

This protocol enables the protocol client to define, modify, and retrieve information about users or **groups** and the **role definitions** to which they are assigned in a particular **site** or **site collection**. This protocol provides support for 44 distinct operations, each with its own specific request and response messages. A list of these distinct operations is provided in section 3.1.4.

1.4 Relationship to Other Protocols

This protocol uses SOAP messages for formatting requests and responses, as described in [SOAP1.1], [SOAP1.2-1/2007], and [SOAP1.2-2/2007]. It transmits these messages by using the HTTP protocol, as described in [RFC2616], or the HTTPS protocol, as described in [RFC2818].

The UserGroup Web Service Protocol uses SOAP over HTTP or HTTPS as shown in the following layering diagram:
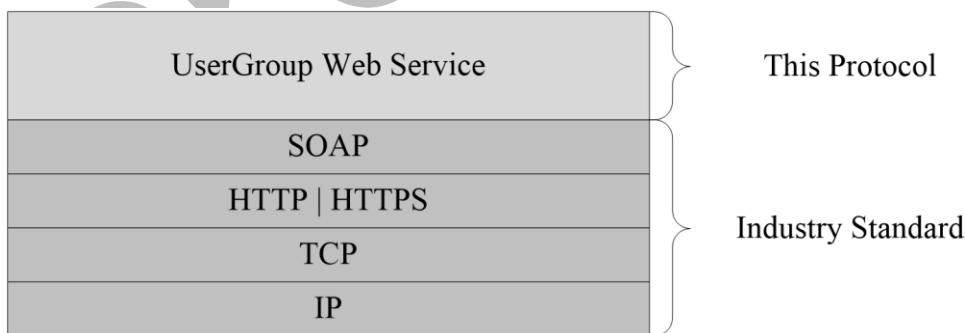
Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a protocol server that is identified by a **Uniform Resource Locator (URL)** that is known by protocol clients. The protocol server endpoint is formed by appending "/_vti_bin/UserGroup.asmx" to the URL of the **site**, for example:
http://www.contoso.com:56737/SharedServices1/_vti_bin/UserGroup.asmx.

This protocol assumes that authentication has been performed by the underlying protocols.

1.6 Applicability Statement

This protocol provides operations for a protocol client to add, remove, update, and retrieve information about the users, **groups**, and **role definitions** that are able to access a **site** or **site collection**. This protocol does not provide any facility for a protocol client to authenticate or to authorize a user to perform any action, nor does it provide any facility for a protocol client to create a site or define the relationship between a site and its **parent site**.

1.7 Versioning and Capability Negotiation

Supported Transports: This protocol uses multiple transports with SOAP as described in section 2.1.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

Protocol servers MUST support **SOAP** over **HTTP**, as specified in [RFC2616]. Protocol servers SHOULD additionally support SOAP over **HTTPS**, as specified in [RFC2818], for securing communication with clients.

Protocol messages MUST be formatted as specified either in [SOAP1.1], section 4, or in [SOAP1.2-1/2007], section 5. Protocol server faults MUST be returned either using HTTP Status Codes as specified in [RFC2616], section 10, or using **SOAP faults** as specified either in [SOAP1.1], section 4.4, or in [SOAP1.2-1/2007], section 5.4.

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 specified in [XMLSCHEMA1/2] and [XMLSCHEMA2/2], and **WSDL**, as specified in [WSDL].

2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tns	http://schemas.microsoft.com/sharepoint/soap/directory/	
s	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1/2] [XMLSCHEMA2/2]
soap12	http://schemas.xmlsoap.org/wsdl/soap12/	[SOAP1.2-1/2007] [SOAP1.2-2/2007]
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]

2.2.2 Messages

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

2.2.3 Elements

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

2.2.4 Complex Types

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

Complex type	Description
Group	The **group** information.
Groups	A collection of elements that contains information about groups.
InputUserType	The user information used as input.
InputUsersType	A collection of elements that contains information about users used as input.
RolesOutputMaskType	A collection of **role definitions**. The **BasePermissions** attribute lists all **permissions** in an unsigned long integer.
RolesOutputTextType	A collection of role definitions. The **BasePermissions** attribute lists all permissions in text.
User	The user information.
Users	A collection of elements that contains information about users.

2.2.4.1 Group

The **Group** complex type contains information about a **group**.

```
<s:complexType name="Group">
  <s:attribute name="ID" type="s:unsignedInt" use="required" />
  <s:attribute name="Name" type="tns:String255Type" use="required" />
  <s:attribute name="Description" type="tns:String512OrEmptyType" use="required" />
  <s:attribute name="OwnerID" type="s:unsignedInt" use="required" />
  <s:attribute name="OwnerIsUser" type="tns:TrueFalseType" use="required" />
</s:complexType>
```

ID: The identifier of the group.

Name: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

Description: The description of the group. The specified value MUST NOT contain more than 512 characters. An empty string value is allowed.

OwnerID: The identifier of the **owner** of a group.

OwnerIsUser: Indicates whether the owner of the group is a user. "True" indicates that the owner of the group is a user. "False" indicates that the owner of the group is a group.

2.2.4.2 Groups

The **Groups** complex type contains an array of **Group** elements. It MUST NOT contain more than 100 **Group** elements.

```
<s:complexType name="Groups">
  <s:sequence>
    <s:element minOccurs="0" maxOccurs="100" name="Group" type="tns:Group">
    </s:element>
  </s:sequence>
</s:complexType>
```

Group: Element specified by the **Group** complex type.

2.2.4.3 InputUsersType

The **InputUsersType** complex type contains an array of **InputUserType** elements. It MUST NOT contain more than 100 **InputUserType** elements.

```
<s:complexType name="InputUsersType">
  <s:sequence>
    <s:element minOccurs="0" maxOccurs="100" name="User" type="tns:InputUserType"/>
  </s:sequence>
</s:complexType>
```

User: Element specified by the **InputUserType** complex type.

2.2.4.4 InputUserType

The **InputUserType** complex type contains information about a user.

```
<s:complexType name="InputUserType">
  <s:attribute name="LoginName" type="tns:String251Type" use="required" />
  <s:attribute name="Email" type="tns:String255OrEmptyType" />
  <s:attribute name="Name" type="tns:String255OrEmptyType" />
  <s:attribute name="Notes" type="tns:String1023OrEmptyType" />
</s:complexType>
```

LoginName: The **login name** of the user, which MUST contain less than 252 characters.

Email: The **e-mail address** of the user, which MUST contain less than 256 characters. The protocol server MUST ignore this value if the login name of the user already exists in the **site**.

Name: The **display name** of the user, which MUST contain less than 256 characters. The protocol server MUST ignore this value if the login name of the user already exists in the site.

Notes: A string containing additional information about the user. The specified value MUST NOT contain more than 1,023 characters. An empty string is allowed.

2.2.4.5 RolesOutputMaskType

The **RolesOutputMaskType** complex type returns a collection of **role definitions**.

```
<s:complexType name="RolesOutputMaskType">
  <s:sequence>
    <s:element name="Role" minOccurs="0" maxOccurs="unbounded">
```

```
    <s:complexType>
      <s:attribute name="ID" type="s:positiveInteger" use="required" />
      <s:attribute name="Name" type="tns:String255Type" use="required" />
      <s:attribute name="Description" type="tns:String512OrEmptyType" use="required" />
      <s:attribute name="Hidden" type="tns:TrueFalseType" use="required" />
      <s:attribute name="Type" type="s:string" use="required" />
      <s:attribute name="BasePermissions" type="s:unsignedLong" use="required" />
    </s:complexType>
  </s:element>
 </s:sequence>
</s:complexType>
```

ID: The identifier of the role definition.

Name: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

Description: The description of the role definition. The specified value MUST NOT contain more than 512 characters, and could be empty.

Hidden: Indicates whether the role definition is hidden in a user interface (UI). "True" indicates that the role definition is hidden in a UI. "False" indicates that the role definition is not hidden<1>.

Type: The **role type** of the role definition. Role type is specified in [MS-DWSS] section 2.2.5.2.

BasePermissions: The set of **permissions** for a role definition. This is an unsigned long integer composed by combining the various permissions. The contents of this attribute are specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14, and [MS-WSSFO3] section 2.2.2.15.

2.2.4.6 RolesOutputTextType

The **RolesOutputTextType** complex type contains a collection of **role definitions**.

```
<s:complexType name="RolesOutputTextType">
  <s:sequence>
    <s:element name="Roles">
      <s:complexType>
        <s:sequence>
          <s:element name="Role" minOccurs="0" maxOccurs="unbounded">
            <s:complexType>
              <s:attribute name="ID" type="s:positiveInteger" use="required" />
              <s:attribute name="Name" type="tns:String255Type" use="required" />
              <s:attribute name="Description" type="tns:String512OrEmptyType" use="required"
/>
              <s:attribute name="Order" type="s:nonNegativeInteger" use="required" />
              <s:attribute name="Hidden" type="tns:TrueFalseType" use="required" />
              <s:attribute name="Type" type="s:string" use="required" />
              <s:attribute name="BasePermissions" type="s:string" use="required" />
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

ID: The identifier of the role definition.

Name: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

Description: The description of the role definition. The specified value MUST NOT contain more than 512 characters, and could be empty.

Order: The order in which role definitions are displayed in a UI that displays role definitions for a **site** or **site collection**. Role definitions with small order appear first. When multiple role definitions have the same order they MUST be ordered by **Type** in reverse alphabetical order.

Hidden: Indicates whether the role definition is hidden in a UI. "True" indicates that the role definition is hidden. "False" indicates that the role definition is not hidden**<2>**.

Type: The **role type** of the role definition. Role type is specified in [MS-DWSS] section 2.2.5.2.

BasePermissions: The set of **permissions** for a role definition. All permissions are listed in text and separated by a comma and a space ", ". The contents of this attribute are specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14, and [MS-WSSFO3] section 2.2.2.15.

2.2.4.7 User

The **User** complex type contains information about a user.

```
<s:complexType name="User">
  <s:attribute name="ID" type="s:unsignedInt" use="required" />
  <s:attribute name="Sid" type="s:string" use="required" />
  <s:attribute name="Name" type="tns:String255OrEmptyType" use="required" />
  <s:attribute name="LoginName" type="tns:String251Type" use="required" />
  <s:attribute name="Email" type="tns:String255OrEmptyType" use="required" />
  <s:attribute name="Notes" type="tns:String1023OrEmptyType" use="required" />
  <s:attribute name="IsSiteAdmin" type="tns:TrueFalseType" use="required" />
  <s:attribute name="IsDomainGroup" type="tns:TrueFalseType" use="required" />
  <s:attribute name="Flags" type="s:unsignedInt" use="required" />
</s:complexType>
```

ID: The identifier of the user.

Sid: The unique **security identifier (SID)** of the user.

Name: The **display name** of the user. The specified value MUST NOT contain more than 255 characters. An empty string is allowed.

LoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

Email: The **e-mail address** of the user. The specified value MUST NOT contain more than 255 characters. An empty string is allowed.

Notes: A string containing additional information about the user. The specified value MUST NOT contain more than 1,023 characters. An empty string is allowed.

IsSiteAdmin: Indicates whether the user is an administrator of the **site collection**. "True" indicates that the user is an administrator. "False" indicates that the user is not an administrator.

IsDomainGroup: Indicates whether the user is a **domain group**. "True" indicates that the user is a domain group. "False" indicates that the user is a **domain user**.

Flags: A 4-byte integer bit mask determining the user's options as defined by the **UserInfo** flags; see [MS-WSSFO2] section 2.2.2.11 and [MS-WSSFO3] section 2.2.2.12.

2.2.4.8 Users

The **Users** complex type contains an array of **User** elements.

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

User: Element specified by the **User** complex type.

2.2.5 Simple Types

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

Simple type	Description
PrincipalType	An enumeration indicating the type of the **security principal**.
String1023OrEmptyType	A string type with length between 0 and 1023 characters.
String251Type	A string type with length between 1 and 251 characters.
String255OrEmptyType	A string type with length between 0 and 255 characters.
String255Type	A string type with length between 1 and 255 characters.
String512OrEmptyType	A string type with length between 0 and 512 characters.

2.2.5.1 PrincipalType

The **PrincipalType** simple type is an enumeration indicating the type of the principal, which can either be a **user** or **group**. It is defined in namespace:
http://schemas.microsoft.com/sharepoint/soap/directory.

```
<s:simpleType name="PrincipalType">
    <s:restriction base="s:string">
        <s:enumeration value="user"/>
        <s:enumeration value="group"/>
    </s:restriction>
</s:simpleType>
```

The following table describes the allowable values for **PrincipalType**.

Value	Description
User	The principal is a user.
Group	The principal is a group.

2.2.5.2 String1023OrEmptyType

The **String1023OrEmptyType** simple type is a string type with length between 0 and 1023 characters. It is defined in namespace: http://schemas.microsoft.com/sharepoint/soap/directory.

```
<s:simpleType name="String1023OrEmptyType">
    <s:restriction base="s:string">
        <s:minLength value="0" />
        <s:maxLength value="1023" />
    </s:restriction>
</s:simpleType>
```

2.2.5.3 String251Type

The **String251Type** simple type is a string type with length between 1 and 251 characters. It is defined in namespace: http://schemas.microsoft.com/sharepoint/soap/directory.

```
<s:simpleType name="String251Type">
    <s:restriction base="s:string">
        <s:minLength value="1" />
        <s:maxLength value="251" />
    </s:restriction>
</s:simpleType>
```

2.2.5.4 String255OrEmptyType

The **String255OrEmptyType** simple type is a string type with length between 0 and 255 characters. It is defined in namespace: http://schemas.microsoft.com/sharepoint/soap/directory.

```
<s:simpleType name="String255OrEmptyType">
    <s:restriction base="s:string">
        <s:minLength value="0" />
        <s:maxLength value="255" />
    </s:restriction>
</s:simpleType>
```

2.2.5.5 String255Type

The **String255Type** simple type is a string type with length between 1 and 255 characters. It is defined in namespace: http://schemas.microsoft.com/sharepoint/soap/directory.

```
<s:simpleType name="String255Type">
    <s:restriction base="s:string">
        <s:minLength value="1" />
        <s:maxLength value="255" />
    </s:restriction>
</s:simpleType>
```

2.2.5.6 String512OrEmptyType

The **String512OrEmptyType** simple type is a string type with length between 0 and 512 characters. It is defined in namespace: http://schemas.microsoft.com/sharepoint/soap/directory.

```
<s:simpleType name="String512OrEmptyType">
    <s:restriction base="s:string">
        <s:minLength value="0" />
```

```
          <s:maxLength value="512" />
        </s:restriction>
    </s:simpleType>
```

2.2.5.7 TrueFalseType

The **TrueFalseType** simple type is used to represent **true** or **false** Boolean values.

```
        <s:simpleType name="TrueFalseType">
          <s:restriction base="s:string">
            <s:enumeration value="True"/>
            <s:enumeration value="False"/>
          </s:restriction>
        </s:simpleType>
```

Value	Description
True	Boolean value true.
False	Boolean value false.

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.

Except where specified, protocol clients SHOULD interpret HTTP status codes returned by the protocol server as specified in [RFC2616], section 10, "Status Code Definitions".

This protocol allows protocol servers to notify protocol clients of application-level faults using **SOAP faults**. This protocol allows protocol servers to provide additional details for SOAP faults by including either a **detail** element as specified in [SOAP1.1], section 4.4, or a **detail** element as specified in [SOAP1.2-1/2007], section 5.4.5, that conforms to the **XML schema definition (XSD)** of the SOAP fault. Except where specified, these SOAP faults are not significant for interoperability, and protocol clients can interpret them in an implementation-specific manner.

This protocol allows protocol servers to perform implementation-specific authorization checks and notify protocol clients of authorization faults as specified previously in this section.

3.1   Server Details

3.1.1   Abstract Data Model

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

The following diagram provides a high-level overview of the relationship between users, **groups**, and **role definitions** that are used in the operations of this protocol.
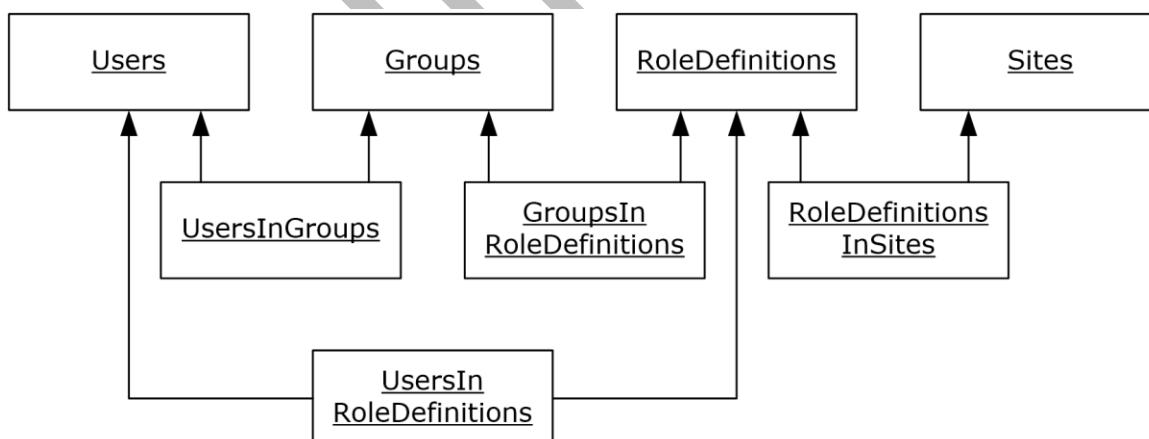
Figure 2: Abstract data model

The protocol server manages information about the following entities:

- Users with **permissions** to access the sites within the **site collection** managed by the protocol server. Each user has an identifier.

- Groups of users. Each group has an identifier.

- Role definitions, which have a set of permissions associated with them. A role definition is the same as a **role** and refers to the same entity. Each role definition has an identifier.

- Sites for which the protocol server manages users and groups. A site collection consists of all the sites that are managed by the protocol server.

In addition, the protocol server manages information about the following relationships:

- which users belong to a group.

- which users are assigned to a role definition.

- which groups are assigned to a role definition.

- which role definitions are defined for a **site**.

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	Description
AddGroup	Adds a **group** to the current **site collection**.
AddGroupToRole	Adds the specified group to the specified **role definition**.
AddRole	Adds a role definition to the current **site**.
AddRoleDef	Adds a role definition to the current site.
AddUserCollectionToGroup	Adds the collection of users to the specified group.
AddUserCollectionToRole	Adds the collection of users to the specified role definition.
AddUserToGroup	Adds the user to the specified group.
AddUserToRole	Adds the user to the specified role definition.
GetAllUserCollectionFromWeb	Returns information about the collection of users that are explicitly added to a role definition for the current site.
GetCurrentUserInfo	Returns information about the current user.

Operation	Description
GetGroupCollection	Returns information about the specified collection of groups in the current site collection.
GetGroupCollectionFromRole	Returns information about the collection of groups assigned to the specified role definition.
GetGroupCollectionFromSite	Returns information about the collection of groups for the current site collection.
GetGroupCollectionFromUser	Returns information about the collection of groups in which the specified user is a member.
GetGroupCollectionFromWeb	Returns information about the collection of groups that are explicitly added to a role definition for the current site.
GetGroupInfo	Returns information about the specified group.
GetRoleCollection	Returns information about the specified collection of role definitions for the current site.
GetRoleCollectionFromGroup	Returns information about the collection of role definitions in which the specified group is a member.
GetRoleCollectionFromUser	Returns information about the collection of role definitions in which the specified user is a member.
GetRoleCollectionFromWeb	Returns information about the collection of role definitions for the current site.
GetRoleInfo	Returns information about the specified role definition.
GetRolesAndPermissionsForCurrentUser	Returns **permissions** and role definitions for the current user.
GetRolesAndPermissionsForSite	Returns permissions and role definitions for the specified site.
GetUserCollection	Returns information about a collection of users based on the specified **login names**.
GetUserCollectionFromGroup	Returns information about the collection of users in the specified group.
GetUserCollectionFromRole	Returns information about the collection of users assigned to the specified role definition.
GetUserCollectionFromSite	Returns information about the collection of users for the current site collection.
GetUserCollectionFromWeb	Returns information about the collection of users that are explicitly added to a role definition for the current site.
GetUserInfo	Returns information about the specified user.
GetUserLoginFromEmail	Returns information about a collection of users based on the specified **e-mail addresses**.
RemoveGroup	Removes the specified group from the current site collection.

Operation	Description
RemoveGroupFromRole	Removes the specified group from the specified role definition.
RemoveRole	Removes the specified role definition from the current site.
RemoveUserCollectionFromGroup	Removes the users with the specified login names from the group.
RemoveUserCollectionFromRole	Removes the users with the specified login names from the specified role definition.
RemoveUserCollectionFromSite	Removes the specified users from the current site collection.
RemoveUserFromGroup	Removes the specified user from the specified group.
RemoveUserFromRole	Removes the specified user from the specified role definition.
RemoveUserFromSite	Removes the specified user from the current site collection.
RemoveUserFromWeb	Removes the specified user from the current site.
UpdateGroupInfo	Updates information for the specified group.
UpdateRoleDefInfo	Updates information for the specified role definition.
UpdateRoleInfo	Updates information for the specified role definition.
UpdateUserInfo	Updates information for the specified user.

All operations supported by this protocol are executed in the context of a site, based on the **URL** used to execute the operation as described in section 1.5. Unless otherwise specified, operations performed by using the URL for a particular site will not affect either its **parent site** or the site collection.

3.1.4.1 AddGroup

The **AddGroup** operation is used to add a **group** with the specified information.

```
<wsdl:operation name="AddGroup">
    <wsdl:input message="tns:AddGroupSoapIn" />
    <wsdl:output message="tns:AddGroupSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddGroupSoapIn** request message (section 3.1.4.1.1.1), and the protocol server responds with an **AddGroupSoapOut** response message (section 3.1.4.1.1.2), in the following sequence:

1. If the value specified in the element **ownerType** is "group" and no group with the name specified in the element **ownerIdentifier** exists in the current **site collection**, the server MUST return a **SOAP fault** with error code 0x80131600.

2. If the value specified in **ownerType** is "user" and the user with the name specified in **ownerIdentifier** does not exist in the current site collection, the server MUST return a SOAP fault with error code 0x80131600.

3. If the user with the name specified in the element **defaultUserLoginName** does not exist in the current site collection, the server MUST return a SOAP fault with error code 0x80131600.

4. If the value specified in **ownerType** is "group" and the group with the name specified in **ownerIdentifier** exists on the current site collection, but the group is a **domain group**, the server MUST return a SOAP fault with error code 0x80131600.

5. If the group name contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return a SOAP fault with the error code 0x8102004f.

6. If a group with the name specified in the element **groupName** already exists on the current site collection, the server MUST return a SOAP fault with error code 0x81020043.

7. Otherwise, the server MUST add the group with an identifier and MUST respond with an **AddGroupSoapOut** response message.

3.1.4.1.1 Messages

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

Message	Description
AddGroupSoapIn	A request to initiate an **AddGroup** operation (section 3.1.4.1) on the protocol server.
AddGroupSoapOut	A response from the protocol server at completion of the **AddGroup** operation.

3.1.4.1.1.1 AddGroupSoapIn

The **AddGroupSoapIn** message is the request of the **AddGroup** operation (section 3.1.4.1).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddGroup
```

The **SOAP body** contains an **AddGroup** element, as specified in section 3.1.4.1.2.1.

3.1.4.1.1.2 AddGroupSoapOut

The **AddGroupSoapOut** message is the response of the **AddGroup** operation (section 3.1.4.1).

The **SOAP body** contains an **AddGroupResponse** element, as specified in section 3.1.4.1.2.2.

3.1.4.1.2 Elements

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

Element	Description
AddGroup	Body of the **AddGroupSoapIn** message (section 3.1.4.1.1.1).
AddGroupResponse	Body of the **AddGroupSoapOut** message (section 3.1.4.1.1.2).

3.1.4.1.2.1   AddGroup

The **AddGroup** element specifies details for the request to add a **group** with the specified information.

```
<s:element name="AddGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
      <s:element name="ownerIdentifier" type="s:string" />
      <s:element name="ownerType" type="tns:PrincipalType" />
      <s:element name="defaultUserLoginName" type="tns:String251Type" />
      <s:element name="description" type="tns:String512OrEmptyType" maxOccurs="1"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

ownerIdentifier: The **owner** identifier of the group. It MUST NOT be empty. If the **ownerType** is "user", it MUST contain a valid **login name**, and it MUST NOT contain more than 251 characters. If the **ownerType** is "group", this field MUST be the name of a group, and it MUST NOT contain more than 255 characters.

ownerType: The principal type of the owner.

defaultUserLoginName: The login name of the user to be added to the group. This field MUST NOT contain more than 251 characters, MUST contain a valid login name, and MUST NOT be empty.

description: The description of the group. The specified value MUST NOT contain more than 512 characters, and could be empty.

3.1.4.1.2.2   AddGroupResponse

The **AddGroupResponse** element contains the response to the request to add a **group** with the specified information.

```
<s:element name="AddGroupResponse">
  <s:complexType/>
</s:element>
```

3.1.4.1.3 Complex Types

None.

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 AddGroupToRole

The **AddGroupToRole** operation is used to add a **group** to a **role definition**.

```
<wsdl:operation name="AddGroupToRole">
    <wsdl:input message="tns:AddGroupToRoleSoapIn" />
    <wsdl:output message="tns:AddGroupToRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddGroupToRoleSoapIn** request message (section 3.1.4.2.1.1), and the protocol server responds with an **AddGroupToRoleSoapOut** response message (section 3.1.4.2.1.2) in the following sequence:

1. If the group name or the role name contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If the specified role definition does not exist on the current **site**, the server MUST return a SOAP fault with the error code 0x80131600.

3. If the specified group does not exist on the current **site collection**, the server MUST return a SOAP fault with the error code 0x80131600.

4. If the specified role definition is a "Guest" **role type**, as specified in section 3.1.4.21.3.1, the server MUST return a SOAP fault with the error code 0x80131600.

5. Otherwise, the server MUST add the group to the role definition and MUST respond with an **AddGroupToRoleSoapOut** response message.

3.1.4.2.1 Messages

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

Message	Description
AddGroupToRoleSoapIn	A request to initiate an **AddGroupToRole** operation (section 3.1.4.2) on the protocol server.
AddGroupToRoleSoapOut	A response from the protocol server at completion of the **AddGroupToRole** operation.

3.1.4.2.1.1 AddGroupToRoleSoapIn

The **AddGroupToRoleSoapIn** message is the request of the **AddGroupToRole** operation (section 3.1.4.2).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddGroupToRole
```

The **SOAP body** contains an **AddGroupToRole** element, as specified in section 3.1.4.2.2.1.

3.1.4.2.1.2   AddGroupToRoleSoapOut

The **AddGroupToRoleSoapOut** message is the response of the **AddGroupToRole** operation (section 3.1.4.2).

The **SOAP body** contains an **AddGroupToRoleResponse** element, as specified in section 3.1.4.2.2.2.

3.1.4.2.2 Elements

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

Element	Description
AddGroupToRole	Body of the **AddGroupToRoleSoapIn** message (section 3.1.4.2.1.1).
AddGroupToRoleResponse	Body of the **AddGroupToRoleSoapOut** message (section 3.1.4.2.1.2).

3.1.4.2.2.1   AddGroupToRole

The **AddGroupToRole** element specifies details for the request to add a **group** to a **role definition**.

```
<s:element name="AddGroupToRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="groupName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.2.2.2   AddGroupToRoleResponse

The **AddGroupToRoleResponse** element contains the response to the request to add a **group** to a **role definition**.

```
      <s:element name="AddGroupToRoleResponse">
```

```
        <s:complexType/>
    </s:element>
```

3.1.4.2.3 Complex Types

None.

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 AddRole

The **AddRole** operation is used to add a **role definition** with the specified information<3>.

```
<wsdl:operation name="AddRole">
    <wsdl:input message="tns:AddRoleSoapIn" />
    <wsdl:output message="tns:AddRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddRoleSoapIn** request message (section 3.1.4.3.1.1), and the protocol server responds with an **AddRoleSoapOut** response message (section 3.1.4.3.1.2) in the following sequence:

1. If this operation is called on a **subsite**, the server MUST return a **SOAP fault**.

2. If the role definition contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return a SOAP fault with the error code 0x8102004f.

3. If a role definition with the specified name already exists on the current **site**, the server MUST return a SOAP fault with the error code 0x81020043.

4. Otherwise, the server MUST add the role definition with an identifier and MUST respond with an **AddRoleSoapOut** response message.

3.1.4.3.1 Messages

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

Message	Description
AddRoleSoapIn	A request to initiate an **AddRole** operation (section 3.1.4.3) on the protocol server.

Message	Description
AddRoleSoapOut	A response from the protocol server at completion of the **AddRole** operation.

3.1.4.3.1.1   AddRoleSoapIn

The **AddRoleSoapIn** message is the request of the **AddRole** operation (section 3.1.4.3).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddRole
```

The **SOAP body** contains an **AddRole** element, as specified in section 3.1.4.3.2.1.

3.1.4.3.1.2   AddRoleSoapOut

The **AddRoleSoapOut** message is the response of the **AddRole** operation (section 3.1.4.3).

The **SOAP body** contains an **AddRoleResponse** element, as specified in section 3.1.4.3.2.2.

3.1.4.3.2 Elements

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

Element	Description
AddRole	Body of the **AddRoleSoapIn** message (section 3.1.4.3.1.1).
AddRoleResponse	Body of the **AddRoleSoapOut** message (section 3.1.4.3.1.2).

3.1.4.3.2.1   AddRole

The **AddRole** element specifies details for the request to add a **role definition** with the specified information.

```
<s:element name="AddRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="description" type="tns:String512OrEmptyType" maxOccurs="1"
minOccurs="0"/>
      <s:element name="permissionMask" type="s:int" />
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

description: The description of the role definition. The specified value MUST NOT contain more than 512 characters. An empty string is allowed.

permissionMask: A 32-bit integer that specifies the **permissions** of the role definition. The type of this field is specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14, and [MS-WSSFO3] section 2.2.2.15.

3.1.4.3.2.2 AddRoleResponse

The **AddRoleResponse** element contains the response to the request to add a **role definition** with the specified information.

```
<s:element name="AddRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.3.3 Complex Types

None.

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 AddRoleDef

The **AddRoleDef** operation<4> is used to add a **role definition** with the specified information.<5>

```
<wsdl:operation name="AddRoleDef">
    <wsdl:input message="tns:AddRoleDefSoapIn" />
    <wsdl:output message="tns:AddRoleDefSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddRoleDefSoapIn** request message (section 3.1.4.4.1.1), and the protocol server responds with an **AddRoleDefSoapOut** response message (section 3.1.4.4.1.2) in the following sequence:

1. If this operation is called on a **subsite**, the server MUST return a **SOAP fault**.
2. If the role definition contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return the error code 0x8102004f.
3. If a role definition with the specified name already exists on the current **site**, the server MUST return a SOAP fault with the error code 0x81020043.
4. Otherwise, the server MUST add the role definition with an identifier and MUST respond with an **AddRoleDefSoapOut** response message.

3.1.4.4.1 Messages

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

Message	Description
AddRoleDefSoapIn	A request to initiate an **AddRoleDef** operation (section 3.1.4.4) on the protocol server.
AddRoleDefSoapOut	A response from the protocol server at completion of the **AddRoleDef** operation.

3.1.4.4.1.1 AddRoleDefSoapIn

The **AddRoleDefSoapIn** message is the request of the **AddRoleDef** operation (section 3.1.4.4).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddRoleDef
```

The **SOAP body** contains an **AddRoleDef** element, as specified in section 3.1.4.4.2.1.

3.1.4.4.1.2 AddRoleDefSoapOut

The **AddRoleDefSoapOut** message is the response of the **AddRoleDef** operation (section 3.1.4.4).

The **SOAP body** contains an **AddRoleDefResponse** element, as specified in section 3.1.4.4.2.2.

3.1.4.4.2 Elements

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

Element	Description
AddRoleDef	Body of the **AddRoleDefSoapIn** message (section 3.1.4.4.1.1).
AddRoleDefResponse	Body of the **AddRoleDefSoapOut** message (section 3.1.4.4.1.2).

3.1.4.4.2.1 AddRoleDef

The **AddRoleDef** element specifies details for the request to add a **role definition** with the specified information.

```
<s:element name="AddRoleDef">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="description" type="tns:String512OrEmptyType" maxOccurs="1"
minOccurs="0"/>
      <s:element name="permissionMask" type="s:unsignedLong" />
```

```
      </s:sequence>
    </s:complexType>
  </s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

description: The description of the role definition. The specified value MUST NOT contain more than 512 characters. An empty string is allowed.

permissionMask: An unsigned long integer that represents the **permissions** of the role definition. The type of this field is specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14, and [MS-WSSFO3] section 2.2.2.15.

3.1.4.4.2.2 AddRoleDefResponse

The **AddRoleDefResponse** element contains the response to the request to add a **role definition** with the specified information.

```
  <s:element name="AddRoleDefResponse">
    <s:complexType/>
  </s:element>
```

3.1.4.4.3 Complex Types

None.

3.1.4.4.4 Simple Types

None.

3.1.4.4.5 Attributes

None.

3.1.4.4.6 Groups

None.

3.1.4.4.7 Attribute Groups

None.

3.1.4.5 AddUserCollectionToGroup

The **AddUserCollectionToGroup** operation is used to add a collection of users to a **group**.

```
  <wsdl:operation name="AddUserCollectionToGroup">
      <wsdl:input message="tns:AddUserCollectionToGroupSoapIn" />
      <wsdl:output message="tns:AddUserCollectionToGroupSoapOut" />
  </wsdl:operation>
```

The protocol client sends an **AddUserCollectionToGroupSoapIn** request message (section 3.1.4.5.1.1), and the protocol server responds with an **AddUserCollectionToGroupSoapOut** response message (section 3.1.4.5.1.2) in the following sequence:<6>

1. If a group with the specified name does not exist in the **site collection**, the server MUST return a **SOAP fault** with error code 0x80131600.

2. If any of the **login names** is empty, the server MUST return a SOAP fault with error code 0x80131600.

3. If one user within the collection of users that are specified by login names does not exist or the user's login name is not in a valid format, the server MUST do the following:

   ▪ Add all users specified before the nonexistent user to the group.

   ▪ Ignore any user specified after the nonexistent user.

   ▪ Return a SOAP fault with error code 0x81020054.

4. Otherwise, the server MUST add all the users to the group and MUST respond with an **AddUserCollectionToGroupSoapOut** response message.

3.1.4.5.1 Messages

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

Message	Description
AddUserCollectionToGroupSoapIn	A request to initiate an **AddUserCollectionToGroup** operation (section 3.1.4.5) on the protocol server.
AddUserCollectionToGroupSoapOut	A response from the protocol server at completion of the **AddUserCollectionToGroup** operation.

3.1.4.5.1.1   AddUserCollectionToGroupSoapIn

The **AddUserCollectionToGroupSoapIn** message is the request of the **AddUserCollectionToGroup** operation (section 3.1.4.5).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddUserCollectionToGroup
```

The **SOAP body** contains an **AddUserCollectionToGroup** element, as specified in section 3.1.4.5.2.1.

3.1.4.5.1.2   AddUserCollectionToGroupSoapOut

The **AddUserCollectionToGroupSoapOut** message is the response of the **AddUserCollectionToGroup** operation (section 3.1.4.5).

The **SOAP body** contains an **AddUserCollectionToGroupResponse** element, as specified in section 3.1.4.5.2.2.

3.1.4.5.2 Elements

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

Element	Description
AddUserCollectionToGroup	Body of the **AddUserCollectionToGroupSoapIn** message (section 3.1.4.5.1.1).
AddUserCollectionToGroupResponse	Body of the **AddUserCollectionToGroupSoapOut** message section 3.1.4.5.1.2).

3.1.4.5.2.1 AddUserCollectionToGroup

The **AddUserCollectionToGroup** element specifies details for the request to add a collection of users to a **group**.

```
<s:element name="AddUserCollectionToGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
      <s:element name="usersInfoXml">
        <s:complexType>
          <s:sequence>
            <s:element name="Users" type="tns:InputUsersType" />
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

usersInfoXml: An **XML element** that specifies a collection of users.

3.1.4.5.2.2 AddUserCollectionToGroupResponse

The **AddUserCollectionToGroupResponse** element contains the response to the request to add users to a **group**.

```
<s:element name="AddUserCollectionToGroupResponse">
  <s:complexType/>
</s:element>
```

3.1.4.5.3 Complex Types

None.

3.1.4.5.4 Simple Types

None.

3.1.4.5.5 Attributes

None.

3.1.4.5.6 Groups

None.

3.1.4.5.7 Attribute Groups

None.

3.1.4.6 AddUserCollectionToRole

The **AddUserCollectionToRole** operation is used to add a collection of users to a specified **role definition**.

```
<wsdl:operation name="AddUserCollectionToRole">
    <wsdl:input message="tns:AddUserCollectionToRoleSoapIn" />
    <wsdl:output message="tns:AddUserCollectionToRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddUserCollectionToRoleSoapIn** request message (section 3.1.4.6.1.1), and the protocol server responds with an **AddUserCollectionToRoleSoapOut** response message (section 3.1.4.6.1.2), in the following sequence.<7>

1. If a role definition with the specified name does not exist on the current **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If any of the **login names** is empty, the server MUST return a SOAP fault with the error code 0x80131600.

3. If one user within the collection of users that are specified by login names does not exist or its login name is not in a valid format, the server MUST do the following:

   ▪ Add all users specified before the nonexistent user to the role definition.

   ▪ Ignore any users specified after the nonexistent user.

   ▪ Return a SOAP fault with the error code 0x81020054.

4. If the specified role definition is a "Guest" **role type**, as specified in section 3.1.4.21.3.1, the server MUST return a SOAP fault with the error code 0x80131600.

5. Otherwise, the server MUST add all the users to the role definition and MUST respond with an **AddUserCollectionToRoleSoapOut** response message.

3.1.4.6.1 Messages

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

Message	Description
AddUserCollectionToRoleSoapIn	A request to initiate an **AddUserCollectionToRole** operation (section 3.1.4.6) on the protocol server.
AddUserCollectionToRoleSoapOut	A response from the protocol server at completion of the **AddUserCollectionToRole** operation.

3.1.4.6.1.1 AddUserCollectionToRoleSoapIn

The **AddUserCollectionToRoleSoapIn** message is the request of the **AddUserCollectionToRole** operation (section 3.1.4.6).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddUserCollectionToRole
```

The **SOAP body** contains an **AddUserCollectionToRole** element, as specified in section 3.1.4.6.2.1.

3.1.4.6.1.2 AddUserCollectionToRoleSoapOut

The **AddUserCollectionToRoleSoapOut** message is the response of the **AddUserCollectionToRole** operation (section 3.1.4.6).

The **SOAP body** contains an **AddUserCollectionToRoleResponse** element, as specified in section 3.1.4.6.2.2.

3.1.4.6.2 Elements

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

Element	Description
AddUserCollectionToRole	Body of the **AddUserCollectionToRoleSoapIn** message (section 3.1.4.6.1.1).
AddUserCollectionToRoleResponse	Body of the **AddUserCollectionToRoleSoapOut** message (section 3.1.4.6.1.2).

3.1.4.6.2.1 AddUserCollectionToRole

The **AddUserCollectionToRole** element specifies details for the request to add users to a **role definition**.

```
<s:element name="AddUserCollectionToRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="usersInfoXml">
        <s:complexType>
          <s:sequence>
            <s:element name="Users" type="tns:InputUsersType" />
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of a role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

usersInfoXml: An **XML element** that specifies a collection of users.

3.1.4.6.2.2 AddUserCollectionToRoleResponse

The **AddUserCollectionToRoleResponse** element contains the response to the request to add users to a **role definition**.

```
<s:element name="AddUserCollectionToRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.6.3 Complex Types

None.

3.1.4.6.4 Simple Types

None.

3.1.4.6.5 Attributes

None.

3.1.4.6.6 Groups

None.

3.1.4.6.7 Attribute Groups

None.

3.1.4.7 AddUserToGroup

The **AddUserToGroup** operation is used to add a user to a **group**.

```
<wsdl:operation name="AddUserToGroup">
    <wsdl:input message="tns:AddUserToGroupSoapIn" />
    <wsdl:output message="tns:AddUserToGroupSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddUserToGroupSoapIn** request message (section 3.1.4.7.1.1), and the protocol server responds with an **AddUserToGroupSoapOut** response message (section 3.1.4.7.1.2), in the following sequence:<8>

1. If a group with the specified name does not exist on the **site collection**, the server MUST return a **SOAP fault** with the error code 0x80131600.
2. If a user with the specified **login name** does not exist or its login name is not in a valid format, the server MUST return a SOAP fault with the error code 0x81020054.
3. Otherwise, the server MUST add the user to the group and MUST respond with an **AddUserToGroupSoapOut** response message.

3.1.4.7.1 Messages

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

Message	Description
AddUserToGroupSoapIn	A request to initiate an **AddUserToGroup** operation (section 3.1.4.7) on the protocol server.
AddUserToGroupSoapOut	A response from the protocol server at completion of the **AddUserToGroup** operation.

3.1.4.7.1.1 AddUserToGroupSoapIn

The **AddUserToGroupSoapIn** message is the request of the **AddUserToGroup** operation (section 3.1.4.7).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddUserToGroup
```

The **SOAP body** contains an **AddUserToGroup** element, as specified in section 3.1.4.7.2.1.

3.1.4.7.1.2 AddUserToGroupSoapOut

The **AddUserToGroupSoapOut** message is the response of the **AddUserToGroup** operation (section 3.1.4.7).

The **SOAP body** contains an **AddUserToGroupResponse** element, as specified in section 3.1.4.7.2.2.

3.1.4.7.2 Elements

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

Element	Description
AddUserToGroup	Body of the **AddUserToGroupSoapIn** message (section 3.1.4.7.1.1).
AddUserToGroupResponse	Body of the **AddUserToGroupSoapOut** message (section 3.1.4.7.1.2).

3.1.4.7.2.1   AddUserToGroup

The **AddUserToGroup** element specifies details for the request to add a user to a **group**.

```
<s:element name="AddUserToGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
      <s:element name="userName" type="tns:String255OrEmptyType" maxOccurs="1"
minOccurs="0"/>
      <s:element name="userLoginName" type="tns:String251Type" />
      <s:element name="userEmail" type="tns:String255OrEmptyType" maxOccurs="1"
minOccurs="0"/>
      <s:element name="userNotes" type="tns:String1023OrEmptyType" maxOccurs="1"
minOccurs="0"/>
```

```
          </s:sequence>
      </s:complexType>
   </s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

userName: The **display name** of the user. The specified value MUST contain less than 256 characters. The protocol server MUST ignore this value if the user already exists in the current **site collection**. An empty string is allowed.

userLoginName: The **login name** of the user, which MUST NOT be an empty string and MUST NOT contain more than 251 characters.

userEmail: The **e-mail address** of the user, which MUST contain less than 256 characters. The service MUST ignore this value if the user already exists in the current site collection. An empty string is allowed.

userNotes: A string containing additional information about the user. The specified value MUST NOT contain more than 1,023 characters. An empty string is allowed.

3.1.4.7.2.2   AddUserToGroupResponse

The **AddUserToGroupResponse** element contains the response to the request to add a user to a **group**.

```
   <s:element name="AddUserToGroupResponse">
     <s:complexType/>
   </s:element>
```

3.1.4.7.3 Complex Types

None.

3.1.4.7.4 Simple Types

None.

3.1.4.7.5 Attributes

None.

3.1.4.7.6 Groups

None.

3.1.4.7.7 Attribute Groups

None.

3.1.4.8 AddUserToRole

The **AddUserToRole** operation is used to add the user to a **role definition**.

```
   <wsdl:operation name="AddUserToRole">
       <wsdl:input message="tns:AddUserToRoleSoapIn" />
```

```
        <wsdl:output message="tns:AddUserToRoleSoapOut" />
    </wsdl:operation>
```

The protocol client sends an **AddUserToRoleSoapIn** request message (section 3.1.4.8.1.1), and the protocol server responds with an **AddUserToRoleSoapOut** response message (section 3.1.4.8.1.2), in the following sequence:

1. If the specified role definition does not exist, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If the specified **login name** does not exist or it is not in a valid format, the server MUST return a SOAP fault with the error code 0x81020054. However, when **Active Directory account creation mode** is enabled, the server responds according to an implementation-specific algorithm.<9>

3. If the specified role definition is a "Guest" **role type**, as specified in section 3.1.4.21.3.1, the server MUST return a SOAP fault with the error code 0x80131600.

4. Otherwise, the server MUST add the user to the specified role definition and MUST respond with an **AddUserToRoleSoapOut** response message.

3.1.4.8.1 Messages

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

Message	Description
AddUserToRoleSoapIn	A request to initiate an **AddUserToRole** operation (section 3.1.4.8) on the protocol server.
AddUserToRoleSoapOut	A response from the protocol server at completion of the **AddUserToRole** operation.

3.1.4.8.1.1   AddUserToRoleSoapIn

The **AddUserToRoleSoapIn** message is the request of the **AddUserToRole** operation (section 3.1.4.8).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/AddUserToRole
```

The **SOAP body** contains an **AddUserToRole** element, as specified in section 3.1.4.8.2.1.

3.1.4.8.1.2   AddUserToRoleSoapOut

The **AddUserToRoleSoapOut** message is the response of the **AddUserToRole** operation (section 3.1.4.8).

The **SOAP body** contains an **AddUserToRoleResponse** element, as specified in section 3.1.4.8.2.2.

3.1.4.8.2 Elements

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

Element	Description
AddUserToRole	Body of the **AddUserToRoleSoapIn** message (section 3.1.4.8.1.1).
AddUserToRoleResponse	Body of the **AddUserToRoleSoapOut** message (section 3.1.4.8.1.2).

3.1.4.8.2.1 AddUserToRole

The **AddUserToRole** element specifies details for the request to add the user to a **role definition**.

```
<s:element name="AddUserToRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="userName" type="tns:String255OrEmptyType" minOccurs="0"
        maxOccurs="1" />
      <s:element name="u
serLoginName" type="tns:String251Type" />
      <s:element name="userEmail" type="tns:String255OrEmptyType" minOccurs="0"
        maxOccurs="1" />
      <s:element name="userNotes" type="tns:String1023OrEmptyType" minOccurs="0"
        maxOccurs="1" />
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

userName: The **display name** of the user. The specified value MUST NOT contain more than 255 characters. An empty string is allowed.

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

userEmail: The **e-mail address** of the user. The specified value MUST NOT contain more than 255 characters. An empty string is allowed.

userNotes: A string containing additional information about the user. The specified value MUST NOT contain more than 1023 characters. An empty string is allowed.

3.1.4.8.2.2 AddUserToRoleResponse

The **AddUserToRoleReponse** element contains the response to the request to add the user to a **role definition**.

```
<s:element name="AddUserToRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.8.3 Complex Types

None.

3.1.4.8.4 Simple Types

None.

3.1.4.8.5 Attributes

None.

3.1.4.8.6 Groups

None.

3.1.4.8.7 Attribute Groups

None.

3.1.4.9 GetAllUserCollectionFromWeb

The **GetAllUserCollectionFromWeb** operation is used to get information about all users that are explicitly added to a **role definition** in the current site.

```
<wsdl:operation name="GetAllUserCollectionFromWeb">
    <wsdl:input message="tns:GetAllUserCollectionFromWebSoapIn" />
    <wsdl:output message="tns:GetAllUserCollectionFromWebSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetAllUserCollectionFromWebSoapIn** request message (section 3.1.4.9.1.1), and the protocol server responds with a **GetAllUserCollectionFromWebSoapOut** response message (section 3.1.4.9.1.2), as follows:

- The server MUST respond with a **GetAllUserCollectionFromWebSoapOut** response message that contains information about all users in the current site.

3.1.4.9.1 Messages

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

Message	Description
GetAllUserCollectionFromWebSoapIn	A request to initiate a **GetAllUserCollectionFromWeb** operation (section 3.1.4.9) on the protocol server.
GetAllUserCollectionFromWebSoapOut	A response from the protocol server at completion of the **GetAllUserCollectionFromWeb** operation.

3.1.4.9.1.1   GetAllUserCollectionFromWebSoapIn

The **GetAllUserCollectionFromWebSoapIn** message is the request of the **GetAllUserCollectionFromWeb** operation (section 3.1.4.9).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetAllUserCollectionFromWeb
```

The **SOAP body** contains a **GetAllUserCollectionFromWeb** element, as specified in section 3.1.4.9.2.1.

3.1.4.9.1.2 GetAllUserCollectionFromWebSoapOut

The **GetAllUserCollectionFromWebSoapOut** message is the response of the **GetAllUserCollectionFromWeb** operation (section 3.1.4.9).

The **SOAP body** contains a **GetAllUserCollectionFromWebResponse** element, as specified in section 3.1.4.9.2.2.

3.1.4.9.2 Elements

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

Element	Description
GetAllUserCollectionFromWeb	Body of the **GetAllUserCollectionFromWebSoapIn** message (section 3.1.4.9.1.1).
GetAllUserCollectionFromWebResponse	Body of the **GetAllUserCollectionFromWebSoapOut** message (section 3.1.4.9.1.2).

3.1.4.9.2.1 GetAllUserCollectionFromWeb

The **GetAllUserCollectionFromWeb** element specifies details for the request to get the information about all users in the current site.

```
<s:element name="GetAllUserCollectionFromWeb">
  <s:complexType/>
</s:element>
```

3.1.4.9.2.2 GetAllUserCollectionFromWebResponse

The **GetAllUserCollectionFromWebResponse** element contains the response to the request to get the information about all users in the current site.

```
<s:element name="GetAllUserCollectionFromWebResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetAllUserCollectionFromWebResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetAllUserCollectionFromWeb">
              <s:complexType>
                <s:sequence>
                  <s:element name="Users" type="tns:Users" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetAllUserCollectionFromWebResult: The information about users in the current **site**.

GetAllUserCollectionFromWeb: A collection of XML elements that contains information about the specified collection of users, which MUST follow the schema of the **Users** complex type, as specified in section 2.2.4.8.

3.1.4.9.3 Complex Types

None.

3.1.4.9.4 Simple Types

None.

3.1.4.9.5 Attributes

None.

3.1.4.9.6 Groups

None.

3.1.4.9.7 Attribute Groups

None.

3.1.4.10   GetCurrentUserInfo

The **GetCurrentUserInfo** operation<10> is used to get information about the current user.

```
<wsdl:operation name="GetCurrentUserInfo">
    <wsdl:input message="tns:GetCurrentUserInfoSoapIn" />
    <wsdl:output message="tns:GetCurrentUserInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetCurrentUserInfoSoapIn** request message (section 3.1.4.10.1.1), and the protocol server responds with a **GetCurrentUserInfoSoapOut** response message (section 3.1.4.10.1.2) that contains information about the current user.

3.1.4.10.1   Messages

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

Message	Description
GetCurrentUserInfoSoapIn	A request to initiate a **GetCurrentUserInfo** operation (section 3.1.4.10) on the protocol server.
GetCurrentUserInfoSoapOut	A response from the protocol server at completion of the **GetCurrentUserInfo** operation.

3.1.4.10.1.1 GetCurrentUserInfoSoapIn

The **GetCurrentUserInfoSoapIn** message is the request of the **GetCurrentUserInfo** operation (section 3.1.4.10).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetCurrentUserInfo
```

The **SOAP body** contains a **GetCurrentUserInfo** element, as specified in section 3.1.4.10.2.1.

3.1.4.10.1.2 GetCurrentUserInfoSoapOut

The **GetCurrentUserInfoSoapOut** message is the response of the **GetCurrentUserInfo** operation (section 3.1.4.10).

The **SOAP body** contains a **GetCurrentUserInfoResponse** element, as specified in section 3.1.4.10.2.2.

3.1.4.10.2 Elements

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

Element	Description
GetCurrentUserInfo	Body of the **GetCurrentUserInfoSoapIn** message (section 3.1.4.10.1.1).
GetCurrentUserInfoResponse	Body of the **GetCurrentUserInfoSoapOut** message (section 3.1.4.10.1.2).

3.1.4.10.2.1 GetCurrentUserInfo

The **GetCurrentUserInfo** element specifies details for the request to get information about the current user.

```
<s:element name="GetCurrentUserInfo">
  <s:complexType/>
</s:element>
```

3.1.4.10.2.2 GetCurrentUserInfoResponse

The **GetCurrentUserInfoResponse** element contains the response to the request to get information about the current user.

```
<s:element name="GetCurrentUserInfoResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetCurrentUserInfoResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserInfo">
              <s:complexType>
                <s:sequence>
                  <s:element name="User" type="tns:User" />
                </s:sequence>
              </s:complexType>
```

```
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetCurrentUserInfoResult: An **XML element** that specifies the information about the current user.

3.1.4.10.3 Complex Types

None.

3.1.4.10.4 Simple Types

None.

3.1.4.10.5 Attributes

None.

3.1.4.10.6 Groups

None.

3.1.4.10.7 Attribute Groups

None.

3.1.4.11 GetGroupCollection

The **GetGroupCollection** operation is used to return information about the specified collection of **groups** in the current **site collection**.

```
<wsdl:operation name="GetGroupCollection">
    <wsdl:input message="tns:GetGroupCollectionSoapIn" />
    <wsdl:output message="tns:GetGroupCollectionSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetGroupCollectionSoapIn** request message (section 3.1.4.11.1.1), and the protocol server responds with a **GetGroupCollectionSoapOut** response message (section 3.1.4.11.1.2), as follows:

▪ The server MUST respond with a **GetGroupCollectionSoapOut** response message that contains information about the specified collection of groups

▪ The server MUST ignore specified groups that do not exist in the current site collection

3.1.4.11.1 Messages

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

Message	Description
GetGroupCollectionSoapIn	A request to initiate a **GetGroupCollection** operation (section 3.1.4.11) on the protocol server.
GetGroupCollectionSoapOut	A response from the protocol server at completion of the **GetGroupCollection** operation.

3.1.4.11.1.1 GetGroupCollectionSoapIn

The **GetGroupCollectionSoapIn** message is the request of the **GetGroupCollection** operation (section 3.1.4.11).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollection
```

The **SOAP body** contains a **GetGroupCollection** element, as specified in section 3.1.4.11.2.1.

3.1.4.11.1.2 GetGroupCollectionSoapOut

The **GetGroupCollectionSoapOut** message is the response of the **GetGroupCollection** operation (section 3.1.4.11).

The **SOAP body** contains a **GetGroupCollectionResponse** element, as specified in section 3.1.4.11.2.2.

3.1.4.11.2　Elements

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

Element	Description
GetGroupCollection	Body of the **GetGroupCollectionSoapIn** message (section 3.1.4.11.1.1).
GetGroupCollectionResponse	Body of the **GetGroupCollectionSoapOut** message (section 3.1.4.11.1.2).

3.1.4.11.2.1 GetGroupCollection

The **GetGroupCollection** element specifies details for the request to return information about the specified collection of **groups** in the current **site collection**.

```
<s:element name="GetGroupCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="groupNamesXml" type="tns:GroupsInputType" />
    </s:sequence>
  </s:complexType>
</s:element>
```

groupNamesXml: An object that MUST NOT contain a null or empty string, and that MUST specify zero or more group names according to the **GroupsInputType** complex type schema, as specified in section 3.1.4.11.3.1.

3.1.4.11.2.2 GetGroupCollectionResponse

The **GetGroupCollectionResponse** element contains the response to the request to return information about the specified collection of **groups** in the current **site collection**.

```
<s:element name="GetGroupCollectionResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetGroupCollectionResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetGroupCollection">
              <s:complexType>
                <s:sequence>
                  <s:element name="Groups" type="tns:Groups" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetGroupCollectionResult: An object that MUST contain one **GetGroupCollection XML element**.

GetGroupCollection: A collection of XML elements that contains information about the specified collection of groups, which MUST follow the schema of the **Groups** complex type, as specified in section 2.2.4.2.

3.1.4.11.3   Complex Types

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

Complex type	Description
GroupsInputType	Contains a list of **group** names.

3.1.4.11.3.1 GroupsInputType

The **GroupsInputType** complex type contains a list of **group** names.

```
<s:complexType name="GroupsInputType">
  <s:sequence>
    <s:element name="Groups">
      <s:complexType>
        <s:sequence>
          <s:element name="Group" minOccurs="0" maxOccurs="100">
            <s:complexType>
              <s:attribute name="GroupName" type="tns:String255Type" />
            </s:complexType>
          </s:element>
```

```
            </s:sequence>
          </s:complexType>
        </s:element>
      </s:sequence>
    </s:complexType>
```

GroupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.11.4 Simple Types

None.

3.1.4.11.5 Attributes

None.

3.1.4.11.6 Groups

None.

3.1.4.11.7 Attribute Groups

None.

3.1.4.12 GetGroupCollectionFromRole

The **GetGroupCollectionFromRole** operation is used to get information about the collection of **groups** assigned to a **role definition**.

```
<wsdl:operation name="GetGroupCollectionFromRole">
    <wsdl:input message="tns:GetGroupCollectionFromRoleSoapIn" />
    <wsdl:output message="tns:GetGroupCollectionFromRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetGroupCollectionFromRoleSoapIn** request message (section 3.1.4.12.1.1), and the protocol server responds with a **GetGroupCollectionFromRoleSoapOut** response message (section 3.1.4.12.1.2) in the following sequence:

1. If the role definition with the specified name does not exist in the **site collection**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetGroupCollectionFromRoleSoapOut** response message that contains either the collection of groups assigned to the role definition, or if no groups are assigned to the role definition, the empty collection.

3.1.4.12.1 Messages

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

Message	Description
GetGroupCollectionFromRoleSoapIn	A request to initiate a **GetGroupCollectionFromRole** operation (section 3.1.4.12) on the protocol server.

Message	Description
GetGroupCollectionFromRoleSoapOut	A response from the protocol server at completion of the **GetGroupCollectionFromRole** operation.

3.1.4.12.1.1 GetGroupCollectionFromRoleSoapIn

The **GetGroupCollectionFromRoleSoapIn** message is the request of the **GetGroupCollectionFromRole** operation (section 3.1.4.12).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromRole
```

The **SOAP body** contains a **GetGroupCollectionFromRole** element, as specified in section 3.1.4.12.2.1.

3.1.4.12.1.2 GetGroupCollectionFromRoleSoapOut

The **GetGroupCollectionFromRoleSoapOut** message is the response of the **GetGroupCollectionFromRole** operation (section 3.1.4.12).

The **SOAP body** contains a **GetGroupCollectionFromRoleResponse** element, as specified in section 3.1.4.12.2.2.

3.1.4.12.2 Elements

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

Element	Description
GetGroupCollectionFromRole	Body of the **GetGroupCollectionFromRoleSoapIn** message (section 3.1.4.12.1.1).
GetGroupCollectionFromRoleResponse	Body of the **GetGroupCollectionFromRoleSoapOut** message (section 3.1.4.12.1.2).

3.1.4.12.2.1 GetGroupCollectionFromRole

The **GetGroupCollectionFromRole** element specifies details for the request to get information about the collection of **groups** assigned to a **role definition**.

```
<s:element name="GetGroupCollectionFromRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.12.2.2 GetGroupCollectionFromRoleResponse

This element contains the response to the request to get information about the collection of **groups** assigned to a **role definition**.

```
<s:element name="GetGroupCollectionFromRoleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetGroupCollectionFromRoleResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetGroupCollectionFromRole">
              <s:complexType>
                <s:sequence>
                  <s:element name="Groups" type="tns:Groups" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetGroupCollectionFromRoleResult: The list of groups assigned to a role definition.

3.1.4.12.3   Complex Types

None.

3.1.4.12.4   Simple Types

None.

3.1.4.12.5   Attributes

None.

3.1.4.12.6   Groups

None.

3.1.4.12.7   Attribute Groups

None.

3.1.4.13   GetGroupCollectionFromSite

The **GetGroupCollectionFromSite** operation is used to get information about the collection of **groups** in the current **site collection**.

```
<wsdl:operation name="GetGroupCollectionFromSite">
    <wsdl:input message="tns:GetGroupCollectionFromSiteSoapIn" />
    <wsdl:output message="tns:GetGroupCollectionFromSiteSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetGroupCollectionFromSiteSoapIn** request message (section 3.1.4.13.1.1), and the protocol server responds with a **GetGroupCollectionFromSiteSoapOut** response message (section 3.1.4.13.1.2), as follows:

- The server MUST respond with a **GetGroupCollectionFromSiteSoapOut** response message that contains either the collection of groups assigned to the current site collection, or, if no groups are assigned to the current site collection, the empty collection.

3.1.4.13.1 Messages

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

Message	Description
GetGroupCollectionFromSiteSoapIn	A request to initiate a **GetGroupCollectionFromSite** operation (section 3.1.4.13) on the protocol server.
GetGroupCollectionFromSiteSoapOut	A response from the protocol server at completion of the **GetGroupCollectionFromSite** operation.

3.1.4.13.1.1 GetGroupCollectionFromSiteSoapIn

The **GetGroupCollectionFromSiteSoapIn** message is the request of the **GetGroupCollectionFromSite** operation (section 3.1.4.13).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromSite
```

The **SOAP body** contains a **GetGroupCollectionFromSite** element, as specified in section 3.1.4.13.2.1.

3.1.4.13.1.2 GetGroupCollectionFromSiteSoapOut

The **GetGroupCollectionFromSiteSoapOut** message is the response of the **GetGroupCollectionFromSite** operation (section 3.1.4.13).

The **SOAP body** contains a **GetGroupCollectionFromSiteResponse** element, as specified in section 3.1.4.13.2.2.

3.1.4.13.2 Elements

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

Element	Description
GetGroupCollectionFromSite	Body of the **GetGroupCollectionFromSiteSoapIn** message (section 3.1.4.13.1.1).
GetGroupCollectionFromSiteResponse	Body of the **GetGroupCollectionFromSiteSoapOut** message (section 3.1.4.13.1.2).

3.1.4.13.2.1 GetGroupCollectionFromSite

The **GetGroupCollectionFromSite** element specifies details for the request to get information about the collection of **groups** for the current **site collection**.

```
<s:element name="GetGroupCollectionFromSite">
  <s:complexType/>
</s:element>
```

3.1.4.13.2.2 GetGroupCollectionFromSiteResponse

The **GetGroupCollectionFromSiteResponse** element contains the response to the request to get information about the collection of **groups** for the current **site collection**.

```
<s:element name="GetGroupCollectionFromSiteResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetGroupCollectionFromSiteResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetGroupCollectionFromSite">
              <s:complexType>
                <s:sequence>
                  <s:element name="Groups" type="tns:Groups" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetGroupCollectionFromSiteResult: A list of groups for the current site collection.

3.1.4.13.3   Complex Types

None.

3.1.4.13.4   Simple Types

None.

3.1.4.13.5   Attributes

None.

3.1.4.13.6   Groups

None.

3.1.4.13.7   Attribute Groups

None.

3.1.4.14 GetGroupCollectionFromUser

The **GetGroupCollectionFromUser** operation is used to get information about the collection of **groups** in which the specified user is a member.

```
<wsdl:operation name="GetGroupCollectionFromUser">
    <wsdl:input message="tns:GetGroupCollectionFromUserSoapIn" />
    <wsdl:output message="tns:GetGroupCollectionFromUserSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetGroupCollectionFromUserSoapIn** request message (section 3.1.4.14.1.1), and the protocol server responds with a **GetGroupCollectionFromUserSoapOut** response message (section 3.1.4.14.1.2) in the following sequence:

1. If the user with the specified **login name** does not exist in the **site collection**, the server MUST return a **SOAP fault** with error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetGroupCollectionFromUserSoapOut** response message that contains either the collection of groups in which the specified user is a member or, if the specified user is not a member of any groups, the empty collection

3.1.4.14.1 Messages

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

Message	Description
GetGroupCollectionFromUserSoapIn	A request to initiate a **GetGroupCollectionFromUser** operation (section 3.1.4.14) on the protocol server.
GetGroupCollectionFromUserSoapOut	A response from the protocol server at completion of the **GetGroupCollectionFromUser** operation.

3.1.4.14.1.1 GetGroupCollectionFromUserSoapIn

The **GetGroupCollectionFromUserSoapIn** message is the request of the **GetGroupCollectionFromUser** operation (section 3.1.4.14).

The **SOAP action** value of the message is defined as:

http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromUser

The **SOAP body** contains a **GetGroupCollectionFromUser** element, as specified in section 3.1.4.14.2.1.

3.1.4.14.1.2 GetGroupCollectionFromUserSoapOut

The **GetGroupCollectionFromUserSoapOut** message is the response of the **GetGroupCollectionFromUser** operation (section 3.1.4.14).

The **SOAP body** contains a **GetGroupCollectionFromUserResponse** element, as specified in section 3.1.4.14.2.2.

3.1.4.14.2 Elements

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

Element	Description
GetGroupCollectionFromUser	Body of the **GetGroupCollectionFromUserSoapIn** message (section 3.1.4.14.1.1).
GetGroupCollectionFromUserResponse	Body of the **GetGroupCollectionFromUserSoapOut** message (section 3.1.4.14.1.2).

3.1.4.14.2.1 GetGroupCollectionFromUser

The **GetGroupCollectionFromUser** element specifies details for the request to get information about the collection of **groups** in which a user is a member.

```
<s:element name="GetGroupCollectionFromUser">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginName" type="tns:String251Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.14.2.2 GetGroupCollectionFromUserResponse

The **GetGroupCollectionFromUserResponse** element contains the response to the request to get information about the collection of **groups** in which the specified user is a member.

```
<s:element name="GetGroupCollectionFromUserResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetGroupCollectionFromUserResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetGroupCollectionFromUser">
              <s:complexType>
                <s:sequence>
                  <s:element name="Groups" type="tns:Groups" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetGroupCollectionFromUserResult: A list of groups in which the specified user is a member.

3.1.4.14.3   Complex Types

None.

3.1.4.14.4 Simple Types

None.

3.1.4.14.5 Attributes

None.

3.1.4.14.6 Groups

None.

3.1.4.14.7 Attribute Groups

None.

3.1.4.15 GetGroupCollectionFromWeb

The **GetGroupCollectionFromWeb** operation is used to get information about the collection of **groups** that are explicitly added to a **role definition** for the current **site**.

```
<wsdl:operation name="GetGroupCollectionFromWeb">
    <wsdl:input message="tns:GetGroupCollectionFromWebSoapIn" />
    <wsdl:output message="tns:GetGroupCollectionFromWebSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetGroupCollectionFromWebSoapIn** request message (section 3.1.4.15.1.1), and the protocol server responds with a **GetGroupCollectionFromWebSoapOut** response message (section 3.1.4.15.1.2), as follows:

▪ The server MUST respond with a **GetGroupCollectionFromWebSoapOut** response message that contains either the collection of groups that are explicitly added to a role definition for the current site, or, if no groups are assigned to the current site, the empty collection.

▪ The server MUST NOT return groups that do not have **permissions** for a site.<11>

3.1.4.15.1 Messages

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

Message	Description
GetGroupCollectionFromWebSoapIn	A request to initiate a **GetGroupCollectionFromWeb** operation (section 3.1.4.15) on the protocol server.
GetGroupCollectionFromWebSoapOut	A response from the protocol server at completion of the **GetGroupCollectionFromWeb** operation.

3.1.4.15.1.1 GetGroupCollectionFromWebSoapIn

The **GetGroupCollectionFromWebSoapIn** message is the request of the **GetGroupCollectionFromWeb** operation (section 3.1.4.15).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromWeb
```

The **SOAP body** contains a **GetGroupCollectionFromWeb** element, as specified in section 3.1.4.15.2.1.

3.1.4.15.1.2 GetGroupCollectionFromWebSoapOut

The **GetGroupCollectionFromWebSoapOut** message is the response of the **GetGroupCollectionFromWeb** operation (section 3.1.4.15).

The **SOAP body** contains a **GetGroupCollectionFromWebResponse** element, as specified in section 3.1.4.15.2.2.

3.1.4.15.2   Elements

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

Element	Description
GetGroupCollectionFromWeb	Body of the **GetGroupCollectionFromWebSoapIn** message (section 3.1.4.15.1.1).
GetGroupCollectionFromWebResponse	Body of the **GetGroupCollectionFromWebSoapOut** message (section 3.1.4.15.1.2).

3.1.4.15.2.1 GetGroupCollectionFromWeb

The **GetGroupCollectionFromWeb** element specifies details for the request to get information about the collection of **groups** that are explicitly added to a **role definition** for the current **site**.

```
<s:element name="GetGroupCollectionFromWeb">
  <s:complexType/>
</s:element>
```

3.1.4.15.2.2 GetGroupCollectionFromWebResponse

The **GetGroupCollectionFromWebResponse** element contains the response to the request to get information about the collection of **groups** that are explicitly added to a **role definition** for the current **site**.

```
<s:element name="GetGroupCollectionFromWebResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetGroupCollectionFromWebResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetGroupCollectionFromWeb">
              <s:complexType>
                <s:sequence>
                  <s:element name="Groups" type="tns:Groups" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
```

```
            </s:element>
          </s:sequence>
        </s:complexType>
    </s:element>
```

GetGroupCollectionFromWebResult: The list of groups for the current site.

3.1.4.15.3   Complex Types

None.

3.1.4.15.4   Simple Types

None.

3.1.4.15.5   Attributes

None.

3.1.4.15.6   Groups

None.

3.1.4.15.7   Attribute Groups

None.

3.1.4.16   GetGroupInfo

The **GetGroupInfo** operation is used to get information about a **group**.

```
<wsdl:operation name="GetGroupInfo">
    <wsdl:input message="tns:GetGroupInfoSoapIn" />
    <wsdl:output message="tns:GetGroupInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetGroupInfoSoapIn** request message (section 3.1.4.16.1.1), and the protocol server responds with a **GetGroupInfoSoapOut** response message (section 3.1.4.16.1.2) in the following sequence:

1. If the specified group does not exist in the current **site collection**, the server MUST return a **SOAP fault** with error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetGroupInfoSoapOut** response message that contains information about the group.

3.1.4.16.1   Messages

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

Message	Description
GetGroupInfoSoapIn	A request to initiate a **GetGroupInfo** operation (section 3.1.4.16) on the protocol server.

Message	Description
GetGroupInfoSoapOut	A response from the protocol server at completion of the **GetGroupInfo** operation.

3.1.4.16.1.1 GetGroupInfoSoapIn

The **GetGroupInfoSoapIn** message is the request of the **GetGroupInfo** operation (section 3.1.4.16).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupInfo
```

The **SOAP body** contains a **GetGroupInfo** element, as specified in section 3.1.4.16.2.1.

3.1.4.16.1.2 GetGroupInfoSoapOut

The **GetGroupInfoSoapOut** message is the response of the **GetGroupInfo** operation (section 3.1.4.16).

The **SOAP body** contains a **GetGroupInfoResponse** element, as specified in section 3.1.4.16.2.2.

3.1.4.16.2 Elements

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

Element	Description
GetGroupInfo	Body of the **GetGroupInfoSoapIn** message (section 3.1.4.16.1.1).
GetGroupInfoResponse	Body of the **GetGroupInfoSoapOut** message (section 3.1.4.16.1.2).

3.1.4.16.2.1 GetGroupInfo

The **GetGroupInfo** element specifies details for the request to get information about a **group**.

```
<s:element name="GetGroupInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.16.2.2 GetGroupInfoResponse

The **GetGroupInfoResponse** element contains the response to the request to get information about a **group**.

```
<s:element name="GetGroupInfoResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetGroupInfoResult" >
        <s:complexType>
          <s:sequence>
            <s:element name="GetGroupInfo" >
              <s:complexType>
                <s:sequence>
                  <s:element name="Group" type="tns:Group" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetGroupInfoResult: An **XML element** that contains information about the group with the specified name.

3.1.4.16.3   Complex Types

None.

3.1.4.16.4   Simple Types

None.

3.1.4.16.5   Attributes

None.

3.1.4.16.6   Groups

None.

3.1.4.16.7   Attribute Groups

None.

3.1.4.17   GetRoleCollection

The **GetRoleCollection** operation is used to return information about the specified collection of **role definitions** for the current **site**.

```
<wsdl:operation name="GetRoleCollection">
    <wsdl:input message="tns:GetRoleCollectionSoapIn" />
    <wsdl:output message="tns:GetRoleCollectionSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRoleCollectionSoapIn** request message (section 3.1.4.17.1.1), and the protocol server responds with a **GetRoleCollectionSoapOut** response message (section 3.1.4.17.1.2), as follows:

▪ The server MUST respond with a **GetRoleCollectionSoapOut** response message that contains information about the collection of role definitions.

▪ The server MUST NOT return information about role definitions that are not assigned to the current site.

3.1.4.17.1   Messages

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

Message	Description
GetRoleCollectionSoapIn	A request to initiate a **GetRoleCollection** operation (section 3.1.4.17) on the protocol server.
GetRoleCollectionSoapOut	A response from the protocol server at completion of the **GetRoleCollection** operation.

3.1.4.17.1.1 GetRoleCollectionSoapIn

The **GetRoleCollectionSoapIn** message is the request of the **GetRoleCollection** operation (section 3.1.4.17).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollection
```

The **SOAP body** contains a **GetRoleCollection** element, as specified in section 3.1.4.17.2.1.

3.1.4.17.1.2 GetRoleCollectionSoapOut

The **GetRoleCollectionSoapOut** message is the response of the **GetRoleCollection** operation (section 3.1.4.17).

The **SOAP body** contains a **GetRoleCollectionResponse** element, as specified in section 3.1.4.17.2.2.

3.1.4.17.2   Elements

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

Element	Description
GetRoleCollection	Body of the **GetRoleCollectionSoapIn** message (section 3.1.4.17.1.1).
GetRoleCollectionResponse	Body of the **GetRoleCollectionSoapOut** message (section 3.1.4.17.1.2).

3.1.4.17.2.1 GetRoleCollection

The **GetRoleCollection** element specifies details for the request to return information about the specified collection of **role definitions** for the current **site**.

```
<s:element name="GetRoleCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="roleNamesXml" type="tns:RolesInputType" />
    </s:sequence>
  </s:complexType>
</s:element>
```

roleNamesXml: An object that specifies zero or more role definition names according to the schema of the **RolesInputType** complex type, as specified in section 3.1.4.17.3.1.

3.1.4.17.2.2 GetRoleCollectionResponse

The **GetRoleCollectionResponse** element contains the response to the request to return information about the specified collection of **role definitions** for the current **site**.

```
<s:element name="GetRoleCollectionResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetRoleCollectionResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetRoleCollection" type="tns:RolesOutputTextType"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetRoleCollectionResult: An object that MUST contain one **GetRoleCollection XML element**.

GetRoleCollection: An XML element that contains a collection of role definitions that MUST follow the schema of the **RolesOutputTextType** complex type, as specified in section 2.2.4.6.

3.1.4.17.3 Complex Types

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

Complex Type	Description
RolesInputType	Collection of roles input to this operation.

3.1.4.17.3.1 RolesInputType

The **RolesInputType** complex type contains a collection of roles as input to this operation.

```
<s:complexType name="RolesInputType">
  <s:sequence>
    <s:element name="Roles" minOccurs="1" maxOccurs="1">
      <s:complexType>
        <s:sequence>
```

```
            <s:element name="Role" minOccurs="0" maxOccurs="100">
              <s:complexType>
                <s:attribute name="RoleName" type="tns:String255Type" />
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
```

RoleName: The name of the **role definition**. The specified value MUST contain less than 256 characters, and MUST NOT be empty.

3.1.4.17.4   Simple Types

None.

3.1.4.17.5   Attributes

None.

3.1.4.17.6   Groups

None.

3.1.4.17.7   Attribute Groups

None.

3.1.4.18   GetRoleCollectionFromGroup

The **GetRoleCollectionFromGroup** operation is used to return the collection of **role definitions** based on a specified **group** name.

```
<wsdl:operation name="GetRoleCollectionFromGroup">
    <wsdl:input message="tns:GetRoleCollectionFromGroupSoapIn" />
    <wsdl:output message="tns:GetRoleCollectionFromGroupSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRoleCollectionFromGroupSoapIn** request message (section 3.1.4.18.1.1), and the protocol server responds with a **GetRoleCollectionFromGroupSoapOut** response message (section 3.1.4.18.1.2) in the following sequence:

1. If the specified group does not exist or has not been assigned to any role definition on the **site**, the server MUST return a **SOAP fault** with error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetRoleCollectionFromGroupSoapOut** response message that contains the collection of all role definitions to which the specified group has been assigned on the site.

3.1.4.18.1   Messages

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

Message	Description
GetRoleCollectionFromGroupSoapIn	A request to initiate a **GetRoleCollectionFromGroup** operation (section 3.1.4.18) on the protocol server.
GetRoleCollectionFromGroupSoapOut	A response from the protocol server at completion of the **GetRoleCollectionFromGroup** operation.

3.1.4.18.1.1 GetRoleCollectionFromGroupSoapIn

The **GetRoleCollectionFromGroupSoapIn** message is the request of the **GetRoleCollectionFromGroup** operation (section 3.1.4.18).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromGroup
```

The **SOAP body** contains a **GetRoleCollectionFromGroup** element, as specified in section 3.1.4.18.2.1.

3.1.4.18.1.2 GetRoleCollectionFromGroupSoapOut

The **GetRoleCollectionFromGroupSoapOut** message is the response of the **GetRoleCollectionFromGroup** operation (section 3.1.4.18).

The **SOAP body** contains a **GetRoleCollectionFromGroupResponse** element, as specified in section 3.1.4.18.2.2.

3.1.4.18.2   Elements

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

Element	Description
GetRoleCollectionFromGroup	Body of the **GetRoleCollectionFromGroupSoapIn** message (section 3.1.4.18.1.1).
GetRoleCollectionFromGroupResponse	Body of the **GetRoleCollectionFromGroupSoapOut** message (section 3.1.4.18.1.2).

3.1.4.18.2.1 GetRoleCollectionFromGroup

The **GetRoleCollectionFromGroup** element specifies details for the request to return the collection of **role definitions** based on a specified **group** name.

```
<s:element name="GetRoleCollectionFromGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of a group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.18.2.2 GetRoleCollectionFromGroupResponse

The **GetRoleCollectionFromGroupResponse** element contains the response to the request to return the collection of **role definitions** based on the specified **group** name.

```
<s:element name="GetRoleCollectionFromGroupResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetRoleCollectionFromGroupResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetRoleCollectionFromGroup" type="tns:RolesOutputTextType"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetRoleCollectionFromGroupResult: An object that MUST contain one **GetRoleCollectionFromGroup XML element**.

GetRoleCollectionFromGroup: An XML element that contains a collection of role definitions that MUST follow the schema of the **RolesOutputTextType** complex type, as specified in section 2.2.4.6.

3.1.4.18.3 Complex Types

None.

3.1.4.18.4 Simple Types

None.

3.1.4.18.5 Attributes

None.

3.1.4.18.6 Groups

None.

3.1.4.18.7 Attribute Groups

None.

3.1.4.19 GetRoleCollectionFromUser

The **GetRoleCollectionFromUser** operation is used to return a collection of **role definitions** based on the specified **login name**.

```
<wsdl:operation name="GetRoleCollectionFromUser">
    <wsdl:input message="tns:GetRoleCollectionFromUserSoapIn" />
    <wsdl:output message="tns:GetRoleCollectionFromUserSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRoleCollectionFromUserSoapIn** request message (section 3.1.4.19.1.1), and the protocol server responds with a **GetRoleCollectionFromUserSoapOut** response message (section 3.1.4.19.1.2) in the following sequence:

1. If a user with the specified login name does not exist on the **site collection** or if a user is not directly assigned to a role definition in the **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetRoleCollectionFromUserSoapOut** response message that contains the collection of role definitions that the user is directly assigned to on the site.

3.1.4.19.1   Messages

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

Message	Description
GetRoleCollectionFromUserSoapIn	A request to initiate a **GetRoleCollectionFromUser** operation (section 3.1.4.19) on the protocol server.
GetRoleCollectionFromUserSoapOut	A response from the protocol server at completion of the **GetRoleCollectionFromUser** operation.

3.1.4.19.1.1 GetRoleCollectionFromUserSoapIn

The **GetRoleCollectionFromUserSoapIn** message is the request of the **GetRoleCollectionFromUser** operation (section 3.1.4.19).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromUser
```

The **SOAP body** contains a **GetRoleCollectionFromUser** element, as specified in section 3.1.4.19.2.1.

3.1.4.19.1.2 GetRoleCollectionFromUserSoapOut

The **GetRoleCollectionFromUserSoapOut** message is the response of the **GetRoleCollectionFromUser** operation (section 3.1.4.19).

The **SOAP body** contains a **GetRoleCollectionFromUserResponse** element, as specified in section 3.1.4.19.2.2.

3.1.4.19.2   Elements

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

Element	Description
GetRoleCollectionFromUser	Body of the **GetRoleCollectionFromUserSoapIn** message (section 3.1.4.19.1.1).

Element	Description
GetRoleCollectionFromUserResponse	Body of the **GetRoleCollectionFromUserSoapOut** message (section 3.1.4.19.1.2).

3.1.4.19.2.1 GetRoleCollectionFromUser

The **GetRoleCollectionFromUser** element specifies details for the request to return the collection of **role definitions** based on a specified **login name**.

```
<s:element name="GetRoleCollectionFromUser">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginName" type="tns:String251Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginName: The login name of the specified user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.19.2.2 GetRoleCollectionFromUserResponse

The **GetRoleCollectionFromUserResponse** element contains the response to the request to return the collection of **role definitions** based on a specified **login name**.

```
<s:element name="GetRoleCollectionFromUserResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetRoleCollectionFromUserResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetRoleCollectionFromUser" type="tns:RolesOutputTextType"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetRoleCollectionFromUserResult: An object that MUST contain one **GetRoleCollectionFromUser XML element**.

GetRoleCollectionFromUser: An XML element that contains a collection of role definitions that MUST follow the schema of the **RolesOutputTextType** complex type, as specified in section 2.2.4.6.

3.1.4.19.3   Complex Types

None.

3.1.4.19.4   Simple Types

None.

3.1.4.19.5   Attributes

None.

3.1.4.19.6   Groups

None.

3.1.4.19.7   Attribute Groups

None.

3.1.4.20   GetRoleCollectionFromWeb

The **GetRoleCollectionFromWeb** operation is used to return the collection of **role definitions** for the current **site**.

```
<wsdl:operation name="GetRoleCollectionFromWeb">
    <wsdl:input message="tns:GetRoleCollectionFromWebSoapIn" />
    <wsdl:output message="tns:GetRoleCollectionFromWebSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRoleCollectionFromWebSoapIn** request message (section 3.1.4.20.1.1), and the protocol server responds with a **GetRoleCollectionFromWebSoapOut** response message (section 3.1.4.20.1.2). The server MUST respond with a **GetRoleCollectionFromWebSoapOut** response message that contains the collection of role definitions.

3.1.4.20.1   Messages

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

Message	Description
GetRoleCollectionFromWebSoapIn	A request to initiate a **GetRoleCollectionFromWeb** operation (section 3.1.4.20) on the protocol server.
GetRoleCollectionFromWebSoapOut	A response from the protocol server at completion of the **GetRoleCollectionFromWeb** operation.

3.1.4.20.1.1   GetRoleCollectionFromWebSoapIn

The **GetRoleCollectionFromWebSoapIn** message is the request of the **GetRoleCollectionFromWeb** operation (section 3.1.4.20).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromWeb
```

The **SOAP body** contains a **GetRoleCollectionFromWeb** element, as specified in section 3.1.4.20.2.1.

3.1.4.20.1.2   GetRoleCollectionFromWebSoapOut

The **GetRoleCollectionFromWebSoapOut** message is the response of the
GetRoleCollectionFromWeb operation (section 3.1.4.20).

The **SOAP body** contains a **GetRoleCollectionFromWebResponse** element, as specified in section
3.1.4.20.2.2.

3.1.4.20.2   Elements

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

Element	Description
GetRoleCollectionFromWeb	Body of the **GetRoleCollectionFromWebSoapIn** message (section 3.1.4.20.1.1).
GetRoleCollectionFromWebResponse	Body of the **GetRoleCollectionFromWebSoapOut** message (section 3.1.4.20.1.2).

3.1.4.20.2.1 GetRoleCollectionFromWeb

The **GetRoleCollectionFromWeb** element specifies details for the request to return the collection of
role definitions from the current **site**.

```
<s:element name="GetRoleCollectionFromWeb">
  <s:complexType/>
</s:element>
```

3.1.4.20.2.2 GetRoleCollectionFromWebResponse

The **GetRoleCollectionFromWebResponse** element contains the response to the request to return
the collection of **role definitions** from the current **site**.

```
<s:element name="GetRoleCollectionFromWebResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetRoleCollectionFromWebResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetRoleCollectionFromWeb" type="tns:RolesOutputTextType"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetRoleCollectionFromWebResult: An object that MUST contain one **GetRoleCollectionFromWeb
XML element**.

GetRoleCollectionFromWeb: An XML element that contains a collection of role definitions. The role
definition MUST follow the schema of the **RolesOutputTextType** complex type, as specified in section
2.2.4.6.

3.1.4.20.3   Complex Types

None.

3.1.4.20.4 Simple Types

None.

3.1.4.20.5 Attributes

None.

3.1.4.20.6 Groups

None.

3.1.4.20.7 Attribute Groups

None.

3.1.4.21 GetRoleInfo

The **GetRoleInfo** operation is used to return information about a **role definition**.

```
<wsdl:operation name="GetRoleInfo">
    <wsdl:input message="tns:GetRoleInfoSoapIn" />
    <wsdl:output message="tns:GetRoleInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRoleInfoSoapIn** request message (section 3.1.4.21.1.1), and the protocol server responds with a **GetRoleInfoSoapOut** response message (section 3.1.4.21.1.2) in the following sequence:

1. If the element **roleName** specifies a role definition that does not exist on the current **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetRoleInfoSoapOut** response message that contains information about the role definition.

3.1.4.21.1 Messages

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

Message	Description
GetRoleInfoSoapIn	A request to initiate a **GetRoleInfo** operation (section 3.1.4.21) on the protocol server.
GetRoleInfoSoapOut	A response from the protocol server at completion of the **GetRoleInfo** operation.

3.1.4.21.1.1 GetRoleInfoSoapIn

The **GetRoleInfoSoapIn** message is the request of the **GetRoleInfo** operation (section 3.1.4.21).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleInfo
```

The **SOAP body** contains a **GetRoleInfo** element, as specified in section 3.1.4.21.2.1.

3.1.4.21.1.2 GetRoleInfoSoapOut

The **GetRoleInfoSoapOut** message is the response of the **GetRoleInfo** operation (section 3.1.4.21).

The **SOAP body** contains a **GetRoleInfoResponse** element, as specified in section 3.1.4.21.2.2.

3.1.4.21.2   Elements

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

Element	Description
GetRoleInfo	Body of the **GetRoleInfoSoapIn** message (section 3.1.4.21.1.1).
GetRoleInfoResponse	Body of the **GetRoleInfoSoapOut** message (section 3.1.4.21.1.2).

3.1.4.21.2.1 GetRoleInfo

The **GetRoleInfo** element specifies details for the request to return information about a **role definition**.

```
<s:element name="GetRoleInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.21.2.2 GetRoleInfoResponse

The **GetRoleInfoResponse** element contains the response to the request to return information about a **role definition**.

```
<s:element name="GetRoleInfoResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetRoleInfoResult" type="tns:RoleOutputType" />
    </s:sequence>
  </s:complexType>
</s:element>
```

GetRoleInfoResult: An object that MUST contain one role definition according to the schema of the **RoleOutputType** complex type, as specified in section 3.1.4.21.3.1.

3.1.4.21.3 Complex Types

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

Complex Type	Description
RoleOutputType	**Role definition** information.

3.1.4.21.3.1 RoleOutputType

The **RoleOutputType** complex type contains information about a **role definition**.

```
<s:complexType name="RoleOutputType">
  <s:sequence>
    <s:element name="GetRoleInfo" minOccurs="1" maxOccurs="1">
      <s:complexType>
        <s:sequence>
          <s:element name="Role" minOccurs="1" maxOccurs="1">
            <s:complexType>
              <s:attribute name="ID" type="s:positiveInteger" use="required" />
              <s:attribute name="Name" type="s:string" use="required" />
              <s:attribute name="Description" type="s:string" use="required" />
              <s:attribute name="Type" type="s:nonNegativeInteger" use="required" />
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

ID: The identifier of the role definition.

Name: The name of the role definition.

Description: The description for the role definition.

Type: An integer representing the **role type** of the role definition, as specified in [MS-DWSS] section 2.2.5.2. The mapping between **Type** and the role type specified in [MS-DWSS] section 2.2.5.2 MUST be as follows:

Role type	Type	Notes
None	0	
Guest	1	The **Guest** role type is used in this protocol, but is not specified in [MS-DWSS] section 2.2.5.2.
Reader	2	
Contributor	3	
WebDesigner	4	
Administrator	5	

3.1.4.21.4 Simple Types

None.

3.1.4.21.5 Attributes

None.

3.1.4.21.6 Groups

None.

3.1.4.21.7 Attribute Groups

None.

3.1.4.22 GetRolesAndPermissionsForCurrentUser

The **GetRolesAndPermissionsForCurrentUser** operation<12> is used to return the **permissions** and **role definitions** for the current user.

```
<wsdl:operation name="GetRolesAndPermissionsForCurrentUser">
    <wsdl:input message="tns:GetRolesAndPermissionsForCurrentUserSoapIn" />
    <wsdl:output message="tns:GetRolesAndPermissionsForCurrentUserSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRolesAndPermissionsForCurrentUserSoapIn** request message (section 3.1.4.22.1.1), and the protocol server responds with a **GetRolesAndPermissionsForCurrentUserSoapOut** response message (section 3.1.4.22.1.2), as follows:

- The server MUST respond with a **GetRolesAndPermissionsForCurrentUserSoapOut** response message that contains all the role definitions that the current user is assigned to, and an integer that is the bitwise "OR" combination of all the permission levels that the user has through these role definitions.

3.1.4.22.1 Messages

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

Message	Description
GetRolesAndPermissionsForCurrentUserSoap In	A request to initiate a **GetRolesAndPermissionsForCurrentUser** operation (section 3.1.4.22) on the protocol server.
GetRolesAndPermissionsForCurrentUserSoap Out	A response from the protocol server at completion of the **GetRolesAndPermissionsForCurrentUser** operation.

3.1.4.22.1.1 GetRolesAndPermissionsForCurrentUserSoapIn

The **GetRolesAndPermissionsForCurrentUserSoapIn** message is the request of the **GetRolesAndPermissionsForCurrentUser** operation (section 3.1.4.22).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRolesAndPermissionsForCurrentUser
```

The **SOAP body** contains a **GetRolesAndPermissionsForCurrentUser** element, as specified in section 3.1.4.22.2.1.

3.1.4.22.1.2 GetRolesAndPermissionsForCurrentUserSoapOut

The **GetRolesAndPermissionsForCurrentUserSoapOut** message is the response of the **GetRolesAndPermissionsForCurrentUser** operation (section 3.1.4.22).

The **SOAP body** contains a **GetRolesAndPermissionsForCurrentUserResponse** element, as specified in section 3.1.4.22.2.2.

3.1.4.22.2 Elements

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

Element	Description
GetRolesAndPermissionsForCurrentUser	Body of the **GetRolesAndPermissionsForCurrentUserSoapIn** message (section 3.1.4.22.1.1).
GetRolesAndPermissionsForCurrentUserResponse	Body of the **GetRolesAndPermissionsForCurrentUserSoapOut** message (section 3.1.4.22.1.2).

3.1.4.22.2.1 GetRolesAndPermissionsForCurrentUser

The **GetRolesAndPermissionsForCurrentUser** element specifies details for the request to return the permissions and **role definitions** for the current user.

```
<s:element name="GetRolesAndPermissionsForCurrentUser">
  <s:complexType/>
</s:element>
```

3.1.4.22.2.2 GetRolesAndPermissionsForCurrentUserResponse

The **GetRolesAndPermissionsForCurrentUserResponse** element contains the response to the request to return the permissions and **role definitions** for the current user.

```
<s:element name="GetRolesAndPermissionsForCurrentUserResponse" >
  <s:complexType>
    <s:sequence>
      <s:element name="GetRolesAndPermissionsForCurrentUserResult">
        <s:complexType>
          <s:sequence>
            <s:element name="RolesAndPermissions">
              <s:complexType>
                <s:sequence>
                  <s:element name="Permissions">
                    <s:complexType>
                      <s:attribute name="Value" type="s:unsignedLong" use="required" />
```

```
                    </s:complexType>
                  </s:element>
                  <s:element name="Roles" type="tns:RolesOutputMaskType" minOccurs="0" />
                </s:sequence>
              </s:complexType>
            </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
```

GetRolesAndPermissionsForCurrentUserResult: An object that MUST contain the following:

▪ **Permissions:** An unsigned long integer that is the bitwise "OR" combination of multiple **permission** levels, as specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14 and [MS-WSSFO3] section 2.2.2.15.

▪ **Roles:** Contain zero or more role definitions according to the schema of the **RolesOutputMaskType** complex type, as specified in section 2.2.4.5.

3.1.4.22.3   Complex Types

None.

3.1.4.22.4   Simple Types

None.

3.1.4.22.5   Attributes

None.

3.1.4.22.6   Groups

None.

3.1.4.22.7   Attribute Groups

None.

3.1.4.23   GetRolesAndPermissionsForSite

The **GetRolesAndPermissionsForSite** operation<13> is used to return the **permissions** and **role definitions** for the current **site collection**.

```
<wsdl:operation name="GetRolesAndPermissionsForSite">
    <wsdl:input message="tns:GetRolesAndPermissionsForSiteSoapIn" />
    <wsdl:output message="tns:GetRolesAndPermissionsForSiteSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetRolesAndPermissionsForSiteSoapIn** request message (section 3.1.4.23.1.1), and the protocol server responds with a **GetRolesAndPermissionsForSiteSoapOut** response message (section 3.1.4.23.1.2), as follows:

▪ The server MUST respond with a **GetRolesAndPermissionsForSiteSoapOut** response message that contains all the role definitions in the site collection. Each role definition has a **permission level** that defines the permissions for that role definition.

3.1.4.23.1 Messages

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

Message	Description
GetRolesAndPermissionsForSiteSoapIn	A request to initiate a **GetRolesAndPermissionsForSite** operation (section 3.1.4.23) on the protocol server.
GetRolesAndPermissionsForSiteSoapOut	A response from the protocol server at completion of the **GetRolesAndPermissionsForSite** operation.

3.1.4.23.1.1 GetRolesAndPermissionsForSiteSoapIn

The **GetRolesAndPermissionsForSiteSoapIn** message is the request of the **GetRolesAndPermissionsForSite** operation (section 3.1.4.23).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetRolesAndPermissionsForSite
```

The **SOAP body** contains a **GetRolesAndPermissionsForSite** element, as specified in section 3.1.4.23.2.1.

3.1.4.23.1.2 GetRolesAndPermissionsForSiteSoapOut

The **GetRolesAndPermissionsForSiteSoapOut** message is the response of the **GetRolesAndPermissionsForSite** operation (section 3.1.4.23).

The **SOAP body** contains a **GetRolesAndPermissionsForSiteResponse** element, as specified in section 3.1.4.23.2.2.

3.1.4.23.2 Elements

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

Element	Description
GetRolesAndPermissionsForSite	Body of the **GetRolesAndPermissionsForSiteSoapIn** message (section 3.1.4.23.1.1).
GetRolesAndPermissionsForSiteResponse	Body of the **GetRolesAndPermissionsForSiteSoapOut** message (section 3.1.4.23.1.2).

3.1.4.23.2.1 GetRolesAndPermissionsForSite

The **GetRolesAndPermissionsForSite** element specifies details for the request to return the **permissions** and **role definitions** for the current **site collection**.

```
<s:element name="GetRolesAndPermissionsForSite">
  <s:complexType/>
</s:element>
```

3.1.4.23.2.2 GetRolesAndPermissionsForSiteResponse

The **GetRolesAndPermissionsForSiteResponse** element contains the response to the request to return the **permissions** and **role definitions** for the current **site collection**.

```
<s:element name="GetRolesAndPermissionsForSiteResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetRolesAndPermissionsForSiteResult">
        <s:complexType>
          <s:sequence>
            <s:element name="Roles" type="tns:RolesOutputMaskType" />
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetRolesAndPermissionsForSiteResult: An object that MUST contain zero or more role definitions according to the schema of the **RolesOutputMaskType** complex type, as specified in section 2.2.4.5.

3.1.4.23.3   Complex Types

None.

3.1.4.23.4   Simple Types

None.

3.1.4.23.5   Attributes

None.

3.1.4.23.6   Groups

None.

3.1.4.23.7   Attribute Groups

None.

3.1.4.24   GetUserCollection

The **GetUserCollection** operation is used to get information about a collection of users in the current **site** based on the specified collection of **login names**.

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

```
    <wsdl:input message="tns:GetUserCollectionSoapIn" />
    <wsdl:output message="tns:GetUserCollectionSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserCollectionSoapIn** request message (section 3.1.4.24.1.1), and the protocol server responds with a **GetUserCollectionSoapOut** response message (section 3.1.4.24.1.2) in the following sequence:

1. If any of the login names are empty, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST ignore nonexistent users that are specified and MUST respond with a **GetUserCollectionSoapOut** response message that contains information about the users.

3.1.4.24.1   Messages

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

Message	Description
GetUserCollectionSoapIn	A request to initiate a **GetUserCollection** operation (section 3.1.4.24) on the protocol server.
GetUserCollectionSoapOut	A response from the protocol server at completion of the **GetUserCollection** operation.

3.1.4.24.1.1 GetUserCollectionSoapIn

The **GetUserCollectionSoapIn** message is the request of the **GetUserCollection** operation (section 3.1.4.24).

The **SOAP action** value of the message is defined as:

http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollection

The **SOAP body** contains a **GetUserCollection** element, as specified in section 3.1.4.24.2.1.

3.1.4.24.1.2 GetUserCollectionSoapOut

The **GetUserCollectionSoapOut** message is the response of the **GetUserCollection** operation (section 3.1.4.24).

The **SOAP body** contains a **GetUserCollectionResponse** element, as specified in section 3.1.4.24.2.2.

3.1.4.24.2   Elements

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

Element	Description
GetUserCollection	Body of the **GetUserCollectionSoapIn** message (section 3.1.4.24.1.1).
GetUserCollectionResponse	Body of the **GetUserCollectionSoapOut** message (section 3.1.4.24.1.2).

3.1.4.24.2.1 GetUserCollection

The **GetUserCollection** element specifies details for the request to get information about a collection of users based on the specified collection of **login names**.

```
<s:element name="GetUserCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginNamesXml">
        <s:complexType>
          <s:sequence>
            <s:element name="Users" type="tns:InputUsersType" />
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginNamesXml: An **XML element** that specifies a collection of users.

3.1.4.24.2.2 GetUserCollectionResponse

The **GetUserCollectionResponse** element contains the response to the request to get information about a collection of users based on the specified collection of **login names**.

```
<s:element name="GetUserCollectionResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserCollectionResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserCollection">
              <s:complexType>
                <s:sequence>
                  <s:element name="Users" type="tns:Users" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetUserCollectionResult: An **XML element** that specifies information about a collection of users.

3.1.4.24.3   Complex Types

None.

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3.1.4.24.4 Simple Types

None.

3.1.4.24.5 Attributes

None.

3.1.4.24.6 Groups

None.

3.1.4.24.7 Attribute Groups

None.

3.1.4.25 GetUserCollectionFromGroup

The **GetUserCollectionFromGroup** operation is used to get information about a collection of users in a **group**.

```
<wsdl:operation name="GetUserCollectionFromGroup">
    <wsdl:input message="tns:GetUserCollectionFromGroupSoapIn" />
    <wsdl:output message="tns:GetUserCollectionFromGroupSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserCollectionFromGroupSoapIn** request message (section 3.1.4.25.1.1), and the protocol server responds with a **GetUserCollectionFromGroupSoapOut** response message (section 3.1.4.25.1.2) in the following sequence:

1. If a group with the specified name does not exist in the **site collection**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetUserCollectionFromGroupSoapOut** response message that contains information about the collection of users.

3.1.4.25.1 Messages

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

Message	Description
GetUserCollectionFromGroupSoapIn	A request to initiate a **GetUserCollectionFromGroup** operation (section 3.1.4.25) on the protocol server.
GetUserCollectionFromGroupSoapOut	A response from the protocol server at completion of the **GetUserCollectionFromGroup** operation.

3.1.4.25.1.1 GetUserCollectionFromGroupSoapIn

The **GetUserCollectionFromGroupSoapIn** message is the request of the **GetUserCollectionFromGroup** operation (section 3.1.4.25).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromGroup
```

The **SOAP body** contains a **GetUserCollectionFromGroup** element, as specified in section 3.1.4.25.2.1.

3.1.4.25.1.2 GetUserCollectionFromGroupSoapOut

The **GetUserCollectionFromGroupSoapOut** message is the response of the **GetUserCollectionFromGroup** operation (section 3.1.4.25).

The **SOAP body** contains a **GetUserCollectionFromGroupResponse** element, as specified in section 3.1.4.25.2.2.

3.1.4.25.2 Elements

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

Element	Description
GetUserCollectionFromGroup	Body of the **GetUserCollectionFromGroupSoapIn** message (section 3.1.4.25.1.1).
GetUserCollectionFromGroupResponse	Body of the **GetUserCollectionFromGroupSoapOut** message (section 3.1.4.25.1.2).

3.1.4.25.2.1 GetUserCollectionFromGroup

The **GetUserCollectionFromGroup** element specifies details for the request to get information about a collection of users in a **group**.

```
<s:element name="GetUserCollectionFromGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of a group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.25.2.2 GetUserCollectionFromGroupResponse

The **GetUserCollectionFromGroupResponse** element contains the response to the request to get information about a collection of users in a **group**.

```
<s:element name="GetUserCollectionFromGroupResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserCollectionFromGroupResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserCollectionFromGroup">
              <s:complexType>
                <s:sequence>
```

```
                <s:element name="Users" type="tns:Users" />
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
</s:element>
```

GetUserCollectionFromGroupResult: An **XML element** that specifies information about a collection of users in a group.

3.1.4.25.3   Complex Types

None.

3.1.4.25.4   Simple Types

None.

3.1.4.25.5   Attributes

None.

3.1.4.25.6   Groups

None.

3.1.4.25.7   Attribute Groups

None.

3.1.4.26   GetUserCollectionFromRole

The **GetUserCollectionFromRole** operation is used to get information about a collection of users assigned to a **role definition**.

```
<wsdl:operation name="GetUserCollectionFromRole">
    <wsdl:input message="tns:GetUserCollectionFromRoleSoapIn" />
    <wsdl:output message="tns:GetUserCollectionFromRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserCollectionFromRoleSoapIn** request message (section 3.1.4.26.1.1), and the protocol server responds with a **GetUserCollectionFromRoleSoapOut** response message (section 3.1.4.26.1.2) in the following sequence:

1. If a role definition with the specified name does not exist, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetUserCollectionFromRoleSoapOut** response message that contains information about the collection of users.

3.1.4.26.1   Messages

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

Message	Description
GetUserCollectionFromRoleSoapIn	A request to initiate a **GetUserCollectionFromRole** operation (section 3.1.4.26) on the protocol server.
GetUserCollectionFromRoleSoapOut	A response from the protocol server at completion of the **GetUserCollectionFromRole** operation.

3.1.4.26.1.1 GetUserCollectionFromRoleSoapIn

The **GetUserCollectionFromRoleSoapIn** message is the request of the **GetUserCollectionFromRole** operation (section 3.1.4.26).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromRole
```

The **SOAP body** contains a **GetUserCollectionFromRole** element, as specified in section 3.1.4.26.2.1.

3.1.4.26.1.2 GetUserCollectionFromRoleSoapOut

The **GetUserCollectionFromRoleSoapOut** message is the response of the **GetUserCollectionFromRole** operation (section 3.1.4.26).

The **SOAP body** contains a **GetUserCollectionFromRoleResponse** element, as specified in section 3.1.4.26.2.2.

3.1.4.26.2   Elements

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

Element	Description
GetUserCollectionFromRole	Body of the **GetUserCollectionFromRoleSoapIn** message (section 3.1.4.26.1.1).
GetUserCollectionFromRoleResponse	Body of the **GetUserCollectionFromRoleSoapOut** message (section 3.1.4.26.1.2).

3.1.4.26.2.1 GetUserCollectionFromRole

Th3 **GetUserCollectionFromRole** element specifies details for the request to get information about a collection of users assigned to a **role definition**.

```
<s:element name="GetUserCollectionFromRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
    </s:sequence>
```

```
        </s:complexType>
    </s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.26.2.2 GetUserCollectionFromRoleResponse

The **GetUserCollectionFromRoleResponse** element contains the response to the request to get information about a collection of users assigned to a **role definition**.

```
<s:element name="GetUserCollectionFromRoleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserCollectionFromRoleResult">
       <s:complexType>
         <s:sequence>
           <s:element name="GetUserCollectionFromRole">
             <s:complexType>
               <s:sequence>
                 <s:element name="Users" type="tns:Users" />
               </s:sequence>
             </s:complexType>
           </s:element>
         </s:sequence>
       </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetUserCollectionFromRoleResult: An **XML element** that specifies information about a collection of users.

3.1.4.26.3 Complex Types

None.

3.1.4.26.4 Simple Types

None.

3.1.4.26.5 Attributes

None.

3.1.4.26.6 Groups

None.

3.1.4.26.7 Attribute Groups

None.

3.1.4.27 GetUserCollectionFromSite

The **GetUserCollectionFromSite** operation is used to get information about a collection of users in the current **site collection**.

```
<wsdl:operation name="GetUserCollectionFromSite">
    <wsdl:input message="tns:GetUserCollectionFromSiteSoapIn" />
    <wsdl:output message="tns:GetUserCollectionFromSiteSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserCollectionFromSiteSoapIn** request message (section 3.1.4.27.1.1), and the protocol server responds with a **GetUserCollectionFromSiteSoapOut** response message (section 3.1.4.27.1.2), as follows:

- The server MUST respond with a **GetUserCollectionFromSiteSoapOut** response message that contains information about the users.

3.1.4.27.1   Messages

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

Message	Description
GetUserCollectionFromSiteSoapIn	A request to initiate a **GetUserCollectionFromSite** operation (section 3.1.4.27) on the protocol server.
GetUserCollectionFromSiteSoapOut	A response from the protocol server at completion of the **GetUserCollectionFromSite** operation.

3.1.4.27.1.1 GetUserCollectionFromSiteSoapIn

The **GetUserCollectionFromSiteSoapIn** message is the request of the **GetUserCollectionFromSite** operation (section 3.1.4.27).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromSite
```

The **SOAP body** contains a **GetUserCollectionFromSite** element, as specified in section 3.1.4.27.2.1.

3.1.4.27.1.2 GetUserCollectionFromSiteSoapOut

The **GetUserCollectionFromSiteSoapOut** message is the response of the **GetUserCollectionFromSite** operation (section 3.1.4.27).

The **SOAP body** contains a **GetUserCollectionFromSiteResponse** element, as specified in section 3.1.4.27.2.2.

3.1.4.27.2   Elements

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

Element	Description
GetUserCollectionFromSite	Body of the **GetUserCollectionFromSiteSoapIn** message (section 3.1.4.27.1.1).

Element	Description
GetUserCollectionFromSiteResponse	Body of the **GetUserCollectionFromSiteSoapOut** message (section 3.1.4.27.1.2).

3.1.4.27.2.1 GetUserCollectionFromSite

The **GetUserCollectionFromSite** element specifies details for the request to get information about a collection of users for the current **site collection**.

```
<s:element name="GetUserCollectionFromSite">
  <s:complexType/>
</s:element>
```

3.1.4.27.2.2 GetUserCollectionFromSiteResponse

The **GetUserCollectionFromSiteResponse** element contains the response to the request to get information about a collection of users for the current **site collection**.

```
<s:element name="GetUserCollectionFromSiteResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserCollectionFromSiteResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserCollectionFromSite">
              <s:complexType>
                <s:sequence>
                  <s:element name="Users" type="tns:Users" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetUserCollectionFromSiteResult: An **XML element** that specifies the information about a collection of users for the current site collection.

3.1.4.27.3   Complex Types

None.

3.1.4.27.4   Simple Types

None.

3.1.4.27.5   Attributes

None.

3.1.4.27.6   Groups

None.

3.1.4.27.7 Attribute Groups

None.

3.1.4.28 GetUserCollectionFromWeb

The **GetUserCollectionFromWeb** operation is used to get information about the collection of users who have been explicitly added to a **role definition** for the current **site**.

```
<wsdl:operation name="GetUserCollectionFromWeb">
    <wsdl:input message="tns:GetUserCollectionFromWebSoapIn" />
    <wsdl:output message="tns:GetUserCollectionFromWebSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserCollectionFromWebSoapIn** request message (section 3.1.4.28.1.1), and the protocol server responds with a **GetUserCollectionFromWebSoapOut** response message (section 3.1.4.28.1.2), as follows:

- The server MUST respond with a **GetUserCollectionFromWebSoapOut** response message that contains information about the users.

3.1.4.28.1 Messages

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

Message	Description
GetUserCollectionFromWebSoapIn	A request to initiate a **GetUserCollectionFromWeb** operation (section 3.1.4.28) on the protocol server.
GetUserCollectionFromWebSoapOut	A response from the protocol server at completion of the **GetUserCollectionFromWeb** operation.

3.1.4.28.1.1 GetUserCollectionFromWebSoapIn

The **GetUserCollectionFromWebSoapIn** message is the request of the **GetUserCollectionFromWeb** operation (section 3.1.4.28).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromWeb
```

The **SOAP body** contains a **GetUserCollectionFromWeb** element, as specified in section 3.1.4.28.2.1.

3.1.4.28.1.2 GetUserCollectionFromWebSoapOut

The **GetUserCollectionFromWebSoapOut** message is the response of the **GetUserCollectionFromWeb** operation (section 3.1.4.28).

The **SOAP body** contains a **GetUserCollectionFromWebResponse** element, as specified in section 3.1.4.28.2.2.

3.1.4.28.2   Elements

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

Element	Description
GetUserCollectionFromWeb	Body of the **GetUserCollectionFromWebSoapIn** message (section 3.1.4.28.1.1).
GetUserCollectionFromWebResponse	Body of the **GetUserCollectionFromWebSoapOut** message (section 3.1.4.28.1.2).

3.1.4.28.2.1   GetUserCollectionFromWeb

The **GetUserCollectionFromWeb** element specifies details for the request to get information about the collection of users who have been explicitly added to a **role definition** for the current **site**.

```
<s:element name="GetUserCollectionFromWeb">
  <s:complexType/>
</s:element>
```

3.1.4.28.2.2   GetUserCollectionFromWebResponse

The **GetUserCollectionFromWebResponse** element contains the response to the request to get information about the collection of users who have been explicitly added to a **role definition** for the current **site**.

```
<s:element name="GetUserCollectionFromWebResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserCollectionFromWebResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserCollectionFromWeb">
              <s:complexType>
                <s:sequence>
                  <s:element name="Users" type="tns:Users" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetUserCollectionFromWebResult: An **XML element** that specifies the information about the collection of users who have been explicitly added to a role definition for the current site.

3.1.4.28.3   Complex Types

None.

3.1.4.28.4   Simple Types

None.

3.1.4.28.5   Attributes

None.

3.1.4.28.6   Groups

None.

3.1.4.28.7   Attribute Groups

None.

3.1.4.29   GetUserInfo

The **GetUserInfo** operation is used to get information about the specified user.

```
<wsdl:operation name="GetUserInfo">
    <wsdl:input message="tns:GetUserInfoSoapIn" />
    <wsdl:output message="tns:GetUserInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserInfoSoapIn** request message (section 3.1.4.29.1.1), and the protocol server responds with a **GetUserInfoSoapOut** response message (section 3.1.4.29.1.2) in the following sequence:

1. If a user with the specified **login name** does not exist, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST respond with a **GetUserInfoSoapOut** response message that contains information about the user.

3.1.4.29.1   Messages

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

Message	Description
GetUserInfoSoapIn	A request to initiate a **GetUserInfo** operation (section 3.1.4.29) on the protocol server.
GetUserInfoSoapOut	A response from the protocol server at completion of the **GetUserInfo** operation.

3.1.4.29.1.1   GetUserInfoSoapIn

The **GetUserInfoSoapIn** message is the request of the **GetUserInfo** operation (section 3.1.4.29).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetUserInfo
```

The **SOAP body** contains a **GetUserInfo** element, as specified in section 3.1.4.29.2.1.

3.1.4.29.1.2 GetUserInfoSoapOut

The **GetUserInfoSoapOut** message is the response of the **GetUserInfo** operation (section 3.1.4.29).

The **SOAP body** contains a **GetUserInfoResponse** element, as specified in section 3.1.4.29.2.2.

3.1.4.29.2 Elements

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

Element	Description
GetUserInfo	Body of the **GetUserInfoSoapIn** message (section 3.1.4.29.1.1).
GetUserInfoResponse	Body of the **GetUserInfoSoapOut** message (section 3.1.4.29.1.2).

3.1.4.29.2.1 GetUserInfo

The **GetUserInfo** element specifies details for the request to get information about the specified user.

```
<s:element name="GetUserInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginName" type="tns:String251Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.29.2.2 GetUserInfoResponse

The **GetUserInfoResponse** element contains the response to the request to get information about the specified user.

```
<s:element name="GetUserInfoResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserInfoResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserInfo">
              <s:complexType>
                <s:sequence>
                  <s:element name="User" type="tns:User" />
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
```

```
            </s:sequence>
        </s:complexType>
    </s:element>
```

GetUserInfoResult: An **XML element** that specifies the information about the specified user.

3.1.4.29.3   Complex Types

None.

3.1.4.29.4   Simple Types

None.

3.1.4.29.5   Attributes

None.

3.1.4.29.6   Groups

None.

3.1.4.29.7   Attribute Groups

None.

3.1.4.30   GetUserLoginFromEmail

The **GetUserLoginFromEmail** operation is used to return information about a collection of users based on the specified **e-mail addresses**.

```
<wsdl:operation name="GetUserLoginFromEmail">
    <wsdl:input message="tns:GetUserLoginFromEmailSoapIn" />
    <wsdl:output message="tns:GetUserLoginFromEmailSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetUserLoginFromEmailSoapIn** request message (section 3.1.4.30.1.1), and the protocol server responds with a **GetUserLoginFromEmailSoapOut** response message (section 3.1.4.30.1.2) in the following sequence:

1. The server MUST respond with a **GetUserLoginFromEmailSoapOut** response message that contains information about the collection of users.

2. If no user can be found for a specified e-mail address, the server MUST assign an empty string to the **Login**, **Email**, and **DisplayName** attributes and MUST assign zero ("0") to the **SiteUser** attribute.<14>

3.1.4.30.1   Messages

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

Message	Description
GetUserLoginFromEmailSoapIn	A request to initiate a **GetUserLoginFromEmail** operation (section 3.1.4.30) on the protocol server.

Message	Description
GetUserLoginFromEmailSoapOut	A response from the protocol server at completion of the **GetUserLoginFromEmail** operation.

3.1.4.30.1.1 GetUserLoginFromEmailSoapIn

The **GetUserLoginFromEmailSoapIn** message is the request of the **GetUserLoginFromEmail** operation section (3.1.4.30).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/GetUserLoginFromEmail
```

The **SOAP body** contains a **GetUserLoginFromEmail** element, as specified in section 3.1.4.30.2.1.

3.1.4.30.1.2 GetUserLoginFromEmailSoapOut

The **GetUserLoginFromEmailSoapOut** message is the response of the **GetUserLoginFromEmail** operation (section 3.1.4.30).

The **SOAP body** contains a **GetUserLoginFromEmailResponse** element, as specified in section 3.1.4.30.2.2.

3.1.4.30.2   Elements

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

Element	Description
GetUserLoginFromEmail	Body of the **GetUserLoginFromEmailSoapIn** message (section 3.1.4.30.1.1).
GetUserLoginFromEmailResponse	Body of the **GetUserLoginFromEmailSoapOut** message (section 3.1.4.30.1.2).

3.1.4.30.2.1 GetUserLoginFromEmail

The **GetUserLoginFromEmail** element specifies details for the request to return information about a collection of users based on the specified **e-mail addresses**.

```
<s:element name="GetUserLoginFromEmail">
  <s:complexType>
    <s:sequence>
      <s:element name="emailXml" type="tns:EmailsInputType"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

emailXml: An object that MUST specify zero or more e-mail addresses according to the schema of the **EmailsInputType** complex type, as specified in section 3.1.4.30.3.1.

3.1.4.30.2.2 GetUserLoginFromEmailResponse

The **GetUserLoginFromEmailResponse** element contains the response to the request to return a collection of user information based on the specified **e-mail addresses**.

```
<s:element name="GetUserLoginFromEmailResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetUserLoginFromEmailResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetUserLoginFromEmail" type="tns:EmailsOutputType" />
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetUserLoginFromEmail: An **XML element** that MUST follow the schema of the **EmailsOutputType** complex type, as specified in section 3.1.4.30.3.2.

GetUserLoginFromEmailResult: An object that MUST contain e-mail information about zero or more users according to the schema of the **EmailsOutputType**.

3.1.4.30.3 Complex Types

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

Complex type	Description
EmailsInputType	Collection of user **e-mail addresses**.
EmailsOutputType	Collection of user information.

3.1.4.30.3.1 EmailsInputType

The **EmailsInputType** complex type contains a collection of user **e-mail addresses** as input to this operation.

```
<s:complexType name="EmailsInputType">
  <s:sequence>
    <s:element name="Users">
      <s:complexType>
        <s:sequence>
          <s:element name="User" minOccurs="0" maxOccurs="100">
            <s:complexType>
              <s:attribute name="Email" type="tns:String255Type" />
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

Email: The e-mail address of the user. The specified value MUST NOT contain null or an empty string<15> and MUST contain less than 256 characters.

3.1.4.30.3.2 EmailsOutputType

The **EmailsOutputType** complex type contains information about a collection of users as the output to this operation.

```
<s:complexType name="EmailsOutputType">
  <s:sequence>
    <s:element name="User" minOccurs="0" maxOccurs="100">
      <s:complexType>
        <s:attribute name="Login" type="s:string" />
        <s:attribute name="Email" type="s:string" />
        <s:attribute name="DisplayName" type="s:string" />
        <s:attribute name="SiteUser">
          <s:simpleType>
            <s:restriction base="s:nonNegativeInteger">
              <s:enumeration value="0" />
              <s:enumeration value="1" />
            </s:restriction>
          </s:simpleType>
        </s:attribute>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

Login: The **login name** of a user.

Email: The **e-mail address** of a user.

DisplayName: The **display name** of a user.

SiteUser: The information about whether this user exists in the current site. The value "1" indicates that this user exists in the current **site** and zero ("0") indicates that this user does not exist in the current site.

3.1.4.30.4   Simple Types

None.

3.1.4.30.5   Attributes

None.

3.1.4.30.6   Groups

None.

3.1.4.30.7   Attribute Groups

None.

3.1.4.31   RemoveGroup

The **RemoveGroup** operation is used to remove a specified **group**.

```
<wsdl:operation name="RemoveGroup">
    <wsdl:input message="tns:RemoveGroupSoapIn" />
```

```
                <wsdl:output message="tns:RemoveGroupSoapOut" />
        </wsdl:operation>
```

The protocol client sends a **RemoveGroupSoapIn** request message (section 3.1.4.31.1.1), and the protocol server responds with a **RemoveGroupSoapOut** response message (section 3.1.4.31.1.2) in the following sequence:

1. If a group with the specified name does not exist in the current **site collection**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If the group name is "Farm Administrators" (case insensitive), the server MUST return a SOAP fault.

3. Otherwise, the server MUST remove the group from the site collection and from all **role definitions** and MUST respond with a **RemoveGroupSoapOut** response message.

3.1.4.31.1   Messages

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

Message	Description
RemoveGroupSoapIn	A request to initiate a **RemoveGroup** operation (section 3.1.4.31) on the protocol server.
RemoveGroupSoapOut	A response from the protocol server at completion of the **RemoveGroup** operation.

3.1.4.31.1.1   RemoveGroupSoapIn

The **RemoveGroupSoapIn** message is the request of the **RemoveGroup** operation (section 3.1.4.31).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveGroup
```

The **SOAP body** contains a **RemoveGroup** element, as specified in section 3.1.4.31.2.1.

3.1.4.31.1.2   RemoveGroupSoapOut

The **RemoveGroupSoapOut** message is the response of the **RemoveGroup** operation (section 3.1.4.31).

The **SOAP body** contains a **RemoveGroupResponse** element, as specified in section 3.1.4.31.2.2.

3.1.4.31.2   Elements

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

Element	Description
RemoveGroup	Body of the **RemoveGroupSoapIn** message (section 3.1.4.31.1.1).
RemoveGroupResponse	Body of the **RemoveGroupSoapOut** message (section 3.1.4.31.1.2).

3.1.4.31.2.1 RemoveGroup

The **RemoveGroup** element specifies details for the request to remove a specified **group**.

```
<s:element name="RemoveGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.31.2.2 RemoveGroupResponse

The **RemoveGroupResponse** element contains the response to the request to remove a specified **group**.

```
<s:element name="RemoveGroupResponse">
  <s:complexType/>
</s:element>
```

3.1.4.31.3 Complex Types

None.

3.1.4.31.4 Simple Types

None.

3.1.4.31.5 Attributes

None.

3.1.4.31.6 Groups

None.

3.1.4.31.7 Attribute Groups

None.

3.1.4.32 RemoveGroupFromRole

The **RemoveGroupFromRole** operation is used to remove a specified **group** from a specified **role definition**.

```
<wsdl:operation name="RemoveGroupFromRole">
    <wsdl:input message="tns:RemoveGroupFromRoleSoapIn" />
    <wsdl:output message="tns:RemoveGroupFromRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveGroupFromRoleSoapIn** request message (section 3.1.4.32.1.1), and the protocol server responds with a **RemoveGroupFromRoleSoapOut** response message (section 3.1.4.32.1.2) in the following sequence:

1. If the specified role definition cannot be found on the current **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If the specified group cannot be found on the current **site collection**, the server MUST return a SOAP fault with the error code 0x80131600.

3. If the group is not assigned to any role definition, the server MUST return a SOAP fault.

4. Otherwise, the server MUST remove the group from the role definition and MUST respond with a **RemoveGroupFromRoleSoapOut** response message.

3.1.4.32.1 Messages

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

Message	Description
RemoveGroupFromRoleSoapIn	A request to initiate a **RemoveGroupFromRole** operation (section 3.1.4.32) on the protocol server.
RemoveGroupFromRoleSoapOut	A response from the protocol server at completion of the **RemoveGroupFromRole** operation.

3.1.4.32.1.1 RemoveGroupFromRoleSoapIn

The **RemoveGroupFromRoleSoapIn** message is the request of the **RemoveGroupFromRole** operation (section 3.1.4.32).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveGroupFromRole
```

The **SOAP body** contains a **RemoveGroupFromRole** element, as specified in section 3.1.4.32.2.1.

3.1.4.32.1.2 RemoveGroupFromRoleSoapOut

The **RemoveGroupFromRoleSoapOut** message is the response of the **RemoveGroupFromRole** operation (section 3.1.4.32).

The **SOAP body** contains a **RemoveGroupFromRoleResponse** element, as specified in section 3.1.4.32.2.2.

3.1.4.32.2 Elements

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

Element	Description
RemoveGroupFromRole	Body of the **RemoveGroupFromRoleSoapIn** message (section 3.1.4.32.1.1).
RemoveGroupFromRoleResponse	Body of the **RemoveGroupFromRoleSoapOut** message (section 3.1.4.32.1.2).

3.1.4.32.2.1 RemoveGroupFromRole

The **RemoveGroupFromRole** element specifies details for the request to remove a specified **group** from a specified **role definition**.

```
<s:element name="RemoveGroupFromRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="groupName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.32.2.2 RemoveGroupFromRoleResponse

The **RemoveGroupFromRoleResponse** element contains the response to the request to remove a specified **group** from a specified **role definition**.

```
<s:element name="RemoveGroupFromRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.32.3 Complex Types

None.

3.1.4.32.4 Simple Types

None.

3.1.4.32.5 Attributes

None.

3.1.4.32.6 Groups

None.

3.1.4.32.7 Attribute Groups

None.

3.1.4.33 RemoveRole

The **RemoveRole** operation is used to remove a specified **role definition**.

```
<wsdl:operation name="RemoveRole">
    <wsdl:input message="tns:RemoveRoleSoapIn" />
    <wsdl:output message="tns:RemoveRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveRoleSoapIn** request message (section 3.1.4.33.1.1), and the protocol server responds with a **RemoveRoleSoapOut** response message (section 3.1.4.33.1.2) in the following sequence:

1. If the specified role definition cannot be found on the current **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If this operation is called on a **subsite**, the server MUST return a SOAP fault.

3. If the role definition to be removed is a **Guest** or **Administrator role type**, as specified in section 3.1.4.21.3.1, the server MUST return a SOAP fault with the error code 0x80131600.

4. Otherwise, the server MUST remove the role definition from the current site and MUST respond with a **RemoveRoleSoapOut** response message.

3.1.4.33.1 Messages

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

Message	Description
RemoveRoleSoapIn	A request to initiate a **RemoveRole** operation (section 3.1.4.33) on the protocol server.
RemoveRoleSoapOut	A response from the protocol server at completion of the **RemoveRole** operation.

3.1.4.33.1.1 RemoveRoleSoapIn

The **RemoveRoleSoapIn** message is the request of the **RemoveRole** operation (section 3.1.4.33).

The **SOAP action** value of the message is defined as:

http://schemas.microsoft.com/sharepoint/soap/directory/RemoveRole

The **SOAP body** contains a **RemoveRole** element, as specified in section 3.1.4.33.2.1.

3.1.4.33.1.2 RemoveRoleSoapOut

The **RemoveRoleSoapOut** message is the response of the **RemoveRole** operation (section 3.1.4.33).

The **SOAP body** contains a **RemoveRoleResponse** element, as specified in section 3.1.4.33.2.2.

3.1.4.33.2 Elements

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

Element	Description
RemoveRole	Body of the **RemoveRoleSoapIn** message (section 3.1.4.33.1.1).
RemoveRoleResponse	Body of the **RemoveRoleSoapOut** message (section 3.1.4.33.1.2).

3.1.4.33.2.1 RemoveRole

The **RemoveRole** element specifies details for the request to remove a specified **role definition**.

```
<s:element name="RemoveRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type" />
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

3.1.4.33.2.2 RemoveRoleResponse

The **RemoveRoleResponse** element contains the response to the request to remove a specified **role definition**.

```
<s:element name="RemoveRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.33.3 Complex Types

None.

3.1.4.33.4 Simple Types

None.

3.1.4.33.5 Attributes

None.

3.1.4.33.6 Groups

None.

3.1.4.33.7 Attribute Groups

None.

3.1.4.34 RemoveUserCollectionFromGroup

The **RemoveUserCollectionFromGroup** operation is used to remove users from the specified **group**.

```
<wsdl:operation name="RemoveUserCollectionFromGroup">
    <wsdl:input message="tns:RemoveUserCollectionFromGroupSoapIn" />
    <wsdl:output message="tns:RemoveUserCollectionFromGroupSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserCollectionFromGroupSoapIn** request message (section 3.1.4.34.1.1), and the protocol server responds with a **RemoveUserCollectionFromGroupSoapOut** response message (section 3.1.4.34.1.2) in the following sequence:

1. If a group with the specified name does not exist in the **site collection**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If one or more users with the specified **login names** do not exist in the site collection, the server MUST return a SOAP fault with the error code 0x81020054. If the user has already been removed from the group or is not a member of the group, no error is reported.

3. Otherwise, the server MUST remove the users from the group and MUST respond with a **RemoveUserCollectionFromGroupSoapOut** response message.<16>

3.1.4.34.1 Messages

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

Message	Description
RemoveUserCollectionFromGroupSoapIn	A request to initiate a **RemoveUserCollectionFromGroup** operation (section 3.1.4.34) on the protocol server.
RemoveUserCollectionFromGroupSoapOut	A response from the protocol server at completion of the **RemoveUserCollectionFromGroup** operation.

3.1.4.34.1.1 RemoveUserCollectionFromGroupSoapIn

The **RemoveUserCollectionFromGroupSoapIn** message is the request of the **RemoveUserCollectionFromGroup** operation (section 3.1.4.34).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromGroup
```

The **SOAP body** contains a **RemoveUserCollectionFromGroup** element, as specified in section 3.1.4.34.2.1.

3.1.4.34.1.2   RemoveUserCollectionFromGroupSoapOut

The **RemoveUserCollectionFromGroupSoapOut** message is the response of the **RemoveUserCollectionFromGroup** operation (section 3.1.4.34).

The **SOAP body** contains a **RemoveUserCollectionFromGroupResponse** element, as specified in section 3.1.4.34.2.2.

3.1.4.34.2   Elements

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

Element	Description
RemoveUserCollectionFromGroup	Body of the **RemoveUserCollectionFromGroupSoapIn** message (section 3.1.4.34.1.1).
RemoveUserCollectionFromGroupResponse	Body of the **RemoveUserCollectionFromGroupSoapOut** message (section 3.1.4.34.1.2).

3.1.4.34.2.1   RemoveUserCollectionFromGroup

The **RemoveUserCollectionFromGroup** element specifies details for the request to remove users from the **group**.

```
<s:element name="RemoveUserCollectionFromGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type"/>
      <s:element name="userLoginNamesXml">
        <s:complexType>
          <s:sequence>
            <s:element name="Users" type="tns:InputUsersType"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

userLoginNamesXml: A collection of users to remove from a group.

3.1.4.34.2.2   RemoveUserCollectionFromGroupResponse

The **RemoveUserCollectionFromGroupResponse** element contains the response to the request to remove users from the **group**.

```
<s:element name="RemoveUserCollectionFromGroupResponse">
  <s:complexType/>
</s:element>
```

3.1.4.34.3   Complex Types

None.

3.1.4.34.4   Simple Types

None.

3.1.4.34.5   Attributes

None.

3.1.4.34.6   Groups

None.

3.1.4.34.7   Attribute Groups

None.

3.1.4.35   RemoveUserCollectionFromRole

The **RemoveUserCollectionFromRole** operation is used to remove users from a **role definition**.

```
<wsdl:operation name="RemoveUserCollectionFromRole">
    <wsdl:input message="tns:RemoveUserCollectionFromRoleSoapIn" />
    <wsdl:output message="tns:RemoveUserCollectionFromRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserCollectionFromRoleSoapIn** request message (section 3.1.4.35.1.1), and the protocol server responds with a **RemoveUserCollectionFromRoleSoapOut** response message (section 3.1.4.35.1.2) in the following sequence:

1. If a role definition with the specified user is not assigned to the **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If one or more users with the specified **login names** do not exist in the **site collection**, the server MUST return a SOAP fault with the error code 0x81020054. If the user has already been removed from the role definition or is not a member of the role definition, no error is reported

3. Otherwise, the server MUST remove the users from the role definition and MUST respond with a **RemoveUserCollectionFromRoleSoapOut** response message<17>.

3.1.4.35.1   Messages

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

Message	Description
RemoveUserCollectionFromRoleSoapIn	A request to initiate a **RemoveUserCollectionFromRole** operation (section 3.1.4.35) on the protocol server.
RemoveUserCollectionFromRoleSoapOut	A response from the protocol server at completion of the **RemoveUserCollectionFromRole** operation.

3.1.4.35.1.1 RemoveUserCollectionFromRoleSoapIn

The **RemoveUserCollectionFromRoleSoapIn** message is the request of the **RemoveUserCollectionFromRole** operation (section 3.1.4.35).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromRole
```

The **SOAP body** contains a **RemoveUserCollectionFromRole** element, as specified in section 3.1.4.35.2.1.

3.1.4.35.1.2 RemoveUserCollectionFromRoleSoapOut

The **RemoveUserCollectionFromRoleSoapOut** message is the response of the **RemoveUserCollectionFromRole** operation (section 3.1.4.35).

The **SOAP body** contains a **RemoveUserCollectionFromRoleResponse** element, as specified in section 3.1.4.35.2.2.

3.1.4.35.2 Elements

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

Element	Description
RemoveUserCollectionFromRole	Body of the **RemoveUserCollectionFromRoleSoapIn** message (section 3.1.4.35.1.1).
RemoveUserCollectionFromRoleResponse	Body of the **RemoveUserCollectionFromRoleSoapOut** message (section 3.1.4.35.1.2).

3.1.4.35.2.1 RemoveUserCollectionFromRole

The **RemoveUserCollectionFromRole** element specifies details for the request to remove users from a **role definition**.

```
<s:element name="RemoveUserCollectionFromRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type"/>
      <s:element name="userLoginNamesXml">
        <s:complexType>
```

```
        <s:sequence>
          <s:element name="Users" type="tns:InputUsersType"/>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

userLoginNamesXml: A list of the users to remove from a role definition.

3.1.4.35.2.2   RemoveUserCollectionFromRoleResponse

The **RemoveUserCollectionFromRoleResponse** element contains the response to the request to remove users from the **role definition**.

```
<s:element name="RemoveUserCollectionFromRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.35.3   Complex Types

None.

3.1.4.35.4   Simple Types

None.

3.1.4.35.5   Attributes

None.

3.1.4.35.6   Groups

None.

3.1.4.35.7   Attribute Groups

None.

3.1.4.36   RemoveUserCollectionFromSite

The **RemoveUserCollectionFromSite** operation is used to remove users from the current **site collection**.

```
<wsdl:operation name="RemoveUserCollectionFromSite">
    <wsdl:input message="tns:RemoveUserCollectionFromSiteSoapIn" />
    <wsdl:output message="tns:RemoveUserCollectionFromSiteSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserCollectionFromSiteSoapIn** request message (section 3.1.4.36.1.1), and the protocol server responds with a **RemoveUserCollectionFromSiteSoapOut** response message (section 3.1.4.36.1.2) in the following sequence:

1. If one or more users with the specified **login names** were never added to the site collection, the server MUST return a **SOAP fault** with the error code 0x80004005.

2. If one or more of the specified login names are invalid, the server MUST return a SOAP fault with the error code 0x81020054.

3. If one or more users with the specified login names are the **owners** of the site collection, the server MUST return a SOAP fault with the error code 0x81020045.

4. Otherwise, the server MUST remove the users from the site collection<18> and from all **groups** and **role definitions** assigned to this site collection, and MUST respond with a **RemoveUserCollectionFromSiteSoapOut** response message<19>.

3.1.4.36.1 Messages

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

Message	Description
RemoveUserCollectionFromSiteSoapIn	A request to initiate a **RemoveUserCollectionFromSite** operation (section 3.1.4.36) on the protocol server.
RemoveUserCollectionFromSiteSoapOut	A response from the protocol server at completion of the **RemoveUserCollectionFromSite** operation.

3.1.4.36.1.1 RemoveUserCollectionFromSiteSoapIn

The **RemoveUserCollectionFromSiteSoapIn** message is the request of the **RemoveUserCollectionFromSite** operation (section 3.1.4.36).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromSite
```

The **SOAP body** contains a **RemoveUserCollectionFromSite** element, as specified in section 3.1.4.36.2.1.

3.1.4.36.1.2 RemoveUserCollectionFromSiteSoapOut

The **RemoveUserCollectionFromSiteSoapOut** message is the response of the **RemoveUserCollectionFromSite** operation (section 3.1.4.36).

The **SOAP body** contains a **RemoveUserCollectionFromSiteResponse** element, as specified in section 3.1.4.36.2.2.

3.1.4.36.2 Elements

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

Element	Description
RemoveUserCollectionFromSite	Body of the **RemoveUserCollectionFromSiteSoapIn** message (section 3.1.4.36.1.1).
RemoveUserCollectionFromSiteResponse	Body of the **RemoveUserCollectionFromSiteSoapOut** message (section 3.1.4.36.1.2).

3.1.4.36.2.1 RemoveUserCollectionFromSite

The **RemoveUserCollectionFromSite** element specifies details for the request to remove users from the current **site collection**.

```
<s:element name="RemoveUserCollectionFromSite">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginNamesXml">
        <s:complexType>
          <s:sequence>
            <s:element name="Users" type="tns:InputUsersType"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginNamesXml: A collection of users to remove from the current site collection.

3.1.4.36.2.2 RemoveUserCollectionFromSiteResponse

The **RemoveUserCollectionFromSiteResponse** element contains the response to the request to remove users from the current **site collection**.

```
<s:element name="RemoveUserCollectionFromSiteResponse">
  <s:complexType/>
</s:element>
```

3.1.4.36.3   Complex Types

None.

3.1.4.36.4   Simple Types

None.

3.1.4.36.5   Attributes

None.

3.1.4.36.6   Groups

None.

3.1.4.36.7   Attribute Groups

None.

3.1.4.37 RemoveUserFromGroup

The **RemoveUserFromGroup** operation is used to remove the specified user from a **group**.

```
<wsdl:operation name="RemoveUserFromGroup">
    <wsdl:input message="tns:RemoveUserFromGroupSoapIn" />
    <wsdl:output message="tns:RemoveUserFromGroupSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserFromGroupSoapIn** request message (section 3.1.4.37.1.1), and the protocol server responds with a **RemoveUserFromGroupSoapOut** response message (section 3.1.4.37.1.2) in the following sequence:

1. If a group with the specified name does not exist in the **site collection**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If a user with the specified **login name** does not exist in the site collection, the server MUST return a SOAP fault with the error code 0x81020054. If the user has already been removed from the group or is not a member of the group, no error is reported

3. Otherwise, the server MUST remove the user from the group and MUST respond with a **RemoveUserFromGroupSoapOut** response message.

3.1.4.37.1 Messages

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

Message	Description
RemoveUserFromGroupSoapIn	A request to initiate a **RemoveUserFromGroup** operation (section 3.1.4.37) on the protocol server.
RemoveUserFromGroupSoapOut	A response from the protocol server at completion of the **RemoveUserFromGroup** operation.

3.1.4.37.1.1 RemoveUserFromGroupSoapIn

The **RemoveUserFromGroupSoapIn** message is the request of the **RemoveUserFromGroup** operation (section 3.1.4.37).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromGroup
```

The **SOAP body** contains a **RemoveUserFromGroup** element, as specified in section 3.1.4.37.2.1.

3.1.4.37.1.2 RemoveUserFromGroupSoapOut

The **RemoveUserFromGroupSoapOut** message is the response of the **RemoveUserFromGroup** operation (section 3.1.4.37).

The **SOAP body** contains a **RemoveUserFromGroupResponse** element, as specified in section 3.1.4.37.2.2.

3.1.4.37.2 Elements

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

Element	Description
RemoveUserFromGroup	Body of the **RemoveUserFromGroupSoapIn** message (section 3.1.4.37.1.1).
RemoveUserFromGroupResponse	Body of the **RemoveUserFromGroupSoapOut** message (section 3.1.4.37.1.2).

3.1.4.37.2.1 RemoveUserFromGroup

The **RemoveUserFromGroup** element specifies details for the request to remove the specified user from a **group**.

```
<s:element name="RemoveUserFromGroup">
  <s:complexType>
    <s:sequence>
      <s:element name="groupName" type="tns:String255Type"/>
      <s:element name="userLoginName" type="tns:String251Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

groupName: The name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.37.2.2 RemoveUserFromGroupResponse

The **RemoveUserFromGroupResponse** element contains the response to the request to remove the specified user from a **group**.

```
<s:element name="RemoveUserFromGroupResponse">
  <s:complexType/>
</s:element>
```

3.1.4.37.3 Complex Types

None.

3.1.4.37.4 Simple Types

None.

3.1.4.37.5 Attributes

None.

3.1.4.37.6 Groups

None.

3.1.4.37.7 Attribute Groups

None.

3.1.4.38 RemoveUserFromRole

The **RemoveUserFromRole** operation is used to remove the specified user from a **role definition**.

```
<wsdl:operation name="RemoveUserFromRole">
    <wsdl:input message="tns:RemoveUserFromRoleSoapIn" />
    <wsdl:output message="tns:RemoveUserFromRoleSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserFromRoleSoapIn** request message (section 3.1.4.38.1.1), and the protocol server responds with a **RemoveUserFromRoleSoapOut** response message (section 3.1.4.38.1.2) in the following sequence:

1. If a role definition with the specified name is not assigned to the **site**, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If a user with the specified **login name** does not exist in the **site collection**, the server MUST return a SOAP fault with the error code 0x81020054. If the user has already been removed from the role definition or is not a member of the role definition, no error is reported

3. Otherwise, the server MUST remove the user from the role definition and MUST respond with a **RemoveUserFromRoleSoapOut** response message.

3.1.4.38.1 Messages

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

Message	Description
RemoveUserFromRoleSoapIn	A request to initiate a **RemoveUserFromRole** operation (section 3.1.4.38) on the protocol server.
RemoveUserFromRoleSoapOut	A response from the protocol server at completion of the **RemoveUserFromRole** operation.

3.1.4.38.1.1 RemoveUserFromRoleSoapIn

The **RemoveUserFromRoleSoapIn** message is the request of the **RemoveUserFromRole** operation (section 3.1.4.38).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromRole
```

The **SOAP body** contains a **RemoveUserFromRole** element, as specified in section 3.1.4.38.2.1.

3.1.4.38.1.2 RemoveUserFromRoleSoapOut

The **RemoveUserFromRoleSoapOut** message is the response of the **RemoveUserFromRole** operation (section 3.1.4.38).

The **SOAP body** contains a **RemoveUserFromRoleResponse** element, as specified in section 3.1.4.38.2.2.

3.1.4.38.2   Elements

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

Element	Description
RemoveUserFromRole	Body of the **RemoveUserFromRoleSoapIn** message (section 3.1.4.38.1.1).
RemoveUserFromRoleResponse	Body of the **RemoveUserFromRoleSoapOut** message (section 3.1.4.38.1.2).

3.1.4.38.2.1 RemoveUserFromRole

The **RemoveUserFromRole** element specifies details for the request to remove the specified user from a **role definition**.

```
<s:element name="RemoveUserFromRole">
  <s:complexType>
    <s:sequence>
      <s:element name="roleName" type="tns:String255Type"/>
      <s:element name="userLoginName" type="tns:String251Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

roleName: The name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.38.2.2 RemoveUserFromRoleResponse

The **RemoveUserFromRoleResponse** element contains the response to the request to remove the specified user from a **role definition**.

```
<s:element name="RemoveUserFromRoleResponse">
  <s:complexType/>
</s:element>
```

3.1.4.38.3   Complex Types

None.

3.1.4.38.4 Simple Types

None.

3.1.4.38.5 Attributes

None.

3.1.4.38.6 Groups

None.

3.1.4.38.7 Attribute Groups

None.

3.1.4.39 RemoveUserFromSite

The **RemoveUserFromSite** operation is used to remove the specified user from the current **site collection**.

```
<wsdl:operation name="RemoveUserFromSite">
    <wsdl:input message="tns:RemoveUserFromSiteSoapIn" />
    <wsdl:output message="tns:RemoveUserFromSiteSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserFromSiteSoapIn** request message (section 3.1.4.39.1.1), and the protocol server responds with a **RemoveUserFromSiteSoapOut** response message (section 3.1.4.39.1.2) in the following sequence:

1. If the user with the specified **login name** was never added to the site collection, the server MUST return a **SOAP fault** with the error code 0x80004005.

2. If the specified login name is invalid, the server MUST return a SOAP fault with the error code 0x81020054.

3. Otherwise, the server MUST remove the user from the site collection[20] and from all **groups** and **role definitions** assigned to this site collection, and MUST respond with a **RemoveUserFromSiteSoapOut** response message.

3.1.4.39.1 Messages

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

Message	Description
RemoveUserFromSiteSoapIn	A request to initiate a **RemoveUserFromSite** operation (section 3.1.4.39) on the protocol server.
RemoveUserFromSiteSoapOut	A response from the protocol server at completion of the **RemoveUserFromSite** operation.

3.1.4.39.1.1 RemoveUserFromSiteSoapIn

The **RemoveUserFromSiteSoapIn** message is the request of the **RemoveUserFromSite** operation (section 3.1.4.39).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromSite
```

The **SOAP body** contains a **RemoveUserFromSite** element, as specified in section 3.1.4.39.2.1.

3.1.4.39.1.2 RemoveUserFromSiteSoapOut

The **RemoveUserFromSiteSoapOut** message is the response of the **RemoveUserFromSite** operation (section 3.1.4.39).

The **SOAP body** contains a **RemoveUserFromSiteResponse** element, as specified in section 3.1.4.39.2.2.

3.1.4.39.2 Elements

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

Element	Description
RemoveUserFromSite	Body of the **RemoveUserFromSiteSoapIn** message (section 3.1.4.39.1.1).
RemoveUserFromSiteResponse	Body of the **RemoveUserFromSiteSoapOut** message (section 3.1.4.39.1.2).

3.1.4.39.2.1 RemoveUserFromSite

The **RemoveUserFromSite** element specifies details for the request to remove the specified user from the current **site collection**.

```
<s:element name="RemoveUserFromSite">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginName" type="tns:String251Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.39.2.2 RemoveUserFromSiteResponse

The **RemoveUserFromSiteResponse** element contains the response to the request to remove the specified user from the current **site collection**.

```
<s:element name="RemoveUserFromSiteResponse">
  <s:complexType/>
</s:element>
```

3.1.4.39.3 Complex Types

None.

3.1.4.39.4 Simple Types

None.

3.1.4.39.5 Attributes

None.

3.1.4.39.6 Groups

None.

3.1.4.39.7 Attribute Groups

None.

3.1.4.40 RemoveUserFromWeb

The **RemoveUserFromWeb** operation is used to remove the specified user from the current **site**.

```
<wsdl:operation name="RemoveUserFromWeb">
    <wsdl:input message="tns:RemoveUserFromWebSoapIn" />
    <wsdl:output message="tns:RemoveUserFromWebSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemoveUserFromWebSoapIn** request message (section 3.1.4.40.1.1), and the protocol server responds with a **RemoveUserFromWebSoapOut** response message (section 3.1.4.40.1.2) in the following sequence:

1. If the user with the specified **login name** does not exist in the **site collection**, the server MUST return a **SOAP fault** with the error code 0x81020054. If the user has already been removed from the site or is not a member of the site, no error is reported.

2. Otherwise, the server MUST remove the user from the site and from all **role definitions** assigned to this user at the site, and MUST respond with a **RemoveUserFromWebSoapOut** response message.

3.1.4.40.1 Messages

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

Message	Description
RemoveUserFromWebSoapIn	A request to initiate a **RemoveUserFromWeb** operation (section 3.1.4.40) on the protocol server.
RemoveUserFromWebSoapOut	A response from the protocol server at completion of the **RemoveUserFromWeb** operation.

3.1.4.40.1.1 RemoveUserFromWebSoapIn

The **RemoveUserFromWebSoapIn** message is the request of the **RemoveUserFromWeb** operation (section 3.1.4.40).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromWeb
```

The **SOAP body** contains a **RemoveUserFromWeb** element, as specified in section 3.1.4.40.2.1.

3.1.4.40.1.2 RemoveUserFromWebSoapOut

The **RemoveUserFromWebSoapOut** message is the response of the **RemoveUserFromWeb** operation (section 3.1.4.40).

The **SOAP body** contains a **RemoveUserFromWebResponse** element, as specified in section 3.1.4.40.2.2.

3.1.4.40.2 Elements

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

Element	Description
RemoveUserFromWeb	Body of the **RemoveUserFromWebSoapIn** message (section 3.1.4.40.1.1).
RemoveUserFromWebResponse	Body of the **RemoveUserFromWebSoapOut** message (section 3.1.4.40.1.2).

3.1.4.40.2.1 RemoveUserFromWeb

The **RemoveUserFromWeb** element specifies details for the request to remove the specified user from the current **site**.

```
<s:element name="RemoveUserFromWeb">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginName" type="tns:String251Type"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

userLoginName: The **login name** of the user. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

3.1.4.40.2.2 RemoveUserFromWebResponse

The **RemoveUserFromWebResponse** element contains the response to the request to remove the specified user from the current **site**.

```
<s:element name="RemoveUserFromWebResponse">
  <s:complexType/>
</s:element>
```

3.1.4.40.3 Complex Types

None.

3.1.4.40.4 Simple Types

None.

3.1.4.40.5 Attributes

None.

3.1.4.40.6 Groups

None.

3.1.4.40.7 Attribute Groups

None.

3.1.4.41 UpdateGroupInfo

The **UpdateGroupInfo** operation is used to update the information about a specified **group**.

```
<wsdl:operation name="UpdateGroupInfo">
    <wsdl:input message="tns:UpdateGroupInfoSoapIn" />
    <wsdl:output message="tns:UpdateGroupInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends an **UpdateGroupInfoSoapIn** request message (section 3.1.4.41.1.1), and the protocol server responds with an **UpdateGroupInfoSoapOut** response message (section 3.1.4.41.1.2) in the following sequence:

1. If the group name or the old group name contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return a **SOAP fault** with the error code 0x80131600.

2. If the value specified in the element **ownerType** is "group" and no group with the name specified in the element **ownerIdentifier** exists on the current **site collection**, the server MUST return a SOAP fault with the error code 0x80131600.
3. If the value specified in **ownerType** is "group" and the group is a **domain group**, the server MUST return a SOAP fault with the error code 0x80131600.
4. If the value specified in **ownerType** is "user" and the user with the name specified in **ownerIdentifier** does not exist in the current site collection, the server MUST return a SOAP fault with the error code 0x80131600.

5. If the group with the name specified in the element **oldGroupName** cannot be found on the current site collection, the server MUST return a SOAP fault with the error code 0x80131600.

6. If the name specified in **oldGroupName** is "Farm Administrators" (case insensitive), the server MUST return a SOAP fault.

7. If a group with the name specified in the element **groupName** already exists on the current site collection, the server SHOULD<21> return a SOAP fault with the error code 0x80131904.

8. Otherwise, the server MUST update the information about the group and MUST respond with an **UpdateGroupInfoSoapOut** response message.

3.1.4.41.1 Messages

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

Message	Description
UpdateGroupInfoSoapIn	A request to initiate an **UpdateGroupInfo** operation (section 3.1.4.41) on the protocol server.
UpdateGroupInfoSoapOut	A response from the protocol server at completion of the **UpdateGroupInfo** operation.

3.1.4.41.1.1 UpdateGroupInfoSoapIn

The **UpdateGroupInfoSoapIn** message is the request of the **UpdateGroupInfo** operation (section 3.1.4.41).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/UpdateGroupInfo
```

The **SOAP body** contains an **UpdateGroupInfo** element, as specified in section 3.1.4.41.2.1.

3.1.4.41.1.2 UpdateGroupInfoSoapOut

The **UpdateGroupInfoSoapOut** message is the response of the **UpdateGroupInfo** operation (section 3.1.4.41).

The **SOAP body** contains an **UpdateGroupInfoResponse** element, as specified in section 3.1.4.41.2.2.

3.1.4.41.2   Elements

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

Element	Description
UpdateGroupInfo	Body of the **UpdateGroupInfoSoapIn** message (section 3.1.4.41.1.1).
UpdateGroupInfoResponse	Body of the **UpdateGroupInfoSoapOut** message (section 3.1.4.41.1.2).

3.1.4.41.2.1 UpdateGroupInfo

The **UpdateGroupInfo** element specifies details for the request to update the information about a specified **group**.

```
<s:element name="UpdateGroupInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="oldGroupName" type="tns:String255Type" />
      <s:element name="groupName" type="tns:String255Type" />
      <s:element name="ownerIdentifier" type="s:string" />
```

```
        <s:element name="ownerType" type="tns:PrincipalType" />
        <s:element name="description" type="tns:String512OrEmptyType" />
      </s:sequence>
    </s:complexType>
  </s:element>
```

oldGroupName: The old name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

groupName: The new name of the group. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

ownerIdentifier: The new **owner** identifier of the group. It MUST NOT be empty. If the **ownerType** is "user", it MUST contain a valid **login name** recognized by the protocol server, and it MUST NOT contain more than 251 characters. If the **ownerType** is "group", this field MUST be the name of a group, and it MUST NOT contain more than 255 characters.

ownerType: The type of the new owner of the group.

description: The new description of the group. The specified value MUST NOT contain more than 512 characters. An empty string is allowed.

3.1.4.41.2.2 UpdateGroupInfoResponse

The **UpdateGroupInfoResponse** element contains the response to the request to update the information of a specified **group**.

```
  <s:element name="UpdateGroupInfoResponse">
    <s:complexType/>
  </s:element>
```

3.1.4.41.3 Complex Types

None.

3.1.4.41.4 Simple Types

None.

3.1.4.41.5 Attributes

None.

3.1.4.41.6 Groups

None.

3.1.4.41.7 Attribute Groups

None.

3.1.4.42 UpdateRoleDefInfo

The **UpdateRoleDefInfo** operation is used to update a **role definition** with the specified information.<22>

```
<wsdl:operation name="UpdateRoleDefInfo">
    <wsdl:input message="tns:UpdateRoleDefInfoSoapIn" />
    <wsdl:output message="tns:UpdateRoleDefInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends an **UpdateRoleDefInfoSoapIn** request message (section 3.1.4.42.1.1), and the protocol server responds with an **UpdateRoleDefInfoSoapOut** response message (section 3.1.4.42.1.2) in the following sequence:

1. If the role definition contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return a **SOAP fault** with the error code 0x8102004f.

2. If the role definition specified by the **oldRoleName** element cannot be found on the current **site**, the server MUST return a SOAP fault with the error code 0x80131600.

3. If a role definition with the name specified in the **roleName** element already exists on the current **site collection**, the server MUST return a SOAP fault with the error code 0x81020043.

4. If this operation is called on a **subsite**, the server MUST return a SOAP fault.

5. Otherwise, the server MUST update the role definition and MUST respond with an **UpdateRoleDefInfoSoapOut** response message.

3.1.4.42.1 Messages

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

Message	Description
UpdateRoleDefInfoSoapIn	A request to initiate an **UpdateRoleDefInfo** operation (section 3.1.4.42) on the protocol server.
UpdateRoleDefInfoSoapOut	A response from the protocol server at completion of the **UpdateRoleDefInfo** operation.

3.1.4.42.1.1 UpdateRoleDefInfoSoapIn

The **UpdateRoleDefInfoSoapIn** message is the request of the **UpdateRoleDefInfo** operation (section 3.1.4.42).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/UpdateRoleDefInfo
```

The **SOAP body** contains an **UpdateRoleDefInfo** element, as specified in section 3.1.4.42.2.1.

3.1.4.42.1.2 UpdateRoleDefInfoSoapOut

The **UpdateRoleDefInfoSoapOut** message is the response of the **UpdateRoleDefInfo** operation (section 3.1.4.42).

The **SOAP body** contains an **UpdateRoleDefInfoResponse** element, as specified in section 3.1.4.42.2.2.

3.1.4.42.2 Elements

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

Element	Description
UpdateRoleDefInfo	Body of the **UpdateRoleDefInfoSoapIn** message (section 3.1.4.42.1.1).
UpdateRoleDefInfoResponse	Body of the **UpdateRoleDefInfoSoapOut** message (section 3.1.4.42.1.2).

3.1.4.42.2.1 UpdateRoleDefInfo

The **UpdateRoleDefInfo** element specifies details for the request to update a **role definition** with the specified information.

```
<s:element name="UpdateRoleDefInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="oldRoleName" type="tns:String255Type" />
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="description" type="tns:String512OrEmptyType" maxOccurs="1"
minOccurs="0"/>
      <s:element name="permissionMask" type="s:unsignedLong" />
    </s:sequence>
  </s:complexType>
</s:element>
```

oldRoleName: The old name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

roleName: The new name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

description: The new description of the role definition. The specified value MUST NOT contain more than 512 characters. An empty string value is allowed.

permissionMask: A 64-bit unsigned integer that represents the new **permissions** of the role definition. The type of this field is specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14 and [MS-WSSFO3] section 2.2.2.15.

3.1.4.42.2.2 UpdateRoleDefInfoResponse

The **UpdateRoleDefInfoResponse** element contains the response to the request to update a **role definition** with the specified information.

```
<s:element name="UpdateRoleDefInfoResponse">
  <s:complexType/>
</s:element>
```

3.1.4.42.3 Complex Types

None.

3.1.4.42.4 Simple Types

None.

3.1.4.42.5 Attributes

None.

3.1.4.42.6 Groups

None.

3.1.4.42.7 Attribute Groups

None.

3.1.4.43 UpdateRoleInfo

The **UpdateRoleInfo** operation is used to update a **role definition** with the specified information.

```
<wsdl:operation name="UpdateRoleInfo">
    <wsdl:input message="tns:UpdateRoleInfoSoapIn" />
    <wsdl:output message="tns:UpdateRoleInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends an **UpdateRoleInfoSoapIn** request message (section 3.1.4.43.1.1), and the protocol server responds with an **UpdateRoleInfoSoapOut** response message (section 3.1.4.43.1.2) in the following sequence:

1. If the role definition contains any special characters (" / \ [ ] : | < > + = ; , ? * ' @), the server MUST return a **SOAP fault** with the error code 0x8102004f.

2. If the role definition specified by the **oldRoleName** element cannot be found on the current **site**, the server MUST return a SOAP fault with the error code 0x80131600.

3. If a role definition with the name specified in the **roleName** element already exists on the current **site collection**, the server MUST return a SOAP fault with the error code 0x81020043.

4. If this operation is called on a **subsite**, the server MUST return a SOAP fault.

5. Otherwise, the server MUST update the role definition with the specified information and MUST respond with an **UpdateRoleInfoSoapOut** response message.

3.1.4.43.1 Messages

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

Message	Description
UpdateRoleInfoSoapIn	A request to initiate an **UpdateRoleInfo** operation (section 3.1.4.43) on the protocol server.
UpdateRoleInfoSoapOut	A response from the protocol server at completion of the **UpdateRoleInfo** operation.

3.1.4.43.1.1 UpdateRoleInfoSoapIn

The **UpdateRoleInfoSoapIn** message is the request of the **UpdateRoleInfo** operation (section 3.1.4.43).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/UpdateRoleInfo
```

The **SOAP body** contains an **UpdateRoleInfo** element, as specified in section 3.1.4.43.2.1.

3.1.4.43.1.2 UpdateRoleInfoSoapOut

The **UpdateRoleInfoSoapOut** message is the response of the **UpdateRoleInfo** operation (section 3.1.4.43).

The **SOAP body** contains an **UpdateRoleInfoResponse** element, as specified in section 3.1.4.43.2.2.

3.1.4.43.2 Elements

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

Element	Description
UpdateRoleInfo	Body of the **UpdateRoleInfoSoapIn** message (section 3.1.4.43.1.1).
UpdateRoleInfoResponse	Body of the **UpdateRoleInfoSoapOut** message (section 3.1.4.43.1.2).

3.1.4.43.2.1 UpdateRoleInfo

The **UpdateRoleInfo** element specifies details for the request to update a **role definition** with the specified information.<23>

```
<s:element name="UpdateRoleInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="oldRoleName" type="tns:String255Type" />
      <s:element name="roleName" type="tns:String255Type" />
      <s:element name="description" type="tns:String512OrEmptyType" maxOccurs="1"
minOccurs="0"/>
      <s:element name="permissionMask" type="s:int" />
    </s:sequence>
  </s:complexType>
</s:element>
```

oldRoleName: The old name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

roleName: The new name of the role definition. The specified value MUST NOT contain more than 255 characters, and MUST NOT be empty.

description: The new description of the role definition. The specified value MUST NOT contain more than 512 characters. An empty string is allowed.

permissionMask: A 32-bit integer that specifies the new **permissions** of the role definition. The type of this field is specified in [MS-WSSFO] section 2.2.2.13, [MS-WSSFO2] section 2.2.2.14 and [MS-WSSFO3] section 2.2.2.15.

3.1.4.43.2.2 UpdateRoleInfoResponse

The **UpdateRoleInfoResponse** element contains the response to the request to update a **role definition** with the specified information.

```
<s:element name="UpdateRoleInfoResponse">
  <s:complexType/>
</s:element>
```

3.1.4.43.3   Complex Types

None.

3.1.4.43.4   Simple Types

None.

3.1.4.43.5   Attributes

None.

3.1.4.43.6   Groups

None.

3.1.4.43.7   Attribute Groups

None.

3.1.4.44   UpdateUserInfo

The **UpdateUserInfo** operation is used to update information about the specified user.

```
<wsdl:operation name="UpdateUserInfo">
    <wsdl:input message="tns:UpdateUserInfoSoapIn" />
    <wsdl:output message="tns:UpdateUserInfoSoapOut" />
</wsdl:operation>
```

The protocol client sends an **UpdateUserInfoSoapIn** request message (section 3.1.4.44.1.1), and the protocol server responds with an **UpdateUserInfoSoapOut** response message (section 3.1.4.44.1.2) in the following sequence:

1. If a user with the specified **login name** does not exist, the server MUST return a **SOAP fault** with the error code 0x80131600.

2. Otherwise, the server MUST update information about the user and MUST respond with an **UpdateUserInfoSoapOut** response message.

3.1.4.44.1   Messages

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

Message	Description
UpdateUserInfoSoapIn	A request to initiate an **UpdateUserInfo** operation (section 3.1.4.44) on the protocol server.
UpdateUserInfoSoapOut	A response from the protocol server at completion of the **UpdateUserInfo** operation.

3.1.4.44.1.1 UpdateUserInfoSoapIn

The **UpdateUserInfoSoapIn** message is the request of the **UpdateUserInfo** operation (section 3.1.4.44).

The **SOAP action** value of the message is defined as:

```
http://schemas.microsoft.com/sharepoint/soap/directory/UpdateUserInfo
```

The **SOAP body** contains an **UpdateUserInfo** element, as specified in section 3.1.4.44.2.1.

3.1.4.44.1.2 UpdateUserInfoSoapOut

The **UpdateUserInfoSoapOut** message is the response of the **UpdateUserInfo** operation (section 3.1.4.44).

The **SOAP body** contains an **UpdateUserInfoResponse** element, as specified in section 3.1.4.44.2.2.

3.1.4.44.2   Elements

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

Element	Description
UpdateUserInfo	Body of the **UpdateUserInfoSoapIn** message (section 3.1.4.44.1.1).
UpdateUserInfoResponse	Body of the **UpdateUserInfoSoapOut** message (section 3.1.4.44.1.2).

3.1.4.44.2.1 UpdateUserInfo

The **UpdateUserInfo** element specifies details for the request to update information about the specified user.

```
<s:element name="UpdateUserInfo">
  <s:complexType>
    <s:sequence>
      <s:element name="userLoginName" type="tns:String251Type" />
      <s:element name="userName" type="tns:String255Type" />
      <s:element name="userEmail" type="tns:String255OrEmptyType" />
```

```
        <s:element name="userNotes" type="tns:String1023OrEmptyType" />
      </s:sequence>
    </s:complexType>
  </s:element>
```

userLoginName: The **login name** of the user whose information is updated. The specified value MUST NOT contain more than 251 characters, and MUST NOT be empty.

userName: The new **display name** of the user. The specified value MUST contain less than 256 characters, and MUST NOT be empty.

userEmail: A string that specifies the new **e-mail address** of the user. The specified value MUST contain less than 256 characters. An empty string is allowed.

userNotes: A string containing additional information about the user. The specified value MUST NOT contain more than 1,023 characters. An empty string is allowed.

3.1.4.44.2.2 UpdateUserInfoResponse

The **UpdateUserInfoResponse** element contains the response to the request to update information for the specified user.

```
<s:element name="UpdateUserInfoResponse">
  <s:complexType/>
</s:element>
```

3.1.4.44.3 Complex Types

None.

3.1.4.44.4 Simple Types

None.

3.1.4.44.5 Attributes

None.

3.1.4.44.6 Groups

None.

3.1.4.44.7 Attribute Groups

None.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 Add Users, Groups, and Role Definitions

The following example demonstrates the protocol client requests and protocol server responses that are used in this protocol to create the **groups** and **role definitions** for a user to access a **site**. The example consists of four operations:

- Create a group.
- Create a role definition that can access a site.
- Add the new group to the new role definition.
- Add the specified user to the new group.

1. The protocol client sends an **AddGroup** request (section 3.1.4.1.1.1) to create the group.

```
<soap:Envelope 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:Body>
    <AddGroup
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <groupName>SampleGroup</groupName>
      <ownerIdentifier>contoso\mark</ownerIdentifier>
      <ownerType>user</ownerType>
      <defaultUserLoginName>contoso\mark</defaultUserLoginName>
      <description>Sample Group</description>
    </AddGroup>
  </soap:Body>
</soap:Envelope>
```

The protocol server adds the group, and responds as follows.

```
<soap:Envelope 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:Body>
    <AddGroupResponse
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
  </soap:Body>
</soap:Envelope>
```

2. The protocol client sends an **AddRole** request (section 3.1.4.3.1.1) to create the role definition. The new role definition includes **permissions** to open a site, **list**, or **folder**.

```
<soap:Envelope 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:Body>
    <AddRole
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <roleName>OpenWeb</roleName>
      <description>Open a site, list, or folder</description>
      <permissionMask>65536</permissionMask>
    </AddRole>
  </soap:Body>
</soap:Envelope>
```

The protocol server adds the new role definition, and responds as follows.

```
<soap:Envelope 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:Body>
    <AddRoleResponse
    xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
  </soap:Body>
</soap:Envelope>
```

3. The protocol client sends an **AddGroupToRole** request (section 3.1.4.2.1.1) to add the group to the role definition.

```
<soap:Envelope 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:Body>
    <AddGroupToRole
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <roleName>OpenWeb</roleName>
      <groupName>SampleGroup</groupName>
    </AddGroupToRole>
  </soap:Body>
</soap:Envelope>
```

The protocol server adds the group to the role definition, and responds as follows.

```
<soap:Envelope 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:Body>
    <AddGroupToRoleResponse
    xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
  </soap:Body>
</soap:Envelope>
```

4. The protocol client sends an **AddUserToGroup** request (section 3.1.4.7.1.1) to add the user to the group.

```
<soap:Envelope 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:Body>
    <AddUserToGroup
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <groupName>SampleGroup</groupName>
      <userName>Andy Jacobs</userName>
      <userLoginName>contoso\andy</userLoginName>
      <userEmail>andy@contoso.com</userEmail>
      <userNotes />
    </AddUserToGroup>
  </soap:Body>
</soap:Envelope>
```

The protocol server adds the user to the group and responds as follows:

```
<soap:Envelope 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:Body>
    <AddUserToGroupResponse
```

```
          xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
      </soap:Body>
   </soap:Envelope>
```

4.2   Retrieve and Update User Information

The following example demonstrates the protocol client requests and protocol server responses that are used in this protocol to get information about the users in the current **site** and update the information about one user. The example consists of two operations:

▪   Get all user information from the current site.

▪   Update the information about a user.

1.   The protocol client sends a **GetUserCollectionFromWeb** request (section 3.1.4.28.1.1) to get information about the users in the current site.

```
   <soap:Envelope 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:Body>
        <GetUserCollectionFromWeb
        xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
      </soap:Body>
   </soap:Envelope>
```

   The protocol server sends a **GetUserCollectionFromWeb** response (section 3.1.4.28.1.2) with the information about the users in the current site as follows.

```
   <soap:Envelope 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:Body>
        <GetUserCollectionFromWebResponse
           xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
        <GetUserCollectionFromWebResult>
          <GetUserCollectionFromWeb>
            <Users>
              <User ID="1" Sid="S-1-5-21-2127521184-1604012920-1887927527-
                3500199" Name="Rachel Valdez" LoginName="contoso\rachel"
                Email="rachel@contoso.com" Notes="" IsSiteAdmin="True"
                IsDomainGroup="False" Flags="0" />
              <User ID="17" Sid="S-1-5-21-2127521184-1604012920-1887927527-
                2895802" Name="Neil Black" LoginName="contoso\neil"
                Email="neil@contoso.com" Notes="some notes"
                IsSiteAdmin="False" IsDomainGroup="False" Flags="0" />
            </Users>
          </GetUserCollectionFromWeb>
        </GetUserCollectionFromWebResult>
      </GetUserCollectionFromWebResponse>
    </soap:Body>
   </soap:Envelope>
```

2.   The protocol client sends an **UpdateUserInfo** request (section 3.1.4.44.1.1) to update the information of a specified user.

```
   <soap:Envelope 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:Body>
```

```
          <UpdateUserInfo
            xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
            <userLoginName>contoso\neil</userLoginName>
            <userName>Neil Black</userName>
            <userEmail>neil@contoso.com</userEmail>
            <userNotes>updated user info</userNotes>
          </UpdateUserInfo>
        </soap:Body>
      </soap:Envelope>
```

The protocol server updates the information of the specified user and sends an **UpdateUserInfo** response (section 3.1.4.44.1.2) as follows.

```
      <soap:Envelope 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:Body>
          <UpdateUserInfoResponse
            xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
        </soap:Body>
      </soap:Envelope>
```

4.3 Remove Groups and Users from a Group

The following example demonstrates the protocol client requests and protocol server responses that are used in this protocol to remove a collection of users from a specified **group** and remove a specified group. The example consists of two operations:

- Remove a collection of users from a specified group.

- Remove a specified group.

1. The protocol client sends a **RemoveUserCollectionFromGroup** request (section 3.1.4.34.1.1) to remove a collection of users from a specified group.

```
      <soap:Envelope 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:Body>
          <RemoveUserCollectionFromGroup
          xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
            <groupName>SampleGroup</groupName>
            <userLoginNamesXml>
              <Users>
                <User LoginName="contoso\tony" />
                <User LoginName="contoso\alex" />
              </Users>
            </userLoginNamesXml>
          </RemoveUserCollectionFromGroup>
        </soap:Body>
      </soap:Envelope>
```

The protocol server removes the specified users from the specified group, and sends a **RemoveUserCollectionFromGroup** response (section 3.1.4.34.1.2) as follows.

```
      <soap:Envelope 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:Body>
          <RemoveUserCollectionFromGroupResponse
```

```
              xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
   </soap:Body>
</soap:Envelope>
```

2. The protocol client sends a **RemoveGroup** request (section 3.1.4.31.1.1) to remove a specified group.

```
<soap:Envelope 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:Body>
    <RemoveGroup
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <groupName>SampleGroup</groupName>
    </RemoveGroup>
  </soap:Body>
</soap:Envelope>
```

The protocol server removes the specified group, and sends a **RemoveGroup** response (section 3.1.4.31.1.2) as follows:

```
<soap:Envelope 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:Body>
    <RemoveGroupResponse
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
  </soap:Body>
</soap:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

For ease of implementation, the full WSDL is provided in this appendix.

```xml
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tns="http://schemas.microsoft.com/sharepoint/soap/directory/"
xmlns:s="http://www.w3.org/2001/XMLSchema"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
targetNamespace="http://schemas.microsoft.com/sharepoint/soap/directory/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <s:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <s:import namespace="http://www.w3.org/2001/XMLSchema" />
      <s:simpleType name="TrueFalseType">
        <s:restriction base="s:string">
          <s:enumeration value="True"/>
          <s:enumeration value="False"/>
        </s:restriction>
      </s:simpleType>
      <s:simpleType name="PrincipalType">
        <s:restriction base="s:string">
          <s:enumeration value="user"/>
          <s:enumeration value="group"/>
        </s:restriction>
      </s:simpleType>
      <s:simpleType name="String255Type">
        <s:restriction base="s:string">
          <s:minLength value="1" />
          <s:maxLength value="255" />
        </s:restriction>     </s:simpleType>
      <s:simpleType name="String255OrEmptyType">
        <s:restriction base="s:string">
          <s:minLength value="0" />
          <s:maxLength value="255" />
        </s:restriction>     </s:simpleType>
      <s:simpleType name="String251Type">
        <s:restriction base="s:string">
          <s:minLength value="1" />
          <s:maxLength value="251" />
        </s:restriction>     </s:simpleType>
      <s:simpleType name="String512OrEmptyType">
        <s:restriction base="s:string">
          <s:minLength value="0" />
          <s:maxLength value="512" />
        </s:restriction>     </s:simpleType>
      <s:simpleType name="String1023OrEmptyType">
        <s:restriction base="s:string">
          <s:minLength value="0" />
          <s:maxLength value="1023" />
        </s:restriction>     </s:simpleType>
      <s:complexType name="RolesInputType">
        <s:sequence>
          <s:element name="Roles" minOccurs="1" maxOccurs="1">
            <s:complexType>
              <s:sequence>
                <s:element name="Role" minOccurs="0" maxOccurs="100">
                  <s:complexType>
                    <s:attribute name="RoleName" type="tns:String255Type" />
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
```

```
        </s:complexType>        <s:complexType name="RoleOutputType">
          <s:sequence>
            <s:element name="GetRoleInfo" minOccurs="1" maxOccurs="1">
              <s:complexType>
                <s:sequence>
                  <s:element name="Role" minOccurs="1" maxOccurs="1">
                    <s:complexType>
                      <s:attribute name="ID" type="s:positiveInteger" use="required" />
                      <s:attribute name="Name" type="s:string" use="required" />
                      <s:attribute name="Description" type="s:string" use="required" />
                      <s:attribute name="Type" type="s:nonNegativeInteger" use="required" />
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
        <s:complexType name="RolesOutputTextType">
          <s:sequence>
            <s:element name="Roles">
              <s:complexType>
                <s:sequence>
                  <s:element name="Role" minOccurs="0" maxOccurs="unbounded">
                    <s:complexType>
                      <s:attribute name="ID" type="s:positiveInteger" use="required" />
                      <s:attribute name="Name" type="tns:String255Type" use="required" />
                      <s:attribute name="Description" type="tns:String512OrEmptyType"
  use="required" />
                      <s:attribute name="Order" type="s:nonNegativeInteger" use="required" />
                      <s:attribute name="Hidden" type="tns:TrueFalseType" use="required" />
                      <s:attribute name="Type" type="s:string" use="required" />
                      <s:attribute name="BasePermissions" type="s:string" use="required" />
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
        <s:complexType name="RolesOutputMaskType">
          <s:sequence>
            <s:element name="Role" minOccurs="0" maxOccurs="unbounded">
              <s:complexType>
                <s:attribute name="ID" type="s:positiveInteger" use="required" />
                <s:attribute name="Name" type="tns:String255Type" use="required" />
                <s:attribute name="Description" type="tns:String512OrEmptyType" use="required"
  />
                <s:attribute name="Hidden" type="tns:TrueFalseType" use="required" />
                <s:attribute name="Type" type="s:string" use="required" />
                <s:attribute name="BasePermissions" type="s:unsignedLong" use="required" />
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
        <s:complexType name="User">
          <s:attribute name="ID" type="s:unsignedInt" use="required" />
          <s:attribute name="Sid" type="s:string" use="required" />
          <s:attribute name="Name" type="tns:String255OrEmptyType" use="required" />
          <s:attribute name="LoginName" type="tns:String251Type" use="required" />
          <s:attribute name="Email" type="tns:String255OrEmptyType" use="required" />
          <s:attribute name="Notes" type="tns:String1023OrEmptyType" use="required" />
          <s:attribute name="IsSiteAdmin" type="tns:TrueFalseType" use="required" />
          <s:attribute name="IsDomainGroup" type="tns:TrueFalseType" use="required" />
          <s:attribute name="Flags" type="s:unsignedInt" use="required" />
        </s:complexType>
        <s:complexType name="Users">
          <s:sequence>
            <s:element minOccurs="0" maxOccurs="unbounded" name="User" type="tns:User" />
```

```
        </s:sequence>
      </s:complexType>
      <s:complexType name="Group">
        <s:attribute name="ID" type="s:unsignedInt" use="required" />
        <s:attribute name="Name" type="tns:String255Type" use="required" />
        <s:attribute name="Description" type="tns:String512OrEmptyType" use="required" />
        <s:attribute name="OwnerID" type="s:unsignedInt" use="required" />
        <s:attribute name="OwnerIsUser" type="tns:TrueFalseType" use="required" />
      </s:complexType>
      <s:complexType name="Groups">
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="100" name="Group" type="tns:Group">
          </s:element>
        </s:sequence>
      </s:complexType>
      <s:complexType name="InputUserType">
        <s:attribute name="LoginName" type="tns:String251Type" use="required" />
        <s:attribute name="Email" type="tns:String255OrEmptyType" />
        <s:attribute name="Name" type="tns:String255OrEmptyType" />
        <s:attribute name="Notes" type="tns:String1023OrEmptyType" />
      </s:complexType>
      <s:complexType name="InputUsersType">
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="100" name="User" type="tns:InputUserType"/>
        </s:sequence>
      </s:complexType>
      <s:complexType name="GroupsInputType">
        <s:sequence>
          <s:element name="Groups">
            <s:complexType>
              <s:sequence>
                <s:element name="Group" minOccurs="0" maxOccurs="100">
                  <s:complexType>
                    <s:attribute name="GroupName" type="tns:String255Type" />
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
      <s:complexType name="EmailsInputType">
        <s:sequence>
          <s:element name="Users">
            <s:complexType>
              <s:sequence>
                <s:element name="User" minOccurs="0" maxOccurs="100">
                  <s:complexType>
                    <s:attribute name="Email" type="tns:String255Type" />
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
      <s:complexType name="EmailsOutputType">
        <s:sequence>
          <s:element name="User" minOccurs="0" maxOccurs="100" >
            <s:complexType>
              <s:attribute name="Login" type="s:string" />
              <s:attribute name="Email" type="s:string" />
              <s:attribute name="DisplayName" type="s:string" />
              <s:attribute name="SiteUser">
                <s:simpleType>
                  <s:restriction base="s:nonNegativeInteger">
                    <s:enumeration value="0" />
                    <s:enumeration value="1" />
                  </s:restriction>
```

```
              </s:simpleType>
            </s:attribute>
          </s:complexType>
        </s:element>
      </s:sequence>
    </s:complexType>
    <s:element name="GetUserCollectionFromSite">
      <s:complexType />
    </s:element>
    <s:element name="GetUserCollectionFromSiteResponse">
      <s:complexType>
        <s:sequence>
          <s:element name="GetUserCollectionFromSiteResult">
            <s:complexType>
              <s:sequence>
                <s:element name="GetUserCollectionFromSite">
                  <s:complexType>
                    <s:sequence>
                      <s:element name="Users" type="tns:Users" />
                    </s:sequence>
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
    <s:element name="GetUserCollectionFromWeb">
      <s:complexType />
    </s:element>
    <s:element name="GetUserCollectionFromWebResponse">
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            <s:element name="userEmail" type="tns:String255OrEmptyType" minOccurs="0"
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      <s:element name="AddUserCollectionToRole">
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```xml
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    </s:element>
    <s:element name="RemoveUserFromSite">
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```

```xml
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    <s:element name="RemoveUserCollectionFromRole">
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    <s:element name="GetGroupCollectionFromSiteResponse">
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        </s:sequence>
      </s:complexType>
    </s:element>
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```

```
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        <s:element name="GetGroupInfoResponse">
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                    <s:element name="GetGroupInfo" >
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                        <s:sequence>
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              <s:element name="defaultUserLoginName" type="tns:String251Type" />
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        <s:element name="AddGroupToRole">
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        <s:element name="UpdateGroupInfo">
```

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        </s:element>
        <s:element name="UpdateGroupInfoResponse">
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        <s:element name="RemoveGroup">
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        </s:element>
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        </s:element>
        <s:element name="GetRoleInfoResponse">
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```xml
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              <s:element name="roleName" type="tns:String255Type" />
              <s:element name="description" type="tns:String512OrEmptyType" maxOccurs="1"
minOccurs="0"/>
              <s:element name="permissionMask" type="s:int" />
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minOccurs="0"/>
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        </s:element>
        <s:element name="RemoveRoleResponse">
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      </wsdl:operation>
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      </wsdl:operation>
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        <wsdl:output message="tns:GetUserCollectionSoapOut" />
      </wsdl:operation>
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      </wsdl:operation>
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        <wsdl:output message="tns:AddUserToRoleSoapOut" />
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      </wsdl:operation>
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        <wsdl:output message="tns:UpdateUserInfoSoapOut" />
      </wsdl:operation>
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        <wsdl:output message="tns:RemoveUserFromSiteSoapOut" />
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        </wsdl:operation>
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        </wsdl:operation>
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        </wsdl:operation>
        <wsdl:operation name="GetUserLoginFromEmail">
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```

```
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      <wsdl:operation name="GetRolesAndPermissionsForSite">
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      </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="UserGroupSoap" type="tns:UserGroupSoap">
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
    <wsdl:operation name="GetUserCollectionFromSite">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromSite"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollectionFromWeb">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromWeb"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetAllUserCollectionFromWeb">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetAllUserCollectionFromWe
b" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollectionFromGroup">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromGroup
" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollectionFromRole">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromRole"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollection">
```

```
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollection"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserInfo">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserInfo"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetCurrentUserInfo">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetCurrentUserInfo"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddUserToGroup">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserToGroup"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddUserCollectionToGroup">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserCollectionToGroup"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddUserToRole">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserToRole"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddUserCollectionToRole">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserCollectionToRole"
style="document" />
```

```
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="UpdateUserInfo">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateUserInfo"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveUserFromSite">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromSite"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveUserCollectionFromSite">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromSi
te" style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveUserFromWeb">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromWeb"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveUserFromGroup">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromGroup"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveUserCollectionFromGroup">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromGr
oup" style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
```

```
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserFromRole">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromRole"
style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserCollectionFromRole">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromRo
le" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGroupCollectionFromSite">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromSite
" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGroupCollectionFromWeb">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromWeb"
style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGroupCollectionFromRole">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromRole
" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGroupCollectionFromUser">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromUser
" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
```

```
        </wsdl:operation>
        <wsdl:operation name="GetGroupCollection">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollection"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetGroupInfo">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupInfo"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddGroup">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddGroup" style="document"
/>
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddGroupToRole">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddGroupToRole"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="UpdateGroupInfo">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateGroupInfo"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveGroup">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveGroup"
style="document" />
          <wsdl:input>
            <soap:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveGroupFromRole">
```

```
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveGroupFromRole"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRoleCollectionFromWeb">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromWeb"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRoleCollectionFromGroup">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromGroup
" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRoleCollectionFromUser">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromUser"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRoleCollection">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollection"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRoleInfo">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleInfo"
style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddRole">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddRole" style="document"
/>
```

```
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="AddRoleDef">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddRoleDef"
style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="UpdateRoleInfo">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateRoleInfo"
style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="UpdateRoleDefInfo">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateRoleDefInfo"
style="document" />
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          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveRole">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveRole"
style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetUserLoginFromEmail">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserLoginFromEmail"
style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetRolesAndPermissionsForCurrentUser">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRolesAndPermissionsForC
urrentUser" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
```

```
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRolesAndPermissionsForSite">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRolesAndPermissionsForS
ite" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
  </wsdl:binding>
  <wsdl:binding name="UserGroupSoap12" type="tns:UserGroupSoap">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http" />
    <wsdl:operation name="GetUserCollectionFromSite">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromSite"
style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollectionFromWeb">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromWeb"
style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetAllUserCollectionFromWeb">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetAllUserCollectionFromWe
b" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollectionFromGroup">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromGroup
" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetUserCollectionFromRole">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollectionFromRole"
style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
```

```
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetUserCollection">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserCollection"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetUserInfo">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserInfo"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetCurrentUserInfo">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetCurrentUserInfo"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="AddUserToGroup">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserToGroup"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="AddUserCollectionToGroup">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserCollectionToGroup"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="AddUserToRole">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserToRole"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
```

```
      </wsdl:operation>
      <wsdl:operation name="AddUserCollectionToRole">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddUserCollectionToRole"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="UpdateUserInfo">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateUserInfo"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserFromSite">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromSite"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserCollectionFromSite">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromSi
te" style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserFromWeb">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromWeb"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserFromGroup">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromGroup"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveUserCollectionFromGroup">
```

```
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromGr
oup" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="RemoveUserFromRole">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserFromRole"
style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="RemoveUserCollectionFromRole">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveUserCollectionFromRo
le" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetGroupCollectionFromSite">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromSite
" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetGroupCollectionFromWeb">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromWeb"
style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetGroupCollectionFromRole">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromRole
" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetGroupCollectionFromUser">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollectionFromUser
" style="document" />
```

```
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetGroupCollection">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupCollection"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetGroupInfo">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetGroupInfo"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="AddGroup">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddGroup" style="document"
/>
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="AddGroupToRole">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddGroupToRole"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="UpdateGroupInfo">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateGroupInfo"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal" />
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="RemoveGroup">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveGroup"
style="document" />
            <wsdl:input>
              <soap12:body use="literal" />
            </wsdl:input>
```

```
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveGroupFromRole">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveGroupFromRole"
style="document" />
          <wsdl:input>
            <soap12:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetRoleCollectionFromWeb">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromWeb"
style="document" />
          <wsdl:input>
            <soap12:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetRoleCollectionFromGroup">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromGroup
" style="document" />
          <wsdl:input>
            <soap12:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetRoleCollectionFromUser">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollectionFromUser"
style="document" />
          <wsdl:input>
            <soap12:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetRoleCollection">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleCollection"
style="document" />
          <wsdl:input>
            <soap12:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetRoleInfo">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRoleInfo"
style="document" />
          <wsdl:input>
            <soap12:body use="literal" />
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal" />
          </wsdl:output>
```

```
      </wsdl:operation>
      <wsdl:operation name="AddRole">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddRole" style="document"
/>
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="AddRoleDef">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddRoleDef"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="UpdateRoleInfo">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateRoleInfo"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="UpdateRoleDefInfo">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdateRoleDefInfo"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="RemoveRole">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemoveRole"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetUserLoginFromEmail">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetUserLoginFromEmail"
style="document" />
        <wsdl:input>
          <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetRolesAndPermissionsForCurrentUser">
```

```
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRolesAndPermissionsForC
urrentUser" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetRolesAndPermissionsForSite">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetRolesAndPermissionsForS
ite" style="document" />
      <wsdl:input>
        <soap12:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
  </wsdl:binding>
</wsdl:definitions>
```

7 Appendix B: 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.

- Active Directory Domain Services (AD DS)

- The 2007 Microsoft Office system

- Microsoft Office 2010 suites

- Microsoft Office 2013

- Windows SharePoint Services 2.0

- Windows SharePoint Services 3.0

- Microsoft SharePoint Foundation 2010

- Microsoft SharePoint Foundation 2013

- Microsoft Office 2016

- Microsoft SharePoint Server 2016

- Microsoft Office 2019

- Microsoft SharePoint Server 2019

- Microsoft Office 2021

- Microsoft SharePoint Server Subscription Edition Preview

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 2.2.4.5: The SharePoint Products and Technologies UI does not provide access to the **Hidden** attribute.

<2> Section 2.2.4.6: The SharePoint Products and Technologies UI does not provide access to the **Hidden** attribute.

<3> Section 3.1.4.3: In SharePoint Products and Technologies, "role definition" is the standard terminology and is used instead of "role" in all descriptions of this protocol's behavior. However, SharePoint Products and Technologies provides two distinct but entirely equivalent operations to add **role definitions**—**AddRole** and **AddRoleDef**—and two distinct but entirely equivalent operations for updating role definitions—**UpdateRoleInfo** and **UpdateRoleDefInfo**.

<4> Section 3.1.4.4: Windows SharePoint Services 2.0 does not support this operation.

<5> Section 3.1.4.4: In SharePoint Products and Technologies, "role definition" is the standard terminology and is used instead of "role" in all descriptions of this protocol's behavior. However, SharePoint Products and Technologies provides two distinct but entirely equivalent operations to add

role definitions—**AddRole** and **AddRoleDef**—and two distinct but entirely equivalent operations for updating role definitions—**UpdateRoleInfo** and **UpdateRoleDefInfo**.

<6> Section 3.1.4.5: If the **Active Directory Domain Services (AD DS)** account creation mode is enabled, the **AddUserCollectionToGroup** operation (section 3.1.4.5) in SharePoint Foundation 2010 works, as specified in section 3.1.4, with the following differences:

- If a user with the **login name** specified in the operation exists in the **site collection**, the server adds the user to the **group** or role definition as specified in the operation.

- If a user with the login name specified in the operation does not exist in the site collection, the protocol server responds as follows:

  - If an **e-mail address** specified in the operation is not in a valid format, the server returns a **SOAP fault** with error code 0x80004005.

  - If one or more of the users in the site collection have the e-mail address specified in the operation, the protocol server responds as follows:

    - The server chooses one of the users with the e-mail address specified in the operation.

    - In the case where the login name and e-mail address for this user in the site collection do not match the login name and e-mail address in AD DS, the server also creates a new AD DS account for this user with a random, but unique login name.

    - The server adds the user to the group or role definition as specified in the operation.

  - Otherwise, if the e-mail address specified in the operation is valid and none of the users in the site collection have the e-mail address specified in the operation, the server creates a new AD DS account for the user with a random but unique login name and adds the user to the group or role definition as specified.

<7> Section 3.1.4.6: If the Active Directory Domain Services (AD DS) account creation mode is enabled, the **AddUserCollectionToRole** operation (section 3.1.4.6) in SharePoint Foundation 2010 works, as specified in section 3.1.4, with the following differences:

- If a user with the login name specified in the operation exists in the site collection, the server adds the user to the group or role definition as specified in the operation.

- If a user with the login name specified in the operation does not exist in the site collection, the protocol server responds as follows:

- If an e-mail address specified in the operation is not in a valid format, the server returns a SOAP fault with error code 0x80004005.

- If one or more of the users in the site collection have the e-mail address specified in the operation, the protocol server responds as follows:

  - The server chooses one of the users with the e-mail address specified in the operation.

  - In the case where the login name and e-mail address for this user in the site collection do not match the login name and e-mail address in AD DS, the server also creates a new AD DS account for this user with a random, but unique login name.

  - The server adds the user to the group or role definition as specified in the operation.

- Otherwise, if the e-mail address specified in the operation is valid and none of the users in the site collection have the e-mail address specified in the operation, the server creates a new AD DS account for the user with a random but unique login name and adds the user to the group or role definition as specified.

: If the Active Directory Domain Services (AD DS) account creation mode is enabled, the **AddUserToGroup** operation (section) in SharePoint Foundation 2010 works, as specified in section 3.1.4, with the following differences:

- If a user with the login name specified in the operation exists in the site collection, the server adds the user to the group or role definition as specified in the operation.

- If a user with the login name specified in the operation does not exist in the site collection, the protocol server responds as follows:

  - If an e-mail address specified in the operation is not in a valid format, the server returns a SOAP fault with error code 0x80004005.

  - If one or more of the users in the site collection have the e-mail address specified in the operation, the protocol server responds as follows:

    - The server chooses one of the users with the e-mail address specified in the operation.

    - In the case where the login name and e-mail address for this user in the site collection do not match the login name and e-mail address in AD DS, the server also creates a new AD DS account for this user with a random, but unique login name.

    - The server adds the user to the group or role definition as specified in the operation.

  - Otherwise, if the e-mail address specified in the operation is valid and none of the users in the site collection have the e-mail address specified in the operation, the server creates a new AD DS account for the user with a random but unique login name and adds the user to the group or role definition as specified.

: If the Active Directory Domain Services (AD DS) account creation mode is enabled, the **AddUserToRole** operation (section) in SharePoint Foundation 2010 works, as specified in section 3.1.4, with the following differences:

- If a user with the login name specified in the operation exists in the site collection, the server adds the user to the group or role definition as specified in the operation.

- If a user with the login name specified in the operation does not exist in the site collection, the protocol server responds as follows:

  - If an e-mail address specified in the operation is not in a valid format, the server returns a SOAP fault with error code 0x80004005.

  - If one or more of the users in the site collection have the e-mail address specified in the operation, the protocol server responds as follows:

    - The server chooses one of the users with the e-mail address specified in the operation.

    - In the case where the login name and e-mail address for this user in the site collection do not match the login name and e-mail address in AD DS, the server also creates a new AD DS account for this user with a random, but unique login name.

    - The server adds the user to the group or role definition as specified in the operation.

  - Otherwise, if the e-mail address specified in the operation is valid and none of the users in the site collection have the e-mail address specified in the operation, the server creates a new AD DS account for the user with a random but unique login name, and adds the user to the group or role definition as specified.

: This operation is not available in Windows SharePoint Services 2.0 or Windows SharePoint Services 3.0.

<11> Section 3.1.4.15: In SharePoint Products and Technologies, if a **site** inherits permissions from a **parent site**, in order for a group to have permissions for that site, the group has to have permissions for the parent site.

<12> Section 3.1.4.22: Windows SharePoint Services 2.0 does not support this operation.

<13> Section 3.1.4.23: Windows SharePoint Services 2.0 does not support this operation.

<14> Section 3.1.4.30: In SharePoint Products and Technologies, if there are multiple users with the same e-mail address, the protocol server treats this case as no user can be found for a specified e-mail address.

<15> Section 3.1.4.30.3.1: In SharePoint Products and Technologies, if the value in the **Email** attribute is "login name", this method returns the user based on the login name; login name accepts both complete "Domain\Alias" format and "Alias only" format.

<16> Section 3.1.4.34: In SharePoint Products and Technologies users are removed in sequential order, which means that if a user name is invalid or does not exist in the site collection, an error code 0x81020054 will be returned, but all previous valid users will be removed.

<17> Section 3.1.4.35: In SharePoint Products and Technologies users are removed in sequential order, which means that if some a user name is invalid or does not exist in the site collection, an error code 0x81020054 will be returned, but all previous valid users will be removed.

<18> Section 3.1.4.36: If AD DS account creation mode is enabled, the **RemoveUserCollectionFromSite** (section 3.1.4.36) and **RemoveUserFromSite** (section 3.1.4.39) operations also delete users from AD DS.

<19> Section 3.1.4.36: In SharePoint Products and Technologies users are removed in sequential order, which means that if a user name is invalid, an error code 0x81020054 will be returned, but all previous valid users will be removed.

<20> Section 3.1.4.39: If AD DS account creation mode is enabled, **RemoveUserCollectionFromSite** (section 3.1.4.36) and **RemoveUserFromSite** (section 3.1.4.39) operations also delete users from AD DS.

<21> Section 3.1.4.41: Windows SharePoint Services 2.0 and Windows SharePoint Services 3.0 return a SOAP fault with error code 0x81020043.

<22> Section 3.1.4.42: In SharePoint Products and Technologies, "role definition" is the standard terminology and is used instead of "role" in all descriptions of this protocol's behavior. However, SharePoint Products and Technologies provides two distinct, but entirely equivalent operations to add role definitions—**AddRole** and **AddRoleDef**—and two distinct, but entirely equivalent operations for updating role definitions—**UpdateRoleInfo** and **UpdateRoleDefInfo**.

<23> Section 3.1.4.43.2.1: In SharePoint Products and Technologies, "role definition" is the standard terminology and is used instead of "role" in all descriptions of this protocol's behavior. However, SharePoint Products and Technologies provides two distinct, but entirely equivalent operations to add role definitions—**AddRole** and **AddRoleDef**—and two distinct, but entirely equivalent operations for updating role definitions—**UpdateRoleInfo** and **UpdateRoleDefInfo**.

8 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.

Section	Description	Revision class
7 Appendix B: Product Behavior	Updated list of supported products.	major
7 Appendix B: Product Behavior	Updated list of supported products.	Major

9 Index