

# [MS-PERMS]: Permissions Web Service Protocol

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## Revision Summary

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# 1 Introduction

The Permissions Web Service Protocol enables protocol clients to manage permissions to items on the protocol server.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

## 1.1 Glossary

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

- Hypertext Transfer Protocol (HTTP)**
- Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**
- security principal name (SPN)**
- SOAP**
- SOAP action**
- SOAP body**
- SOAP fault**
- SOAP message**
- XML**
- XML namespace**

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

- list**
- role**
- security principal**
- site**
- Uniform Resource Locator (URL)**
- web service**
- Web Services Description Language (WSDL)**
- WSDL message**
- XML schema**

The following terms are specific to this document:

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

## 1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the documents, which are updated frequently. References to other documents include a publishing year when one is available.

### 1.2.1 Normative References

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

[MS-WSSFO3] Microsoft Corporation, "[Windows SharePoint Services \(WSS\): File Operations Database Communications Version 3 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.ietf.org/rfc/rfc2616.txt>

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

[SOAP1.2/1] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 1: Messaging Framework", W3C Recommendation, June 2003, <http://www.w3.org/TR/2003/REC-soap12-part1-20030624>

[SOAP1.2/2] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 2: Adjuncts", W3C Recommendation, June 2003, <http://www.w3.org/TR/2003/REC-soap12-part2-20030624>

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

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

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

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

## 1.2.2 Informative References

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)".

[MS-OFCGLOS] Microsoft Corporation, "[Microsoft Office Master Glossary](#)".

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

## 1.3 Overview

This protocol enables protocol clients to manage permissions to content on a protocol server. The content can be stored as **sites (2)** or **lists (1)**, and the protocol is to be used through a **Web service**. It defines messages to add, modify, get and remove permissions.

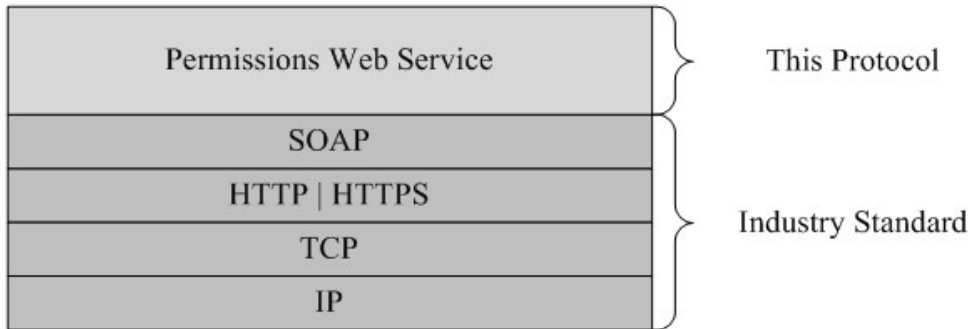
This protocol only manages the permissions. The protocol server implementation is expected to store and enforce them.

## 1.4 Relationship to Other Protocols

This protocol uses the **SOAP** message protocol for formatting request and response messages, as described in [\[SOAP1.1\]](#), [\[SOAP1.2/1\]](#) and [\[SOAP1.2/2\]](#). It transmits those messages by using **HTTP**, as described in [\[RFC2616\]](#), or **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as described in [\[RFC2818\]](#).



The following diagram shows the underlying messaging and transport stack used by the protocol:



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

### 1.5 Prerequisites/Preconditions

This protocol operates against a site (2) that is identified by a **URL** that is known by protocol clients. The protocol server endpoint is formed by appending "\_vti\_bin/permissions.asmx" to the URL of the site, for example [http://www.example.com/Repository/\\_vti\\_bin/permissions.asmx](http://www.example.com/Repository/_vti_bin/permissions.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, modify, get, and remove permissions from a site (2) or a list (1). This protocol is not intended to be used to add new **roles**.

### 1.7 Versioning and Capability Negotiation

This protocol uses multiple transports with SOAP as specified 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. Protocol servers **SHOULD** additionally support SOAP over HTTPS for securing communication with protocol clients.

Protocol messages **MUST** be formatted as specified either in [\[SOAP1.1\]](#) section 4 or in [\[SOAP1.2/1\]](#) section 5. Protocol server faults **MUST** be returned either by using HTTP Status Codes as specified in [\[RFC2616\]](#) section 10 or by using **SOAP faults** as specified either in [\[SOAP1.1\]](#) section 4.4 or in [\[SOAP1.2/1\]](#) 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 [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#), and **Web Services Description Language (WSDL)**, as specified in [\[WSDL\]](#).

#### 2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
soap	<a href="http://schemas.xmlsoap.org/wsdl/soap/">http://schemas.xmlsoap.org/wsdl/soap/</a>	<a href="#">[SOAP1.1]</a>
tns	<a href="http://schemas.microsoft.com/sharepoint/soap/directory/">http://schemas.microsoft.com/sharepoint/soap/directory/</a>	
s	<a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>	<a href="#">[XMLSCHEMA1]</a>
soap12	<a href="http://schemas.xmlsoap.org/wsdl/soap12/">http://schemas.xmlsoap.org/wsdl/soap12/</a>	<a href="#">[SOAP1.2/1]</a> <a href="#">[SOAP1.2/2]</a>
(none)	<a href="http://schemas.microsoft.com/sharepoint/soap/directory/">http://schemas.microsoft.com/sharepoint/soap/directory/</a>	
wsdl	<a href="http://schemas.xmlsoap.org/wsdl/">http://schemas.xmlsoap.org/wsdl/</a>	<a href="#">[WSDL]</a>

#### 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

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

#### 2.2.5 Simple Types

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

### **2.2.6 Attributes**

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

### **2.2.7 Groups**

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

### **2.2.8 Attribute Groups**

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

## 3 Protocol Details

Except where specified, protocol clients SHOULD interpret HTTP Status Codes returned by the protocol server as specified in [\[RFC2616\]](#) section 10.

This protocol allows protocol servers to notify protocol clients of application-level faults by using SOAP faults. 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 either by using HTTP Status Codes or by using SOAP faults as specified previously in this section.

### 3.1 Permissions Soap 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 specification does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this specification.

A server implementation of this protocol MUST maintain a list of permissions for each list (1) or site (2) that it contains. Such permissions MUST be accessible by the name of the list (1) or site (2) that it relates to.

#### 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
AddPermission	Used to add permissions on a site (2) or a list (1).
AddPermissionCollection	Used to add a collection of permissions on a site (2) or a list (1).
GetPermissionCollection	Used to get the permission collection for a site (2) or a list (1).
RemovePermission	Used to remove a specified permission from a list (1) or a site (2).
RemovePermissionCollection	Used to remove permissions from a list (1) or a site (2) for the specified <b>security principal (2)</b> collection.
UpdatePermission	Used to modify permissions of a list (1) or site (2) for the specified security principal (2) or security group.

### 3.1.4.1 AddPermission

This operation is used to add site (2) permissions for the specified security principal (2) or security group that exists on the site (2), or to add permissions to the specified list (1) for the specified security principal (2) or security group that exists on the site (2).

```
<wsdl:operation name="AddPermission">
  <wsdl:input message="tns:AddPermissionSoapIn" />
  <wsdl:output message="tns:AddPermissionSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddPermissionSoapIn** request message and the protocol server responds with an **AddPermissionSoapOut** response message, as follows:

- If the value specified in **objectType** is "list" and no list (1) with the name specified in **objectName** exists, the server MUST return a SOAP fault with error code 0x82000006.
- If the value specified in **objectType** is not "list" or "web", the server MUST return a SOAP fault with error code 0x80131600.
- If the value specified in **permissionType** is not "user", "group", or "role", the server MUST return a SOAP fault with error code 0x80131600.
- If the security principal (2) or the security group specified in **permissionIdentifier** does not exist, the server MUST return a SOAP fault with error code 0x80131600.

#### 3.1.4.1.1 Messages

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

Message	Description
<b>AddPermissionSoapIn</b>	A request to initiate a <b>AddPermission</b> operation on the protocol server.
<b>AddPermissionSoapOut</b>	A response from the protocol server at completion of the <b>AddPermission</b> operation.

##### 3.1.4.1.1.1 AddPermissionSoapIn

The request message for an **AddPermission** operation.

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

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

The **SOAP body** contains an **AddPermission** element.

##### 3.1.4.1.1.2 AddPermissionSoapOut

The response message of an **AddPermission** operation.

The SOAP body contains an **AddPermissionResponse** element.

### 3.1.4.1.2 Elements

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

Element	Description
<b>AddPermission</b>	The input data of an <b>AddPermission</b> operation.
<b>AddPermissionResponse</b>	The output data of an <b>AddPermission</b> operation.

#### 3.1.4.1.2.1 AddPermission

The input data of an **AddPermission** operation. The definition of the **AddPermission** element is as follows:

```
<s:element name="AddPermission">
  <s:complexType>
    <s:sequence>
      <s:element name="objectName" type="s:string" minOccurs="1" maxOccurs="1"/>
      <s:element name="objectType" type="s:string" minOccurs="1" maxOccurs="1"/>
      <s:element name="permissionIdentifier" type="s:string" minOccurs="1" maxOccurs="1"/>
      <s:element name="permissionType" type="s:string" minOccurs="1" maxOccurs="1"/>
      <s:element name="permissionMask" type="s:int" minOccurs="1" maxOccurs="1"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

**objectName:** A string that contains the name of a list (1) or a site (2). The specified list (1) or site (2) specified in this parameter **MUST** exist on the protocol server.

**objectType:** A string that specifies whether permission is to be added to a list (1) or a site (2). The value **MUST** be "list" for a list (1) or "web" for a site (2).

**permissionIdentifier:** A string that contains the name of the security group or the **security principal name (SPN)** of the security principal (2) to whom the permission applies. The security principal (2) or security group **MUST** already exist on the site (2) on the protocol server.

**permissionType:** A string that specifies whether permission applies to a security principal (2) or to a security group. The value **MUST** be "user" for security principal (2), "group" for security group, or "role". If **permissionType** equals "role" and **objectType** equals "web", permissions for the role will not be updated. If **permissionType** equals "role" and **objectType** equals "list", permissions for all security principals (2) assigned to the role will be updated. <1>

**permissionMask:** A Rights Mask that is lower 32 bits of the WSS Rights Mask that is specified in [\[MS-WSSFO3\]](#) section 2.2.2.15.

#### 3.1.4.1.2.2 AddPermissionResponse

The output data of an **AddPermission** operation. If the operation succeeds, an **AddPermissionResponse** **MUST** be returned by the protocol server.

The definition of the **AddPermissionResponse** element is as follows:

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

```
<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 AddPermissionCollection

This operation is used to add site (2) permissions for the specified collection of security principals (2) or security groups, or to add permissions to a list (1) for the specified collection of security principals (2) or security groups that exist on the protocol server.

```
<wsdl:operation name="AddPermissionCollection">
  <wsdl:input message="tns:AddPermissionCollectionSoapIn" />
  <wsdl:output message="tns:AddPermissionCollectionSoapOut" />
</wsdl:operation>
```

The protocol client sends an **AddPermissionCollectionSoapIn** request message and the protocol server responds with an **AddPermissionCollectionSoapOut** response message, as follows:

- If the value specified in **objectType** is "list" and no list (1) with the name specified in **objectName** exists, the server MUST return a SOAP fault with error code 0x82000006.
- If the value specified in **objectType** is not "list" or "web", the server MUST return a SOAP fault with error code 0x80131600.
- If the value specified in **permissionsInfoXml** is an invalid **XML**, the server returns a SOAP fault without an error code.

### 3.1.4.2.1 Messages

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

Message	Description
<b>AddPermissionCollectionSoapIn</b>	A request to initiate a <b>AddPermissionCollection</b> operation on the protocol server.
<b>AddPermissionCollectionSoapOut</b>	A response from the protocol server at completion of the <b>AddPermissionCollection</b> operation.

### 3.1.4.2.1.1 AddPermissionCollectionSoapIn

The request message for an **AddPermissionCollection** operation.

The SOAP action value of the message is defined as:

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

The SOAP body contains an **AddPermissionCollection** element.

### 3.1.4.2.1.2 AddPermissionCollectionSoapOut

The response message of an **AddPermissionCollection** operation.

The SOAP body contains an **AddPermissionCollectionResponse** element.

### 3.1.4.2.2 Elements

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

Element	Description
<b>AddPermissionCollection</b>	The input data of an <b>AddPermissionCollection</b> operation.
<b>AddPermissionCollectionResponse</b>	The output data of an <b>AddPermissionCollection</b> operation.

#### 3.1.4.2.2.1 AddPermissionCollection

The input data of an **AddPermissionCollection** operation. The definition of the **AddPermissionCollection** element is as follows:

```
<s:element name="AddPermissionCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="objectName" type="s:string" minOccurs="1"/>
      <s:element name="objectType" type="s:string" minOccurs="1"/>
      <s:element name="permissionsInfoXml" minOccurs="1">
        <s:complexType>
          <s:sequence>
            <s:element name="Permissions">
              <s:complexType>
                <s:sequence>
                  <s:element name="Users" minOccurs="0" maxOccurs="1">
                    <s:complexType>
                      <s:sequence>
                        <s:element minOccurs="0" maxOccurs="100" name="User">
```



```

    <s:complexType>
      <s:attribute name="LoginName" type="s:string" use="required" />
      <s:attribute name="Email" type="s:string" use="optional" />
      <s:attribute name="Name" type="s:string" use="optional" />
      <s:attribute name="Notes" type="s:string" use="optional" />
      <s:attribute name="PermissionMask" type="s:int" use="required" />
    </s:complexType>
  </s:element>
</s:sequence>
</s:complexType>
</s:element>
<s:element name="Groups" minOccurs="0" maxOccurs="1">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="100" name="Group">
        <s:complexType>
          <s:attribute name="GroupName" type="s:string" use="required" />
          <s:attribute name="PermissionMask" type="s:int" use="required" />
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
<s:element name="Roles" minOccurs="0" maxOccurs="1">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="100" name="Role">
        <s:complexType>
          <s:attribute name="RoleName" type="s:string" use="required" />
          <s:attribute name="PermissionMask" type="s:int" use="required" />
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
</s:sequence>
</s:complexType>
</s:element>
</s:sequence>
</s:complexType>
</s:element>
</s:sequence>
</s:complexType>
</s:element>

```

**objectName:** A string that contains the name of a list (1) or a site (2). The list (1) or site (2) specified in this parameter MUST exist on the protocol server.

**objectType:** A string that specifies whether permissions are to be added to a list (1) or a site (2). The value MUST be "list" for a list (1) or "web" for a site (2).

**permissionsInfoXml:** An XML fragment that contains the permissions to add. The XML fragment MUST adhere to the schema specified previously in this section.

### 3.1.4.2.2 AddPermissionCollectionResponse

The output data of an **AddPermissionCollection** operation. If the operation succeeds, an **AddPermissionCollectionResponse** MUST be returned by the protocol server.

The definition of the **AddPermissionCollectionResponse** element is as follows:

```
<s:element name="AddPermissionCollectionResponse">
  <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 GetPermissionCollection

This operation is used to retrieve the permission collection for a site (2) or a list (1) from a protocol server.

```
<wsdl:operation name="GetPermissionCollection">
  <wsdl:input message="tns:GetPermissionCollectionSoapIn" />
  <wsdl:output message="tns:GetPermissionCollectionSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetPermissionCollectionSoapIn** request message and the protocol server responds with a **GetPermissionCollectionSoapOut** response message, as follows:

- If the value specified in **objectType** is "list" and no list (1) with the name specified in **objectName** exists, the server MUST return a SOAP fault with error code 0x82000006.
- If the value specified in **objectType** is not "list" or "web", the server MUST return a SOAP fault with error code 0x80131600.

### 3.1.4.3.1 Messages

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

Message	Description
<b>GetPermissionCollectionSoapIn</b>	A request to initiate a <b>GetPermissionCollection</b> operation on the protocol server.
<b>GetPermissionCollectionSoapOut</b>	A response from the protocol server at completion of the <b>GetPermissionCollection</b> operation.

### 3.1.4.3.1.1 GetPermissionCollectionSoapIn

The request message for a **GetPermissionCollection** operation.

The SOAP action value of the message is defined as:

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

The SOAP body contains a **GetPermissionCollection** element.

### 3.1.4.3.1.2 GetPermissionCollectionSoapOut

The response message of a **GetPermissionCollection** operation.

The SOAP body contains a **GetPermissionCollectionResponse** element.

### 3.1.4.3.2 Elements

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

Element	Description
<b>GetPermissionCollection</b>	The input data for a <b>GetPermissionCollection</b> operation.
<b>GetPermissionCollectionResponse</b>	The output data of a <b>GetPermissionCollection</b> operation.

#### 3.1.4.3.2.1 GetPermissionCollection

The input data for a **GetPermissionCollection** operation. The definition of the **GetPermissionCollection** element is as follows:

```
<s:element name="GetPermissionCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="objectName" type="s:string" minOccurs="1" maxOccurs="1"/>
      <s:element name="objectType" type="s:string" minOccurs="1" maxOccurs="1"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

**objectName:** A string that contains the name of a list (1) or a site (2). The list (1) or site (2) specified in this parameter MUST exist on the protocol server.

**objectType:** A string that specifies whether permissions are to be retrieved for a list (1) or a site (2). The value MUST be "list" for a list (1) or "web" for a site (2).

### 3.1.4.3.2 GetPermissionCollectionResponse

The output data of a **GetPermissionCollection** operation. If the operation succeeds, a **GetPermissionCollectionResponse** MUST be returned by the protocol server.

```
<s:element name="GetPermissionCollectionResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="GetPermissionCollectionResult">
        <s:complexType>
          <s:sequence>
            <s:element name="GetPermissionCollection">
              <s:complexType>
                <s:sequence>
                  <s:element maxOccurs="unbounded" name="Permission">
                    <s:complexType>
                      <s:attribute name="MemberID" type="s:int" use="required" />
                      <s:attribute name="Mask" type="s:int" use="required" />
                      <s:attribute name="MemberIsUser" type="s:string" use="required" />
                      <s:attribute name="MemberGlobal" type="s:string" use="required" />
                      <s:attribute name="UserLogin" type="s:string" use="optional" />
                      <s:attribute name="GroupName" type="s:string" use="optional" />
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

**GetPermissionCollectionResult:** An XML fragment that contains the permissions for the specified site (2) or list (1). The XML fragment MUST adhere to the preceding schema.

### 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 RemovePermission

This operation is used to remove a specified permission from a list (1) or a site (2).

```
<wsdl:operation name="RemovePermission">
  <wsdl:input message="tns:RemovePermissionSoapIn" />
  <wsdl:output message="tns:RemovePermissionSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemovePermissionSoapIn** request message and the protocol server responds with a **RemovePermissionSoapOut** response message, as follows:

- If the value specified in **objectType** is "list" and no list (1) with the name specified in **objectName** exists, the server MUST return a SOAP fault with error code 0x82000006.
- If the value specified in **objectType** is not "list" or "web", the server MUST return a SOAP fault with error code 0x80131600.
- If the value specified in **permissionType** is not "user" or "group", the server MUST return a SOAP fault with error code 0x80131600.
- If the security principal (2) or the security group specified in **permissionIdentifier** does not exist, the server MUST return a SOAP fault with error code 0x80131600.

#### 3.1.4.4.1 Messages

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

Message	Description
<b>RemovePermissionSoapIn</b>	A request to initiate a <b>RemovePermission</b> operation on the protocol server.
<b>RemovePermissionSoapOut</b>	A response from the protocol server at completion of the <b>RemovePermission</b> operation.

##### 3.1.4.4.1.1 RemovePermissionSoapIn

The request message for a **RemovePermission** operation.

The SOAP action value of the message is defined as:

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

The SOAP body contains a **RemovePermission** element.

##### 3.1.4.4.1.2 RemovePermissionSoapOut

The response message of a **RemovePermission** operation.

The SOAP body contains a **RemovePermissionResponse** element.

### 3.1.4.4.2 Elements

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

Element	Description
<b>RemovePermission</b>	The input data for a <b>RemovePermission</b> operation.
<b>RemovePermissionResponse</b>	The output data of a <b>RemovePermission</b> operation.

#### 3.1.4.4.2.1 RemovePermission

The input data for a **RemovePermission** operation. The definition of the **RemovePermission** element is as follows:

```
<s:element name="RemovePermission">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="objectName" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="objectType" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionIdentifier" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionType" type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>
```

**objectName:** A string that contains the name of a list (1) or a site (2). The specified list (1) or site (2) specified in this parameter MUST exist on the protocol server.

**objectType:** A string that specifies whether permission is to be removed for a list (1) or a site (2). The value MUST be "list" for a list (1) or "web" for a site (2).

**permissionIdentifier:** A string that contains the name of the security group or the name of the security principal (2) whose permission is to be removed. The specified security principal (2) or security group MUST already exist on the site.

**permissionType:** A string that specifies whether permission is to be removed for the security principal (2) or security group. The value MUST be "user" for security principal (2), "group" for security group, or "role". If **permissionType** equals "role" and **objectType** equals "web", permissions for the role will not be removed. If **permissionType** equals "role" and **objectType** equals "list", permissions for all security principals (2) assigned to the role will remain unchanged. [<2>](#)

#### 3.1.4.4.2.2 RemovePermissionResponse

The output data of a **RemovePermission** operation. If the operation succeeds, a **RemovePermissionResponse** MUST be returned by the protocol server.

```
<s:element name="RemovePermissionResponse">
  <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 RemovePermissionCollection

This operation is used to remove permissions from a list (1) or a site (2) for the specified security principals (2).

```
<wsdl:operation name="RemovePermissionCollection">
  <wsdl:input message="tns:RemovePermissionCollectionSoapIn" />
  <wsdl:output message="tns:RemovePermissionCollectionSoapOut" />
</wsdl:operation>
```

The protocol client sends a **RemovePermissionCollectionSoapIn** request message and the protocol server responds with a **RemovePermissionCollectionSoapOut** response message, as follows:

- If the value specified in **objectType** is "list" and no list (1) with the name specified in **objectName** exists, the server MUST return a SOAP fault with error code 0x82000006.
- If the value specified in **objectType** is not "list" or "web", the server MUST return a SOAP fault with error code 0x80131600.
- If the value specified in **memberIdsXml** is an invalid XML, the server returns a SOAP fault without an error code.

### 3.1.4.5.1 Messages

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

Message	Description
<b>RemovePermissionCollectionSoapIn</b>	A request to initiate a <b>RemovePermissionCollection</b> operation on the protocol server.
<b>RemovePermissionCollectionSoapOut</b>	A response from the protocol server at completion of the

Message	Description
	<b>RemovePermissionCollection</b> operation.

### 3.1.4.5.1.1 RemovePermissionCollectionSoapIn

The request message for a **RemovePermissionCollection** operation.

The SOAP action value of the message is defined as:

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

The SOAP body contains a **RemovePermissionCollection** element.

### 3.1.4.5.1.2 RemovePermissionCollectionSoapOut

The response message of a **RemovePermissionCollection** operation.

The SOAP body contains a **RemovePermissionCollectionResponse** element.

### 3.1.4.5.2 Elements

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

Element	Description
<b>RemovePermissionCollection</b>	The input data for a <b>RemovePermissionCollection</b> operation.
<b>RemovePermissionCollectionResponse</b>	The output data of a <b>RemovePermissionCollection</b> operation.

#### 3.1.4.5.2.1 RemovePermissionCollection

The input data for a **RemovePermissionCollection** operation. The definition of the **RemovePermissionCollection** element is as follows:

```
<s:element name="RemovePermissionCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="objectName" type="s:string" minOccurs="1"/>
      <s:element name="objectType" type="s:string" minOccurs="1"/>
      <s:element name="memberIdsXml" minOccurs="1">
        <s:complexType>
          <s:sequence>
            <s:element name="Members">
              <s:complexType>
                <s:sequence>
                  <s:element maxOccurs="unbounded" name="Member">
                    <s:complexType>
                      <s:attribute name="ID" type="s:int" use="required" />
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```



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

**objectName:** A string that contains the name of a list (1) or a site (2). The list (1) or site (2) specified in this parameter MUST exist on the protocol server.

**objectType:** A string that specifies whether permissions are to be removed for a list (1) or a site (2). The value MUST be "list" for a list (1) or "web" for a site (2).

**memberIdsXml:** An XML fragment that contains the permissions to be removed from the specified list. The XML fragment MUST adhere to the schema specified previously in this section.

### 3.1.4.5.2.2 RemovePermissionCollectionResponse

The output data of a **RemovePermissionCollection** operation. If the operation succeeds, a **RemovePermissionCollectionResponse** MUST be returned by the protocol server.

```
<s:element name="RemovePermissionCollectionResponse">
  <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 UpdatePermission

This operation is used to modify site (2) permissions for the specified security principal (2) or security group, or to modify permissions of a list (1) for the specified security principal (2) or security group.

```

<wsdl:operation name="UpdatePermission">
  <wsdl:input message="tns:UpdatePermissionSoapIn" />
  <wsdl:output message="tns:UpdatePermissionSoapOut" />
</wsdl:operation>

```

The protocol client sends an **UpdatePermissionSoapIn** request message and the protocol server responds with an **UpdatePermissionSoapOut** response message, as follows:

- If the value specified in **objectType** is "list" and no list (1) with the name specified in **objectName** exists, the server MUST return a SOAP fault with error code 0x82000006.
- If the value specified in **objectType** is not "list" or "web", the server MUST return a SOAP fault with error code 0x80131600.
- If the value specified in **permissionType** is not "user" or "group", the server MUST return a SOAP fault with error code 0x80131600.
- If the security principal (2) or the security group specified in **permissionIdentifier** does not exist, the server MUST return a SOAP fault with error code 0x80131600.

### 3.1.4.6.1 Messages

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

Message	Description
<b>UpdatePermissionSoapIn</b>	A request to initiate a <b>UpdatePermission</b> operation on the protocol server.
<b>UpdatePermissionSoapOut</b>	A response from the protocol server at completion of the <b>UpdatePermission</b> operation.

#### 3.1.4.6.1.1 UpdatePermissionSoapIn

The request message for an **UpdatePermission** operation.

The SOAP action value of the message is defined as:

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

The SOAP body contains an **UpdatePermission** element.

#### 3.1.4.6.1.2 UpdatePermissionSoapOut

The response message of an **UpdatePermission** operation.

The SOAP body contains an **UpdatePermissionResponse** element.

### 3.1.4.6.2 Elements

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

Element	Description
<b>UpdatePermission</b>	The input data of an <b>UpdatePermission</b> operation.
<b>UpdatePermissionResponse</b>	The output data for an <b>UpdatePermission</b> operation.

### 3.1.4.6.2.1 UpdatePermission

The input data of an **UpdatePermission** operation. The definition of the **UpdatePermission** element is as follows:

```
<s:element name="UpdatePermission">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="objectName" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="objectType" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionIdentifier" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionType" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionMask" type="s:int" />
    </s:sequence>
  </s:complexType>
</s:element>
```

**objectName:** A string that contains the name of a list (1) or a site (2). The list (1) or site (2) specified in this parameter MUST exist on the protocol server.

**objectType:** A string that specifies whether permission is to be updated for a list (1) or a site (2). The value MUST be "list" for a list (1) or "web" for a site (2).

**permissionIdentifier:** A string that contains the name of the security group or the name of the security principal (2) to whom the permission applies. The security principal (2) or security group MUST already exist on the site (2) on the protocol server.

**permissionType:** A string that specifies whether permission applies to the security principal (2) or to the security group. The value MUST be "user" for security principal (2), "group" for security group, or "role". If **permissionType** equals "role" and **objectType** equals "web", the server MUST return a SOAP fault with error code 0x80131600. If **permissionType** equals "role" and **objectType** equals "list", the server MUST return a SOAP fault with error code 0x80131600. [<3>](#)

**permissionMask:** A Rights Mask that is lower 32 bits of the WSS Rights Mask which is specified in [\[MS-WSSFO3\]](#) section 2.2.2.15.

### 3.1.4.6.2.2 UpdatePermissionResponse

The output data for an **UpdatePermission** operation. If the operation succeeds, an **UpdatePermissionResponse** MUST be returned by the protocol server.

```
<s:element name="UpdatePermissionResponse">
  <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.

#### **3.1.5 Timer Events**

None.

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

None.

## 4 Protocol Examples

In this scenario, a protocol client first adds a permission to a list (1) and then gets the collection of permissions for that list (1). The protocol client then updates the recently added permission and gets the collection of permissions again to see the updated collection.

A protocol client first constructs the following **SOAP message** to add a permission to a list (1). The protocol client sends the SOAP message to the protocol server:

```
<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>
    <AddPermission xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <objectName>
        Announcements
      </objectName>
      <objectType>
        list
      </objectType>
      <permissionIdentifier>
        HelpGroup
      </permissionIdentifier>
      <permissionType>
        group
      </permissionType>
      <permissionMask>
        -1
      </permissionMask>
    </AddPermission>
  </soap:Body>
</soap:Envelope>
```

The protocol server then responds with the following:

```
<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>
    <AddPermissionResponse xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
  </soap:Body>
</soap:Envelope>
```

To get the collection of permissions from a list (1), the protocol client next constructs the following SOAP message. The protocol client sends the SOAP message to the protocol server:

```
<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>
    <GetPermissionCollection xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <objectName>
        Announcements
      </objectName>
      <objectType>
        list
      </objectType>
    </GetPermissionCollection>
  </soap:Body>
</soap:Envelope>
```

```

    </objectType>
  </GetPermissionCollection>
</soap:Body>
</soap:Envelope>

```

The protocol server then responds with the following:

```

<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>
    <GetPermissionCollectionResponse
xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <GetPermissionCollectionResult>
        <GetPermissionCollection>
          <Permissions>
            <Permission MemberID="1" Mask="-1" MemberIsUser="True" MemberGlobal="False"
UserLogin="MYDOMAIN\user1" />
            <Permission MemberID="3" Mask="-1" MemberIsUser="False" MemberGlobal="True"
GroupName="Farm Administrators" />
            <Permission MemberID="5" Mask="-1" MemberIsUser="False" MemberGlobal="True"
GroupName="HelpGroup" />
          </Permissions>
        </GetPermissionCollection>
      </GetPermissionCollectionResult>
    </GetPermissionCollectionResponse>
  </soap:Body>
</soap:Envelope>

```

To update the permissions for a group to a list (1), the protocol client constructs the following SOAP message and sends it to the protocol server:

```

<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>
    <UpdatePermission xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <objectName>
        Announcements
      </objectName>
      <objectType>
        list
      </objectType>
      <permissionIdentifier>
        HelpGroup
      </permissionIdentifier>
      <permissionType>
        group
      </permissionType>
      <permissionMask>
        138612833
      </permissionMask>
    </UpdatePermission>
  </soap:Body>
</soap:Envelope>

```

The protocol server then responds with the following:

```
<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>
    <UpdatePermissionResponse xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/"
/>
  </soap:Body>
</soap:Envelope>
```

To get the collection of permissions from a list (1), the protocol client then constructs the following SOAP message and sends it to the protocol server:

```
<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>
    <GetPermissionCollection xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <objectName>
        Announcements
      </objectName>
      <objectType>
        list
      </objectType>
    </GetPermissionCollection>
  </soap:Body>
</soap:Envelope>
```

The protocol server then responds with the following:

```
<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>
    <GetPermissionCollectionResponse
xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/">
      <GetPermissionCollectionResult>
        <GetPermissionCollection>
          <Permissions>
            <Permission MemberID="1" Mask="-1" MemberIsUser="True" MemberGlobal="False"
UserLogin="MYDOMAIN\user1" />
            <Permission MemberID="3" Mask="-1" MemberIsUser="False" MemberGlobal="True"
GroupName="Farm Administrators" />
            <Permission MemberID="5" Mask="138612833" MemberIsUser="False" MemberGlobal="True"
GroupName="HelpGroup" />
          </Permissions>
        </GetPermissionCollection>
      </GetPermissionCollectionResult>
    </GetPermissionCollectionResponse>
  </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 and schema are provided in this appendix.

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tm="http://microsoft.com/wsdl/mime/textMatching/"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
xmlns:tns="http://schemas.microsoft.com/sharepoint/soap/directory/"
xmlns:s1="http://microsoft.com/wsdl/types/" 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://microsoft.com/wsdl/types/" />
      <s:element name="GetPermissionCollection">
        <s:complexType>
          <s:sequence>
            <s:element minOccurs="1" maxOccurs="1" name="objectName" type="s:string" />
            <s:element minOccurs="1" maxOccurs="1" name="objectType" type="s:string" />
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="GetPermissionCollectionResponse">
        <s:complexType>
          <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="GetPermissionCollectionResult">
              <s:complexType>
                <s:sequence>
                  <s:element name="GetPermissionCollection">
                    <s:complexType>
                      <s:sequence>
                        <s:element maxOccurs="unbounded" name="Permission">
                          <s:complexType>
                            <s:attribute name="MemberID" type="s:int" use="required" />
                            <s:attribute name="Mask" type="s:int" use="required" />
                            <s:attribute name="MemberIsUser" type="s:string" use="required" />
                            <s:attribute name="MemberGlobal" type="s:string" use="required" />
                            <s:attribute name="UserLogin" type="s:string" use="optional" />
                            <s:attribute name="GroupName" type="s:string" use="optional" />
                          </s:complexType>
                        </s:element>
                      </s:sequence>
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="AddPermission">
        <s:complexType>
          <s:sequence>
            <s:element minOccurs="1" maxOccurs="1" name="objectName" type="s:string" />
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:schema>
  </wsdl:types>

```

```

    <s:element minOccurs="1" maxOccurs="1" name="objectType" type="s:string" />
    <s:element minOccurs="1" maxOccurs="1" name="permissionIdentifier" type="s:string" />
    <s:element minOccurs="1" maxOccurs="1" name="permissionType" type="s:string" />
    <s:element minOccurs="1" maxOccurs="1" name="permissionMask" type="s:int" />
  </s:sequence>
</s:complexType>
</s:element>
<s:element name="AddPermissionResponse">
  <s:complexType />
</s:element>
<s:element name="AddPermissionCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="objectName" type="s:string" minOccurs="1"/>
      <s:element name="objectType" type="s:string" minOccurs="1"/>
      <s:element name="permissionsInfoXml" minOccurs="1">
        <s:complexType>
          <s:sequence>
            <s:element name="Permissions">
              <s:complexType>
                <s:sequence>
                  <s:element name="Users" minOccurs="0" maxOccurs="1">
                    <s:complexType>
                      <s:sequence>
                        <s:element minOccurs="0" maxOccurs="100" name="User">
                          <s:complexType>
                            <s:attribute name="LoginName" type="s:string" use="required" />
                            <s:attribute name="Email" type="s:string" use="optional" />
                            <s:attribute name="Name" type="s:string" use="optional" />
                            <s:attribute name="Notes" type="s:string" use="optional" />
                            <s:attribute name="PermissionMask" type="s:int" use="required" />
                          </s:complexType>
                        </s:element>
                      </s:sequence>
                    </s:complexType>
                  </s:element>
                  <s:element name="Groups" minOccurs="0" maxOccurs="1">
                    <s:complexType>
                      <s:sequence>
                        <s:element minOccurs="0" maxOccurs="100" name="Group">
                          <s:complexType>
                            <s:attribute name="GroupName" type="s:string" use="required" />
                            <s:attribute name="PermissionMask" type="s:int" use="required" />
                          </s:complexType>
                        </s:element>
                      </s:sequence>
                    </s:complexType>
                  </s:element>
                  <s:element name="Roles" minOccurs="0" maxOccurs="1">
                    <s:complexType>
                      <s:sequence>
                        <s:element minOccurs="0" maxOccurs="100" name="Role">
                          <s:complexType>
                            <s:attribute name="RoleName" type="s:string" use="required" />
                            <s:attribute name="PermissionMask" type="s:int" use="required" />
                          </s:complexType>
                        </s:element>
                      </s:sequence>
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>

```

```

        </s:element>
      </s:sequence>
    </s:complexType>
  </s:element>
</s:sequence>
</s:complexType>
</s:element>
</s:sequence>
</s:complexType>
</s:element>
<s:element name="AddPermissionCollectionResponse">
  <s:complexType />
</s:element>
<s:element name="UpdatePermission">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="objectName" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="objectType" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionIdentifier" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionType" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionMask" type="s:int" />
    </s:sequence>
  </s:complexType>
</s:element>
<s:element name="UpdatePermissionResponse">
  <s:complexType />
</s:element>
<s:element name="RemovePermission">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="1" maxOccurs="1" name="objectName" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="objectType" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionIdentifier" type="s:string" />
      <s:element minOccurs="1" maxOccurs="1" name="permissionType" type="s:string" />
    </s:sequence>
  </s:complexType>
</s:element>
<s:element name="RemovePermissionResponse">
  <s:complexType />
</s:element>
<s:element name="RemovePermissionCollection">
  <s:complexType>
    <s:sequence>
      <s:element name="objectName" type="s:string" minOccurs="1"/>
      <s:element name="objectType" type="s:string" minOccurs="1"/>
      <s:element name="memberIdsXml" minOccurs="1">
        <s:complexType>
          <s:sequence>
            <s:element name="Members">
              <s:complexType>
                <s:sequence>
                  <s:element maxOccurs="unbounded" name="Member">
                    <s:complexType>
                      <s:attribute name="ID" type="s:int" use="required" />
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>

```

```

        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
</s:element>
<s:element name="RemovePermissionCollectionResponse">
  <s:complexType />
</s:element>
</s:schema>
<s:schema elementFormDefault="qualified"
targetNamespace="http://microsoft.com/wsdl/types/">
  <s:simpleType name="guid">
    <s:restriction base="s:string">
      <s:pattern value="[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" />
    </s:restriction>
  </s:simpleType>
</s:schema>
</wsdl:types>
<wsdl:message name="GetPermissionCollectionSoapIn">
  <wsdl:part name="parameters" element="tns:GetPermissionCollection" />
</wsdl:message>
<wsdl:message name="GetPermissionCollectionSoapOut">
  <wsdl:part name="parameters" element="tns:GetPermissionCollectionResponse" />
</wsdl:message>
<wsdl:message name="AddPermissionSoapIn">
  <wsdl:part name="parameters" element="tns:AddPermission" />
</wsdl:message>
<wsdl:message name="AddPermissionSoapOut">
  <wsdl:part name="parameters" element="tns:AddPermissionResponse" />
</wsdl:message>
<wsdl:message name="AddPermissionCollectionSoapIn">
  <wsdl:part name="parameters" element="tns:AddPermissionCollection" />
</wsdl:message>
<wsdl:message name="AddPermissionCollectionSoapOut">
  <wsdl:part name="parameters" element="tns:AddPermissionCollectionResponse" />
</wsdl:message>
<wsdl:message name="UpdatePermissionSoapIn">
  <wsdl:part name="parameters" element="tns:UpdatePermission" />
</wsdl:message>
<wsdl:message name="UpdatePermissionSoapOut">
  <wsdl:part name="parameters" element="tns:UpdatePermissionResponse" />
</wsdl:message>
<wsdl:message name="RemovePermissionSoapIn">
  <wsdl:part name="parameters" element="tns:RemovePermission" />
</wsdl:message>
<wsdl:message name="RemovePermissionSoapOut">
  <wsdl:part name="parameters" element="tns:RemovePermissionResponse" />
</wsdl:message>
<wsdl:message name="RemovePermissionCollectionSoapIn">
  <wsdl:part name="parameters" element="tns:RemovePermissionCollection" />
</wsdl:message>
<wsdl:message name="RemovePermissionCollectionSoapOut">
  <wsdl:part name="parameters" element="tns:RemovePermissionCollectionResponse" />
</wsdl:message>
<wsdl:portType name="PermissionsSoap">
  <wsdl:operation name="GetPermissionCollection">
    <wsdl:input message="tns:GetPermissionCollectionSoapIn" />

```

```

    <wsdl:output message="tns:GetPermissionCollectionSoapOut" />
  </wsdl:operation>
  <wsdl:operation name="AddPermission">
    <wsdl:input message="tns:AddPermissionSoapIn" />
    <wsdl:output message="tns:AddPermissionSoapOut" />
  </wsdl:operation>
  <wsdl:operation name="AddPermissionCollection">
    <wsdl:input message="tns:AddPermissionCollectionSoapIn" />
    <wsdl:output message="tns:AddPermissionCollectionSoapOut" />
  </wsdl:operation>
  <wsdl:operation name="UpdatePermission">
    <wsdl:input message="tns:UpdatePermissionSoapIn" />
    <wsdl:output message="tns:UpdatePermissionSoapOut" />
  </wsdl:operation>
  <wsdl:operation name="RemovePermission">
    <wsdl:input message="tns:RemovePermissionSoapIn" />
    <wsdl:output message="tns:RemovePermissionSoapOut" />
  </wsdl:operation>
  <wsdl:operation name="RemovePermissionCollection">
    <wsdl:input message="tns:RemovePermissionCollectionSoapIn" />
    <wsdl:output message="tns:RemovePermissionCollectionSoapOut" />
  </wsdl:operation>
</wsdl:portType>
<wsdl:binding name="PermissionsSoap" type="tns:PermissionsSoap">
  <soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
  <wsdl:operation name="GetPermissionCollection">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetPermissionCollection"
      style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="AddPermission">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddPermission"
      style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="AddPermissionCollection">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddPermissionCollection"
      style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="UpdatePermission">

```

```

    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdatePermission"
style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="RemovePermission">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemovePermission"
style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="RemovePermissionCollection">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemovePermissionCollection"
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="PermissionsSoap12" type="tns:PermissionsSoap">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http" />
    <wsdl:operation name="GetPermissionCollection">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/GetPermissionCollection"
style="document" />
        <wsdl:input>
            <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap12:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddPermission">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddPermission"
style="document" />
        <wsdl:input>
            <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap12:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="AddPermissionCollection">

```

```

    <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/AddPermissionCollection"
style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="UpdatePermission">
    <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/UpdatePermission"
style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="RemovePermission">
    <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemovePermission"
style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="RemovePermissionCollection">
    <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/directory/RemovePermissionCollection"
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 released service packs:

- 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

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

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

[<1> Section 3.1.4.1.2.1](#): This is the expected behavior but when "role" is given, Windows SharePoint Services 3.0 does not work as expected.

[<2> Section 3.1.4.4.2.1](#): This is the expected behavior but when "role" is given, Windows SharePoint Services 3.0 does not work as expected.

[<3> Section 3.1.4.6.2.1](#): This is the expected behavior but when "role" is given, Windows SharePoint Services 3.0 does not work as expected.



## 8 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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