[MS-IMAGS]:
Imaging Service Protocol

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Revision Summary

Date	Revision History	Revision Class	Comments
04/04/2008	0.1		Initial Availability
06/27/2008	1.0	Major	Revised and edited the technical content
12/12/2008	1.01	Editorial	Revised and edited the technical content
07/13/2009	1.02	Major	Revised and edited the technical content
08/28/2009	1.03	Editorial	Revised and edited the technical content
11/06/2009	1.04	Editorial	Revised and edited the technical content
02/19/2010	2.0	Minor	Updated the technical content
03/31/2010	2.01	Editorial	Revised and edited the technical content
04/30/2010	2.02	Editorial	Revised and edited the technical content
06/07/2010	2.03	Editorial	Revised and edited the technical content
06/29/2010	2.04	Minor	Clarified the meaning of the technical content.
07/23/2010	2.04	No change	No changes to the meaning, language, or formatting of the technical content.
09/27/2010	2.04	No change	No changes to the meaning, language, or formatting of the technical content.
11/15/2010	2.04	No change	No changes to the meaning, language, or formatting of the technical content.
12/17/2010	2.04	No change	No changes to the meaning, language, or formatting of the technical content.
03/18/2011	2.04	No change	No changes to the meaning, language, or formatting of the technical content.
06/10/2011	2.5	Minor	Clarified the meaning of the technical content.
01/20/2012	2.6	Minor	Clarified the meaning of the technical content.
04/11/2012	2.6	No change	No changes to the meaning, language, or formatting of the technical content.
07/16/2012	2.7	Minor	Clarified the meaning of the technical content.
09/12/2012	2.7	No change	No changes to the meaning, language, or formatting of the technical content.
10/08/2012	2.8	Minor	Clarified the meaning of the technical content.
02/11/2013	2.9	Minor	Clarified the meaning of the technical content.

Date	Revision History	Revision Class	Comments
07/30/2013	2.10	Minor	Clarified the meaning of the technical content.
11/18/2013	2.10	No change	No changes to the meaning, language, or formatting of the technical content.
02/10/2014	2.10	No change	No changes to the meaning, language, or formatting of the technical content.
04/30/2014	2.10	No change	No changes to the meaning, language, or formatting of the technical content.

Table of Contents

1   Introduction

The Imaging Service Protocol specifies a set of client-server interactions that allows a client to retrieve, upload, and organize images on a 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]:

Coordinated Universal Time (UTC)
GUID
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
SOAP
SOAP action
SOAP body
SOAP fault
XML namespace

The following terms are defined in [MS-OFCGLOS]:

file
folder
item
list
list item
picture library
site
subsite
Uniform Resource Locator (URL)
URL encode
Web Services Description Language (WSDL)
WSDL message
WSDL operation
XML namespace prefix
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. We will assist you in finding the relevant information.

[MS-LISTSWS] Microsoft Corporation, "Lists Web Service Protocol".

[MS-PRSTFR] Microsoft Corporation, "ADO XML Persistence Format Protocol Specification".

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

[RFC4648] Josefsson, S., "The Base16, Base32, and Base64 Data Encodings", RFC 4648, October 2006, http://www.ietf.org/rfc/rfc4648.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 is a **SOAP**-based protocol that uses HTTP/S as its transport. Protocol clients can perform the following actions:

- Attempt to have a specified **URL** resolved as a **subsite**, **list (1)**, and **folder** for a **picture library**.

- Create a new folder in a picture library.

- Delete **list items** from a picture library.

- Download list items from a picture library.

- Provide identifiers and have the corresponding list items in a picture library returned.

- Provide names and have the corresponding metadata of the list items in a picture library returned.

- Obtain all list items in a specified folder in a picture library.

- List all picture library items on the **site (2)**.

- Rename list items in a picture library.

- Upload an image to a folder in a picture library.

The following diagram shows the communication between the protocol client and the protocol server:
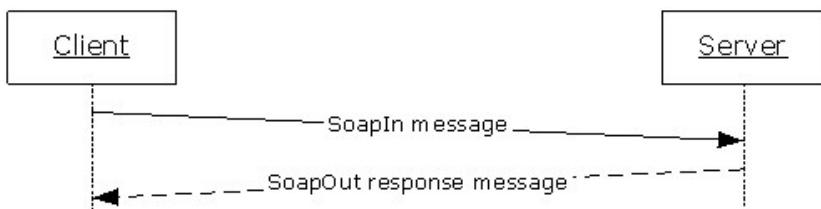
Figure 1: Sample WSDL operation sequence

The protocol client sends a request **WSDL message** to the protocol server.

The protocol server replies with a response WSDL message to the protocol client. If the **WSDL operation** succeeds, the response WSDL message of the WSDL operation is sent. If the WSDL operation fails, a **SOAP fault** WSDL message is sent with an error code.

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:
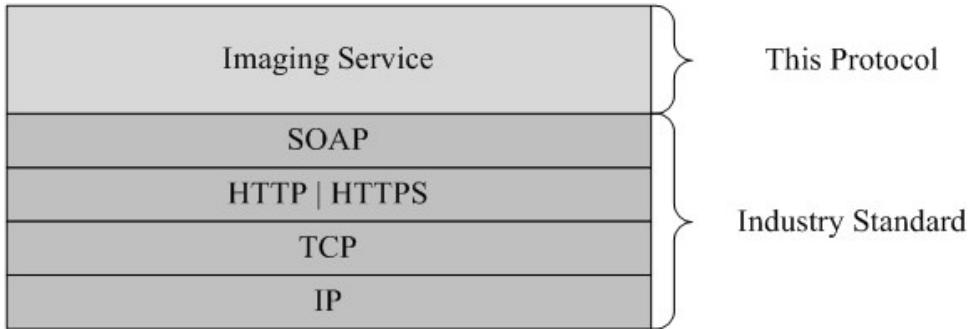
Figure 2: This protocol in relation to other protocols

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/imaging.asmx" to the URL of the site (2), for example http://www.contoso.com/Repository/_vti_bin/Imaging.asmx.

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

1.6 Applicability Statement

None.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

▪ **Supported Transports:** 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 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 using either HTTP Status Codes as specified in [RFC2616], section 10 or SOAP faults, as specified in [SOAP1.1], section 4.4 or [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 **WSDL**, as specified in [WSDL].

2.2.1 Namespaces

This specification specifies and references various **XML namespaces**, using the mechanisms specified in [XMLNS]. Although this specification associates a specific **XML namespace prefix** with 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/ois/	
s	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1][XMLSCHEMA2]
soap12	http://schemas.xmlsoap.org/wsdl/soap12/	[SOAP1.2/1] [SOAP1.2/2]
(none)	http://schemas.microsoft.com/sharepoint/soap/ois/	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
z	#RowsetSchema	[MS-PRSTFR]

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 WSDL operation are described with the WSDL operation.

Complex type	Description
ArrayOfString	An array of strings.
ArrayOfRows	An array of **z:row** objects.
SOAPFaultDetails	The details of a SOAP fault.

2.2.4.1 ArrayOfString

An array of strings.

```
<s:complexType name="ArrayOfString">
  <s:sequence>
    <s:element name="string" type="s:string" maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
```

string: MUST be **URL-encoded**. MUST be non-empty and less than 256 characters in length.

2.2.4.2 ArrayOfRows

An array of **z:row** elements. **z** is equal to `#RowsetSchema` as specified in [MS-PRSTFR]. Each **z:row** element describes a single list item. The names of the attributes of this element correspond to the names of fields in the list (1). (For more details, see [MS-WSSFO2].) To get the schema of the list (1), protocol clients can make a **GetList** call as specified in [MS-LISTSWS] section 3.1.4.15.

```
<s:complexType name="ArrayOfRows" mixed="true">
  <s:sequence>
    <s:any minOccurs="0" maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
```

2.2.4.3 SOAPFaultDetails

The details of a SOAP fault.

```
<s:schema xmlns:s="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/sharepoint/soap">
  <s:complexType name="SOAPFaultDetails">
    <s:sequence>
      <s:element name="errorstring" type="s:string"/>
      <s:element name="errorcode" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:schema>
```

errorstring: A human-readable text explaining the application-level fault.

errorcode: The hexadecimal representation of a 4-byte result code.

Errorcode	Condition
0x00000001	**ListNotFound:** The requested list (1) was not found.
0x00000002	**IsNotLibrary**: The requested list (1), although found, is not a picture library.
0x00000004	**FolderNotFound**: The requested folder was not found.
0x00000005	**InvalidArgument**: One or more arguments are not valid, specified as follows.
0x00000006	**FileExists**: The **file (1)** already exists, and the user does not specify the overwrite option. **IllegalFileName**: The file name contains illegal character(s), specified as follows.
0x81020067	**EmptyString:** The file name is an empty string.

For the folder name in the request WSDL message, the server MUST respond with an **InvalidArgument** error code in the following conditions:

▪ The folder name contains illegal characters, specified as: \ : * ?" < > | # { } % and \t.

▪ The folder name contains a parent path directive—that is, "..".

▪ The relative path contains a folder named "forms".

▪ The relative path contains a folder named "_t" or "_w".

For the file name in the request WSDL message, the server MUST respond with an **InvalidArgument** error code if the file name contains any of the following characters:

/, \, \t

For the file name in the request WSDL message, the server MUST respond with an **IllegalFileName** error code if the file name contains any of the following characters:

:, *, ?, ", <, >, |, #, {, }, %

2.2.5 Simple Types

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

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3   Protocol Details

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls made by the higher-layer protocol or application are passed directly to the transport, and the results returned by the transport are passed directly back to the higher-layer protocol or application.

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

This protocol enables protocol servers to notify protocol clients of application-level faults using SOAP faults. This protocol enables protocol servers to provide additional details for SOAP faults by including a detail element as specified in [SOAP1.1], section 4.4 that conforms to the XML schema of the **SOAPFaultDetails** complex type specified in **SOAPFaultDetails** (section 2.2.4.3). Except where specified, these SOAP faults are not significant for interoperability, and protocol clients can interpret them in an implementation-specific manner.

This protocol enables protocol servers to perform implementation-specific authorization checks and to notify protocol clients of authorization faults either using HTTP Status Codes or using SOAP faults as specified previously in this section.

3.1   ImagingSoap 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.

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
CheckSubwebAndList	A WSDL operation that checks the specified URL and attempts to resolve it as a subsite, list (1), and folder.
CreateNewFolder	A WSDL operation that creates a new folder in the specified list (1) and folder.
Delete	A WSDL operation that removes the specified list items from the specified list (1) and folder.
Download	A WSDL operation that downloads the specified list items from the specified list (1) and folder.

Operation	Description
Edit	A WSDL operation that edits an image in the specified list (1) and folder. This WSDL operation is reserved.
GetItemsByIds	A WSDL operation that returns list items with the specified identifiers in the specified list (1).
GetItemsXMLData	A WSDL operation that returns metadata of specified list items in the specified list (1) and folder.
GetListItems	A WSDL operation that returns list items in the specified list (1) and folder.
ListPictureLibrary	A WSDL operation that returns all picture libraries on the current site (2).
Rename	A WSDL operation that renames **items** in a list (1) and folder.
Upload	A WSDL operation that uploads a file to the specified list (1) and folder.

3.1.4.1 CheckSubwebAndList

This WSDL operation checks the specified URL and attempts to resolve it as a subsite, list (1), and folder.

```
<wsdl:operation name="CheckSubwebAndList">
  <wsdl:input message="tns:CheckSubwebAndListSoapIn" />
  <wsdl:output message="tns:CheckSubwebAndListSoapOut" />
</wsdl:operation>
```

The client sends a **CheckSubwebAndListSoapIn** request WSDL message, and the server responds with a **CheckSubwebAndListSoapOut** response WSDL message, as follows:

- If the list (1) contained in the **strUrl**, although found, is not a picture library, the server MUST return an **IsNotLibrary** SOAP fault.

- Otherwise, the server MUST send a **CheckSubwebAndListSoapOut** response WSDL 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
CheckSubwebAndListSoapIn	A request to initiate a **CheckSubwebAndList** operation on the protocol server.
CheckSubwebAndListSoapOut	A response from the protocol server at completion of the **CheckSubwebAndList** operation.

3.1.4.1.1.1 CheckSubwebAndListSoapIn

This WSDL message contains information required by the **CheckSubwebAndList** WSDL operation. This WSDL message is a request.

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

```
http://schemas.microsoft.com/sharepoint/soap/ois/CheckSubwebAndList
```

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

3.1.4.1.1.2 CheckSubwebAndListSoapOut

This WSDL message contains results returned by the **CheckSubwebAndList** WSDL operation. This WSDL message is a response.

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

3.1.4.1.2 Elements

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

Element	Description
CheckSubwebAndList	Body of the **CheckSubwebAndListSoapIn** message.
CheckSubwebAndListResponse	Body of the **CheckSubwebAndListSoapOut** message.

3.1.4.1.2.1 CheckSubwebAndList

Input data for a **CheckSubwebAndList** WSDL operation.

```
<s:element name="CheckSubwebAndList">
  <s:complexType>
    <s:sequence>
      <s:element name="strUrl" type="s:string"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

strUrl: The URL to check. MUST contain a valid URL. MUST be URL-encoded.

3.1.4.1.2.2 CheckSubwebAndListResponse

Result data for a **CheckSubwebAndList** WSDL operation.

```
<s:element name="CheckSubwebAndListResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="CheckSubwebAndListResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="result">
              <s:complexType>
                <s:attribute name="url" type="s:string"/>
                <s:attribute name="subweb" type="s:string"/>
                <s:attribute name="list" type="s:string"/>
                <s:attribute name="listGuid" type="s:string"/>
                <s:attribute name="folder" type="s:string"/>
                <s:attribute name="rest" type="s:string"/>
```

```
                <s:attribute name="found" type="s:boolean" use="optional" default="true"/>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
  </s:complexType>
</s:element>
```

CheckSubwebAndListResult: The element containing the result of the **CheckSubwebAndList** WSDL operation.

CheckSubwebAndListResult.result: The result of the **CheckSubwebAndList** WSDL operation.

CheckSubwebAndListResult.result.found: True if the subsite was found; otherwise, false.

CheckSubwebAndListResult.result.url: The original URL in the request WSDL message.

CheckSubwebAndListResult.result.subweb: The URL of the subsite.

CheckSubwebAndListResult.result.list: The name of the list (1) in the requested URL, if the requested URL is part of a list (1).

CheckSubwebAndListResult.result.listGuid: The **GUID** of the list (1) in the requested URL, if the requested URL is part of a list (1).

CheckSubwebAndListResult.result.folder: The name of the folder in the requested URL, if the requested URL includes a folder.

CheckSubwebAndListResult.result.rest: The remaining path of the requested URL after the **subweb**, list (1), or folder elements. The default is null if there is no remaining path after the **subweb**, list (1), or folder elements.

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 CreateNewFolder

This WSDL operation creates a new folder in the specified list (1) and folder.

```
<wsdl:operation name="CreateNewFolder">
  <wsdl:input message="tns:CreateNewFolderSoapIn" />
  <wsdl:output message="tns:CreateNewFolderSoapOut" />
</wsdl:operation>
```

The client sends a **CreateNewFolderSoapIn** request WSDL message, and the server responds with a **CreateNewFolderSoapOut** response WSDL message, as follows:

▪ If the **strListName** does not exist or is empty, the server MUST return a **ListNotFound** SOAP fault.

▪ If the **strListName** is not a picture library, the server MUST return an **IsNotLibrary** SOAP fault.

▪ If the **strParentFolder** is not a legal folder path as specified in **SOAPFaultDetails** , the server MUST return an **InvalidArgument** SOAP fault.

▪ If the **strParentFolder** does not exist, the server MUST return a **FolderNotFound** SOAP fault.

▪ Otherwise, the server MUST send a **CreateNewFolderSoapOut** response and MUST create the new folder with an unused name, either "New folder" or "New folder (*n*)" if a folder with that name already exists, where *n* is a number greater than 0.

3.1.4.2.1 Messages

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

Message	Description
CreateNewFolderSoapIn	A request to initiate a **CreateNewFolder** operation on the protocol server.
CreateNewFolderSoapOut	A response from the protocol server at completion of the **CreateNewFolder** operation.

3.1.4.2.1.1 CreateNewFolderSoapIn

This WSDL message contains information required by the **CreateNewFolder** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/CreateNewFolder
```

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

3.1.4.2.1.2 CreateNewFolderSoapOut

This WSDL message contains results returned by the **CreateNewFolder** WSDL operation. This WSDL message is a response.

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

3.1.4.2.2 Elements

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

Element	Description
CreateNewFolder	Body of the **CreateNewFolderSoapIn** message.
CreateNewFolderResponse	Body of the **CreateNewFolderSoapOut** message.

3.1.4.2.2.1 CreateNewFolder

Input data for a **CreateNewFolder** WSDL operation.

```
<s:element name="CreateNewFolder">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strParentFolder" type="s:string"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST be non-empty.

strParentFolder: The relative path from the root of the list (1) to the parent folder. MUST be URL-encoded.

3.1.4.2.2.2 CreateNewFolderResponse

Result data for a **CreateNewFolder** WSDL operation.

```
<s:element name="CreateNewFolderResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="CreateNewFolderResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="NewFolder">
              <s:complexType>
                <s:attribute name="title" type="s:string"/>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

CreateNewFolderResult: The result of the **CreateNewFolder** WSDL operation.

CreateNewFolderResult.NewFolder: The new folder that is created by the **CreateNewFolder** WSDL operation.

CreateNewFolderResult.NewFolder.title: The title of the new folder.

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 Delete

This WSDL operation removes the specified list items from the specified list (1) and folder.

```
<wsdl:operation name="Delete">
  <wsdl:input message="tns:DeleteSoapIn" />
  <wsdl:output message="tns:DeleteSoapOut" />
</wsdl:operation>
```

The client sends a **DeleteSoapIn** request WSDL message, and the server responds with a **DeleteSoapOut** response WSDL message, as follows:

▪ If **strListName** or **itemFileNames** is empty, the server MUST return an **InvalidArgument** SOAP fault.

▪ If the **strListName** does not exist, the server MUST return a **ListNotFound** SOAP fault.

▪ If the **strListName** is not a picture library, the server MUST return an **IsNotLibrary** SOAP fault.

▪ If the **strFolder** is not a legal folder path as specified in **SOAPFaultDetails** (section 2.2.4.3), the server MUST return an **InvalidArgument** SOAP fault.

▪ If the **strFolder** does not exist, the server MUST return a **FolderNotFound** SOAP fault.

▪ If **itemFileNames** contains any illegal character(s) as specified in **SOAPFaultDetails** (section 2.2.4.3), the server MUST return an **IllegalFileName** SOAP fault.

▪ Otherwise, the server MUST send a **DeleteSoapOut** response WSDL message with the **deleted** flag set to specify WSDL operation status. The server MUST delete the specified list items.

3.1.4.3.1 Messages

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

Message	Description
DeleteSoapIn	A request to initiate a **Delete** operation on the protocol server.
DeleteSoapOut	A response from the protocol server at completion of the **Delete** operation.

3.1.4.3.1.1 DeleteSoapIn

This WSDL message contains information required by the **Delete** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/Delete
```

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

3.1.4.3.1.2 DeleteSoapOut

This WSDL message contains results returned by the **Delete** WSDL operation. This WSDL message is a response.

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

3.1.4.3.2 Elements

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

Element	Description
Delete	Body of the **DeleteSoapIn** message.
DeleteResponse	Body of the **DeleteSoapOut** message.

3.1.4.3.2.1 Delete

Input data for a **Delete** WSDL operation.

```
<s:element name="Delete">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
      <s:element name="itemFileNames" type="tns:ArrayOfString"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

strListName: The name of the list (1) in the current site (2). MUST be URL-encoded. MUST NOT be empty.

strFolder: The relative path from the root of the list (1) to the target folder. MUST be URL-encoded. An empty value indicates the root of the list (1).

itemFileNames: An array of the names of list items to be deleted from the list (1). MUST NOT be empty.

3.1.4.3.2.2 DeleteResponse

Result data for a **Delete** WSDL operation.

```
<s:element name="DeleteResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="DeleteResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="results" type="tns:ArrayOfDeleteResults"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

DeleteResult: The container element of **DeleteResult.results**.

DeleteResult.results: The result of the **Delete** WSDL operation.

3.1.4.3.3 Complex Types

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

Complex type	Description
ArrayOfDeleteResults	Results of the **Delete** operation.

3.1.4.3.3.1 ArrayOfDeleteResults

Array of **Delete** WSDL operation results.

```
<s:complexType name="ArrayOfDeleteResults">
  <s:sequence>
    <s:element name="result" minOccurs="0" maxOccurs="unbounded">
      <s:complexType>
        <s:attribute name="deleted" type="s:boolean"/>
        <s:attribute name="name" type="s:string"/>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

result: Contains the result of the WSDL operation.

result.deleted: True if the list item was successfully deleted; otherwise, false.

result.name: The name of the list item that was deleted.

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 Download

This WSDL operation downloads the specified list items from the specified list (1) and folder.

```
<wsdl:operation name="Download">
  <wsdl:input message="tns:DownloadSoapIn" />
  <wsdl:output message="tns:DownloadSoapOut" />
</wsdl:operation>
```

The client sends a **DownloadSoapIn** request WSDL message, and the server responds with a **DownloadSoapOut** response WSDL message, as follows:

- If **strListName** or **itemFileNames** is empty or the **type** is not an integer between 0 to 2 inclusive, the server MUST return an **InvalidArgument** SOAP fault.

- If the **strListName** does not exist, the server MUST return a **ListNotFound** SOAP fault.

- If the **strListName** is not a picture library, the server MUST return an **IsNotLibrary** SOAP fault.

- If the **strFolder** is not a legal folder path as specified in **SOAPFaultDetails** (section 2.2.4.3), the server MUST return an **InvalidArgument** SOAP fault.

- If the **strFolder** does not exist, the server MUST return a **FolderNotFound** SOAP fault.

- If **itemFileNames** contains any illegal character(s) as specified in **SOAPFaultDetails** (section 2.2.4.3), the server MUST return an **IllegalFileName** SOAP fault.

- Otherwise, the server MUST send a **DownloadSoapOut** response with the **found** flag set to specify WSDL operation status.

3.1.4.4.1 Messages

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

Message	Description
DownloadSoapIn	A request to initiate a **Download** operation on the protocol server.
DownloadSoapOut	A response from the protocol server at completion of the **Download** operation.

3.1.4.4.1.1 DownloadSoapIn

This WSDL message contains information required by the **Download** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/Download
```

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

3.1.4.4.1.2 DownloadSoapOut

This WSDL message contains results returned by the **Download** WSDL operation. This WSDL message is a response.

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

3.1.4.4.2 Elements

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

Element	Description
Download	Body of the **DownloadSoapIn** message.
DownloadResponse	Body of the **DownloadSoapOut** message.

3.1.4.4.2.1 Download

Input data for a **Download** WSDL operation.

```
<s:element name="Download">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
      <s:element name="itemFileNames" type="tns:ArrayOfString"/>
      <s:element name="type" type="s:unsignedInt"/>
      <s:element name="fFetchOriginalIfNotAvailable" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
```

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

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST NOT be empty.

strFolder: The relative path from the root of the list (1) to the target folder. MUST be URL-encoded. An empty value indicates the root of the list (1).

itemFileNames: An array of the names of list items to download. MUST NOT be empty.

type: The version of the files to download. The following table shows valid values.

Value	Version
0	The original image in the original file format when it was uploaded. The width and height of this image is the same as the original image uploaded to the server.
1	The thumbnail of the image in JPEG format. The width and height of this image are determined during the JPEG compression phase and are not fixed numbers.
2	The image optimized for use on the Web in JPEG format. The width and height of this image are determined during the JPEG compression phase and are not fixed numbers.

The image width and height for values 1 and 2 are calculated depending on the width and height of the original image during JPEG compression.

fFetchOriginalIfNotAvailable: A value that MUST be TRUE or FALSE. If this parameter is set to TRUE and the requested version is not available for any reason, the original version MUST be returned, and the **File** element will have an **originalDownloaded** attribute set to TRUE. If this parameter is set to FALSE and the requested version is not available, an error code of 0x81070211 will be returned, indicating that the file could not be opened.

3.1.4.4.2.2 DownloadResponse

Result data for a **Download** WSDL operation.

```
  <s:element name="DownloadResponse">
    <s:complexType>
      <s:sequence>
        <s:element name="DownloadResult">
          <s:complexType mixed="true">
            <s:sequence>
              <s:element name="Files" type="tns:ArrayOfFiles"/>
            </s:sequence>
          </s:complexType>
        </s:element>
      </s:sequence>
    </s:complexType>
  </s:element>
```

DownloadResult.Files: The result of the **Download** WSDL operation.

3.1.4.4.3 Complex Types

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

Complex type	Description
ArrayOfFiles	Encoded Base64 file objects.

3.1.4.4.3.1 ArrayOfFiles

Array of file objects. The content of the file MUST be encoded with Base64, as specified in [RFC4648].

```
<s:complexType name="ArrayOfFiles">
  <s:sequence>
    <s:element name="File" minOccurs="0" maxOccurs="unbounded">
      <s:complexType>
        <s:simpleContent>
          <s:extension base="s:base64Binary">
            <s:attribute name="name" type="s:string"/>
            <s:attribute name="lastmodified" type="s:dateTime"/>
            <s:attribute name="found" type="s:boolean" use="optional" default="true"/>
            <s:attribute name="originalDownloaded" type="s:boolean" use="optional"
default="true"/>
          </s:extension>
        </s:simpleContent>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

File: Contains information about a file.

File.name: The name of the file. MUST NOT be the name of a folder.

File.found: True if the list item is found; otherwise, false.

File.lastmodified: The time stamp of the last modification. MUST be in **UTC** format.

File.originalDownloaded: True if the original version is returned. MUST be true if present.

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 Edit

This WSDL operation edits an image in the specified list (1) and folder. This WSDL operation is reserved for future use.

```
<wsdl:operation name="Edit">
  <wsdl:input message="tns:EditSoapIn" />
  <wsdl:output message="tns:EditSoapOut" />
</wsdl:operation>
```

The client sends an **EditSoapIn** request WSDL message, and the server MUST respond with an **EditSoapOut** response WSDL 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
EditSoapIn	A request to initiate a **Edit** operation on the protocol server.
EditSoapOut	A response from the protocol server at completion of the **Edit** operation.

3.1.4.5.1.1 EditSoapIn

This WSDL message contains information required by the **Edit** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/Edit
```

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

3.1.4.5.1.2 EditSoapOut

This WSDL message contains results returned by the **Edit** WSDL operation. This WSDL message is a response.

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

3.1.4.5.2 Elements

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

Element	Description
Edit	Body of the **EditSoapIn** message.
EditResponse	Body of the **EditSoapOut** message.

3.1.4.5.2.1 Edit

Input data for an Edit WSDL operation.

```
<s:element name="Edit">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string" minOccurs="0"/>
      <s:element name="strFolder" type="s:string" minOccurs="0"/>
      <s:element name="itemFileName" type="s:string" minOccurs="0"/>
      <s:element name="recipe" minOccurs="0">
        <s:complexType>
          <s:sequence>
            <s:any/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

strListName: The name of the list (1) on the current site (2).

strFolder: The relative path from the root of the list (1) to the target folder.

itemFileName: The names of list items to edit.

recipe: The collection of edit commands.

3.1.4.5.2.2 EditResponse

Result data for an **Edit** WSDL operation.

```
<s:element name="EditResponse">
  <s:complexType>
    <s:sequence>
      <s:element minOccurs="0" maxOccurs="1" name="EditResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="notImplemented"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

notImplemented: This element MUST be set to empty when sent by the server, and MUST be ignored when received by the client.

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 GetItemsByIds

This WSDL operation returns list items with the specified identifier in the specified list (1).

```
<wsdl:operation name="GetItemsByIds">
  <wsdl:input message="tns:GetItemsByIdsSoapIn" />
  <wsdl:output message="tns:GetItemsByIdsSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetItemsByIdsSoapIn** request WSDL message, and the protocol server responds with a **GetItemsByIdsSoapOut** response WSDL message, as follows:

▪ If **strListName** or **ids** is empty, the protocol server MUST return an **InvalidArgument** SOAP fault.

▪ If the **strListName** does not exist, the protocol server MUST return a **ListNotFound** SOAP fault.

▪ If the **strListName** is not a picture library, the protocol server MUST return an **IsNotLibrary** SOAP fault.

▪ Otherwise, the protocol server MUST send a **GetItemsByIdsSoapOut** response. If the specified identifiers are not found in the protocol server, the protocol server MUST ignore them and return the rest of the valid list items.

3.1.4.6.1 Messages

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

Message	Description
GetItemsByIdsSoapIn	A request to initiate a **GetItemsByIds** operation on the protocol server.
GetItemsByIdsSoapOut	A response from the protocol server at completion of the **GetItemsByIds** operation.

3.1.4.6.1.1 GetItemsByIdsSoapIn

This WSDL message contains information required by the **GetItemsByIds** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/GetItemsByIds
```

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

3.1.4.6.1.2 GetItemsByIdsSoapOut

This WSDL message contains results returned by the **GetItemsByIds** WSDL operation. This WSDL message is a response.

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

3.1.4.6.2 Elements

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

Element	Description
GetItemsByIds	Body of the **GetItemsByIdsSoapIn** message.
GetItemsByIdsResponse	Body of the **GetItemsByIdsSoapOut** message.

3.1.4.6.2.1 GetItemsByIds

Input data for a **GetItemsByIds** WSDL operation.

```
<s:element name="GetItemsByIds">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="ids" type="tns:ArrayOfUnsignedInt"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST NOT be empty.

ids: An array of the identifiers of the list items. MUST NOT be empty.

3.1.4.6.2.2 GetItemsByIdsResponse

Result data for a **GetItemsByIds** WSDL operation.

```
<s:element name="GetItemsByIdsResponse">
  <s:complexType>
    <s:sequence>
```

```
            <s:element name="GetItemsByIdsResult">
              <s:complexType mixed="true">
                <s:sequence>
                  <s:element name="results" type="tns:ArrayOfRows"/>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
```

GetItemsByIdsResult: The container element of the **GetItemsByIdsResult.results** element.

GetItemsByIdsResult.results: The array of results from the **GetItemsByIds** WSDL operation.

3.1.4.6.3 Complex Types

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

Complex type	Description
ArrayOfUnsignedInt	An array of list item identifiers.

3.1.4.6.3.1 ArrayOfUnsignedInt

Array of unsigned integers.

```
<s:complexType name="ArrayOfUnsignedInt">
  <s:sequence>
    <s:element name="unsignedInt" type="s:unsignedInt" maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
```

unsignedInt: This element MUST be present.

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 GetItemsXMLData

This WSDL operation returns metadata of specified list items in the specified list (1) and folder.

```
<wsdl:operation name="GetItemsXMLData">
  <wsdl:input message="tns:GetItemsXMLDataSoapIn" />
  <wsdl:output message="tns:GetItemsXMLDataSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetItemsXMLDataSoapIn** request WSDL message, and the protocol server responds with a **GetItemsXMLDataSoapOut** response WSDL message, as follows:

- If **strListName** or **itemFileNames** is empty, the protocol server MUST return an **InvalidArgument** SOAP fault.

- If the **strListName** does not exist, the protocol server MUST return a **ListNotFound** SOAP fault.

- If the **strListName** is not a picture library, the protocol server MUST return an **IsNotLibrary** SOAP fault.

- If the **strFolder** is not a legal folder path as specified in **SOAPFaultDetails** (section 2.2.4.3), the protocol server MUST return an **InvalidArgument** SOAP fault.

- If the **strFolder** does not exist, the protocol server MUST return a **FolderNotFound** SOAP fault.

- If **itemFileNames** contains any illegal character(s) as specified in **SOAPFaultDetails** (section 2.2.4.3), the protocol server MUST return an **IllegalFileName** SOAP fault.

- Otherwise, the protocol server MUST send a **GetItemsXMLDataSoapOut** response.

3.1.4.7.1 Messages

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

Message	Description
GetItemsXMLDataSoapIn	A request to initiate a **GetItemsXMLData** operation on the protocol server.
GetItemsXMLDataSoapOut	A response from the protocol server at completion of the **GetItemsXMLData** operation.

3.1.4.7.1.1 GetItemsXMLDataSoapIn

This WSDL message contains information required by the **GetItemsXMLData** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/GetItemsXMLData
```

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

3.1.4.7.1.2 GetItemsXMLDataSoapOut

This WSDL message contains results returned by the **GetItemsXMLData** WSDL operation. This WSDL message is a response.

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

3.1.4.7.2 Elements

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

Element	Description
GetItemsXMLData	Body of the **GetItemsXMLDataSoapIn** message.
GetItemsXMLDataResponse	Body of the **GetItemsXMLDataSoapOut** message.

3.1.4.7.2.1 GetItemsXMLData

Input data for a **GetItemsXMLData** WSDL operation.

```
<s:element name="GetItemsXMLData">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
      <s:element name="itemFileNames" type="tns:ArrayOfString"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST be non-empty.

strFolder: The relative path from the root of the list (1) to the target folder. MUST be URL-encoded. This specifies the root of the library if it is left empty.

itemFileNames: An array of the names of the list items queried for XML data.

3.1.4.7.2.2 GetItemsXMLDataResponse

Result data for a **GetItemsXMLData** WSDL operation.

```
<s:element name="GetItemsXMLDataResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetItemsXMLDataResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="results" type="tns:ArrayOfItems"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
```

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

GetItemsXMLDataResult: The container element of the **GetItemsXMLDataResult.results** element.

GetItemsXMLDataResult.results: The result of the **GetItemsXMLData** WSDL operation.

3.1.4.7.3 Complex Types

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

Complex type	Description
ArrayOfItems	An array of list items.

3.1.4.7.3.1 ArrayOfItems

Array of list items.

```
<s:complexType name="ArrayOfItems">
  <s:sequence>
    <s:element name="item" minOccurs="0" maxOccurs="unbounded">
      <s:complexType>
        <s:attribute name="name" type="s:string"/>
        <s:attribute name="ID" type="s:unsignedInt"/>
        <s:attribute name="Author" type="s:string"/>
        <s:attribute name="Editor" type="s:string"/>
        <s:attribute name="File_x0020_Size" type="s:string"/>
        <s:attribute name="ImageWidth" type="s:unsignedInt"/>
        <s:attribute name="ImageHeight" type="s:unsignedInt"/>
        <s:attribute name="Description" type="s:string"/>
        <s:attribute name="Title" type="s:string"/>
        <s:attribute name="Keywords" type="s:string"/>
        <s:attribute name="ImageCreateDate" type="s:string"/>
        <s:attribute name="Created" type="s:dateTime"/>
        <s:attribute name="Modified" type="s:dateTime"/>
        <s:attribute name="found" type="s:boolean" use="optional" default="true"/>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

item: Contains information about a list item.

item.name: The name of the list item.

item.ID: The identifier of the list item.

item.Author: The identifier of the user who created the list item.

item.Editor: The identifier of the user who edited the list item.

item.File_x0020_Size: The file size, in kilobytes, of the list item if that list item is an image.

item.ImageWidth: The width, in pixels, of the list item if that list item is an image.

item.ImageHeight: The height, in pixels, of the list item if that list item is an image.

item.Description: The alternative text of the list item, if the list item is an image.

item.Title: The title of the list item, if the list item is an image.

item.Keywords: The keywords of the list item, if the list item is an image.

item.ImageCreateDate: The date and time at which the picture was taken. This is applicable only if the list item is an image.

item.Created: The date and time at which the list item was created. MUST be in UTC format.

item.Modified: The date and time at which the list item was last modified. MUST be in UTC format.

item.found: True if the list item is found; otherwise, false.

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   GetListItems

This WSDL operation enumerates list items in the folder in the list (1).

```
<wsdl:operation name="GetListItems">
  <wsdl:input message="tns:GetListItemsSoapIn" />
  <wsdl:output message="tns:GetListItemsSoapOut" />
</wsdl:operation>
```

The protocol client sends a **GetListItemsSoapIn** request WSDL message, and the protocol server responds with a **GetListItemsSoapOut** response WSDL message as follows:

▪ If the **strListName** is an empty string or does not exist, the protocol server MUST return a **ListNotFound** SOAP fault.

▪ If the **strListName** is not a picture library, the protocol server MUST return an **IsNotLibrary** SOAP fault.

▪ If the **strFolder** is not a legal folder path as specified in **SOAPFaultDetails** (section 2.2.4.3), the protocol server MUST return an **InvalidArgument** SOAP fault.

- If the **strFolder** does not exist, the protocol server MUST return a **FolderNotFound** SOAP fault.

- Otherwise, the protocol server MUST send a **GetListItemsSoapOut** response.

3.1.4.8.1 Messages

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

Message	Description
GetListItemsSoapIn	A request to initiate a **GetListItems** operation on the protocol server.
GetListItemsSoapOut	A response from the protocol server at completion of the **GetListItems** operation.

3.1.4.8.1.1 GetListItemsSoapIn

This WSDL message contains information required by the **GetListItems** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/GetListItems
```

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

3.1.4.8.1.2 GetListItemsSoapOut

This WSDL message contains results returned by the **GetListItems** WSDL operation. This WSDL message is a response.

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

3.1.4.8.2 Elements

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

Element	Description
GetListItems	Body of the **GetListItemsSoapIn** message.
GetListItemsResponse	Body of the **GetListItemsSoapOut** message.

3.1.4.8.2.1 GetListItems

Input data for a **GetListItems** WSDL operation.

```
<s:element name="GetListItems">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
```

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

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST be non-empty.

strFolder: The relative path from the root of the list (1) to the target folder. MUST be URL-encoded.

3.1.4.8.2.2 GetListItemsResponse

Result data for a **GetListItems** WSDL operation.

```
<s:element name="GetListItemsResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetListItemsResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="Library">
              <s:complexType mixed="true">
                <s:complexContent>
                  <s:extension base="tns:ArrayOfRows" >
                    <s:attribute name="name" type="s:string"/>
                  </s:extension>
                </s:complexContent>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetListItemsResult: Contains the result of the **GetListItems** WSDL operation.

GetListItemsResult.Library: The array of list items in the folder that is specified by the **strFolder** parameter.

GetListItemsResult.Library.Name: The names of the attributes containing the list item data in this response correspond to the **Name** attribute in the **Field** elements of **GetList** and are prefixed by "ows_". Note that the set of fields returned by the method is restricted by the **viewField** or **viewName** parameter. The response includes the **ows_ServerRedirected** attribute to indicate whether protocol server rendering is available for the item. A value of 0 indicates that no rendering mechanism is available for this item on the protocol server. A value of 1 indicates that a rendering mechanism is available for this item on the protocol server. If a rendering mechanism is available, the response MUST include the **ows_ServerRedirectedUrl** attribute. The value of this attribute MUST specify the link used to render the item on the protocol server.

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 ListPictureLibrary

This WSDL operation lists all picture libraries on the current site (2).

```
<wsdl:operation name="ListPictureLibrary">
  <wsdl:input message="tns:ListPictureLibrarySoapIn" />
  <wsdl:output message="tns:ListPictureLibrarySoapOut" />
</wsdl:operation>
```

The protocol client sends a **ListPictureLibrarySoapIn** request WSDL message, and the protocol server MUST respond with a **ListPictureLibrarySoapOut** response WSDL message.

3.1.4.9.1 Messages

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

Message	Description
ListPictureLibrarySoapIn	A request to initiate a **ListPictureLibrary** operation on the protocol server.
ListPictureLibrarySoapOut	A response from the protocol server at completion of the **ListPictureLibrary** operation.

3.1.4.9.1.1 ListPictureLibrarySoapIn

This WSDL message contains information required by the **ListPictureLibrary** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/ListPictureLibrary
```

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

3.1.4.9.1.2 ListPictureLibrarySoapOut

This WSDL message contains results returned by the **ListPictureLibrary** WSDL operation. This WSDL message is a response.

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

3.1.4.9.2 Elements

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

Element	Description
ListPictureLibrary	Body of the **ListPictureLibrarySoapIn** message.
ListPictureLibraryResponse	Body of the **ListPictureLibrarySoapOut** message.

3.1.4.9.2.1 ListPictureLibrary

Input data for a **ListPictureLibrary** WSDL operation.

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

3.1.4.9.2.2 ListPictureLibraryResponse

Result data for a **ListPictureLibrary** WSDL operation.

```
<s:element name="ListPictureLibraryResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ListPictureLibraryResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="PictLib" type="tns:ArrayOfLibraries"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

ListPictureLibaryResult: Contains the result of the **ListPictureLibrary** WSDL operation.

ListPictureLibraryResult.PictLib: The array of picture libraries.

3.1.4.9.3 Complex Types

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

Complex type	Description
ArrayOfLibraries	An array of picture libraries.

3.1.4.9.3.1 ArrayOfLibraries

Array of libraries.

```
<s:complexType name="ArrayOfLibraries">
  <s:sequence>
    <s:element name="Library" minOccurs="0" maxOccurs="unbounded">
      <s:complexType>
        <s:attribute name="guid" type="s:string"/>
        <s:attribute name="name" type="s:string"/>
        <s:attribute name="title" type="s:string"/>
        <s:attribute name="url" type="s:string"/>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

Library: Contains information about a picture library.

Library.guid: The GUID of the picture library.

Library.name: The name of the picture library. Its value is equal to the value of **Library.guid** enclosed in braces.

Library.title: The title of the picture library.

Library.url: The URL of the picture library.

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 Rename

This WSDL operation renames list items in a list (1) and folder.

```
<wsdl:operation name="Rename">
  <wsdl:input message="tns:RenameSoapIn" />
```

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

The protocol client sends a **RenameSoapIn** request WSDL message, and the protocol server responds with a **RenameSoapOut** response WSDL message, as follows:

▪ If **strListName** is empty, the protocol server MUST return an **InvalidArgument** SOAP fault.

▪ If the **strListName** does not exist, the protocol server MUST return a **ListNotFound** SOAP fault.

▪ If the **strListName** is not a picture library, the protocol server MUST return an **IsNotLibrary** SOAP fault.

▪ If the **strFolder** is not a legal folder path as specified in **SOAPFaultDetails** (section 2.2.4.3), the protocol server MUST return an **InvalidArgument** SOAP fault.

▪ If the **strFolder** does not exist, the protocol server MUST return a **FolderNotFound** SOAP fault.

▪ Otherwise, the protocol server MUST send a **RenameSoapOut** response as follows: for the list items that were both found and successfully renamed, the **renamed** flag is set; for any other list items, the **renamed** flag is not set.

3.1.4.10.1 Messages

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

Message	Description
RenameSoapIn	A request to initiate a **Rename** operation on the protocol server.
RenameSoapOut	A response from the protocol server at completion of the **Rename** operation.

3.1.4.10.1.1 RenameSoapIn

This WSDL message contains information required by the **Rename** WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
   http://schemas.microsoft.com/sharepoint/soap/ois/Rename
```

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

3.1.4.10.1.2 RenameSoapOut

This WSDL message contains results returned by the **Rename** WSDL operation. This WSDL message is a response.

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

3.1.4.10.2 Elements

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

Element	Description
Rename	Body of the **RenameSoapIn** message.
RenameResponse	Body of the **RenameSoapOut** message.

3.1.4.10.2.1 Rename

Input data for a **Rename** WSDL operation.

```
<s:element name="Rename">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
      <s:element name="request">
        <s:complexType>
          <s:sequence>
            <s:element name="files" type="tns:ArrayOfRenameFiles"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST be non-empty.

strFolder: The relative path from the root of the list (1) to the target folder. MUST be URL-encoded.

Request.files: The array of files to rename.

3.1.4.10.2.2 RenameResponse

Result data for a **Rename** WSDL operation.

```
<s:element name="RenameResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RenameResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="results" type="tns:ArrayOfRenameResults"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

RenameResult.results: The results of the **Rename** WSDL operation.

3.1.4.10.3 Complex Types

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

Complex type	Description
ArrayOfRenameFiles	An array of file names: current and new.
ArrayOfRenameResults	Array of **Rename** operation results.

3.1.4.10.3.1 ArrayOfRenameFiles

Array of current file names and new names, without paths.

```
<s:complexType name="ArrayOfRenameFiles">
  <s:sequence>
    <s:element name="file" maxOccurs="unbounded">
      <s:complexType>
        <s:attribute name="filename" type="s:string"/>
        <s:attribute name="newbasename" type="s:string"/>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

file: Contains information about the file.

file.filename: The name of the list item, including the extension.

file.newbasename: The new name of the list item, without a path or extension.

3.1.4.10.3.2 ArrayOfRenameResults

Array of results of a **Rename** WSDL operation.

```
<s:complexType name="ArrayOfRenameResults">
  <s:sequence>
    <s:element name="result" minOccurs="0" maxOccurs="unbounded">
      <s:complexType>
        <s:attribute name="name" type="s:string"/>
        <s:attribute name="renamed" type="s:boolean" use="optional" default="true"/>
        <s:attribute name="lastmodified" type="s:dateTime"/>
        <s:attribute name="newbasename" type="s:string"/>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
```

result: Contains the result of the **Rename** WSDL operation.

result.name: The name of the list item before it was renamed.

result.newbasename: The new name of the list item, without a path.

result.lastmodified: The time stamp of the last modification. MUST be in UTC format.

result.renamed: True if the **Rename** operation succeeds; otherwise, false.

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 Upload

This WSDL operation uploads a file to the specified list (1) and folder.

```
<wsdl:operation name="Upload">
  <wsdl:input message="tns:UploadSoapIn" />
  <wsdl:output message="tns:UploadSoapOut" />
</wsdl:operation>
```

The protocol client sends an **UploadSoapIn** request WSDL message, and the protocol server responds with an **UploadSoapOut** response WSDL message, as follows:

- If **strListName**, **bytes,** or **fileName** is omitted, the protocol server MUST return an **InvalidArgument** SOAP fault.

- If **fileName** contains any illegal character(s) as specified in **SOAPFaultDetails** (section 2.2.4.3), the protocol server MUST return an **IllegalFileName** SOAP fault.

- If the **strListName** does not exist, the protocol server MUST return a **ListNotFound** SOAP fault.

- If the **strListName** is not a picture library, the protocol server MUST return an **IsNotLibrary** SOAP fault.

- If the **strFolder** is not a legal folder path as specified in **SOAPFaultDetails** (section 2.2.4.3), the protocol server MUST return an **InvalidArgument** SOAP fault.

- If the **strFolder** does not exist, the protocol server MUST return a **FolderNotFound** SOAP fault.

- If **fileName** already exists on the protocol server and **fOverWriteIfExist** is set to FALSE, the protocol server MUST return a **FileExists** SOAP fault.

- Otherwise, the protocol server MUST send an **UploadSoapOut** response with the time stamp and upload the file as specified.

Release: April 30, 2014

3.1.4.11.1   Messages

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

Message	Description
UploadSoapIn	A request to initiate a **Upload** operation on the protocol server.
UploadSoapOut	A response from the protocol server at completion of the **Upload** operation.

3.1.4.11.1.1   UploadSoapIn

This WSDL message contains information required by the Upload WSDL operation. This WSDL message is a request.

The SOAP action value of the WSDL message is defined as follows:

```
http://schemas.microsoft.com/sharepoint/soap/ois/Upload
```

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

3.1.4.11.1.2   UploadSoapOut

This WSDL message contains results returned by the **Upload** WSDL operation. This WSDL message is a response.

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

3.1.4.11.2   Elements

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

Element	Description
Upload	Body of the **UploadSoapIn** message.
UploadResponse	Body of the **UploadSoapOut** message.

3.1.4.11.2.1   Upload

Input data for an **Upload** WSDL operation.

```
<s:element name="Upload">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
      <s:element name="bytes" type="s:base64Binary"/>
      <s:element name="fileName" type="s:string"/>
      <s:element name="fOverWriteIfExist" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
```

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

strListName: The name of the list (1) on the current site (2). MUST be URL-encoded. MUST NOT be empty.

strFolder: The relative path from the root of the list (1) to the target folder. MUST be URL-encoded. An empty value indicates the root folder of the list (1).

bytes: The binary content of the file to upload. MUST be encoded in Base64, as specified in [RFC4648]. MUST NOT be empty.

fileName: The file name to use as the list item name in the list (1). MUST be URL-encoded.

fOverWriteIfExist: Specifies whether to overwrite a file with the same name. This element MUST be present.

3.1.4.11.2.2 UploadResponse

Result data for an **Upload** WSDL operation.

```
<s:element name="UploadResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="UploadResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="Upload">
              <s:complexType>
                <s:attribute name="lastmodified" type="s:dateTime"/>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
```

UploadResult: The elements containing the result of the **Upload** WSDL operation.

UploadResult.Upload: The result of the **Upload** WSDL operation.

UploadResult.Upload.lastmodified: The time stamp, which MUST be in UTC format, of the last modification.

3.1.4.11.3 Complex Types

None.

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.

3.1.5   Timer Events

None.

3.1.6   Other Local Events

None.

4 Protocol Examples

The following examples demonstrate the interactions between the protocol client and the protocol server. Only the SOAP body is listed for the sake of brevity.

4.1 Create New Folder

To create a new folder named Zoo, the protocol client sends a **CreateNewFolderSoapIn** request to the protocol server:

```
<CreateNewFolder xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <strListName>
    Shared Pictures
  </strListName>
  <strParentFolder />
</CreateNewFolder>
```

The protocol server confirms the WSDL operation in **CreateNewFolderSoapOut** as follows:

```
<CreateNewFolderResponse
  xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <CreateNewFolderResult>
    <NewFolder
      xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/"
      title="New folder (1)"/>
  </CreateNewFolderResult>
</CreateNewFolderResponse>
```

4.2 Rename Folder

The protocol client needs to explicitly rename New folder(1) to Zoo, sending **RenameSoapIn** to the server:

```
<Rename xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <strListName>
    Shared Pictures
  </strListName>
  <strFolder />
  <request>
    <files xmlns="">
      <file filename="New folder(1)" newbasename="Zoo" />
    </files>
  </request>
</Rename>
```

The protocol server responds with **RenameSoapOut** as follows:

```
<RenameResponse xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <RenameResult>
    <results xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
      <result name="New folder (1)" renamed="true"
        newbasename="Zoo"/>
    </results>
```

```
    </RenameResult>
  </RenameResponse>
```

4.3 Upload Image

Then, the protocol client proceeds to upload a picture to the Zoo folder, sending **UploadSoapIn** to the protocol server:

```
<Upload xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <strListName>
    Shared Pictures
  </strListName>
  <strFolder>
    Zoo
  </strFolder>
  <bytes>
    // base64 encoded image content …
  </bytes>
  <fileName>
    panda.jpg
  </fileName>
  <fOverWriteIfExist>
    True
  </fOverWriteIfExist>
</Upload>
```

The protocol server confirms the upload WSDL operation in **UploadSoapOut**, as follows:

```
<UploadResponse xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <UploadResult>
    <Upload xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/"
      lastmodified="2008-01-18T23:44:34Z"/>
  </UploadResult>
</UploadResponse>
```

The protocol client checks the validity of the URL by sending **CheckSubwebAndListSoapIn**, as follows:

```
<CheckSubwebAndList
  xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <strUrl>
    http://site/Shared Pictures/Zoo/panda.jpg
  </strUrl>
</CheckSubwebAndList>
```

The protocol server tries to resolve the URL and responds with **CheckSubwebAndListSoapOut**, as follows:

```
<CheckSubwebAndListResponse
  xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
```

```
<CheckSubwebAndListResult>
  <result xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/"
    url="http://site/Shared Pictures/Zoo/panda.jpg"
    subweb="http://site" list="Shared Pictures"
    listGuid="502939ee-8e57-43d3-a5d8-e19fe90313ce" folder="Zoo"
    rest="/panda.jpg" />
</CheckSubwebAndListResult>
</CheckSubwebAndListResponse>
```

4.4 Get Data on All Images

Then, the protocol client requests data on all the pictures in the Zoo folder, using **GetListItemsSoapIn**, as follows:

```
<GetListItems xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <strListName>
    Shared Pictures
  </strListName>
  <strFolder>
    Zoo
  </strFolder>
</GetListItems>
```

The following is the **GetListItemsSoapOut** response from the protocol server:

```
<GetListItemsResponse
  xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <GetListItemsResult>
    <Library xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/"
      name="Shared Pictures">
      <z:row xmlns:z='#RowsetSchema' ows_ID='75' ows_Author='1;#Ye
        Xu' ows_Editor='1;#Ye Xu' ows_Created='2008-01-18T23:44:34Z'
        ows_Modified='2008-01-18T23:44:34Z'
        ows_File_x0020_Size='75;#1000' ows_FSObjType='75;#0'
        ows_FileLeafRef='75;#panda.jpg'
        ows_EncodedAbsUrl='http://site/Shared%20Pictures/Zoo/panda.jpg'
        ows_ImageWidth='15' ows_ImageHeight='20'
        ows__ModerationStatus='0' ows__Level='1'
        ows_UniqueId='75;#{B7AE51A7-9503-40E7-9B82-F830DEC2CB6B}'
        ows_Created_x0020_Date='75;#2008-01-18T23:44:34Z'
        ows_ProgId='75;#' ows_FileRef='75;#sites/Shared
        Pictures/Zoo/panda.jpg' ows_DocIcon='jpg'

ows_MetaInfo='75;#vti_parserversion:SR|14.0.0.4730..vti_modifiedby:SR|CONTOSO\yexu..vti_lasth
eight:IX|20..ContentTypeId:SW|0x01010200BC73A9F9558BC445A09D0F26FB930A03..vti_lastwidth:IX|15
..vti_author:SR| CONTOSO\yexu..'
        ows_Last_x0020_Modified='75;#2008-01-18T23:44:34Z'
        ows_owshiddenversion='1' ows_ServerRedirected='0'/>
      <z:row xmlns:z='#RowsetSchema' ows_ID='76' ows_Author='1;#Ye
        Xu' ows_Editor='1;#Ye Xu' ows_Created='2009-01-18T23:44:35Z'
        ows_Modified='2009-01-18T23:44:35Z'
        ows_File_x0020_Size='76;#1000' ows_FSObjType='76;#0'
        ows_FileLeafRef='76;#dinosaur.jpg'
        ows_EncodedAbsUrl='http://site/Shared%20Pictures/Zoo/dinosaur.jpg'
        ows_ImageWidth='15' ows_ImageHeight='20'
```

```
            ows__ModerationStatus='0' ows__Level='1'
            ows__UniqueId='76;#{4691F195-1513-477F-9EB4-AABD2C328259}'
            ows_Created_x0020_Date='76;#2009-01-18T23:44:35Z'
            ows_ProgId='76;#' ows_FileRef='76;#sites/Shared
            Pictures/Zoo/dinosaur.jpg' ows_DocIcon='jpg'

  ows_MetaInfo='76;#vti_parserversion:SR|14.0.0.4730..vti_modifiedby:SR|CONTOSO\yexu..vti_lasth
  eight:IX|20..ContentTypeId:SW|0x01010200BC73A9F9558BC445A09D0F26FB930A03..vti_lastwidth:IX|15
  ..vti_author:SR| CONTOSO\yexu..'
            ows_Last_x0020_Modified='76;#2009-01-18T23:44:35Z'
            ows_owshiddenversion='1' ows_ServerRedirected='0'/>
      </Library>
    </GetListItemsResult>
  </GetListItemsResponse>
```

4.5 Download Image

Later, to build an encyclopedia, the protocol client downloads some images from the protocol as illustrations, sending **DownloadSoapIn** to the protocol server, as follows:

```
<Download xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <strListName>
    Shared Pictures
  </strListName>
  <strFolder>
    Zoo
  </strFolder>
  <itemFileNames>
    <string>
      panda.jpg
    </string>
    <string>
      dinosaur.jpg
    </string>
  </itemFileNames>
  <type>
    0
  </type>
  <fFetchOriginalIfNotAvailable>
    true
  </fFetchOriginalIfNotAvailable>
</Download>
```

Dinosaur is not found in the Zoo folder, so the protocol server responds with **DownloadSoapOut**, as follows:

```
<DownloadResponse
  xmlns="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <DownloadResult>
    <Files>
      <File name="panda.jpg" lastmodified="2008-01-16T23:12:57Z">
        ... ...
      </File>
      <File name="dinosaur.jpg" found="false"/>
    </Files>
```

```
            </DownloadResult>
          </DownloadResponse>
```

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
<?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/ois/"
xmlns:s="http://www.w3.org/2001/XMLSchema"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://schemas.microsoft.com/sharepoint/soap/ois/">
  <wsdl:types>
    <s:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/sharepoint/soap/ois/">
      <s:import namespace="http://www.w3.org/2001/XMLSchema"/>
      <s:element name="ListPictureLibrary">
        <s:complexType/>
      </s:element>
      <s:element name="ListPictureLibraryResponse">
        <s:complexType>
          <s:sequence>
            <s:element name="ListPictureLibraryResult">
              <s:complexType mixed="true">
                <s:sequence>
                  <s:element name="PictLib" type="tns:ArrayOfLibraries"/>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:complexType name="ArrayOfLibraries">
        <s:sequence>
          <s:element name="Library" minOccurs="0" maxOccurs="unbounded">
            <s:complexType>
              <s:attribute name="guid" type="s:string"/>
              <s:attribute name="name" type="s:string"/>
              <s:attribute name="title" type="s:string"/>
              <s:attribute name="url" type="s:string"/>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
      <s:element name="Upload">
        <s:complexType>
          <s:sequence>
            <s:element name="strListName" type="s:string"/>
            <s:element name="strFolder" type="s:string"/>
            <s:element name="bytes" type="s:base64Binary"/>
            <s:element name="fileName" type="s:string"/>
            <s:element name="fOverWriteIfExist" type="s:boolean"/>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="UploadResponse">
        <s:complexType>
          <s:sequence>
            <s:element name="UploadResult">
              <s:complexType mixed="true">
```

```
        <s:sequence>
          <s:element name="Upload">
            <s:complexType>
              <s:attribute name="lastmodified" type="s:dateTime"/>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
  </s:sequence>
</s:complexType>
</s:element>
<s:element name="GetItemsXMLData">
  <s:complexType>
    <s:sequence>
      <s:element name="strListName" type="s:string"/>
      <s:element name="strFolder" type="s:string"/>
      <s:element name="itemFileNames" type="tns:ArrayOfString"/>
    </s:sequence>
  </s:complexType>
</s:element>
<s:complexType name="ArrayOfString">
  <s:sequence>
    <s:element name="string" type="s:string" maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
<s:element name="GetItemsXMLDataResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetItemsXMLDataResult">
        <s:complexType mixed="true">
          <s:sequence>
            <s:element name="results" type="tns:ArrayOfItems"/>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:sequence>
  </s:complexType>
</s:element>
<s:complexType name="ArrayOfItems">
  <s:sequence>
    <s:element name="item" minOccurs="0" maxOccurs="unbounded">
      <s:complexType>
        <s:attribute name="name" type="s:string"/>
        <s:attribute name="ID" type="s:unsignedInt"/>
        <s:attribute name="Author" type="s:string"/>
        <s:attribute name="Editor" type="s:string"/>
        <s:attribute name="File_x0020_Size" type="s:string"/>
        <s:attribute name="ImageWidth" type="s:unsignedInt"/>
        <s:attribute name="ImageHeight" type="s:unsignedInt"/>
        <s:attribute name="Description" type="s:string"/>
        <s:attribute name="Title" type="s:string"/>
        <s:attribute name="Keywords" type="s:string"/>
        <s:attribute name="ImageCreateDate" type="s:string"/>
        <s:attribute name="Created" type="s:dateTime"/>
        <s:attribute name="Modified" type="s:dateTime"/>
        <s:attribute name="found" type="s:boolean" use="optional" default="true"/>
      </s:complexType>
    </s:element>
```

```
        </s:sequence>
      </s:complexType>
      <s:element name="GetItemsByIds">
        <s:complexType>
          <s:sequence>
            <s:element name="strListName" type="s:string"/>
            <s:element name="ids" type="tns:ArrayOfUnsignedInt"/>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:complexType name="ArrayOfUnsignedInt">
        <s:sequence>
          <s:element name="unsignedInt" type="s:unsignedInt" maxOccurs="unbounded"/>
        </s:sequence>
      </s:complexType>
      <s:element name="GetItemsByIdsResponse">
        <s:complexType>
          <s:sequence>
            <s:element name="GetItemsByIdsResult">
              <s:complexType mixed="true">
                <s:sequence>
                  <s:element name="results" type="tns:ArrayOfRows"/>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:complexType name="ArrayOfRows" mixed="true">
        <s:sequence>
          <s:any minOccurs="0" maxOccurs="unbounded"/>
        </s:sequence>
      </s:complexType>
      <s:element name="Delete">
        <s:complexType>
          <s:sequence>
            <s:element name="strListName" type="s:string"/>
            <s:element name="strFolder" type="s:string"/>
            <s:element name="itemFileNames" type="tns:ArrayOfString"/>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="DeleteResponse">
        <s:complexType>
          <s:sequence>
            <s:element name="DeleteResult">
              <s:complexType mixed="true">
                <s:sequence>
                  <s:element name="results" type="tns:ArrayOfDeleteResults"/>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:complexType name="ArrayOfDeleteResults">
        <s:sequence>
          <s:element name="result" minOccurs="0" maxOccurs="unbounded">
            <s:complexType>
```

```xml
                    <s:attribute name="deleted" type="s:boolean"/>
                    <s:attribute name="name" type="s:string"/>
                </s:complexType>
            </s:element>
        </s:sequence>
    </s:complexType>
    <s:element name="Download">
        <s:complexType>
            <s:sequence>
                <s:element name="strListName" type="s:string"/>
                <s:element name="strFolder" type="s:string"/>
                <s:element name="itemFileNames" type="tns:ArrayOfString"/>
                <s:element name="type" type="s:unsignedInt"/>
                <s:element name="fFetchOriginalIfNotAvailable" type="s:boolean"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="DownloadResponse">
        <s:complexType>
            <s:sequence>
                <s:element name="DownloadResult">
                    <s:complexType mixed="true">
                        <s:sequence>
                            <s:element name="Files" type="tns:ArrayOfFiles"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:complexType name="ArrayOfFiles">
        <s:sequence>
            <s:element name="File" minOccurs="0" maxOccurs="unbounded">
                <s:complexType>
                    <s:simpleContent>
                        <s:extension base="s:base64Binary">
                            <s:attribute name="name" type="s:string"/>
                            <s:attribute name="lastmodified" type="s:dateTime"/>
                            <s:attribute name="found" type="s:boolean" use="optional" default="true"/>
                            <s:attribute name="originalDownloaded" type="s:boolean" use="optional"
default="true"/>
                        </s:extension>
                    </s:simpleContent>
                </s:complexType>
            </s:element>
        </s:sequence>
    </s:complexType>
    <s:element name="Edit">
        <s:complexType>
            <s:sequence>
                <s:element name="strListName" type="s:string" minOccurs="0"/>
                <s:element name="strFolder" type="s:string" minOccurs="0"/>
                <s:element name="itemFileName" type="s:string" minOccurs="0"/>
                <s:element name="recipe" minOccurs="0">
                    <s:complexType>
                        <s:sequence>
                            <s:any/>
                        </s:sequence>
                    </s:complexType>
```

```xml
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
    <s:element name="EditResponse">
      <s:complexType>
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="1" name="EditResult">
            <s:complexType mixed="true">
              <s:sequence>
                <s:element name="notImplemented"/>
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
    <s:element name="GetListItems">
      <s:complexType>
        <s:sequence>
          <s:element name="strListName" type="s:string"/>
          <s:element name="strFolder" type="s:string"/>
        </s:sequence>
      </s:complexType>
    </s:element>
    <s:element name="GetListItemsResponse">
      <s:complexType>
        <s:sequence>
          <s:element name="GetListItemsResult">
            <s:complexType mixed="true">
              <s:sequence>
                <s:element name="Library">
                  <s:complexType mixed="true">
                    <s:complexContent>
                      <s:extension base="tns:ArrayOfRows">
                        <s:attribute name="name" type="s:string"/>
                      </s:extension>
                    </s:complexContent>
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
    </s:element>
    <s:element name="CheckSubwebAndList">
      <s:complexType>
        <s:sequence>
          <s:element name="strUrl" type="s:string"/>
        </s:sequence>
      </s:complexType>
    </s:element>
    <s:element name="CheckSubwebAndListResponse">
      <s:complexType>
        <s:sequence>
          <s:element name="CheckSubwebAndListResult">
            <s:complexType mixed="true">
              <s:sequence>
```

```
                    <s:element name="result">
                      <s:complexType>
                        <s:attribute name="url" type="s:string"/>
                        <s:attribute name="subweb" type="s:string"/>
                        <s:attribute name="list" type="s:string"/>
                        <s:attribute name="listGuid" type="s:string"/>
                        <s:attribute name="folder" type="s:string"/>
                        <s:attribute name="rest" type="s:string"/>
                        <s:attribute name="found" type="s:boolean" use="optional"
  default="true"/>
                      </s:complexType>
                    </s:element>
                </s:sequence>
              </s:complexType>
          </s:element>
          <s:element name="Rename">
            <s:complexType>
              <s:sequence>
                <s:element name="strListName" type="s:string"/>
                <s:element name="strFolder" type="s:string"/>
                <s:element name="request">
                  <s:complexType>
                    <s:sequence>
                      <s:element name="files" type="tns:ArrayOfRenameFiles"/>
                    </s:sequence>
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
          <s:complexType name="ArrayOfRenameFiles">
            <s:sequence>
              <s:element name="file" maxOccurs="unbounded">
                <s:complexType>
                  <s:attribute name="filename" type="s:string"/>
                  <s:attribute name="newbasename" type="s:string"/>
                </s:complexType>
              </s:element>
            </s:sequence>
          </s:complexType>
          <s:element name="RenameResponse">
            <s:complexType>
              <s:sequence>
                <s:element name="RenameResult">
                  <s:complexType mixed="true">
                    <s:sequence>
                      <s:element name="results" type="tns:ArrayOfRenameResults"/>
                    </s:sequence>
                  </s:complexType>
                </s:element>
              </s:sequence>
            </s:complexType>
          </s:element>
          <s:complexType name="ArrayOfRenameResults">
            <s:sequence>
              <s:element name="result" minOccurs="0" maxOccurs="unbounded">
```

```
            <s:complexType>
              <s:attribute name="name" type="s:string"/>
              <s:attribute name="renamed" type="s:boolean" use="optional" default="true"/>
              <s:attribute name="lastmodified" type="s:dateTime"/>
              <s:attribute name="newbasename" type="s:string"/>
            </s:complexType>
          </s:element>
        </s:sequence>
      </s:complexType>
      <s:element name="CreateNewFolder">
        <s:complexType>
          <s:sequence>
            <s:element name="strListName" type="s:string"/>
            <s:element name="strParentFolder" type="s:string"/>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="CreateNewFolderResponse">
        <s:complexType>
          <s:sequence>
            <s:element name="CreateNewFolderResult">
              <s:complexType mixed="true">
                <s:sequence>
                  <s:element name="NewFolder">
                    <s:complexType>
                      <s:attribute name="title" type="s:string"/>
                    </s:complexType>
                  </s:element>
                </s:sequence>
              </s:complexType>
            </s:element>
          </s:sequence>
        </s:complexType>
      </s:element>
    </s:schema>
  </wsdl:types>
  <wsdl:message name="ListPictureLibrarySoapIn">
    <wsdl:part name="parameters" element="tns:ListPictureLibrary"/>
  </wsdl:message>
  <wsdl:message name="ListPictureLibrarySoapOut">
    <wsdl:part name="parameters" element="tns:ListPictureLibraryResponse"/>
  </wsdl:message>
  <wsdl:message name="UploadSoapIn">
    <wsdl:part name="parameters" element="tns:Upload"/>
  </wsdl:message>
  <wsdl:message name="UploadSoapOut">
    <wsdl:part name="parameters" element="tns:UploadResponse"/>
  </wsdl:message>
  <wsdl:message name="GetItemsXMLDataSoapIn">
    <wsdl:part name="parameters" element="tns:GetItemsXMLData"/>
  </wsdl:message>
  <wsdl:message name="GetItemsXMLDataSoapOut">
    <wsdl:part name="parameters" element="tns:GetItemsXMLDataResponse"/>
  </wsdl:message>
  <wsdl:message name="GetItemsByIdsSoapIn">
    <wsdl:part name="parameters" element="tns:GetItemsByIds"/>
  </wsdl:message>
  <wsdl:message name="GetItemsByIdsSoapOut">
    <wsdl:part name="parameters" element="tns:GetItemsByIdsResponse"/>
```

```
    </wsdl:message>
    <wsdl:message name="DeleteSoapIn">
      <wsdl:part name="parameters" element="tns:Delete"/>
    </wsdl:message>
    <wsdl:message name="DeleteSoapOut">
      <wsdl:part name="parameters" element="tns:DeleteResponse"/>
    </wsdl:message>
    <wsdl:message name="DownloadSoapIn">
      <wsdl:part name="parameters" element="tns:Download"/>
    </wsdl:message>
    <wsdl:message name="DownloadSoapOut">
      <wsdl:part name="parameters" element="tns:DownloadResponse"/>
    </wsdl:message>
    <wsdl:message name="EditSoapIn">
      <wsdl:part name="parameters" element="tns:Edit"/>
    </wsdl:message>
    <wsdl:message name="EditSoapOut">
      <wsdl:part name="parameters" element="tns:EditResponse"/>
    </wsdl:message>
    <wsdl:message name="GetListItemsSoapIn">
      <wsdl:part name="parameters" element="tns:GetListItems"/>
    </wsdl:message>
    <wsdl:message name="GetListItemsSoapOut">
      <wsdl:part name="parameters" element="tns:GetListItemsResponse"/>
    </wsdl:message>
    <wsdl:message name="CheckSubwebAndListSoapIn">
      <wsdl:part name="parameters" element="tns:CheckSubwebAndList"/>
    </wsdl:message>
    <wsdl:message name="CheckSubwebAndListSoapOut">
      <wsdl:part name="parameters" element="tns:CheckSubwebAndListResponse"/>
    </wsdl:message>
    <wsdl:message name="RenameSoapIn">
      <wsdl:part name="parameters" element="tns:Rename"/>
    </wsdl:message>
    <wsdl:message name="RenameSoapOut">
      <wsdl:part name="parameters" element="tns:RenameResponse"/>
    </wsdl:message>
    <wsdl:message name="CreateNewFolderSoapIn">
      <wsdl:part name="parameters" element="tns:CreateNewFolder"/>
    </wsdl:message>
    <wsdl:message name="CreateNewFolderSoapOut">
      <wsdl:part name="parameters" element="tns:CreateNewFolderResponse"/>
    </wsdl:message>
    <wsdl:portType name="ImagingSoap">
      <wsdl:operation name="ListPictureLibrary">
        <wsdl:input message="tns:ListPictureLibrarySoapIn"/>
        <wsdl:output message="tns:ListPictureLibrarySoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="Upload">
        <wsdl:input message="tns:UploadSoapIn"/>
        <wsdl:output message="tns:UploadSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="GetItemsXMLData">
        <wsdl:input message="tns:GetItemsXMLDataSoapIn"/>
        <wsdl:output message="tns:GetItemsXMLDataSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="GetItemsByIds">
        <wsdl:input message="tns:GetItemsByIdsSoapIn"/>
        <wsdl:output message="tns:GetItemsByIdsSoapOut"/>
```

```
      </wsdl:operation>
      <wsdl:operation name="Delete">
        <wsdl:input message="tns:DeleteSoapIn"/>
        <wsdl:output message="tns:DeleteSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="Download">
        <wsdl:input message="tns:DownloadSoapIn"/>
        <wsdl:output message="tns:DownloadSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="Edit">
        <wsdl:input message="tns:EditSoapIn"/>
        <wsdl:output message="tns:EditSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="GetListItems">
        <wsdl:input message="tns:GetListItemsSoapIn"/>
        <wsdl:output message="tns:GetListItemsSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="CheckSubwebAndList">
        <wsdl:input message="tns:CheckSubwebAndListSoapIn"/>
        <wsdl:output message="tns:CheckSubwebAndListSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="Rename">
        <wsdl:input message="tns:RenameSoapIn"/>
        <wsdl:output message="tns:RenameSoapOut"/>
      </wsdl:operation>
      <wsdl:operation name="CreateNewFolder">
        <wsdl:input message="tns:CreateNewFolderSoapIn"/>
        <wsdl:output message="tns:CreateNewFolderSoapOut"/>
      </wsdl:operation>
    </wsdl:portType>
  <wsdl:binding name="ImagingSoap" type="tns:ImagingSoap">
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="ListPictureLibrary">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/ListPictureLibrary"
style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="Upload">
      <soap:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Upload"
style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetItemsXMLData">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/GetItemsXMLData"
style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
```

```
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetItemsByIds">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/GetItemsByIds"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="Delete">
        <soap:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Delete"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="Download">
        <soap:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Download"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="Edit">
        <soap:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Edit"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetListItems">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/GetListItems" style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="CheckSubwebAndList">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/CheckSubwebAndList"
style="document"/>
```

```
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="Rename">
      <soap:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Rename"
 style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="CreateNewFolder">
      <soap:operation
 soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/CreateNewFolder"
 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="ImagingSoap12" type="tns:ImagingSoap">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="ListPictureLibrary">
      <soap12:operation
 soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/ListPictureLibrary"
 style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="Upload">
      <soap12:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Upload"
 style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetItemsXMLData">
      <soap12:operation
 soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/GetItemsXMLData"
 style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
```

```
              <soap12:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetItemsByIds">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/GetItemsByIds"
style="document"/>
            <wsdl:input>
              <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="Delete">
            <soap12:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Delete"
style="document"/>
            <wsdl:input>
              <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="Download">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Download" style="document"/>
            <wsdl:input>
              <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="Edit">
            <soap12:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Edit"
style="document"/>
            <wsdl:input>
              <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetListItems">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/GetListItems" style="document"/>
            <wsdl:input>
              <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
              <soap12:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="CheckSubwebAndList">
            <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/CheckSubwebAndList"
style="document"/>
            <wsdl:input>
              <soap12:body use="literal"/>
```

```
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="Rename">
        <soap12:operation soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/Rename"
 style="document"/>
        <wsdl:input>
          <soap12:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="CreateNewFolder">
        <soap12:operation
 soapAction="http://schemas.microsoft.com/sharepoint/soap/ois/CreateNewFolder"
 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:

- Microsoft Office 2003

- The 2007 Microsoft Office system

- Microsoft Office 2010 suites

- Microsoft Office 2013

- 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.

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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