

[MS-EMMWCF]: Metadata Shared Service WCF Service Protocol Specification

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Revision Summary

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11/06/2009	0.3	Editorial	Revised and edited the technical content
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1 Introduction

This document specifies the Metadata Shared Service WCF Service Protocol. This protocol is used to communicate with an application that manages a store of structured metadata. Typical operations include searching for and retrieving metadata values and parameters, creating new metadata values, configuring parameters on metadata values, and configuring the general behavior of the metadata application.

Sections 1.8, 2, and 3 of this specification are normative and contain RFC 2119 language. Sections 1.5 and 1.9 are also normative but cannot contain RFC 2119 language. All other sections and examples in this specification are informative.

1.1 Glossary

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

- access control list (ACL)**
- base64**
- Coordinated Universal Time (UTC)**
- GUID**
- Hypertext Transfer Protocol (HTTP)**
- Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**
- language code identifier (LCID)**
- Universal Naming Convention (UNC)**
- XML**

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

- cabinet (.cab) file**
- child**
- content database**
- content type**
- content type identifier**
- content type package**
- deployment package**
- descendant**
- endpoint**
- field**
- folder**
- internal identifier**
- login name**
- merged term**
- orphaned term**
- partition**
- partition identifier**
- reused term**
- security principal**
- service application**
- session**
- Simple Object Access Protocol (SOAP)**
- site collection**
- site subscription**
- SOAP action**
- SOAP body**
- SOAP fault**

source term
term
term label
term set
term set group
term store
Uniform Resource Identifier (URI)
Uniform Resource Locator (URL)
Web application
Web Services Description Language (WSDL)
workflow
workflow association
workflow template
WSDL message
WSDL operation
XML namespace
XML namespace prefix

The following terms are specific to this document:

content type subscriber: A site collection that is connected to a shared service application that provides content types.

term label path: A string that contains the labels for a term and the labels for all of its parent terms.

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 Specification documents 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. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MSDN-TSQL-Ref] Microsoft Corporation, "Transact-SQL Reference", [http://msdn.microsoft.com/en-us/library/ms189826\(SQL.90\).aspx](http://msdn.microsoft.com/en-us/library/ms189826(SQL.90).aspx)

[MS-EMMSTORE] Microsoft Corporation, "[Enterprise Metadata Service Database Schema Specification](#)".

[MS-PRIMEPF] Microsoft Corporation, "[Deployment Package Format Specification](#)".

[MS-SPSTWS] Microsoft Corporation, "[SharePoint Security Token Service Web Service Protocol Specification](#)".

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

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

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

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

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

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

[WSA1.0 Metadata] Gudgin, M., Ed., Hadley, M., Ed., Rogers, T., Ed., Yalcinalp, U., Ed., "Web Services Addressing 1.0 - Metadata", W3C Recommendation, September 2007, <http://www.w3.org/TR/2007/REC-ws-addr-metadata-20070904>

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

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

1.2.2 Informative References

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

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

[MS-SPTWS] Microsoft Corporation, "[Service Platform Topology Web Service Protocol Specification](#)".

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

1.3 Protocol Overview (Synopsis)

This protocol specifies a set of operations for applications, such as content management systems, document authoring applications, and line of business systems, to read from, write to, and manage metadata in a centrally-managed store.

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 **HTTPS**, as described in [\[RFC2818\]](#).

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

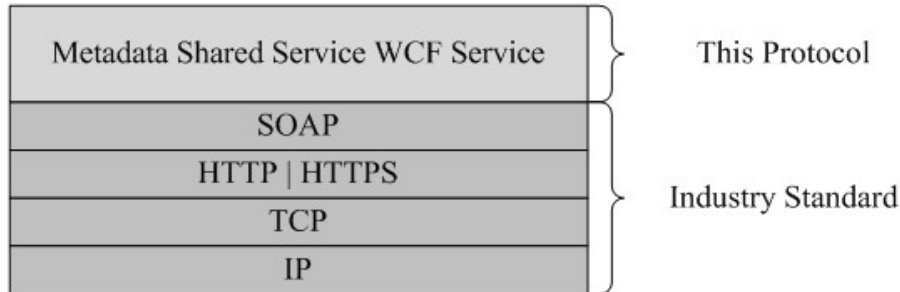


Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a protocol server that exposes one or more **endpoint (4) URIs** that are known by protocol clients. The endpoint (4) URI of the protocol server and the transport that is used by the protocol server are either known by the protocol client or obtained by using the discovery mechanism that is described in [\[MS-SPTWS\]](#).

The protocol client obtains the requisite **ApplicationClassId** and **ApplicationVersion** values and the endpoint (4) URI of the protocol server that provides the discovery mechanism, as described in [\[MS-SPTWS\]](#), by means that are independent of either this protocol or the topology service protocol described in [\[MS-SPTWS\]](#).

This protocol requires the protocol client to have appropriate permission to call the operations on the protocol server.

The protocol client implements the token-based security mechanisms that are required by the protocol server and related security protocols, as described in [\[MS-SPSTWS\]](#).

1.6 Applicability Statement

This protocol is designed for requests and submissions that are less than 50 megabytes in size to a protocol server.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol can be implemented by using transports that support sending SOAP (Simple Object Access Protocol) messages, as specified in [section 2.1](#).
- **Protocol Versions:** This protocol is not versioned.

Capability Negotiation: This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

Preliminary

2 Messages

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

2.1 Transport

Protocol servers **MUST** support SOAP over HTTP or HTTPS.

All protocol messages **MUST** be transported by using HTTP bindings at the transport level.

Protocol messages **MUST** be formatted as specified in either [\[SOAP1.1\]](#) section 4 or [\[SOAP1.2/1\]](#) section 5. Protocol server faults **MUST** be returned by 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.

If the HTTPS transport is used, a server certificate **MUST** be deployed.

This protocol **MAY** transmit an additional SOAP header, the **ServiceContext** header, as specified in [\[MS-SPSTWS\]](#) section 2.2.4.1.

This protocol does not define any means for activating a protocol server or protocol client. The protocol server **MUST** be configured and begin listening in an implementation-specific way. In addition, the protocol client **MUST** know the format and transport that is used by the protocol server, for example, the SOAP format over an HTTP transport.

2.2 Common Message Syntax

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

2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tns	http://schemas.microsoft.com/sharepoint/taxonomy/soap/	
soap1	http://schemas.xmlsoap.org/wsdl/soap12/	[SOAP1.2/1]

Prefix	Namespace URI	Reference
2		[SOAP1.2/2]
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
wsam	http://www.w3.org/2007/05/addressing/metadata/	[WSA1.0 Metadata]
ser	http://schemas.microsoft.com/2003/10/Serialization/	
sera	http://schemas.microsoft.com/2003/10/Serialization/Arrays	
mst	http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy	
mstc	http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.Content TypeSync	

2.2.2 Messages

None.

2.2.3 Elements

This specification does not define any common XML Schema element definitions.

2.2.4 Complex Types

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

Complex Type	Description
ArrayOfguid	A collection of GUID values.
ArrayOfint	A collection of integer values.
ChangeDataForAddTermSet	Change data for a term set being created.
ChangeDataForAddTermSetMembership	Change data for a term being added to a term set.
ChangeDataForAddUsedTerm	Change data for a term being used on a site collection .
ChangeDataForDeleteTerm	Change data for a list of terms being deleted.
ChangeDataForMergeTerm	Change data for a term being merged.
ChangeDataForMoveOrUpdateTermSetMembership	Change data for a term being moved or updated.
ChangeDataForRestoreTermStore	Change data for a change to restore the term store .
ChangeDataForSetDefaultLanguage	Change data for a change to the default language for the term store.
ChangeDataForUpdateTerm	Change data for a term is being updated. <1>
ChangeDataForUpdateTermSet	Change data for a term set is being moved or updated.

Complex Type	Description
GetApplicationLogRoot	An implementation-specific<2> log of data generated for content type publication, the contents of which MUST be ignored.
GetChangesRoot	A list of changes made to the term store.
GetGroupsAndTermSetsRoot	Information about the groups that contain one or more term sets, information about those term sets, and the root terms for each term set.
GetGroupsRoot	Information about one or more term set groups .
GetServiceSettingsRoot	A setting for a term store partition (1) .
GetTermRoot	Information about one or more terms.
GetUpdateInformationRoot	The updates in a content type package .
SearchedTermsRoot	Information about terms matching search criteria. This element MUST conform to the schema of one of the GetTermRoot (section 2.2.4.17), SearchedTermsRootOptimized (section 2.2.4.20), or SearchedTermsRootStandard types (section 2.2.4.21).
SearchedTermsRootOptimized	Information about terms in a specific term store partition (1). This type contains a subset of the data from the SearchedTermsRootStandard (section 2.2.4.21), excluding group and permission data.
SearchedTermsRootStandard	Information about terms in a specific term store partition (1).
SerializedECMChangeLogTableRow	<p>A change to the term store. For each object type, valid combinations of change type, data type, and meaning are as follows:</p> <ul style="list-style-type: none"> ▪ Object Type: 1 (Term) <ul style="list-style-type: none"> ▪ 1 (Add) - ChangeDataForAddTermSetMembership - Term added to term set. ▪ 5 (Copy) - ChangeDataForAddTermSetMembership - Term created by copying from another Term. ▪ 4 (Move) - ChangeDataForMoveOrUpdateTermSetMembership - Term moved within term set or to a different term set. ▪ 3 (Delete) - ChangeDataForDeleteTerm - Term deleted. ▪ 7 (Merge) - ChangeDataForMergeTerm - Term merged. ▪ Object Type: 2 (TermSet)

Complex Type	Description
	<ul style="list-style-type: none"> ▪ 1 (Add) - ChangeDataForAddTermSet - Term set created. ▪ 5 (Copy) - ChangeDataForAddTermSet - Term set created by copying from another term set. ▪ 4 (Move) - ChangeDataForUpdateTermSet - Term set moved to different term set group. ▪ 2 (Edit) - None - Term set edited without moving to different term set group. ▪ 3 (Delete) - None - Term set deleted. ▪ Object Type: 3 (Group) <ul style="list-style-type: none"> ▪ 1 (Add) - None - Term set group created. ▪ 2 (Edit) - None - Term set group updated. ▪ 3 (Delete) - None - Term set group deleted. ▪ Object Type: 4 (TermStore) <ul style="list-style-type: none"> ▪ 1 (Add) - ChangeDataForAddOrDeleteLanguage - Language added to a term store. ▪ 3 (Delete) - ChangeDataForAddOrDeleteLanguage - Language deleted from a term store. ▪ 2 (Edit) - ChangeDataForSetDefaultLanguage - Default language changed for term store. ▪ 2 (Edit) - None - Creating, updating or deleting an access control list (ACL) for the term store or term set group. ▪ Object Type: 5 (Site) <ul style="list-style-type: none"> ▪ 1 (Add) - ChangeDataForAddUsedTerm - Using a Term in a site collection for the first time.
SerializedECMChangeLogTableTimeOnlyRow	A timestamp defined as follows.
SerializedECMChildTermTableRow	A term that is a child of the parent term.
SerializedECMGroupTableRow	A term set group.
SerializedECMGroupTermSetIdsTableRow	Information about a term set group of which a term set is a member.
SerializedECMLanguageTableRow	A language for a term store partition (1).
SerializedECMPermissionTableRow	A permission setting.
SerializedECMRootTermTableRow	A root term.
SerializedECMServiceSettingsTableRow	Settings for a term store partition (1).

Complex Type	Description
SerializedECMTermDescriptionTableRowBase	A description of a term. This element specifies the base attributes shared by both SerializedECMTermDescriptionTableRowForRead (section 2.2.4.31) and SerializedECMTermDescriptionTableRowForWrite (section 3.1.4.40.3.5).
SerializedECMTermDescriptionTableRowForRead	A description of a term.
SerializedECMTermLabelTableRowBase	A term label for a term. This element specifies the base attributes shared by both SerializedECMTermLabelTableRowForRead (section 2.2.4.33) and SerializedECMTermLabelTableRowForWrite (section 3.1.4.40.3.4).
SerializedECMTermLabelTableRowForRead	A term label for a term.
SerializedECMTermPropertyTableRowBase	A property of a term. This element specifies the base attributes shared by both SerializedECMTermPropertyTableRowForRead (section 2.2.4.35) and SerializedECMTermPropertyTableRowForWrite (section 3.1.4.40.3.6).
SerializedECMTermPropertyTableRowForRead	A property of a term.
SerializedECMTermSetMembershipTableRowBase	Information about a term set of which a term is a member. This element specifies the base attributes shared by both SerializedECMTermSetMembershipTableRowForRead (section 2.2.4.37) and SerializedECMTermSetMembershipTableRowForWrite (section 3.1.4.40.3.7).
SerializedECMTermSetMembershipTableRowForRead	Information about a term set of which a term is a member.
SerializedECMTermSetTableRow	A term set.
SerializedECMTermTableRowForRead	A term returned with the results in the containing element. The following attributes MUST be present: a0 , a6 , a7 , a8 , a9 , a14 , a19 , a20 , a21 , a22 .
ServiceSettings	The settings for a term store partition (1).
ServiceSettingsSettingsXmlDoc	The settings for a term store partition (1).
WorkflowData	This type specifies one or more workflow associations for a content type .

2.2.4.1 ArrayOfguid

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/Arrays>

A collection of GUID values.

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

```

<xs:sequence>
  <xs:element minOccurs="0" maxOccurs="unbounded" name="guid" type="ser:guid"/>
</xs:sequence>
</xs:complexType>

```

guid: GUID value.

2.2.4.2 ArrayOfint

Namespace: http://schemas.microsoft.com/2003/10/Serialization/Arrays

A collection of integer values.

```

<xs:complexType name="ArrayOfint">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int"/>
  </xs:sequence>
</xs:complexType>

```

int: Integer value.

2.2.4.3 ChangeDataForAddTermSet

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term set being created.

```

<xs:complexType name="ChangeDataForAddTermSet">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="FromTermSetId"
            type="InternalIdentifier"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

Data: Root element.

Data.FromTermSetId: **Internal identifier (1)** of the term set from which this term set is copied.

2.2.4.4 ChangeDataForAddTermSetMembership

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term being added to a term set.

```

<xs:complexType name="ChangeDataForAddTermSetMembership">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>

```

```

    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier"/>
      <xs:element minOccurs="0" maxOccurs="1" name="SourceId" type="InternalIdentifier"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>

```

Data: Root element.

Data.PTId: Internal identifier (1) of the parent term of the term being added. Zero if the term does not have parent term.

Data.SourceId: Internal identifier (1) of the term from which the newly added term was copied. The word "source" here is unrelated to the concept of a **source term**.

2.2.4.5 ChangeDataForAddUsedTerm

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term being used on a site collection.

```

<xs:complexType name="ChangeDataForAddUsedTerm">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="SiteGuid" type="ser:guid"/>
          <xs:element minOccurs="1" maxOccurs="1" name="TermSetId" type="ser:guid"/>
          <xs:element minOccurs="1" maxOccurs="1" name="TermId" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

Data: Root element.

Data.SiteGuid: Identifier of the site collection.

Data.TermSetId: Identifier of the term set of the term being added.

Data.TermId: Identifier of the term being added.

2.2.4.6 ChangeDataForDeleteTerm

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a list of terms being deleted.

```

<xs:complexType name="ChangeDataForDeleteTerm">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>

```

```

<xs:sequence>
  <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier"/>
  <xs:element minOccurs="1" maxOccurs="unbounded" name="row">
    <xs:complexType>
      <xs:attribute name="TId" type="InternalIdentifier" use="required"/>
    </xs:complexType>
  </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>

```

Data: Root element.

Data.PTId: Internal identifier (1) of the parent term of the terms being deleted.

Data.row: A term being deleted.

Data.row.TId: Internal identifier (1) of the deleted term.

2.2.4.7 ChangeDataForMergeTerm

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term being merged.

```

<xs:complexType name="ChangeDataForMergeTerm">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="TTId" type="InternalIdentifier"/>
          <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier"/>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="row">
            <xs:complexType>
              <xs:attribute name="TId" type="InternalIdentifier" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

Data: Root element.

Data.TTId: Internal identifier (1) of the target term of the merge operation into which the term is being merged.

Data.PTId: Internal identifier (1) of a parent term of the term being merged.

Data.row: A term that is a child of the term being merged.

Data.row.TId: Internal identifier (1) of the child term.

2.2.4.8 ChangeDataForMoveOrUpdateTermSetMembership

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term being moved or updated.

```
<xs:complexType name="ChangeDataForMoveOrUpdateTermSetMembership">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier"/>
          <xs:element minOccurs="1" maxOccurs="1" name="STSID" type="InternalIdentifier"/>
          <xs:element minOccurs="1" maxOccurs="1" name="SPTId" type="InternalIdentifier"/>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="row">
            <xs:complexType>
              <xs:attribute name="TId" type="InternalIdentifier" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Data: Root element.

Data.PTId: Internal identifier (1) of the updated parent term for the term. 0 if the term does not have parent term.

Data.STSID: Internal identifier (1) of the original term set for the term.

Data.SPTId: Internal identifier (1) of the original parent term for the term. 0 if the term does not have original parent term.

Data.row: A descendant term of the updated term.

Data.row.TId: Internal identifier (1) of the descendant term.

2.2.4.9 ChangeDataForRestoreTermStore

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a change to restore the term store.

```
<xs:complexType name="ChangeDataForRestoreTermStore">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="IsFullFarmRestore"
            type="xs:boolean"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

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

Data: Root element.

Data.IsFullFarmRestore: A value indicating whether it is a full farm restore.

2.2.4.10 ChangeDataForSetDefaultLanguage

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a change to the default language for the term store.

```
<xs:complexType name="ChangeDataForSetDefaultLanguage">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="FromLanguage" type="LCID"/>
          <xs:element minOccurs="1" maxOccurs="1" name="ToLanguage" type="LCID"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Data: Root element.

Data.FromLanguage: The previous default **language code identifier (LCID)** for the term store.

Data.ToLanguage: The new default LCID for the term store.

2.2.4.11 ChangeDataForUpdateTermSet

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term set is being moved or updated.

```
<xs:complexType name="ChangeDataForUpdateTermSet">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="FromGroupGuid" type="ser:guid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Data: Root element.

Data.FromGroupGuid: Identifier of the term set group from which the term set is being moved or updated.

2.2.4.12 GetApplicationLogRoot

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

An implementation-specific<3> log of data generated for content type publication, the contents of which MUST be ignored.

```
<xs:complexType name="GetApplicationLogRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="AL">
            <xs:complexType>
              <xs:attribute name="a63" type="xs:string" use="required"/>
              <xs:attribute name="a64" type="xs:string" use="optional"/>
              <xs:attribute name="a65" type="mstc:SyndicationStatus" use="required"/>
              <xs:attribute name="a66" type="xs:string" use="required"/>
              <xs:attribute name="a7" type="xs:dateTime" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.AL: A log entry.

Root.AL.a63: The URL of a site for which the log entry is generated.

Root.AL.a64: The name of the object for which the log entry is generated.

Root.AL.a65: The implementation specific name of the content type publication stage for which the log entry is generated.

Root.AL.a66: The implementation specific contents of the log entry.

Root.AL.a7: The **UTC** time when the log entry is generated.

2.2.4.13 GetChangesRoot

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A list of changes made to the term store.

```
<xs:complexType name="GetChangesRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="CL"
            type="SerializedECMChangeLogTableRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

```

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

```

Root: Root element.

Root.CL: Details of a change.

2.2.4.14 GetGroupsAndTermSetsRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Information about the groups that contain one or more term sets, information about those term sets, and the root terms for each term set.

```

<xs:complexType name="GetGroupsAndTermSetsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="G" type="SerializedECMGroupTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="P" type="SerializedECMPermissionTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="GTSIds" type="SerializedECMGroupTermSetIdsTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TS" type="SerializedECMTermSetTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="RT" type="SerializedECMRootTermTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

Root: Root element.

Root.G: A **SerializedECMGroupTableRow** (section [2.2.4.24](#)) for each term set group that contains the term sets in "Root.TS".

Root.NextResult: Separates the preceding set of results of one type from the next set of a different type.

Root.P: A **SerializedECMPermissionTableRow** (section [2.2.4.27](#)) for each **security principal (2)** that has permissions assigned to the term set groups.

Root.GTSIds: A **SerializedECMGroupTermSetIdsTableRow** (section [2.2.4.25](#)) for each term set.

Root.TS: A **SerializedECMTermSetTableRow** (section [2.2.4.38](#)) for each term set.

Root.RT: A **SerializedECMRootTermTableRow** (section [2.2.4.28](#)) for the root terms for each term set.

Root.TP: A **SerializedECMTermPropertyTableRowForRead** element (section [2.2.4.35](#)) for each term set.

2.2.4.15 GetGroupsRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Information about one or more term set groups.

```
<xs:complexType name="GetGroupsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="G" type="SerializedECMGroupTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="P" type="SerializedECMPermissionTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="GTSIds" type="SerializedECMGroupTermSetIdsTableRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.G: A **SerializedECMGroupTableRow** (section [2.2.4.24](#)) for each term set group.

Root.NextResult: Separates the preceding set of results of one type from the next set of a different type.

Root.P: A **SerializedECMPermissionTableRow** (section [2.2.4.27](#)) for each security principal (2) that has permissions assigned to the term set groups.

Root.GTSIds: A **SerializedECMGroupTermSetIdsTableRow** (section [2.2.4.25](#)) for each term set.

2.2.4.16 GetServiceSettingsRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A setting for a term store partition (1).

```
<xs:complexType name="GetServiceSettingsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="SS" type="SerializedECMServiceSettingsTableRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.SS: A setting.

2.2.4.17 GetTermRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Information about one or more terms.

```
<xs:complexType name="GetTermRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="T" type="SerializedECMTermTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TL" type="SerializedECMTermLabelTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="0" name="TD"
type="SerializedECMTermDescriptionTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="0" name="TP"
type="SerializedECMTermPropertyTableRowForRead"/>
          <xs:element minOccurs="0" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="0" name="CT" type="SerializedECMChildTermTableRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.T: A **SerializedECMTermTableRowForRead** element (section [2.2.4.39](#)) for each term.

Root.NextResult: Separates the preceding set of results of one type from the next set of a different type.

Root.TL: A **SerializedECMTermLabelTableRowForRead** element (section [2.2.4.33](#)) for each term label belonging to the terms.

Root.TD: A **SerializedECMTermDescriptionTableRowForRead** element (section [2.2.4.31](#)) for each term.

Root.TM: A **SerializedECMTermSetMembershipTableRowForRead** element (section [2.2.4.37](#)) for each term.

Root.TP: A **SerializedECMTermPropertyTableRowForRead** element (section [2.2.4.35](#)) for each term.

Root.CT: A **SerializedECMChildTermTableRow** (section [2.2.4.23](#)) for each term that is a child of the terms.

2.2.4.18 GetUpdateInformationRoot

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

The updates in a content type package.

```
<xs:complexType name="GetUpdateInformationRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="P">
            <xs:complexType>
              <xs:attribute name="PId" type="ContentTypeId" use="required"/>
              <xs:attribute name="PType" type="ser:guid" use="required"/>
              <xs:attribute name="PP" type="xs:boolean" use="required"/>
            </xs:complexType>
          </xs:element>
          <xs:element name="T" type="xs:dateTime"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.P: An update.

Root.P.PId: The identifier of the content type.

Root.P.PType: The identifier of the type of object in the package. The value MUST be "B4AD3A44-D934-4C91-8D1F-463ACEADE443".

Root.P.PP: Whether the content type is published.

Root.T: The last update time of the content type package.

2.2.4.19 SearchedTermsRoot

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Information about terms matching search criteria. This element MUST conform to the schema of one of the **GetTermRoot** (section [2.2.4.17](#)), **SearchedTermsRootOptimized** (section [2.2.4.20](#)), or **SearchedTermsRootStandard** types (section [2.2.4.21](#)).

```
<xs:complexType name="SearchedTermsRoot">
  <xs:sequence>
    <xs:any/>
  </xs:sequence>
</xs:complexType>
```

2.2.4.20 SearchedTermsRootOptimized

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Information about terms in a specific term store partition (1). This type contains a subset of the data from the **SearchedTermsRootStandard** (section [2.2.4.21](#)), excluding group and permission data.

```
<xs:complexType name="SearchedTermsRootOptimized">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="TS"
type="SerializedECMTermSetTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="T" type="SerializedECMTermTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TL" type="SerializedECMTermLabelTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TD" type="SerializedECMTermDescriptionTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="CT" type="SerializedECMChildTermTableRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.TS: A **SerializedECMTermSetTableRow** element (section [2.2.4.38](#)) for each term set that contains one or more of the terms. There MUST be one or more **Root.TS** elements for each **Root.T** element.

Root.NextResult: Separates the preceding set of results of one type from the next set of a different type.

Root.T: A **SerializedECMTermTableRowForRead** element (section [2.2.4.39](#)) for each term.

Root.TL: A **SerializedECMTermLabelTableRowForRead** element (section [2.2.4.33](#)) for each term label of each term. There MUST be one or more **Root.TL** elements for each **Root.T** element.

Root.TD: A **SerializedECMTermDescriptionTableRowForRead** element (section [2.2.4.31](#)) for the description of each term. There MUST be 0 or 1 **Root.TD** elements for each **Root.T** element.

Root.TM: A **SerializedECMTermSetMembershipTableRowForRead** element (section [2.2.4.37](#)) for each term. There MUST be one or more **Root.TM** elements for each **Root.T** element.

Root.TP: A **SerializedECMTermPropertyTableRowForRead** element (section [2.2.4.35](#)) for each custom property of the terms.

Root.CT: A **SerializedECMChildTermTableRow** element (section [2.2.4.23](#)) for each term that is a child of the terms.

2.2.4.21 SearchedTermsRootStandard

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Information about terms in a specific term store partition (1).

```
<xs:complexType name="SearchedTermsRootStandard">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="G" type="SerializedECMGroupTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="P" type="SerializedECMPermissionTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="GTSIds" type="SerializedECMGroupTermSetIdsTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TS" type="SerializedECMTermSetTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="RT" type="SerializedECMRootTermTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="T" type="SerializedECMTermTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TL" type="SerializedECMTermLabelTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TD" type="SerializedECMTermDescriptionTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="CT" type="SerializedECMChildTermTableRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.G: A **SerializedECMGroupTableRow** (section [2.2.4.24](#)) for each term set group that contains the term sets in **Root.TS**.

Root.NextResult: Separates the preceding set of results of one type from the next set of a different type.

Root.P: A **SerializedECMPermissionTableRow** (section [2.2.4.27](#)) for each security principal (2) that has permissions assigned to the term set groups.

Root.GTSIds: A **SerializedECMGroupTermSetIdsTableRow** element (section [2.2.4.25](#)) for each term set. There MUST be one or more **Root.GTSIds** elements for each **Root.G** element.

Root.TS: A **SerializedECMTermSetTableRow** element (section [2.2.4.38](#)) for each term set that contains one or more of the terms. There MUST be one or more **Root.TS** elements for each **Root.T** element.

Root.RT: A **SerializedECMRootTermTableRow** element (section [2.2.4.28](#)) for the root terms for each term set.

Root.T: A **SerializedECMTermTableRowForRead** element (section [2.2.4.39](#)) for each term.

Root.TL: A **SerializedECMTermLabelTableRowForRead** element (section [2.2.4.33](#)) for each term label of each term. There MUST be one or more **Root.TL** elements for each **Root.T** element.

Root.TD: A **SerializedECMTermDescriptionTableRowForRead** element (section [2.2.4.31](#)) for the description of each term. There MUST be zero or 1 **Root.TD** elements for each **Root.T** element.

Root.TM: A **SerializedECMTermSetMembershipTableRowForRead** element (section [2.2.4.37](#)) for each term. There MUST be one or more **Root.TM** elements for each **Root.T** element.

Root.TP: A **SerializedECMTermPropertyTableRowForRead** element (section [2.2.4.35](#)) for each custom property of the terms.

Root.CT: A **SerializedECMChildTermTableRow** element (section [2.2.4.23](#)) for each term that is a child of the terms.

2.2.4.22 SerializedECMChangeLogTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A change to the term store. For each object type, valid combinations of change type, data type, and meaning are as follows:

- Object Type: 1 (Term)
 - 1 (Add) - ChangeDataForAddTermSetMembership - Term added to term set.
 - 5 (Copy) - ChangeDataForAddTermSetMembership - Term created by copying from another Term.
 - 4 (Move) - ChangeDataForMoveOrUpdateTermSetMembership - Term moved within term set or to a different term set.
 - 3 (Delete) - ChangeDataForDeleteTerm - Term deleted.
 - 7 (Merge) - ChangeDataForMergeTerm - Term merged.
- Object Type: 2 (TermSet)
 - 1 (Add) - ChangeDataForAddTermSet - Term set created.
 - 5 (Copy) - ChangeDataForAddTermSet - Term set created by copying from another term set.
 - 4 (Move) - ChangeDataForUpdateTermSet - Term set moved to different term set group.
 - 2 (Edit) - None - Term set edited without moving to different term set group.
 - 3 (Delete) - None - Term set deleted.
- Object Type: 3 (Group)
 - 1 (Add) - None - Term set group created.
 - 2 (Edit) - None - Term set group updated.

- 3 (Delete) - None - Term set group deleted.
- Object Type: 4 (TermStore)
 - 1 (Add) - ChangeDataForAddOrDeleteLanguage - Language added to a term store.
 - 3 (Delete) - ChangeDataForAddOrDeleteLanguage - Language deleted from a term store.
 - 2 (Edit) - ChangeDataForSetDefaultLanguage - Default language changed for term store.
 - 2 (Edit) - None - Creating, updating or deleting an access control list (ACL) for the term store or term set group.
- Object Type: 5 (Site)
 - 1 (Add) - ChangeDataForAddUsedTerm - Using a Term in a site collection for the first time.

```
<xs:complexType name="SerializedECMChangeLogTableRow">
  <xs:attribute name="a0" type="ser:guid" use="required"/>
  <xs:attribute name="a48" type="ser:guid" use="optional"/>
  <xs:attribute name="a49" type="ser:guid" use="optional"/>
  <xs:attribute name="a50" type="ser:guid" use="optional"/>
  <xs:attribute name="a51" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a52" type="xs:int" use="required"/>
  <xs:attribute name="a53" type="xs:int" use="required"/>
  <xs:attribute name="a54" type="xs:dateTime" use="required"/>
  <xs:attribute name="a55" type="xs:string" use="optional"/>
  <xs:attribute name="a56" type="UserName" use="optional"/>
</xs:complexType>
```

a0: The identifier of the term store partition (1).

a48: The identifier of a term set group. The value MUST be NULL if the change is not scoped inside a term set group, for example, a language or permissions changes.

a49: The identifier of a term set. The value MUST be NULL if the change is not scoped inside a term set, for example, language or permissions changes.

a50: The identifier of the object being changed. The value MUST be NULL if the change is not for a specific object, for example, language or permissions changes.

a51: The internal identifier (1) of the object being changed. The value MUST be NULL if the change is not for a specific object, for example, language or permissions changes.

a52: The type of the object, which MUST be a value specified in the preceding list.

a53: The type of the change, which MUST be a value specified in the preceding list.

a54: The UTC time when the change happened.

a55: The details of the change. If used, it MUST be one of the following types:

- **ChangeDataForAddOrDeleteLanguage** (section [2.2.5.1](#))
- **ChangeDataForSetDefaultLanguage** (section [2.2.4.10](#))
- **ChangeDataForAddTermSetMembership** (section [2.2.4.4](#))

- **ChangeDataForMoveOrUpdateTermSetMembership** (section [2.2.4.8](#))
- **ChangeDataForAddTermSet** (section [2.2.4.3](#))
- **ChangeDataForUpdateTermSet** (section [2.2.4.11](#))
- **ChangeDataForDeleteTerm** (section [2.2.4.6](#))
- **ChangeDataForMergeTerm** (section [2.2.4.7](#))
- **ChangeDataForAddUsedTerm** (section [2.2.4.5](#))
- **ChangeDataForUpdateTerm** (section [2.2.4.43](#))<4>

a56: Reserved. The value MUST be NULL.

2.2.4.23 SerializedECMChildTermTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A term that is a child of the parent term.

```
<xs:complexType name="SerializedECMChildTermTableRow">
  <xs:attribute name="a25" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a24" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a57" type="InternalIdentifier" use="required"/>
</xs:complexType>
```

a25: The internal identifier (1) of the parent term. If there is no parent term because the term is a root term, this MUST be zero.

a24: The internal identifier (1) of the term set of the term.

a57: The internal identifier (1) of the child term in the term set.

2.2.4.24 SerializedECMGroupTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A term set group.

```
<xs:complexType name="SerializedECMGroupTableRow">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="P"
type="SerializedECMPermissionTableRow"/>
  </xs:sequence>
  <xs:attribute name="a6" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a0" type="ser:guid" use="required"/>
  <xs:attribute name="a7" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a8" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a9" type="ser:guid" use="optional"/>
  <xs:attribute name="a12" type="xs:string" use="optional"/>
  <xs:attribute name="a11" type="xs:string" use="optional"/>
  <xs:attribute name="a15" type="GroupType" use="optional"/>
  <xs:attribute name="a5" type="CommandActionBasic" use="optional"/>
</xs:complexType>
```

P: Additions, deletions or updates to permissions for this term set group. The **a1** attribute of each of these elements MUST be equal to the **a6** attribute of the parent **G** element. If attribute **a5** of the parent **G** element is absent or has the value 2, then these **P** elements MUST be absent.

a6: The identifier of the term set group.

a0: The identifier of the term store partition (1) to which the term set group belongs.

a7: The UTC time when the term set group was created.

a8: The UTC time of last modification of the term set group.

a9: The identifier of the term set group.

a12: The name of the term set group. This MUST be less than 255 characters in length. It MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

a11: The description of the term set group. This MUST be less than 1000 characters in length.

a15: The type of term set group.

a5: The type of write operation, which MUST be a value from the **CommandActionBasic** enumeration (section [2.2.5.3](#)). This attribute MUST be present when the parent element is a **WriteRoot** (section [3.1.4.40.3.1](#)) during a **Write** operation (section [3.1.4.40.2.1](#)); otherwise, it MUST NOT be present.

If the value is 2 (**Delete**), the **a12**, **a11**, **a15** attributes and **P** child elements MUST be absent.

If **a5** is absent, the following attributes MUST be present: **a0**, **a6**, **a7**, **a8**, **a9**, **a11**, **a12**, **a15**.

2.2.4.25 SerializedECMGroupTermSetIdsTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Information about a term set group of which a term set is a member.

```
<xs:complexType name="SerializedECMGroupTermSetIdsTableRow">
  <xs:attribute name="a1" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a6" type="InternalIdentifier" use="required"/>
</xs:complexType>
```

a1: The internal identifier (1) of the term set group.

a6: The internal identifier (1) of the term set.

2.2.4.26 SerializedECMLanguageTableRow

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A language for a term store partition (1).

```
<xs:complexType name="SerializedECMLanguageTableRow">
  <xs:attribute name="a0" type="ser:guid" use="required"/>
  <xs:attribute name="a59" type="LCID" use="required"/>
  <xs:attribute name="a58" type="xs:boolean" use="optional"/>
  <xs:attribute name="a5" type="CommandActionBasic" use="optional"/>
</xs:complexType>
```

a0: The identifier of the term store partition (1).

a59: The LCID of the language.

a58: Specifies whether the language is the default language for the term store partition (1).

a5: The type of write operation, which MUST be a value from the **CommandActionBasic** enumeration (section [2.2.5.3](#)). This attribute MUST be present when the parent element is a **WriteRoot** (section [3.1.4.40.3.1](#)) during a **Write** operation (section [3.1.4.40.2.1](#)), otherwise it MUST NOT be present.

If the value is 2 (**Delete**), the **a58** attribute MUST be absent.

2.2.4.27 SerializedECMPermissionTableRow

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A permission setting.

```
<xs:complexType name="SerializedECMPermissionTableRow">
  <xs:attribute name="a2" type="xs:string" use="required"/>
  <xs:attribute name="a3" type="xs:string" use="optional"/>
  <xs:attribute name="a4" type="Rights" use="optional"/>
  <xs:attribute name="a1" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a0" type="ser:guid" use="optional"/>
  <xs:attribute name="a5" type="CommandActionBasic" use="optional"/>
</xs:complexType>
```

a2: The **login name** of the user. This MUST be less than 255 characters in length.

a3: The display name of the user. This MUST be less than 255 characters in length.

a4: Permissions bitmask for the user.

a1: The internal identifier (1) of a term set group. If this is during a **Write** operation (section [3.1.4.40.2.1](#)) and the parent is a **WriteRoot** (section [3.1.4.40.3.1](#)), the value of **a1** MUST be zero. If the parent is **SerializedECMGroupTableRow** (section [2.2.4.24](#)), the value of **a1** MUST be the same as the **a6** value of the parent.

a0: The identifier of the term store partition (1) to which the term set group belongs.

a5: The type of write operation, which MUST be a value from the **CommandActionBasic** enumeration (section [2.2.5.3](#)). This attribute MUST be present when the parent element is a **WriteRoot** or a **SerializedECMGroupTableRow** during a **Write** operation, otherwise it MUST NOT be present.

If the value is 2 (**Delete**), the **a3** and **a4** attributes MUST be absent.

If **a5** is absent, the following attributes MUST be present: **a1**, **a2**, **a4**, and the **a0** attribute MUST be absent.

2.2.4.28 SerializedECMRootTermTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A root term.

```
<xs:complexType name="SerializedECMRootTermTableRow">
  <xs:attribute name="a24" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a34" type="InternalIdentifier" use="required"/>
</xs:complexType>
```

a24: The internal identifier (1) of a term set.

a34: The internal identifier (1) of a root term for the term set.

2.2.4.29 SerializedECMServiceSettingsTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Settings for a term store partition (1).

```
<xs:complexType name="SerializedECMServiceSettingsTableRow">
  <xs:attribute name="a62" type="xs:string" use="required"/>
</xs:complexType>
```

a62: Settings for the term store partition (1), which is an XML encoded string that MUST conform to the schema of the **ServiceSettingsSettingsXmlDoc** complex type (section [2.2.4.41](#)).

2.2.4.30 SerializedECMTermDescriptionTableRowBase

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A description of a term. This element specifies the base attributes shared by both **SerializedECMTermDescriptionTableRowForRead** (section [2.2.4.31](#)) and **SerializedECMTermDescriptionTableRowForWrite** (section [3.1.4.40.3.5](#)).

```
<xs:complexType name="SerializedECMTermDescriptionTableRowBase">
  <xs:attribute name="a33" type="LCID" use="required"/>
  <xs:attribute name="a11" type="xs:string" use="required"/>
</xs:complexType>
```

a33: The LCID of the language for which the description applies.

a11: The description of a term. This MUST be less than 1000 characters in length.

2.2.4.31 SerializedECMTermDescriptionTableRowForRead

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A description of a term.

```
<xs:complexType name="SerializedECMTermDescriptionTableRowForRead">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermDescriptionTableRowBase">
      <xs:attribute name="a34" type="InternalIdentifier" use="required"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

a34: The internal identifier (1) of the term.

2.2.4.32 SerializedECMTermLabelTableRowBase

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A term label for a term. This element specifies the base attributes shared by both **SerializedECMTermLabelTableRowForRead** (section [2.2.4.33](#)) and **SerializedECMTermLabelTableRowForWrite** (section [3.1.4.40.3.4](#)).

```
<xs:complexType name="SerializedECMTermLabelTableRowBase">
  <xs:attribute name="a33" type="LCID" use="required"/>
  <xs:attribute name="a32" type="xs:string" use="required"/>
  <xs:attribute name="a31" type="xs:boolean" use="optional"/>
</xs:complexType>
```

a33: The LCID of the language for which the term label applies.

a32: The text of the term label. This MUST be less than 255 characters in length. This MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

a31: Whether this term label is the default term label for the language. If the element is of type **SerializedECMTermLabelTableRowForRead** (section [2.2.4.33](#)), attribute **a31** MUST be present.

2.2.4.33 SerializedECMTermLabelTableRowForRead

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A term label for a term.

```
<xs:complexType name="SerializedECMTermLabelTableRowForRead">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermLabelTableRowBase">
      <xs:attribute name="a34" type="InternalIdentifier" use="required"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

a34: The internal identifier (1) of the term.

2.2.4.34 SerializedECMTermPropertyTableRowBase

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A property of a term. This element specifies the base attributes shared by both **SerializedECMTermPropertyTableRowForRead** (section [2.2.4.35](#)) and **SerializedECMTermPropertyTableRowForWrite** (section [3.1.4.40.3.6](#)).

```
<xs:complexType name="SerializedECMTermPropertyTableRowBase">
  <xs:attribute name="a37" type="xs:string" use="required"/>
  <xs:attribute name="a38" type="xs:string" use="optional"/>
</xs:complexType>
```

a37: The name of the property. This MUST be less than 255 characters in length. This MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

a38: The value of the property. This MUST be less than 255 characters in length. This MUST NOT contain tab or line break. If the element is of type **SerializedECMTermPropertyTableRowForRead** (section [2.2.4.35](#)), attribute **a38** MUST be present.

2.2.4.35 SerializedECMTermPropertyTableRowForRead

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A property of a term.

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

```

<xs:extension base="SerializedECMTermPropertyTableRowBase">
  <xs:attribute name="a34" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a24" type="InternalIdentifier" use="required"/>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

a34: The internal identifier (1) of the term.

a24: The internal identifier (1) of a term set of which the term is a member.

2.2.4.36 SerializedECMTermSetMembershipTableRowBase

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Information about a term set of which a term is a member. This element specifies the base attributes shared by both **SerializedECMTermSetMembershipTableRowForRead** (section [2.2.4.37](#)) and **SerializedECMTermSetMembershipTableRowForWrite** (section [3.1.4.40.3.7](#)).

```

<xs:complexType name="SerializedECMTermSetMembershipTableRowBase">
  <xs:attribute name="a24" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a25" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a17" type="xs:boolean" use="optional"/>
  <xs:attribute name="a26" type="xs:boolean" use="optional"/>
  <xs:attribute name="a67" type="xs:string" use="optional"/>
  <xs:attribute name="a74" type="InternalIdentifier" use="optional"/>
</xs:complexType>

```

a24: The internal identifier (1) of the term set.

a25: The internal identifier (1) of the parent term. If the term is a root term, this MUST be zero.

a17: Whether a term set is visible to users that are not administrators.

a26: Whether the term is a source term.

a67: A list of identifiers for terms separated by a colon (:), which specify a fixed order in which the terms that are children appear.

a74: The internal identifier (1) of the source term set that this term is pinned to. If the term is not pinned to any term set, this MUST be NULL. [<5>](#)

2.2.4.37 SerializedECMTermSetMembershipTableRowForRead

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Information about a term set of which a term is a member.

```

<xs:complexType name="SerializedECMTermSetMembershipTableRowForRead">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermSetMembershipTableRowBase">
      <xs:attribute name="a34" type="InternalIdentifier" use="required"/>
      <xs:attribute name="a39" type="xs:string" use="required"/>
      <xs:attribute name="a40" type="xs:string" use="optional"/>
      <xs:attribute name="a71" type="xs:string" use="optional"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```



```

    <xs:attribute name="a43" type="ser:guid" use="optional"/>
    <xs:attribute name="a42" type="xs:string" use="optional"/>
    <xs:attribute name="a41" type="ser:guid" use="optional"/>
    <xs:attribute name="a15" type="TermSetType" use="optional"/>
  </xs:extension>
</xs:complexContent>
</xs:complexType>

```

a34: The internal identifier (1) of the term.

a39: The hierarchical path of the term in identifiers. This value is composed of values separated by a backslash (\). Each value is a level of the hierarchy and consists of an internal identifier (1) of a term. The first value is for the root term in the hierarchy, and the last value is for the term. This MUST be less than 884 characters in length.

a40: The hierarchical path of the term in labels. This value is composed of values separated by a semicolon (;). Each value is a level of the hierarchy and is composed of a term label of a term. The default label of each term is used in the default language of the term store. The first value is for the root term in the hierarchy, and the last value is for the term. If the term is a root term, then this value MUST be empty.

a71: The full path of the term. This value is composed of identifiers separated by the vertical bar (|). The first identifier is the identifier of the term set group, followed by the identifier of the term set, followed by the identifiers of each term in the hierarchy, that is, first value is for the root term, and the last value is for the term.

a43: The identifier of the parent term. If the term is a root term, this MUST be NULL.

a42: The list of locale-specific term set names of the term set for the term. This value is composed of inner values separated by a semicolon (;). Each inner value defines a locale-specific term set name and is composed of an LCID followed by a vertical bar (|), followed by a term set name. The term set name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

The term set name MUST be less than 255 characters.

a41: The identifier of the term set for the term.

a15: The type of term set for the term.

2.2.4.38 SerializedECMTermSetTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A term set.

```
<xs:complexType name="SerializedECMTermSetTableRow">
  <xs:attribute name="a6" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a0" type="ser:guid" use="required"/>
  <xs:attribute name="a7" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a8" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a9" type="ser:guid" use="optional"/>
  <xs:attribute name="a14" type="xs:string" use="optional"/>
  <xs:attribute name="a12" type="xs:string" use="optional"/>
  <xs:attribute name="a11" type="xs:string" use="optional"/>
  <xs:attribute name="a15" type="TermSetType" use="optional"/>
  <xs:attribute name="a16" type="xs:boolean" use="optional"/>
  <xs:attribute name="a17" type="xs:boolean" use="optional"/>
  <xs:attribute name="a18" type="xs:string" use="optional"/>
  <xs:attribute name="a68" type="xs:string" use="optional"/>
  <xs:attribute name="a1" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a67" type="xs:string" use="optional"/>
  <xs:attribute name="a10" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a5" type="CommandAction" use="optional"/>
</xs:complexType>
```

a6: The internal identifier (1) of the term set.

a0: The identifier of the term store partition (1) to which the term set belongs.

a7: The UTC time when the term set was created.

a8: The UTC time of the last modification to the term set object.

a9: The identifier of the term set.

a14: The name of the owner of the term set. This MUST be less than 255 characters in length.

a12: The list of locale-specific term set names. This value is composed of inner values separated by a semicolon (;). Each inner value defines a locale-specific term set name and is composed of an LCID followed by a vertical bar (|), followed by a term set name. The term set name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

The term set name MUST be less than 255 characters in length.

a11: The description of the term set. This MUST be less than 1000 characters in length.

a15: The type of the term set.

a16: Whether a term set allows users without explicit permissions to add terms to the term set.

a17: Whether a term set is visible to users that are not administrators.

a18: A list of users that have an interest in the term set. Each user is separated by a semicolon (;). This MUST be less than 1000 characters in length.

a68: The account to be contacted if a user wants to request the addition of a term to the term set if the **a16** is "false". This MUST be less than 320 characters in length.

a1: The internal identifier (1) of the term set group to which this term set belongs.

a67: A list of identifiers for terms separated by a colon (:), which specify a fixed order in which the terms that are children appear.

a10: The internal identifier (1) of the term set from which the term set was copied. If the value of **a5** is 4 (**Copy**), **a10** MUST be present; otherwise, **a10** MUST be absent.

a5: The type of write operation, which MUST be a value from the **CommandAction** enumeration (section [2.2.5.2](#)). This attribute MUST be present when the parent element is a **WriteRoot** (section [3.1.4.40.3.1](#)); otherwise, it MUST NOT be present. The value MUST NOT be 5 (**Merge**).

If the value is 2 (**Delete**), the **a7**, **a14**, **a12**, **a11**, **a15**, **a16**, **a17**, **a18**, **a68**, **a1** and **a10** attributes MUST be absent.

If **a5** is absent, the following attributes MUST be present: **a0**, **a1**, **a6**, **a7**, **a8**, **a9**, **a11**, **a12**, **a14**, **a15**, **a16**, **a17**, **a18**, **a68**, and the **a10** attribute MUST be absent.

2.2.4.39 SerializedECMTermTableRowForRead

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A term returned with the results in the containing element. The following attributes MUST be present: **a0**, **a6**, **a7**, **a8**, **a9**, **a14**, **a19**, **a20**, **a21**, **a22**.

```
<xs:complexType name="SerializedECMTermTableRowForRead">
  <xs:attribute name="a6" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a0" type="ser:guid" use="required"/>
  <xs:attribute name="a7" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a8" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a9" type="ser:guid" use="optional"/>
  <xs:attribute name="a14" type="xs:string" use="optional"/>
  <xs:attribute name="a19" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a20" type="xs:int" use="optional"/>
  <xs:attribute name="a21" type="xs:boolean" use="optional"/>
  <xs:attribute name="a22" type="xs:boolean" use="optional"/>
</xs:complexType>
```

a6: The internal identifier (1) of the term.

a0: The identifier of the term store partition (1) to which the term belongs.

a7: The UTC time when the term was created.

a8: The UTC time of the last modification of the term object.

a9: The identifier of the term.

a14: The name of the owner of the term. This MUST be less than 255 characters in length.

a19: Reserved. The value MUST be ignored

a20: Reserved. The value MUST be zero.

a21: Whether the term has been deprecated.

a22: Whether the term has been deleted.

2.2.4.40 ServiceSettings

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

The settings for a term store partition (1).

```
<xs:complexType name="ServiceSettings">
  <xs:attribute name="HubUri" type="xs:string" use="required"/>
  <xs:attribute name="RptOn" type="xs:boolean" use="required"/>
  <xs:attribute name="TSId" type="ser:guid" use="required"/>
  <xs:attribute name="CacheSec" type="xs:int" use="optional"/>
  <xs:attribute name="MaxChan" type="xs:int" use="optional"/>
</xs:complexType>
```

HubUri: URL of the content type publication hub. MUST be empty if none exists.

RptOn: Whether errors during content type publication are reported to the administrator.

TSId: The identifier of the term store.

CacheSec: The interval in seconds that a protocol client is expected to wait before asking the protocol server for changes. If specified, this value MUST be 1 or greater.

MaxChan: The maximum number of connections that a protocol client is expected to have open to the protocol server. If specified, this value MUST be 0 or greater.

2.2.4.41 ServiceSettingsSettingsXmlDoc

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

The settings for a term store partition (1).

```
<xs:complexType name="ServiceSettingsSettingsXmlDoc">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="MetadataSettings" type="ServiceSettings"/>
  </xs:sequence>
</xs:complexType>
```

MetadataSettings: Settings.

2.2.4.42 WorkflowData

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

This type specifies one or more workflow associations for a content type.

```

<xs:complexType name="WorkflowData">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="WorkflowAssociations">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="unbounded" name="WorkflowAssociation">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="1" maxOccurs="1" name="object">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:choice minOccurs="19" maxOccurs="19">
                        <xs:element minOccurs="16" maxOccurs="16" name="sFld">
                          <xs:complexType mixed="true">
                            <xs:sequence minOccurs="0" maxOccurs="1">
                              <xs:element minOccurs="23" maxOccurs="23" name="sFld">
                                <xs:complexType>
                                  <xs:simpleContent>
                                    <xs:extension base="xs:string">
                                      <xs:attribute name="type" type="xs:string"
use="required"/>
                                    </xs:extension>
                                  </xs:simpleContent>
                                </xs:complexType>
                              </xs:element>
                            </xs:sequence>
                          <xs:attribute name="type" type="xs:string" use="required"/>
                          <xs:attribute name="name" type="xs:string" use="required"/>
                        </xs:complexType>
                      </xs:element>
                    <xs:element minOccurs="3" maxOccurs="3" name="fld">
                      <xs:complexType>
                        <xs:simpleContent>
                          <xs:extension base="xs:string">
                            <xs:attribute name="type" type="xs:string" use="required"/>
                            <xs:attribute name="name" type="xs:string" use="required"/>
                          </xs:extension>
                        </xs:simpleContent>
                      </xs:complexType>
                    </xs:element>
                  </xs:choice>
                </xs:sequence>
              <xs:attribute name="type" type="xs:string" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

WorkflowAssociations: A list of workflow associations for a content type.

WorkflowAssociations.WorkflowAssociation: A workflow association.

WorkflowAssociations.WorkflowAssociation.object: A workflow association.

WorkflowAssociations.WorkflowAssociation.object.sFld: A field value of the workflow association. There MUST be the following:

- An **sFld** with type "Boolean[]", name "m_updatedProp", and no value.
- An **sFld** with type "String", name "m_strName", and the value of the workflow association name.
- An **sFld** with type "String", name "m_strDescription", and the value of the workflow association description.
- An **sFld** with type "Int32", name "m_autoCleanupDays", and the value of the workflow association auto clean up days.
- An **sFld** with type "Guid", name "m_id", and the value of the workflow association identifier.
- An **sFld** with type "Guid", name "m_baseId", and the value of the **workflow template** identifier.
- An **sFld** with type "Guid", name "m_parentId", and the value of the identifier of the parent association in the parent content type of this association's content type.
- An **sFld** with type "String", name "m_strContentTypeId", and the value of the content type identifier.
- An **sFld** with type "Guid", name "m_taskListId", and the value of the task list identifier.
- An **sFld** with type "Guid", name "m_historyListId", and the value of the history list identifier.
- An **sFld** with type "String", name "m_strTaskListTitle", and the value of the task list title.
- An **sFld** with type "String", name "strHistoryListTitle", and the value of the history list title.
- An **sFld** with type "DateTime", name "m_created", and the value of the created time.
- An **sFld** with type "DateTime", name "m_modified", and the value of the modified time.
- An **sFld** with type "String", name "m_associationData", and the value of the association data.
- An **sFld** with type "Int32", name "m_author", and the value of the author identifier.

"m_updatedProp" MUST NOT contain a value, and MUST contain 23 **sFld** sub elements. Other **sFld** elements MUST NOT contain any subelements.

WorkflowAssociations.WorkflowAssociation.object.sFld.sFld: A field value of the "m_updatedProp" element.

- The type attribute MUST be "Boolean".
- The value of the element MUST be "true" or "false".

There MUST be 23 of this type for "m_updatedProp". Each one specifies whether a specific attribute of the workflow association has been changed.

- The first, second, and third MUST have a value of "false".
- The fourth is for the name.
- The fifth is for the description.

- The sixth is for the status field name.
- The seventh and eighth MUST have a value of "false".
- The ninth is for the list identifier.
- The tenth is for the content type identifier.
- The eleventh MUST have a value of "false".
- The twelfth is for the task list identifier.
- The thirteenth is for the history list identifier.
- The fourteenth is for the task list title.
- The fifteenth is for the history list title.
- The sixteenth, seventeenth, and eighteenth MUST have a value of "false".
- The nineteenth is for the **PermissionsManual** (the WSS Rights Mask, as specified in [\[MS-WSSFO2\]](#) section 2.2.2.14, required to manually start any **workflows (2)** created from the workflow association) of the workflow association.
- The twentieth MUST have a value of "false".
- The twenty-first is for **AutoCleanupDays** (the number of days after which finished workflows (2) created from the workflow association will be automatically deleted) of the workflow association.
- The twenty-second is for **AssociationData** (customized settings for this workflow association) of the workflow association.
- The twenty-third is for configurations of the workflow association.

WorkflowAssociations.WorkflowAssociation.object.sFld.sFld.type: Reserved. MUST be "Boolean".

WorkflowAssociations.WorkflowAssociation.object.sFld.type: The type of an attribute.

WorkflowAssociations.WorkflowAssociation.object.sFld.name: The name of an attribute.

WorkflowAssociations.WorkflowAssociation.object.fld: An attribute of the workflow association. There MUST be:

- An **fld** with type "Microsoft.SharePoint.SPBasePermissions, Microsoft.SharePoint, Version=14.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c", name "m_bpermManual", and the value of the workflow association's **PermissionsManual** property.
- An **fld** with type "null", name "m_strStatusFieldName", and the value of the status field name for the workflow association.
- An **fld** with type "Microsoft.SharePoint.Workflow.SPWorkflowAssociationCollection+Configuration, Microsoft.SharePoint, Version=14.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c", name "m_configuration", and the value of the workflow association's configurations.

WorkflowAssociations.WorkflowAssociation.object.fld.type: The type of the attribute.

WorkflowAssociations.WorkflowAssociation.object.fld.name: The name of the attribute.

WorkflowAssociations.WorkflowAssociation.object.type: The assembly qualified name of the class of the workflow association code.

2.2.4.43 ChangeDataForUpdateTerm

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Change data for a term is being updated. [<6>](#)

```
<xs:complexType name="ChangeDataForUpdateTerm">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="E" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Data: Root element.

Data.E: Details of the update. It is composed of a sequence of strings separated by pipe (|). The string MUST represent one of the following: the languages in which term labels have been changed (the string starts with "L", followed by LCIDs for those languages, separated by semicolon (,)); the languages in which term descriptions have been changed (the string starts with "D", followed by LCIDs for those languages, separated by semicolon (,)); the names of custom properties that are shared among reused instances of this term and have been changed for this term (the string starts with "P", followed by custom property names, separated by semicolon (,)); the names of custom properties that are specific the term's term set and have been changed for this term (the string starts with "LP", followed by custom property names, separated by semicolon (,)).

2.2.4.44 SerializedECMChangeLogTableTimeOnlyRow

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A timestamp defined as follows.

```
<xs:complexType name="SerializedECMChangeLogTableTimeOnlyRow">
  <xs:attribute name="a54" type="xs:dateTime" use="optional"/>
</xs:complexType>
```

a54: The UTC time when the change occurred.

2.2.5 Simple Types

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

Simple Type	Description
ChangeDataForAddOrDeleteLanguage	Change data for adding or deleting a language to or from a term

Simple Type	Description
	store.
CommandAction	The type of write operation to perform for a Write transaction (section 3.1.4.40).
CommandActionBasic	The type of write operation to perform for a Write transaction (section 3.1.4.40).
ContentTypeId	A content type identifier .
GroupType	The type of term set group.
guid	A GUID.
InternalIdentifier	An internal identifier (1) for a term store object.
LCID	An LCID.
Rights	Permissions bitmask for a user. The value MUST be a combination of one or more of the values defined in [MS-EMMSTORE] section 2.2.5.15.
StreamBody	A base64 encoded stream of data.
StringMatchOption	The type of search to perform.
TermSetType	The type of term set.
UserName	The name of a user making changes to the term store.

2.2.5.1 ChangeDataForAddOrDeleteLanguage

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Change data for adding or deleting a language to or from a term store.

```
<xs:simpleType name="ChangeDataForAddOrDeleteLanguage">
  <xs:restriction base="LCID"/>
</xs:simpleType>
```

2.2.5.2 CommandAction

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

The type of write operation to perform for a **Write** transaction (section [3.1.4.40](#)).

```
<xs:simpleType name="CommandAction">
  <xs:restriction base="xs:int">
    <xs:enumeration value="0"/>
    <xs:enumeration value="1"/>
    <xs:enumeration value="2"/>
    <xs:enumeration value="3"/>
    <xs:enumeration value="4"/>
    <xs:enumeration value="5"/>
  </xs:restriction>
</xs:simpleType>
```

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

The following table specifies the allowable values for **CommandAction**.

Value	Meaning
0	An add operation.
1	An edit operation.
2	A delete operation.
3	A move operation.
4	A copy operation.
5	A merge operation.

2.2.5.3 CommandActionBasic

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

The type of write operation to perform for a **Write** transaction (section [3.1.4.40](#)).

```
<xs:simpleType name="CommandActionBasic">  
  <xs:restriction base="CommandAction">  
    <xs:enumeration value="0"/>  
    <xs:enumeration value="1"/>  
    <xs:enumeration value="2"/>  
  </xs:restriction>  
</xs:simpleType>
```

The following table specifies the allowable values for **CommandActionBasic**.

Value	Meaning
0	An add operation.
1	An edit operation.
2	A delete operation.

2.2.5.4 ContentTypeId

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A content type identifier.

```
<xs:simpleType name="ContentTypeId">  
  <xs:restriction base="xs:string">  
    <xs:pattern value="0x([0-9A-Fa-f][1-9A-Fa-f]|[1-9A-Fa-f][0-9A-Fa-f]|00[0-9A-Fa-f]{32})*/>  
    <xs:minLength value="2"/>  
    <xs:maxLength value="1026"/>  
  </xs:restriction>
```

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

2.2.5.5 GroupType

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

The type of term set group.

```
<xs:simpleType name="GroupType">  
  <xs:restriction base="xs:int">  
    <xs:enumeration value="0"/>  
    <xs:enumeration value="1"/>  
    <xs:enumeration value="2"/>  
  </xs:restriction>  
</xs:simpleType>
```

The following table specifies the allowable values for **GroupType**.

Value	Meaning
0	A regular group.
1	A system group.
2	A site collection group.

2.2.5.6 guid

Namespace: http://schemas.microsoft.com/2003/10/Serialization/

A GUID.

```
<xs:simpleType name="guid">  
  <xs:restriction base="xs:string">  
    <xs:pattern value="\{[da-fA-F]{8}-[da-fA-F]{4}-[da-fA-F]{4}-[da-fA-F]{4}-[da-fA-F]{12}\}"/>  
  </xs:restriction>  
</xs:simpleType>
```

2.2.5.7 InternalIdentifier

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

An internal identifier (1) for a term store object.

```
<xs:simpleType name="InternalIdentifier">  
  <xs:restriction base="xs:int"/>  
</xs:simpleType>
```

2.2.5.8 LCID

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

An LCID.

```
<xs:simpleType name="LCID">  
  <xs:restriction base="xs:int"/>  
</xs:simpleType>
```

2.2.5.9 Rights

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Permissions bitmask for a user. The value MUST be a combination of one or more of the values defined in [\[MS-EMMSTORE\]](#) section 2.2.5.15.

```
<xs:simpleType name="Rights">  
  <xs:restriction base="xs:unsignedLong">  
    <xs:minInclusive value="0"/>  
    <xs:maxInclusive value="273"/>  
  </xs:restriction>  
</xs:simpleType>
```

2.2.5.10 StreamBody

Namespace: http://schemas.microsoft.com/Message

A base64 encoded stream of data.

```
<xs:simpleType name="StreamBody">  
  <xs:restriction base="xs:base64Binary"/>  
</xs:simpleType>
```

2.2.5.11 StringMatchOption

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy

The type of search to perform.

```
<xs:simpleType name="StringMatchOption">  
  <xs:restriction base="xs:string">  
    <xs:enumeration value="StartsWith"/>  
    <xs:enumeration value="ExactMatch"/>  
  </xs:restriction>  
</xs:simpleType>
```

The following table specifies the allowable values for **StringMatchOption**.

Value	Meaning
StartsWith	Match a value if it begins with the search string.
ExactMatch	Match a value if it matches the input search string.

2.2.5.12 TermSetType

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

The type of term set.

```
<xs:simpleType name="TermSetType">
  <xs:restriction base="xs:int">
    <xs:enumeration value="0"/>
    <xs:enumeration value="1"/>
    <xs:enumeration value="2"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for **TermSetType**.

Value	Meaning
0	A regular term set.
1	A term set of keywords.
2	A term set of orphaned terms .

2.2.5.13 UserName

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

The name of a user making changes to the term store.

```
<xs:simpleType name="UserName">
  <xs:restriction base="xs:string">
    <xs:length value="255"/>
  </xs:restriction>
</xs:simpleType>
```

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

In the following sections, the schema definition might be less restrictive than the processing rules imposed by the protocol. The WSDL in this specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL specifies additional restrictions that reflect Microsoft product behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present** but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **present**, and **not null**.

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.

This protocol allows protocol servers to notify protocol clients of application-level faults using SOAP faults. Except where specified, these SOAP faults are not significant for interoperability, and protocol clients can interpret them in an implementation-specific manner.

3.1 Server Details

3.1.1 Abstract Data Model

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

The protocol server (or "**service application**") maintains multiple term stores.

Each term store has settings that control whether it is partitioned or unpartitioned. That is, the data maintained by the protocol server can either be stored for all callers or partitioned by a **partition identifier** (unpartitioned term stores are equivalent to a single partition (1)).

One or more site collections will map to a single term store partition (1) if the site collections are all subscribed to the same **site subscription** and their **Web applications (1)** are associated with the term store. Additionally, the Web application (1) of a site collection can be associated with multiple term stores, in which case a site collection can be mapped to zero or more term store partitions (1).

Each term store partition (1) maintains settings for:

- Language(s), including a default language.
- Permissions.
- The location of the content type publication hub, that is, the **URL** of a site collection that contains content types that are shared for usage.
- Content type packages that contain the definitions of those content types.
- A log for issues encountered during content type publication, and a setting controlling whether errors are logged or not.

Each term store partition (1) maintains term sets and terms. Term sets contain a hierarchy of terms (potentially re-using individual terms in multiple term sets, for example, "office" being reused as a

product name and a location); that is, the term set has root terms (terms without parents), and each term has zero or more terms that are children.

Each term set and each term has values for one or more of the languages. For example, a term has a term label for each language.

For terms that appear in multiple term sets, only one instance will be the source term, that is, the term that is used for permission checking when editing.

Each term store partition (1) maintains groups of related term sets, such as "Cities in Washington", "Cities in Arizona", and so on. Each term set group has permission settings controlling access.

Each term store partition (1) has a system term set group that contains two system term sets, one for keyword metadata and one for orphaned terms. Orphaned terms are terms whose previous source term was deleted, and whose new source term has not yet been designated.

Each term store partition (1) has a log of changes made to term store objects.

Each term store partition (1) maintains a record of which terms are used and the site collections in which they have been used.

3.1.2 Timers

None.

3.1.3 Initialization

Before any other operation can be called on a term set, the **GetSessionData** operation MUST be called.

3.1.4 Message Processing Events and Sequencing Rules

This specification includes the following **WSDL operations**:

WSDL Operation	Description
ClearApplicationLog	This operation is called to remove log entries from the content type publication log for a term store partition (1).
ClearPartitionData	This operation is called to delete all data in a term store partition (1).
DeleteServiceSettings	This operation is called to reset the settings for a term store partition (1).
DownloadPackage	This operation is called to download the specified content type package from the specified term store partition (1).
ExportPartitionData	This operation is called to export the main data objects (terms, term sets, term set groups, and so on) from a term store partition (1). The change log is not exported.
GetApplicationLog	This operation is called to retrieve the content type publication log.
GetChangedTermSets	Returns all term sets that have changed since a specific time. <7>
GetChanges	This operation is called to retrieve change log entries in the specified term store partition (1) or all term store partitions occurring after a specified time.

WSDL Operation	Description
GetChangesForFullListSync	This operation is called to retrieve change log entries associated with term store import or restore operation occurring after a specified time.
GetChangesForListSync	This operation is called to retrieve change log entries associated with terms used in a specified Web application (1) occurring after a specified time.
GetChangesOverInterval	This operation is called to retrieve change log entries in the specified term store partition (1) occurring the span of the time specified before now.
GetChangeTime	This operation is called to retrieve the timestamp of the last time an object within a term store partition (1), term set group or term set has changed.
GetDescendentTerms	This operation is called to retrieve the descendant terms of a specified term.
GetGroupByGuid	The GetGroupByGuid operation retrieves the properties of a term set group from the specified term store partition (1).
GetGroups	This operation is called to retrieve the properties of the specified term set groups from the specified term store partition (1).
GetIsServiceApplicationPartitioned	This operation is called to find out if the service application contains partitioned term stores.
GetServiceApplicationName	This operation is called to retrieve the name of the service application.
GetServiceApplicationSettings	This operation is called to retrieve the settings of the service application. Those settings are applied to all term store partitions on this service application.
GetServiceSettings	This operation is called to retrieve the settings of a term store partition (1).
GetSessionData	This operation is called to retrieve session (2) related data for the specified term store partition (1).
GetSitesContainingTerms	This operation is reserved and MUST NOT be called.
GetSortedChildTermIds	This operation is called to retrieve the terms that are children of a term.
GetTerm	This operation is called to retrieve details about a term.
GetTerms	This operation is called to get details about multiple terms.
GetTermSets	This operation is called to get details about multiple of term sets.
GetTermSetsByLabel	This operation is called to get details about term sets that contain terms with the specified term labels.
GetTermSetsInternal	This operation is called to get details about multiple of term sets.
GetTermSetWithAllTerms	This operation is called to retrieve the terms in a term set.

WSDL Operation	Description
GetTermsInternal	This operation is called to retrieve the specified terms.
GetUpdateInformation	This operation is called to get information about content type package changes that happened after the specified time.
ImportPartitionData	This operation is called to import data into a term store partition (1).
InitiateCacheFlush	This operation is called to indicate that the protocol client needs to flush any caches that it is maintaining.
PublishPackage	This operation is called to publish a content type package to the specified term store partition (1).
RemoveUsedTermSet	This operation is called to remove term usage information, as specified in [MS-EMMSTORE] section 2.2.5.8, for terms belonging to the specified term set.
SearchAllTermSetsByProperty	This operation is called to find term set properties that have properties that match the search criteria across all the tenants. <8>
SearchTermByLabel	This operation is called to find terms that have term labels that match a search criteria.
SearchTermByProperty	This operation is called to find terms that have properties that match a search criteria.
SearchTermSetByName	This operation is called to find term sets by name.
SearchTermSetsByProperty	This operation is called to find term sets that have properties that match the search criteria. <9>
SetServiceSettings	This operation is called to set a setting for a term store partition (1).
UnpublishPackage	This operation is called to unpublish a content type package from the specified term store partition (1).
UploadStatus	This operation is called to add an entry to the content type publication log.
Write	This operation is called to perform write operations against a term store partition (1).
WriteClearUsedTerms	This operation is called to remove the term usage information, as specified in [MS-EMMSTORE] section 2.2.5.8, for the specified site collection.
WriteUsedTerm	Adds term usage information, as specified in section [MS-EMMSTORE] section 2.2.5.8, indicating that the specified term has been used in the specified site collection.
WriteUsedTerms	Adds term usage information, as specified in [MS-EMMSTORE] section 2.2.5.8, indicating that the specified terms have been used in the specified site collection.

3.1.4.1 ClearApplicationLog

This operation is called to remove log entries from the content type publication log for a term store partition (1).

```

<wsdl:operation name="ClearApplicationLog">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearApplicationLog"
    message="tns:IMetadataWebServiceApplication_ClearApplicationLog_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearApplicationLogResponse"
    message="tns:IMetadataWebServiceApplication_ClearApplicationLog_OutputMessage"/>
</wsdl:operation>

```

The protocol server removes log entries from the content type publication log entries for the specified term store partition (1) that occurred on or before the specified time.

3.1.4.1.1 Messages

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

3.1.4.1.1.1 IMetadataWebServiceApplication_ClearApplicationLog_InputMessage

The request WSDL message for the **ClearApplicationLog** WSDL operation.

The **SOAP action** value is:

```

http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearApplicationLog

```

The **SOAP body** contains the **ClearApplicationLog** element.

3.1.4.1.1.2 IMetadataWebServiceApplication_ClearApplicationLog_OutputMessage

The response WSDL message for the **ClearApplicationLog** WSDL operation.

The SOAP body contains the **ClearApplicationLogResponse** element.

3.1.4.1.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.1.2.1 ClearApplicationLog

The input data for the **ClearApplicationLog** WSDL operation.

```

<xs:element name="ClearApplicationLog">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q70="http://schemas.microsoft.com/2003/10/Serialization/" type="q70:guid"/>
      <xs:element minOccurs="1" name="endTime" type="xs:dateTime"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

endTime: A UTC time. Any log entries for the specified term store partition (1) that occurred on or before this time get removed from the content type publication log.

3.1.4.1.2.2 ClearApplicationLogResponse

The result data for the **ClearApplicationLog** WSDL operation.

```
<xs:element name="ClearApplicationLogResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.1.3 Complex Types

None.

3.1.4.1.4 Simple Types

None.

3.1.4.1.5 Attributes

None.

3.1.4.1.6 Groups

None.

3.1.4.1.7 Attribute Groups

None.

3.1.4.2 ClearPartitionData

This operation is called to delete all data in a term store partition (1).

```
<wsdl:operation name="ClearPartitionData">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearPartitionData"
    message="tns:IMetadataWebServiceApplication_ClearPartitionData_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearPartitionDataResponse"
    message="tns:IMetadataWebServiceApplication_ClearPartitionData_OutputMessage"/>
</wsdl:operation>
```

This operation is called to delete the specified term store partition (1) and all of its data.

3.1.4.2.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.2.1.1 IMetadataWebServiceApplication_ClearPartitionData_InputMessage

The request WSDL message for the **ClearPartitionData** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearPartitionData
```

The SOAP body contains the **ClearPartitionData** element.

3.1.4.2.1.2 IMetadataWebServiceApplication_ClearPartitionData_OutputMessage

The response WSDL message for the **ClearPartitionData** WSDL operation.

The SOAP body contains the **ClearPartitionDataResponse** element.

3.1.4.2.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.2.2.1 ClearPartitionData

The input data for the **ClearPartitionData** WSDL operation.

```
<xs:element name="ClearPartitionData">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q75="http://schemas.microsoft.com/2003/10/Serialization/" type="q75:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

3.1.4.2.2.2 ClearPartitionDataResponse

The result data for the **ClearPartitionData** WSDL operation.

```
<xs:element name="ClearPartitionDataResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.2.3 Complex Types

None.

3.1.4.2.4 Simple Types

None.

3.1.4.2.5 Attributes

None.

3.1.4.2.6 Groups

None.

3.1.4.2.7 Attribute Groups

None.

3.1.4.3 DeleteServiceSettings

This operation is called to reset the settings for a term store partition (1).

```
<wsdl:operation name="DeleteServiceSettings">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DeleteServiceSettings"
    message="tns:IMetadataWebServiceApplication_DeleteServiceSettings_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DeleteServiceSettingsResponse"
    message="tns:IMetadataWebServiceApplication_DeleteServiceSettings_OutputMessage"/>
</wsdl:operation>
```

The protocol server will clear the settings for the specified term store partition (1). The settings are defined in complex type **ServiceSettings** (section [2.2.4.40](#)).

3.1.4.3.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.3.1.1

IMetadataWebServiceApplication_DeleteServiceSettings_InputMessage

The request WSDL message for the **DeleteServiceSettings** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DeleteServiceSettings
```

The SOAP body contains the **DeleteServiceSettings** element.

3.1.4.3.1.2

IMetadataWebServiceApplication_DeleteServiceSettings_OutputMessage

The response WSDL message for the **DeleteServiceSettings** WSDL operation.

The SOAP body contains the **DeleteServiceSettingsResponse** element.

3.1.4.3.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.3.2.1 DeleteServiceSettings

The input data for the **DeleteServiceSettings** WSDL operation.

```
<xs:element name="DeleteServiceSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q58="http://schemas.microsoft.com/2003/10/Serialization/" type="q58:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

3.1.4.3.2.2 DeleteServiceSettingsResponse

The result data for the **DeleteServiceSettings** WSDL operation.

```
<xs:element name="DeleteServiceSettingsResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.3.3 Complex Types

None.

3.1.4.3.4 Simple Types

None.

3.1.4.3.5 Attributes

None.

3.1.4.3.6 Groups

None.

3.1.4.3.7 Attribute Groups

None.

3.1.4.4 DownloadPackage

This operation is called to download the specified content type package from the specified term store partition (1).

```
<wsdl:operation name="DownloadPackage">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DownloadPackage"
    message="tns:IMetadataWebServiceApplication_DownloadPackage_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DownloadPackageResponse"
    message="tns:IMetadataWebServiceApplication_DownloadPackage_OutputMessage"/>
</wsdl:operation>
```

If the specified package does not exist, an empty stream is returned. Otherwise, the **DownloadPackageResult** element contains the base64 encoded contents of the content type package.

3.1.4.4.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.4.1.1 IMetadataWebServiceApplication_DownloadPackage_InputMessage

The request WSDL message for the **DownloadPackage** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DownloadPackage
```

The SOAP body contains the **DownloadPackage** element.

3.1.4.4.1.2 IMetadataWebServiceApplication_DownloadPackage_OutputMessage

The response WSDL message for the **DownloadPackage** WSDL operation.

The SOAP body contains the **DownloadPackageResponse** element.

3.1.4.4.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.4.2.1 DownloadPackage

The input data for the **DownloadPackage** WSDL operation.

```
<xs:element name="DownloadPackage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q63="http://schemas.microsoft.com/2003/10/Serialization/" type="q63:guid"/>
      <xs:element minOccurs="1" name="packageId" nillable="false" type="ContentTypeId"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
<xs:element minOccurs="1" name="packageType"
xmlns:q64="http://schemas.microsoft.com/2003/10/Serialization/" type="q64:guid"/>
</xs:sequence>
</xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

packageId: The identifier of the content type.

packageType: Reserved. The value MUST be " B4AD3A44-D934-4c91-8D1F-463ACEADE443".

3.1.4.4.2 DownloadPackageResponse

The result data for the **DownloadPackage** WSDL operation.

```
<xs:element name="DownloadPackageResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="DownloadPackageResult"
xmlns:q65="http://schemas.microsoft.com/Message" type="q65:StreamBody"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DownloadPackageResult: The base64 encoded contents of the content type package.

3.1.4.4.3 Complex Types

None.

3.1.4.4.4 Simple Types

None.

3.1.4.4.5 Attributes

None.

3.1.4.4.6 Groups

None.

3.1.4.4.7 Attribute Groups

None.

3.1.4.5 ExportPartitionData

This operation is called to export the main data objects (terms, term sets, term set groups, and so on) from a term store partition (1). The change log is not exported.

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



```

    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ExportPartitionData"
message="tns:IMetadataWebServiceApplication_ExportPartitionData_InputMessage"/>
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ExportPartitionDataResponse"
message="tns:IMetadataWebServiceApplication_ExportPartitionData_OutputMessage"/>
</wsdl:operation>

```

If the user does not have implementation-specific rights to store the file at the specified file path, the protocol server MUST send a SOAP fault message containing a **System.Exception**. Otherwise, the protocol server exports data from the specified term store partition (1) and saves it in an implementation specific **cabinet (.cab) file** at the specified file path.

3.1.4.5.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.5.1.1 IMetadataWebServiceApplication_ExportPartitionData_InputMessage

The request WSDL message for the **ExportPartitionData** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ExportPartitionData

```

The SOAP body contains the **ExportPartitionData** element.

3.1.4.5.1.2 IMetadataWebServiceApplication_ExportPartitionData_OutputMessage

The response WSDL message for the **ExportPartitionData** WSDL operation.

The SOAP body contains the **ExportPartitionDataResponse** element.

3.1.4.5.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.5.2.1 ExportPartitionData

The input data for the **ExportPartitionData** WSDL operation.

```

<xs:element name="ExportPartitionData">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
xmlns:q73="http://schemas.microsoft.com/2003/10/Serialization/" type="q73:guid"/>
      <xs:element minOccurs="1" name="filePath" nillable="false" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

filePath: **UNC** path to the file where the term store partition (1) data is to be stored.

3.1.4.5.2.2 ExportPartitionDataResponse

The result data for the **ExportPartitionData** WSDL operation.

```
<xs:element name="ExportPartitionDataResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.5.3 Complex Types

None.

3.1.4.5.4 Simple Types

None.

3.1.4.5.5 Attributes

None.

3.1.4.5.6 Groups

None.

3.1.4.5.7 Attribute Groups

None.

3.1.4.6 GetApplicationLog

This operation is called to retrieve the content type publication log.

```
<wsdl:operation name="GetApplicationLog">
  <wsdl:input
  wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetApplicationLog"
  message="tns:IMetadataWebServiceApplication_GetApplicationLog_InputMessage"/>
  <wsdl:output
  wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetApplicationLogResponse"
  message="tns:IMetadataWebServiceApplication_GetApplicationLog_OutputMessage"/>
</wsdl:operation>
```

The protocol server returns the latest 1000 log (or all entries if there are fewer than 1000) entries from the content type publication log entries for the specified term store partition (1).

3.1.4.6.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.6.1.1 IMetadataWebServiceApplication_GetApplicationLog_InputMessage

The request WSDL message for the **GetApplicationLog** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetApplicationLog
```

The SOAP body contains the **GetApplicationLog** element.

3.1.4.6.1.2 IMetadataWebServiceApplication_GetApplicationLog_OutputMessage

The response WSDL message for the **GetApplicationLog** WSDL operation.

The SOAP body contains the **GetApplicationLogResponse** element.

3.1.4.6.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.6.2.1 GetApplicationLog

The input data for the **GetApplicationLog** WSDL operation.

```
<xs:element name="GetApplicationLog">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element minOccurs="1" name="rawPartitionId"  
        xmlns:q68="http://schemas.microsoft.com/2003/10/Serialization/" type="q68:guid"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

3.1.4.6.2.2 GetApplicationLogResponse

The result data for the **GetApplicationLog** WSDL operation.

```
<xs:element name="GetApplicationLogResponse">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element name="GetApplicationLogResult"  
        xmlns:q69="http://schemas.microsoft.com/Message" type="q69:StreamBody"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>
```

GetApplicationLogResult: The contents of the content type publication log, which MUST be a base64 encoded XML document that conforms to the schema of the **GetApplicationLogRoot** complex type (section [2.2.4.12](#)).

3.1.4.6.3 Complex Types

None.

3.1.4.6.4 Simple Types

None.

3.1.4.6.5 Attributes

None.

3.1.4.6.6 Groups

None.

3.1.4.6.7 Attribute Groups

None.

3.1.4.7 GetChanges

This operation is called to retrieve change log entries in the specified term store partition (1) or all term store partitions occurring after a specified time.

```
<wsdl:operation name="GetChanges">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChanges" message="tns:IMetadataWebServiceApplication_GetChanges_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesResponse" message="tns:IMetadataWebServiceApplication_GetChanges_OutputMessage"/>
</wsdl:operation>
```

First, the change log entries are filtered to those that occurred after **sinceTime**.

If parameter **rawPartitionId** is not NULL, the change log entries pertain to the specified term store partition (1) are returned. Otherwise, the entries from all term store partitions are returned.

If parameter **termSetId** is not NULL, the entries that pertain to the specified term set are returned. Otherwise, if parameter **groupId** is not NULL, the entries that pertain to the specified term set group are returned. Otherwise, all are returned.

The entries returned MUST be ordered by the time the change occurred in ascending order. Additionally, if either **changedItemType** or **changedOperationType** are specified and not 0 (Unknown), the entries are filtered to those that apply to the specified type of term store object or type of write operation, respectively.

3.1.4.7.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.7.1.1 IMetadataWebServiceApplication_GetChanges_InputMessage

The request WSDL message for the **GetChanges** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChanges
```

The SOAP body contains the **GetChanges** element.

3.1.4.7.1.2 IMetadataWebServiceApplication_GetChanges_OutputMessage

The response WSDL message for the **GetChanges** WSDL operation.

The SOAP body contains the **GetChangesResponse** element.

3.1.4.7.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.7.2.1 GetChanges

The input data for the **GetChanges** WSDL operation.

```
<xs:element name="GetChanges">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="rawPartitionId" nillable="true"
        xmlns:q21="http://schemas.microsoft.com/2003/10/Serialization/" type="q21:guid"/>
      <xs:element minOccurs="1" name="sinceTime" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="groupId" nillable="true" type="xs:int"/>
      <xs:element minOccurs="0" name="termSetId" nillable="true" type="xs:int"/>
      <xs:element minOccurs="0" name="changedItemType" nillable="true"
        xmlns:q22="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
        type="q22:ChangedItemType"/>
      <xs:element minOccurs="0" name="changedOperationType" nillable="true"
        xmlns:q23="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
        type="q23:ChangedOperationType"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request.

sinceTime: The date and time value, in UTC, after which the changes that occurred are returned.

groupId: Term set group identifier.

termSetId: Term set identifier.

changedItemType: A filter of the type of term store object.

changedOperationType: A filter of the type of write operation.

3.1.4.7.2.2 GetChangesResponse

The result data for the **GetChanges** WSDL operation.

```
<xs:element name="GetChangesResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesResult" nillable="true"
type="GetChangesRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetChangesResult: The change log entries.

3.1.4.7.3 Complex Types

None.

3.1.4.7.4 Simple Types

The following XML Schema simple type definitions are specific to this operation.

3.1.4.7.4.1 ChangedItemType

Namespace: <http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy>

Type of term store object defined as follows.

```
<xs:simpleType name="ChangedItemType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Unknown"/>
    <xs:enumeration value="Term"/>
    <xs:enumeration value="TermSet"/>
    <xs:enumeration value="Group"/>
    <xs:enumeration value="TermStore"/>
    <xs:enumeration value="Site"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for **ChangedItemType**.

Value	Meaning
Unknown	This value is defined for diagnostic purposes only. It is not used by the protocol.
Term	For changes to term and its properties such as which term set it is a member of.
TermSet	For changes to term set and its properties.
Group	For changes to term set group and its properties.
TermStore	For changes to a term store and its properties such as languages and permissions.
Site	For changes to list of terms used in which site collection.

3.1.4.7.4.2 ChangedOperationType

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy

Type of write operation defined as follows.

```
<xs:simpleType name="ChangedOperationType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Unknown"/>
    <xs:enumeration value="Add"/>
    <xs:enumeration value="Edit"/>
    <xs:enumeration value="Delete"/>
    <xs:enumeration value="Move"/>
    <xs:enumeration value="Copy"/>
    <xs:enumeration value="PathChange"/>
    <xs:enumeration value="Merge"/>
    <xs:enumeration value="Import"/>
    <xs:enumeration value="Restore"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for **ChangedOperationType**.

Value	Meaning
Unknown	This value is defined for diagnostic purposes only. It is not used by the protocol.
Add	For changes associated with adding an item. Applicable to ChangedItemType of 1 (Term), 2 (TermSet), 3 (Group), 4 (TermStore) and 5 (Site).
Edit	For changes associated with editing an item. Applicable to ChangedItemType of 1 (Term), 2 (TermSet), 3 (Group) and 4 (TermStore).
Delete	For changes associated with removing an item. Applicable to ChangedItemType of 1 (Term), 2 (TermSet), 3 (Group) and 4 (TermStore).
Move	For changes associated with moving an item. Applicable to ChangedItemType of 1 (Term) and 2 (TermSet).
Copy	For changes associated with copying an item. Applicable to ChangedItemType of 1 (Term) and 2 (TermSet).
PathChange	For changes associated with changing default term label. Applicable to ChangedItemType of 1 (Term).
Merge	For changes associated with merging two terms. Applicable to ChangedItemType of 1 (Term).
Import	For changes associated with importing term store partition (1) data. Applicable to ChangedItemType of 4 (TermStore).
Restore	For changes associated with restoring term store partition (1) data. Applicable to ChangedItemType of 4 (TermStore). These changes may be from the restoration of the service application of the term store or from a full farm restore.

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 GetChangesForFullListSync

This operation is called to retrieve change log entries associated with term store import or restore operation occurring after a specified time.

```
<wsdl:operation name="GetChangesForFullListSync">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForFullListSync"
    message="tns:IMetadataWebServiceApplication_GetChangesForFullListSync_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForFullListSyncResponse"
    message="tns:IMetadataWebServiceApplication_GetChangesForFullListSync_OutputMessage"/>
</wsdl:operation>
```

The change log entries are filtered to those that occurred after **sinceTime**.

3.1.4.8.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.8.1.1

IMetadataWebServiceApplication_GetChangesForFullListSync_InputMessage

The request WSDL message for the **GetChangesForFullListSync** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForFullListSync
```

The SOAP body contains the **GetChangesForFullListSync** element.

3.1.4.8.1.2

IMetadataWebServiceApplication_GetChangesForFullListSync_OutputMessage

The response WSDL message for the **GetChangesForFullListSync** WSDL operation.

The SOAP body contains the **GetChangesForFullListSyncResponse** element.

3.1.4.8.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.8.2.1 GetChangesForFullListSync

The input data for the **GetChangesForFullListSync** WSDL operation.

```
<xs:element name="GetChangesForFullListSync">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="sinceTime" type="xs:dateTime"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

sinceTime: The date and time value, in UTC, after which the changes that occurred are returned.

3.1.4.8.2.2 GetChangesForFullListSyncResponse

The result data for the **GetChangesForFullListSync** WSDL operation.

```
<xs:element name="GetChangesForFullListSyncResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesForFullListSyncResult" nillable="true"
type="GetChangesForFullListSyncRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetChangesForFullListSyncResult: The change log entries.

3.1.4.8.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.8.3.1 GetChangesForFullListSyncRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

A list of change log entries defined as follows.

```
<xs:complexType name="GetChangesForFullListSyncRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="T">
            <xs:complexType>
              <xs:attribute name="a0" type="ser:guid" use="required"/>
              <xs:attribute name="a48" type="ser:guid" use="optional"/>
              <xs:attribute name="a49" type="ser:guid" use="optional"/>
              <xs:attribute name="a50" type="ser:guid" use="optional"/>
              <xs:attribute name="a51" type="InternalIdentifier" use="optional"/>
              <xs:attribute name="a52" type="xs:int" use="required"/>
              <xs:attribute name="a53" type="xs:int" use="required"/>
              <xs:attribute name="a54" type="xs:dateTime" use="required"/>
              <xs:attribute name="a55" type="xs:string" use="optional"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

```
        <xs:attribute name="a56" type="UserName" use="optional"/>
    </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.T: A change log entry.

Root.T.a0: The term store partition identifier.

Root.T.a48: Reserved. The value MUST be NULL.

Root.T.a49: Reserved. The value MUST be NULL.

Root.T.a50: Reserved. The value MUST be NULL.

Root.T.a51: Reserved. The value MUST be NULL.

Root.T.a52: The type of the object which MUST be a value specified in the list defined in **SerializedECMChangeLogTableRow** (section [2.2.4.22](#)).

Root.T.a53: The type of write operation which MUST be a value specified in the list defined in **SerializedECMChangeLogTableRow** (section [2.2.4.22](#)).

Root.T.a54: The UTC time when the change occurred.

Root.T.a55: The details of the change. If used, it MUST be a **ChangeDataForRestoreTermStore** (section [2.2.4.9](#)) type.

Root.T.a56: Reserved. The value MUST be NULL.

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 GetChangesForListSync

This operation is called to retrieve change log entries associated with terms used in a specified Web application (1) occurring after a specified time.

```

<wsdl:operation name="GetChangesForListSync">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForListSync"
    message="tns:IMetadataWebServiceApplication_GetChangesForListSync_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForListSyncResponse"
    message="tns:IMetadataWebServiceApplication_GetChangesForListSync_OutputMessage"/>
</wsdl:operation>

```

First, the change log entries are filtered to those that occurred after **sinceTime**.

Then the protocol server uses its record of site collections in which a term is used and for each term that is used in a site collection from the specified Web application (1), the entries that pertain are returned.

The entries MUST be ordered in ascending order by term store partition identifier, then in descending numeric order by type of object, then in ascending order by site collection identifier, and finally in ascending order by term set identifier.

3.1.4.9.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.9.1.1

IMetadataWebServiceApplication_GetChangesForListSync_InputMessage

The request WSDL message for the **GetChangesForListSync** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForListSync

```

The SOAP body contains the **GetChangesForListSync** element.

3.1.4.9.1.2

IMetadataWebServiceApplication_GetChangesForListSync_OutputMessage

The response WSDL message for the **GetChangesForListSync** WSDL operation.

The SOAP body contains the **GetChangesForListSyncResponse** element.

3.1.4.9.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.9.2.1 **GetChangesForListSync**

The input data for the **GetChangesForListSync** WSDL operation.

```

<xs:element name="GetChangesForListSync">
  <xs:complexType>

```

```

    <xs:sequence>
      <xs:element minOccurs="1" name="sinceTime" type="xs:dateTime"/>
      <xs:element minOccurs="1" name="webAppId"
xmlns:q20="http://schemas.microsoft.com/2003/10/Serialization/" type="q20:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

sinceTime: The date and time value, in UTC, after which the changes that occurred are returned.

webAppId: Web application (1) identifier.

3.1.4.9.2.2 GetChangesForListSyncResponse

The result data for the **GetChangesForListSync** WSDL operation.

```

<xs:element name="GetChangesForListSyncResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesForListSyncResult" nillable="true"
type="GetChangesForListSyncRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

GetChangesForListSyncResult: The change log entries.

3.1.4.9.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.9.3.1 GetChangesForListSyncRoot

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A list of change log entries defined as follows.

```

<xs:complexType name="GetChangesForListSyncRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="T">
            <xs:complexType>
              <xs:attribute name="a0" type="ser:guid" use="required"/>
              <xs:attribute name="a60" type="ser:guid" use="required"/>
              <xs:attribute name="a48" type="ser:guid" use="optional"/>
              <xs:attribute name="a49" type="ser:guid" use="optional"/>
              <xs:attribute name="a50" type="ser:guid" use="optional"/>
              <xs:attribute name="a51" type="InternalIdentifier" use="optional"/>
              <xs:attribute name="a52" type="xs:int" use="required"/>
              <xs:attribute name="a53" type="xs:int" use="required"/>
              <xs:attribute name="a54" type="xs:dateTime" use="required"/>
              <xs:attribute name="a55" type="xs:string" use="optional"/>
              <xs:attribute name="a62" type="xs:string" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

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

Root: Root element.

Root.T: A change log entry.

Root.T.a0: The term store partition identifier.

Root.T.a60: The site collection identifier.

Root.T.a48: The term set group identifier. The value MUST be NULL if the change is not scoped inside a term set group, such as language or permissions change.

Root.T.a49: The term set identifier. The value MUST be NULL if the change is not scoped inside a term set, such as language change or permissions change.

Root.T.a50: The identifier of the object. The value MUST be NULL if the change is not for a specific object, such as language change or permissions change.

Root.T.a51: The internal identifier (1) of the object.

Root.T.a52: The type of the object which MUST be a value specified in the list defined in **SerializedECMChangeLogTableRow** (section [2.2.4.22](#)).

Root.T.a53: The type of write operation which MUST be a value specified in the list defined in **SerializedECMChangeLogTableRow** (section [2.2.4.22](#)).

Root.T.a54: The UTC time when the change occurred.

Root.T.a55: The details of the change. If used, it MUST be one of the following types:

- **ChangeDataForAddOrDeleteLanguage** (section [2.2.5.1](#))
- **ChangeDataForSetDefaultLanguage** (section [2.2.4.10](#))
- **ChangeDataForAddTermSetMembership** (section [2.2.4.4](#))
- **ChangeDataForMoveOrUpdateTermSetMembership** (section [2.2.4.8](#))
- **ChangeDataForAddTermSet** (section [2.2.4.3](#))
- **ChangeDataForUpdateTermSet** (section [2.2.4.11](#))
- **ChangeDataForDeleteTerm** (section [2.2.4.6](#))
- **ChangeDataForMergeTerm** (section [2.2.4.7](#))

Root.T.a62: Settings for the term store partition (1), which is an XML encoded string that MUST conform to the schema of the **ServiceSettingsSettingsXmlDoc** complex type (section [2.2.4.41](#)).

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 GetChangesOverInterval

This operation is called to retrieve change log entries in the specified term store partition (1) occurring the span of the time specified before now.

```
<wsdl:operation name="GetChangesOverInterval">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesOverInterval"
    message="tns:IMetadataWebServiceApplication_GetChangesOverInterval_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesOverIntervalResponse"
    message="tns:IMetadataWebServiceApplication_GetChangesOverInterval_OutputMessage"/>
</wsdl:operation>
```

The change log entries for the term store partition (1) are filtered to those that occurred within the last **sinceTimeAgo** time interval.

The entries returned MUST be ordered by the time the change occurred in ascending order.

3.1.4.10.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.10.1.1

IMetadataWebServiceApplication_GetChangesOverInterval_InputMessage

The request WSDL message for the **GetChangesOverInterval** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesOverInterval
```

The SOAP body contains the **GetChangesOverInterval** element.

3.1.4.10.1.2

IMetadataWebServiceApplication_GetChangesOverInterval_OutputMessage

The response WSDL message for the **GetChangesOverInterval** WSDL operation.

The SOAP body contains the **GetChangesOverIntervalResponse** element.

3.1.4.10.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.10.2.1 GetChangesOverInterval

The input data for the **GetChangesOverInterval** WSDL operation.

```
<xs:element name="GetChangesOverInterval">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q24="http://schemas.microsoft.com/2003/10/Serialization/" type="q24:guid"/>
      <xs:element minOccurs="1" name="sinceTimeAgo"
        xmlns:q25="http://schemas.microsoft.com/2003/10/Serialization/" type="q25:duration"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

sinceTimeAgo: The previous time interval during which the changes that occurred are returned.

3.1.4.10.2.2 GetChangesOverIntervalResponse

The result data for the **GetChangesOverInterval** WSDL operation.

```
<xs:element name="GetChangesOverIntervalResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesOverIntervalResult" nillable="true"
        type="GetChangesRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetChangesOverIntervalResult: The change log entries.

3.1.4.10.3 Complex Types

None.

3.1.4.10.4 Simple Types

The following XML Schema simple type definitions are specific to this operation.

3.1.4.10.4.1 duration

Namespace: http://schemas.microsoft.com/2003/10/Serialization/

A time interval in days, hours, minutes, and seconds defined as follows.

```
<xs:simpleType name="duration">
  <xs:restriction base="xs:duration">
    <xs:pattern value="\-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?" />
    <xs:minInclusive value="-P10675199DT2H48M5.4775808S" />
    <xs:maxInclusive value="P10675199DT2H48M5.4775807S" />
  </xs:restriction>
</xs:simpleType>
```

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 GetChangeTime

This operation is called to retrieve the timestamp of the last time an object within a term store partition (1), term set group or term set has changed.

```
<wsdl:operation name="GetChangeTime">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangeTime" message="tns:IMetadataWebServiceApplication_GetChangeTime_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangeTimeResponse" message="tns:IMetadataWebServiceApplication_GetChangeTime_OutputMessage"/>
</wsdl:operation>
```

If the **termSetGuid** parameter is not NULL, the last time an object in the specified term set was changed is returned. Otherwise, if parameter **groupGuid** is not NULL, the last time an object in the specified term set group was changed is returned. Otherwise, the last time anything within the specified term store partition (1) was changed is returned.

3.1.4.11.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.11.1.1 IMetadataWebServiceApplication_GetChangeTime_InputMessage

The request WSDL message for the **GetChangeTime** WSDL operation.

The SOAP action value is:

The SOAP body contains the **GetChangeTime** element.

3.1.4.11.1.2 IMetadataWebServiceApplication_GetChangeTime_OutputMessage

The response WSDL message for the **GetChangeTime** WSDL operation.

The SOAP body contains the **GetChangeTimeResponse** element.

3.1.4.11.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.11.2.1 GetChangeTime

The input data for the **GetChangeTime** WSDL operation.

```
<xs:element name="GetChangeTime">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q26="http://schemas.microsoft.com/2003/10/Serialization/" type="q26:guid"/>
      <xs:element minOccurs="0" name="groupGuid" nillable="true"
        xmlns:q27="http://schemas.microsoft.com/2003/10/Serialization/" type="q27:guid"/>
      <xs:element minOccurs="0" name="termSetGuid" nillable="true"
        xmlns:q28="http://schemas.microsoft.com/2003/10/Serialization/" type="q28:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

groupGuid: Term set group identifier.

termSetGuid: Term set identifier.

3.1.4.11.2.2 GetChangeTimeResponse

The result data for the **GetChangeTime** WSDL operation.

```
<xs:element name="GetChangeTimeResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangeTimeResult" nillable="true"
        type="GetChangeTimeRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetChangeTimeResult: The time of the most recent modification within the specified term store partition (1), term set group or term set.

3.1.4.11.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.11.3.1 GetChangeTimeRoot

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A timestamp defined as follows.

```
<xs:complexType name="GetChangeTimeRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="CL"
            type="SerializedECMChangeLogTableTimeOnlyRow"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.CL: The timestamp.

3.1.4.11.4 Simple Types

None.

3.1.4.11.5 Attributes

None.

3.1.4.11.6 Groups

None.

3.1.4.11.7 Attribute Groups

None.

3.1.4.12 GetDescendentTerms

This operation is called to retrieve the descendant terms of a specified term.

```
<wsdl:operation name="GetDescendentTerms">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetDes
    cendentTerms" message="tns:IMetadataWebServiceApplication_GetDescendentTerms_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetDes
    cendentTermsResponse"
    message="tns:IMetadataWebServiceApplication_GetDescendentTerms_OutputMessage"/>
</wsdl:operation>
```

```
</wsdl:operation>
```

If the term is not found in the term store partition (1) and term set, the response MUST contain an empty root node. Otherwise, the descendant terms are returned, as defined in **GetTermRoot** (section [2.2.4.17](#)).

3.1.4.12.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.12.1.1

IMetadataWebServiceApplication_GetDescendentTerms_InputMessage

The request WSDL message for the **GetDescendentTerms** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetDescendentTerms
```

The SOAP body contains the **GetDescendentTerms** element.

3.1.4.12.1.2

IMetadataWebServiceApplication_GetDescendentTerms_OutputMessage

The response WSDL message for the **GetDescendentTerms** WSDL operation.

The SOAP body contains the **GetDescendentTermsResponse** element.

3.1.4.12.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.12.2.1 GetDescendentTerms

The input data for the **GetDescendentTerms** WSDL operation.

```
<xs:element name="GetDescendentTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q19="http://schemas.microsoft.com/2003/10/Serialization/" type="q19:guid"/>
      <xs:element minOccurs="1" name="termSetId" type="xs:int"/>
      <xs:element minOccurs="1" name="termId" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetId: The internal identifier (1) of the term set.

termId: The internal identifier (1) of the term.

3.1.4.12.2 GetDescendentTermsResponse

The result data for the **GetDescendentTerms** WSDL operation.

```
<xs:element name="GetDescendentTermsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetDescendentTermsResult" nillable="true"
type="GetTermRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetDescendentTermsResult: Details about the descendant terms.

3.1.4.12.3 Complex Types

None.

3.1.4.12.4 Simple Types

None.

3.1.4.12.5 Attributes

None.

3.1.4.12.6 Groups

None.

3.1.4.12.7 Attribute Groups

None.

3.1.4.13 GetGroupByGuid

The **GetGroupByGuid** operation retrieves the properties of a term set group from the specified term store partition (1).

```
<wsdl:operation name="GetGroupByGuid">
  <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupByGuid" message="tns:IMetadataWebServiceApplication_GetGroupByGuid_InputMessage"/>
  <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupByGuidResponse" message="tns:IMetadataWebServiceApplication_GetGroupByGuid_OutputMessage"/>
</wsdl:operation>
```

If the term store partition (1) does not exist, or if the term set group does not exist in the term store partition (1), the response MUST contain no **GetGroupByGuidResult** elements. Otherwise, the properties of the term set group are returned.

3.1.4.13.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.13.1.1 IMetadataWebServiceApplication_GetGroupByGuid_InputMessage

The request WSDL message for the **GetGroupByGuid** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupByGuid
```

The SOAP body contains the **GetGroupByGuid** element.

3.1.4.13.1.2 IMetadataWebServiceApplication_GetGroupByGuid_OutputMessage

The response WSDL message for the **GetGroupByGuid** WSDL operation.

The SOAP body contains the **GetGroupByGuidResponse** element.

3.1.4.13.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.13.2.1 GetGroupByGuid

The input data for the **GetGroupByGuid** WSDL operation.

```
<xs:element name="GetGroupByGuid">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q2="http://schemas.microsoft.com/2003/10/Serialization/" type="q2:guid"/>
      <xs:element minOccurs="1" name="groupGuid"
        xmlns:q3="http://schemas.microsoft.com/2003/10/Serialization/" type="q3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

groupGuid: The term set group identifier, which MUST NOT be NULL.

3.1.4.13.2.2 GetGroupByGuidResponse

The result data for the **GetGroupByGuid** WSDL operation.

```
<xs:element name="GetGroupByGuidResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetGroupByGuidResult" nillable="true"
        type="GetGroupsRoot"/>
    </xs:sequence>
  </xs:complexType>
```

</xs:element>

GetGroupByGuidResult: A **GetGroupsRoot** element (section [2.2.4.15](#)) element that contains the properties of the term set group.

3.1.4.13.3 Complex Types

None.

3.1.4.13.4 Simple Types

None.

3.1.4.13.5 Attributes

None.

3.1.4.13.6 Groups

None.

3.1.4.13.7 Attribute Groups

None.

3.1.4.14 GetGroups

This operation is called to retrieve the properties of the specified term set groups from the specified term store partition (1).

```
<wsdl:operation name="GetGroups">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroups"
    message="tns:IMetadataWebServiceApplication_GetGroups_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupsResponse"
    message="tns:IMetadataWebServiceApplication_GetGroups_OutputMessage"/>
</wsdl:operation>
```

If the term store partition (1) does not exist, the response MUST contain no **GetGroupsResult** elements. Otherwise, the properties of the each term set group specified by the **groupIds** parameter, if it exists, are returned.

3.1.4.14.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.14.1.1 IMetadataWebServiceApplication_GetGroups_InputMessage

The request WSDL message for the **GetGroups** WSDL operation.

The SOAP action value is:

<http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroups>

The SOAP body contains the **GetGroups** element.

3.1.4.14.1.2 IMetadataWebServiceApplication_GetGroups_OutputMessage

The response WSDL message for the **GetGroups** WSDL operation.

The SOAP body contains the **GetGroupsResponse** element.

3.1.4.14.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.14.2.1 GetGroups

The input data for the **GetGroups** WSDL operation.

```
<xs:element name="GetGroups">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q4="http://schemas.microsoft.com/2003/10/Serialization/" type="q4:guid"/>
      <xs:element minOccurs="1" name="groupIds" nillable="false"
        xmlns:q5="http://schemas.microsoft.com/2003/10/Serialization/Arrays" type="q5:ArrayOfint"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

groupIds: A list of term set group internal identifiers (1).

3.1.4.14.2.2 GetGroupsResponse

The result data for the **GetGroups** WSDL operation.

```
<xs:element name="GetGroupsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetGroupsResult" nillable="true" type="GetGroupsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetGroupsResult: A **GetGroupsRoot** element (section [2.2.4.15](#)) for each term set group.

3.1.4.14.3 Complex Types

None.

3.1.4.14.4 Simple Types

None.

3.1.4.14.5 Attributes

None.

3.1.4.14.6 Groups

None.

3.1.4.14.7 Attribute Groups

None.

3.1.4.15 GetIsServiceApplicationPartitioned

This operation is called to find out if the service application contains partitioned term stores.

```
<wsdl:operation name="GetIsServiceApplicationPartitioned">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetIsServiceApplicationPartitioned"
    message="tns:IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_InputMessage"/
  >
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetIsServiceApplicationPartitionedResponse"
    message="tns:IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_OutputMessage"
  />
</wsdl:operation>
```

This operation MUST return "true" if the service application contains partitioned term stores.

3.1.4.15.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.15.1.1

IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_InputMessage

The request WSDL message for the **GetIsServiceApplicationPartitioned** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetIsServiceApplicationPartitioned
```

The SOAP body contains the **GetIsServiceApplicationPartitioned** element.

3.1.4.15.1.2

IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_OutputMessage

The response WSDL message for the **GetIsServiceApplicationPartitioned** WSDL operation.

The SOAP body contains the **GetIsServiceApplicationPartitionedResponse** element.

3.1.4.15.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.15.2.1 GetIsServiceApplicationPartitioned

The input data for the **GetIsServiceApplicationPartitioned** WSDL operation.

```
<xs:element name="GetIsServiceApplicationPartitioned">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.15.2.2 GetIsServiceApplicationPartitionedResponse

The result data for the **GetIsServiceApplicationPartitioned** WSDL operation.

```
<xs:element name="GetIsServiceApplicationPartitionedResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetIsServiceApplicationPartitionedResult"
type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetIsServiceApplicationPartitionedResult: Whether the service application contains partitioned term stores.

3.1.4.15.3 Complex Types

None.

3.1.4.15.4 Simple Types

None.

3.1.4.15.5 Attributes

None.

3.1.4.15.6 Groups

None.

3.1.4.15.7 Attribute Groups

None.

3.1.4.16 GetServiceApplicationName

This operation is called to retrieve the name of the service application.

```
<wsdl:operation name="GetServiceApplicationName">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationName"
    message="tns:IMetadataWebServiceApplication_GetServiceApplicationName_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationNameResponse"
    message="tns:IMetadataWebServiceApplication_GetServiceApplicationName_OutputMessage"/>
</wsdl:operation>
```

The name of the service application is returned.

3.1.4.16.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.16.1.1

IMetadataWebServiceApplication_GetServiceApplicationName_InputMessage

The request WSDL message for the **GetServiceApplicationName** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationName
```

The SOAP body contains the **GetServiceApplicationName** element.

3.1.4.16.1.2

IMetadataWebServiceApplication_GetServiceApplicationName_OutputMessage

The response WSDL message for the **GetServiceApplicationName** WSDL operation.

The SOAP body contains the **GetServiceApplicationNameResponse** element.

3.1.4.16.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.16.2.1 GetServiceApplicationName

The input data for the **GetServiceApplicationName** WSDL operation.

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

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

3.1.4.16.2.2 GetServiceApplicationNameResponse

The result data for the **GetServiceApplicationName** WSDL operation.

```
<xs:element name="GetServiceApplicationNameResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetServiceApplicationNameResult" nillable="true"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetServiceApplicationNameResult: The name of the service application.

3.1.4.16.3 Complex Types

None.

3.1.4.16.4 Simple Types

None.

3.1.4.16.5 Attributes

None.

3.1.4.16.6 Groups

None.

3.1.4.16.7 Attribute Groups

None.

3.1.4.17 GetServiceApplicationSettings

This operation is called to retrieve the settings of the service application. Those settings are applied to all term store partitions on this service application.

```
<wsdl:operation name="GetServiceApplicationSettings">
  <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/GetServiceApplicationSettings"
message="tns:IMetadataWebServiceApplication_GetServiceApplicationSettings_InputMessage"/>
  <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/GetServiceApplicationSettingsResponse"
message="tns:IMetadataWebServiceApplication_GetServiceApplicationSettings_OutputMessage"/>
```

```
</wsdl:operation>
```

The settings of the service application are returned.

3.1.4.17.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.17.1.1

IMetadataWebServiceApplication_GetServiceApplicationSettings_InputMessage

The request WSDL message for the **GetServiceApplicationSettings** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationSettings
```

The SOAP body contains the **GetServiceApplicationSettings** element.

3.1.4.17.1.2

IMetadataWebServiceApplication_GetServiceApplicationSettings_OutputMessage

The response WSDL message for the **GetServiceApplicationSettings** WSDL operation.

The SOAP body contains the **GetServiceApplicationSettingsResponse** element.

3.1.4.17.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.17.2.1 GetServiceApplicationSettings

The input data for the **GetServiceApplicationSettings** WSDL operation.

```
<xs:element name="GetServiceApplicationSettings">  
  <xs:complexType>  
    <xs:sequence/>  
  </xs:complexType>  
</xs:element>
```

3.1.4.17.2.2 GetServiceApplicationSettingsResponse

The result data for the **GetServiceApplicationSettings** WSDL operation.

```
<xs:element name="GetServiceApplicationSettingsResponse">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element minOccurs="0" name="GetServiceApplicationSettingsResult" nillable="true"  
        type="GetServiceSettingsRoot"/>  
    </xs:sequence>  
  </xs:complexType>
```

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

GetServiceApplicationSettingsResult: The settings of the service application.

3.1.4.17.3 Complex Types

None.

3.1.4.17.4 Simple Types

None.

3.1.4.17.5 Attributes

None.

3.1.4.17.6 Groups

None.

3.1.4.17.7 Attribute Groups

None.

3.1.4.18 GetServiceSettings

This operation is called to retrieve the settings of a term store partition (1).

```
<wsdl:operation name="GetServiceSettings">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceSettings"
    message="tns:IMetadataWebServiceApplication_GetServiceSettings_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceSettingsResponse"
    message="tns:IMetadataWebServiceApplication_GetServiceSettings_OutputMessage"/>
</wsdl:operation>
```

The settings of the term store partition (1) are returned.

3.1.4.18.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.18.1.1 IMetadataWebServiceApplication_GetServiceSettings_InputMessage

The request WSDL message for the **GetServiceSettings** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceSettings
```

The SOAP body contains the **GetServiceSettings** element.

3.1.4.18.1.2

IMetadataWebServiceApplication_GetServiceSettings_OutputMessage

The response WSDL message for the **GetServiceSettings** WSDL operation.

The SOAP body contains the **GetServiceSettingsResponse** element.

3.1.4.18.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.18.2.1 **GetServiceSettings**

The input data for the **GetServiceSettings** WSDL operation.

```
<xs:element name="GetServiceSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q59="http://schemas.microsoft.com/2003/10/Serialization/" type="q59:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

3.1.4.18.2.2 **GetServiceSettingsResponse**

The result data for the **GetServiceSettings** WSDL operation.

```
<xs:element name="GetServiceSettingsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetServiceSettingsResult" nillable="true"
        type="GetServiceSettingsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetServiceSettingsResult: A **GetServiceSettingsResult** element that contains the settings for the term store partition (1).

3.1.4.18.3 **Complex Types**

None.

3.1.4.18.4 **Simple Types**

None.

3.1.4.18.5 Attributes

None.

3.1.4.18.6 Groups

None.

3.1.4.18.7 Attribute Groups

None.

3.1.4.19 GetSessionData

This operation is called to retrieve session (2) related data for the specified term store partition (1).

```
<wsdl:operation name="GetSessionData">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSessionData" message="tns:IMetadataWebServiceApplication_GetSessionData_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSessionDataResponse" message="tns:IMetadataWebServiceApplication_GetSessionData_OutputMessage"/>
</wsdl:operation>
```

If the specified term store partition has not been created, the protocol server creates it and performs implementation-specific initialization.

Then the session related data for the specified term store partition (1) are returned.

3.1.4.19.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.19.1.1 IMetadataWebServiceApplication_GetSessionData_InputMessage

The request WSDL message for the **GetSessionData** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSessionData
```

The SOAP body contains the **GetSessionData** element.

3.1.4.19.1.2 IMetadataWebServiceApplication_GetSessionData_OutputMessage

The response WSDL message for the **GetSessionData** WSDL operation.

The SOAP body contains the **GetSessionDataResponse** element.

3.1.4.19.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.19.2.1 GetSessionData

The input data for the **GetSessionData** WSDL operation.

```
<xs:element name="GetSessionData">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/" type="q1:guid"/>
      <xs:element minOccurs="1" name="lcid" type="LCID"/>
      <xs:element minOccurs="1" name="systemGroupName" nillable="false" type="xs:string"/>
      <xs:element minOccurs="1" name="systemGroupDescription" nillable="false"
type="xs:string"/>
      <xs:element minOccurs="1" name="keywordsTermsetName" nillable="false"
type="xs:string"/>
      <xs:element minOccurs="1" name="keywordsTermsetDescription" nillable="false"
type="xs:string"/>
      <xs:element minOccurs="1" name="orphanedTermsTermsetName" nillable="false"
type="xs:string"/>
      <xs:element minOccurs="1" name="orphanedTermsTermsetDescription" nillable="false"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

lcid: An LCID for the default language if the term store partition (1) has to be created.

systemGroupName: The name of the system term set group if the term store partition (1) has to be created. The name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

systemGroupDescription: The description of the system term set group if the term store partition (1) has to be created. It MUST be less than or equal to 1000 characters in length.

keywordsTermsetName: The name of the term set of keywords if the term store partition (1) has to be created. The name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)

- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

keywordsTermsetDescription: The description of the keyword term set if the term store partition (1) has to be created. It MUST be less than or equal to 1000 characters in length.

orphanedTermsTermsetName: The name of the orphaned terms term set if the term store partition (1) has to be created. The name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

orphanedTermsTermsetDescription: The description of the orphaned terms term set if the term store partition (1) has to be created. It MUST be less than or equal to 1000 characters in length.

3.1.4.19.2 GetSessionDataResponse

The result data for the **GetSessionData** WSDL operation.

```
<xs:element name="GetSessionDataResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetSessionDataResult" nillable="true"
type="GetSessionDataRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetSessionDataResult: Session related data for the specified term store partition (1).

3.1.4.19.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.19.3.1 GetSessionDataRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Session related data for the specified term store partition (1) defined as follows.

```
<xs:complexType name="GetSessionDataRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="L" type="SerializedECMLanguageTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="GIds" type="SerializedECMGroupIdsTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="P" type="SerializedECMPermissionTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="SGId" type="SystemGroupIdIndicator"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="KTSId"
type="KeywordTermSetIdIndicator"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="0" maxOccurs="1" name="OTSID"
type="OrphanedTermSetIdIndicator"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element minOccurs="1" maxOccurs="1" name="CL"
type="SerializedECMChangeLogTableTimeOnlyRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="partition"
type="NewPartitionIndicator"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.L: Data for a language in the specified term store partition (1).

Root.NextResult: Separates the preceding set of term store objects of one type from the next set of a different type.

Root.GIds: Internal identifier (1) for a term set group in the specified term store partition (1).

Root.P: Data for term store specific permission in the specified term store partition (1).

Root.SGId: Identifier for the system term set group in the specified term store partition (1).

Root.KTSId: Identifier for the keyword term set in the specified term store partition (1).

Root.OTSID: Identifier for the orphaned terms term set in the specified term store partition (1).

Root.CL: The timestamp for the latest change that has happened in this term store partition (1).

Root.partition: Data that states if this was the first time that a partition was used. [<10>](#).

3.1.4.19.3.2 SerializedECMGroupIdsTableRow

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Internal identifier (1) for a term set group in a term store partition (1) defined as follows.

```
<xs:complexType name="SerializedECMGroupIdsTableRow">
  <xs:attribute name="a6" type="InternalIdentifier" use="required"/>
</xs:complexType>
```

a6: Internal identifier (1) of the term set group.

3.1.4.19.3.3 SystemGroupIdIndicator

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Identifier for the system term set group in a term store partition (1) defined as follows.

```
<xs:complexType name="SystemGroupIdIndicator">
  <xs:attribute name="a9" type="ser:guid" use="required"/>
</xs:complexType>
```

a9: Identifier of the term set group.

3.1.4.19.3.4 KeywordTermSetIdIndicator

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Identifier for the keyword term set in a term store partition (1) defined as follows.

```
<xs:complexType name="KeywordTermSetIdIndicator">
  <xs:attribute name="a9" type="ser:guid" use="required"/>
</xs:complexType>
```

a9: Identifier of the term set.

3.1.4.19.3.5 OrphanedTermSetIdIndicator

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Identifier for the orphaned terms term set in a term store partition (1) defined as follows.

```
<xs:complexType name="OrphanedTermSetIdIndicator">
  <xs:attribute name="a9" type="ser:guid" use="required"/>
</xs:complexType>
```

a9: Identifier of the term set.

3.1.4.19.3.6 NewPartitionIndicator

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

This is used to indicate if this is the first time that a given partition has been used. [<11>](#) The partition in question is defined by the **rawPartitionID** of the **GetSesionData** request.

```
<xs:complexType name="NewPartitionIndicator">
  <xs:attribute name="new" type="xs:boolean" use="required"/>
</xs:complexType>
```

</xs:complexType>

new: If this is the first time that a partition was accessed, this MUST be true. Otherwise, it MUST be false.

3.1.4.19.4 Simple Types

None.

3.1.4.19.5 Attributes

None.

3.1.4.19.6 Groups

None.

3.1.4.19.7 Attribute Groups

None.

3.1.4.20 GetSitesContainingTerms

This operation is reserved and MUST NOT be called.

```
<wsdl:operation name="GetSitesContainingTerms">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSitesContainingTerms"
    message="tns:IMetadataWebServiceApplication_GetSitesContainingTerms_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSitesContainingTermsResponse"
    message="tns:IMetadataWebServiceApplication_GetSitesContainingTerms_OutputMessage"/>
</wsdl:operation>
```

Will be removed for final release.

3.1.4.20.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.20.1.1

IMetadataWebServiceApplication_GetSitesContainingTerms_InputMessage

The request WSDL message for the **GetSitesContainingTerms** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSitesContainingTerms
```

The SOAP body contains the **GetSitesContainingTerms** element.

3.1.4.20.1.2

IMetadataWebServiceApplication_GetSitesContainingTerms_OutputMessage

The response WSDL message for the **GetSitesContainingTerms** WSDL operation.

The SOAP body contains the **GetSitesContainingTermsResponse** element.

3.1.4.20.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.20.2.1 **GetSitesContainingTerms**

The input data for the **GetSitesContainingTerms** WSDL operation.

```
<xs:element name="GetSitesContainingTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
xmlns:q38="http://schemas.microsoft.com/2003/10/Serialization/" type="q38:guid"/>
      <xs:element minOccurs="1" name="termSetIdMappings" nillable="false"
xmlns:q39="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
type="q39:ArrayOfKeyValueOfguidArrayOfguidox8ieOcg"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetIdMappings: Reserved. MUST be ignored

3.1.4.20.2.2 **GetSitesContainingTermsResponse**

The result data for the **GetSitesContainingTerms** WSDL operation.

```
<xs:element name="GetSitesContainingTermsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetSitesContainingTermsResult" nillable="true"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetSitesContainingTermsResult: Reserved. MUST be ignored

3.1.4.20.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.20.3.1 **ArrayOfKeyValueOfguidArrayOfguidox8ieOcg**

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/Arrays>

Reserved. MUST NOT be used. It is defined as follows.

```

<xs:complexType name="ArrayOfKeyValueOfguidArrayOfguidox8ieOcg">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValueOfguidArrayOfguidox8ieOcg">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Key" type="ser:guid"/>
          <xs:element name="Value" nillable="true" type="tns:ArrayOfguid"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

KeyValueOfguidArrayOfguidox8ieOcg: Reserved.

KeyValueOfguidArrayOfguidox8ieOcg.Key: Reserved.

KeyValueOfguidArrayOfguidox8ieOcg.Value: Reserved.

3.1.4.20.4 Simple Types

None.

3.1.4.20.5 Attributes

None.

3.1.4.20.6 Groups

None.

3.1.4.20.7 Attribute Groups

None.

3.1.4.21 GetSortedChildTermIds

This operation is called to retrieve the terms that are children of a term.

```

<wsdl:operation name="GetSortedChildTermIds">
  <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSortedChildTermIds"
message="tns:IMetadataWebServiceApplication_GetSortedChildTermIds_InputMessage"/>
  <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSortedChildTermIdsResponse"
message="tns:IMetadataWebServiceApplication_GetSortedChildTermIds_OutputMessage"/>
</wsdl:operation>

```

The identifiers of the child terms are sorted in alphabetical order based on their effective labels. The effective label is determined as follows: if the term has a term label in the language corresponding to the **locale** parameter, that term label is the effective label, or if there is more than one term label in that locale the default term label for that locale is used. Otherwise, the effective label is the term label in the language corresponding to the default language of the term store partition (1), or if

there is more than one term label in the default language then the default term label for that language is used.

3.1.4.21.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.21.1.1

IMetadataWebServiceApplication_GetSortedChildTermIds_InputMessage

The request WSDL message for the **GetSortedChildTermIds** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSortedChildTermIds
```

The SOAP body contains the **GetSortedChildTermIds** element.

3.1.4.21.1.2

IMetadataWebServiceApplication_GetSortedChildTermIds_OutputMessage

The response WSDL message for the **GetSortedChildTermIds** WSDL operation.

The SOAP body contains the **GetSortedChildTermIdsResponse** element.

3.1.4.21.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.21.2.1 **GetSortedChildTermIds**

The input data for the **GetSortedChildTermIds** WSDL operation.

```
<xs:element name="GetSortedChildTermIds">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q16="http://schemas.microsoft.com/2003/10/Serialization/" type="q16:guid"/>
      <xs:element minOccurs="1" name="termSetId" type="xs:int"/>
      <xs:element minOccurs="1" name="parentTermId" type="xs:int"/>
      <xs:element minOccurs="1" name="locale" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetId: The internal identifier (1) of the term set to which the term belongs.

parentTermId: The internal identifier (1) of the term.

locale: The LCID of the language to be used for sorting the terms that are children.

3.1.4.21.2.2 GetSortedChildTermIdsResponse

The result data for the **GetSortedChildTermIds** WSDL operation.

```
<xs:element name="GetSortedChildTermIdsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetSortedChildTermIdsResult" nillable="true"
        type="GetSortedChildTermIdsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetSortedChildTermIdsResult: A **GetSortedChildTermIdsRoot** element (section [3.1.4.21.3.1](#)) containing the terms found that are children of the specified term.

3.1.4.21.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.21.3.1 GetSortedChildTermIdsRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

The terms that are children.

```
<xs:complexType name="GetSortedChildTermIdsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="T">
            <xs:complexType>
              <xs:attribute name="a9" type="ser:guid" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.T: A term that is a child.

Root.T.a9: The identifier of a child term.

3.1.4.21.4 Simple Types

None.

3.1.4.21.5 Attributes

None.

3.1.4.21.6 Groups

None.

3.1.4.21.7 Attribute Groups

None.

3.1.4.22 GetTerm

This operation is called to retrieve details about a term.

```
<wsdl:operation name="GetTerm">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm"
    message="tns:IMetadataWebServiceApplication_GetTerm_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermResponse"
    message="tns:IMetadataWebServiceApplication_GetTerm_OutputMessage"/>
</wsdl:operation>
```

If the term does not exist in the specified term set and term store partition (1), an empty **GetTermResponse** MUST be returned. If the term was previously merged with another term, the details of the **merged term** are returned. Otherwise, the details of the term are returned.

3.1.4.22.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.22.1.1 IMetadataWebServiceApplication_GetTerm_InputMessage

The request WSDL message for the **GetTerm** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
```

The SOAP body contains the **GetTerm** element.

3.1.4.22.1.2 IMetadataWebServiceApplication_GetTerm_OutputMessage

The response WSDL message for the **GetTerm** WSDL operation.

The SOAP body contains the **GetTermResponse** element.

3.1.4.22.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.22.2.1 GetTerm

The input data for the **GetTerm** WSDL operation.

```
<xs:element name="GetTerm">
```

```

<xs:complexType>
  <xs:sequence>
    <xs:element minOccurs="1" name="rawPartitionId"
      xmlns:q6="http://schemas.microsoft.com/2003/10/Serialization/" type="q6:guid"/>
    <xs:element minOccurs="1" name="termGuid"
      xmlns:q7="http://schemas.microsoft.com/2003/10/Serialization/" type="q7:guid"/>
    <xs:element minOccurs="1" name="termSetId" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termGuid: The identifier of the term.

termSetId: The internal identifier (1) of the term set of which the term is a member.

3.1.4.22.2.2 GetTermResponse

The result data for the **GetTerm** WSDL operation.

```

<xs:element name="GetTermResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermResult" nillable="true" type="GetTermRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

GetTermResult: A **GetTermRoot** element (section [2.2.4.17](#)) that contains the details of the term.

3.1.4.22.3 Complex Types

None.

3.1.4.22.4 Simple Types

None.

3.1.4.22.5 Attributes

None.

3.1.4.22.6 Groups

None.

3.1.4.22.7 Attribute Groups

None.

3.1.4.23 GetTerms

This operation is called to get details about multiple terms.

```

<wsdl:operation name="GetTerms">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerms"
    message="tns:IMetadataWebServiceApplication_GetTerms_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsResponse"
    message="tns:IMetadataWebServiceApplication_GetTerms_OutputMessage"/>
</wsdl:operation>

```

Any term that does not exist in the specified term store partition (1) is ignored. For each term that was previously merged with another term, the details of the merged term are returned. Otherwise, the details of the term are returned.

3.1.4.23.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.23.1.1 IMetadataWebServiceApplication_GetTerms_InputMessage

The request WSDL message for the **GetTerms** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerms
```

The SOAP body contains the **GetTerms** element.

3.1.4.23.1.2 IMetadataWebServiceApplication_GetTerms_OutputMessage

The response WSDL message for the **GetTerms** WSDL operation.

The SOAP body contains the **GetTermsResponse** element.

3.1.4.23.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.23.2.1 GetTerms

The input data for the **GetTerms** WSDL operation.

```

<xs:element name="GetTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q10="http://schemas.microsoft.com/2003/10/Serialization/" type="q10:guid"/>
      <xs:element minOccurs="1" name="termGuids" nillable="false"
        xmlns:q11="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
        type="q11:ArrayOfguid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termGuids: A list of identifiers of terms.

3.1.4.23.2 GetTermsResponse

The result data for the **GetTerms** WSDL operation.

```
<xs:element name="GetTermsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermsResult" nillable="true"
        type="SearchedTermsRootStandard"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetTermsResult: A **SearchedTermsRootStandard** element (section [2.2.4.21](#)) that contains details of the terms.

3.1.4.23.3 Complex Types

None.

3.1.4.23.4 Simple Types

None.

3.1.4.23.5 Attributes

None.

3.1.4.23.6 Groups

None.

3.1.4.23.7 Attribute Groups

None.

3.1.4.24 GetTermSets

This operation is called to get details about multiple of term sets.

```
<wsdl:operation name="GetTermSets">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSets"
    message="tns:IMetadataWebServiceApplication_GetTermSets_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsResponse"
    message="tns:IMetadataWebServiceApplication_GetTermSets_OutputMessage"/>
</wsdl:operation>
```

Any term set that does not exist in the specified term store partition (1) is ignored. Otherwise, the details of each specified term set are returned.

3.1.4.24.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.24.1.1 IMetadataWebServiceApplication_GetTermSets_InputMessage

The request WSDL message for the **GetTermSets** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSets
```

The SOAP body contains the **GetTermSets** element.

3.1.4.24.1.2 IMetadataWebServiceApplication_GetTermSets_OutputMessage

The response WSDL message for the **GetTermSets** WSDL operation.

The SOAP body contains the **GetTermSetsResponse** element.

3.1.4.24.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.24.2.1 GetTermSets

The input data for the **GetTermSets** WSDL operation.

```
<xs:element name="GetTermSets">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q12="http://schemas.microsoft.com/2003/10/Serialization/" type="q12:guid"/>
      <xs:element minOccurs="1" name="termSetGuids" nillable="false"
        xmlns:q13="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
        type="q13:ArrayOfguid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetGuids: A list of term set identifiers.

3.1.4.24.2.2 GetTermSetsResponse

The result data for the **GetTermSets** WSDL operation.

```
<xs:element name="GetTermSetsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermSetsResult" nillable="true"
        type="GetGroupsAndTermSetsRoot"/>
    </xs:sequence>
  </xs:complexType>
```

</xs:element>

GetTermSetsResult: A **GetGroupsAndTermSetsRoot** element (section [2.2.4.14](#)) that contains information about the term sets.

3.1.4.24.3 Complex Types

None.

3.1.4.24.4 Simple Types

None.

3.1.4.24.5 Attributes

None.

3.1.4.24.6 Groups

None.

3.1.4.24.7 Attribute Groups

None.

3.1.4.25 GetTermSetsByLabel

This operation is called to get details about term sets that contain terms with the specified term labels.

```
<wsdl:operation name="GetTermSetsByLabel">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsByLabel" message="tns:IMetadataWebServiceApplication_GetTermSetsByLabel_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsByLabelResponse"
    message="tns:IMetadataWebServiceApplication_GetTermSetsByLabel_OutputMessage"/>
</wsdl:operation>
```

This operation searches for all term sets in a term store partition (1) that contain terms with the specified term labels. The term labels **MUST** be matched using the **LIKE** operator, as specified in [\[MSDN-TSQL-Ref\]](#). The following additional constraints apply:

- Every matched term set **MUST** contain at least one term with a term label that matches each specified label. Term sets with terms matching only some of the specified term labels are not returned.
- Additional implementation specific [<12>](#) constraints.

If one or more term sets contain terms that match every specified term label, all those term sets are returned. If the term store partition (1) is not found, or if no term set contains terms that match all of the specified term labels, the result set **MUST** be empty. The search is case-insensitive, and matches that the term labels start with the value specified.

3.1.4.25.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.25.1.1

IMetadataWebServiceApplication_GetTermSetsByLabel_InputMessage

The request WSDL message for the **GetTermSetsByLabel** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsByLabel
```

The SOAP body contains the **GetTermSetsByLabel** element.

3.1.4.25.1.2

IMetadataWebServiceApplication_GetTermSetsByLabel_OutputMessage

The response WSDL message for the **GetTermSetsByLabel** WSDL operation.

The SOAP body contains the **GetTermSetsByLabelResponse** element.

3.1.4.25.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.25.2.1 GetTermSetsByLabel

The input data for the **GetTermSetsByLabel** WSDL operation.

```
<xs:element name="GetTermSetsByLabel">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q32="http://schemas.microsoft.com/2003/10/Serialization/" type="q32:guid"/>
      <xs:element minOccurs="1" name="labels" nillable="false"
        xmlns:q33="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
        type="q33:ArrayOfstring"/>
      <xs:element minOccurs="0" name="lcid" nillable="true" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

labels: A list of term label strings which are used to search for term sets that contain matching terms.

lcid: An LCID that restricts the language in which the specified term labels are matched. If this parameter is NULL, the default language of each term is used.

3.1.4.25.2.2 GetTermSetsByLabelResponse

The result data for the **GetTermSetsByLabel** WSDL operation.

```

<xs:element name="GetTermSetsByLabelResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermSetsByLabelResult" nillable="true"
type="GetGroupsAndTermSetsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

GetTermSetsByLabelResult: A **GetGroupsAndTermSetsRoot** element (section [2.2.4.14](#)) that contains information about the term sets.

3.1.4.25.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.25.3.1 ArrayOfstring

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/Arrays>

A list of strings defined as follows.

```

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

```

string: A string.

3.1.4.25.4 Simple Types

None.

3.1.4.25.5 Attributes

None.

3.1.4.25.6 Groups

None.

3.1.4.25.7 Attribute Groups

None.

3.1.4.26 GetTermSetsInternal

This operation is called to get details about multiple of term sets.

```

<wsdl:operation name="GetTermSetsInternal">
  <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTer

```



```

mSetsInternal"
message="tns:IMetadataWebServiceApplication_GetTermSetsInternal_InputMessage"/>
  <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsInternalResponse"
message="tns:IMetadataWebServiceApplication_GetTermSetsInternal_OutputMessage"/>
</wsdl:operation>

```

Any term set that does not exist in the specified term store partition (1) is ignored. Otherwise, the details of each specified term set are returned.

3.1.4.26.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.26.1.1

IMetadataWebServiceApplication_GetTermSetsInternal_InputMessage

The request WSDL message for the **GetTermSetsInternal** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsInternal
```

The SOAP body contains the **GetTermSetsInternal** element.

3.1.4.26.1.2

IMetadataWebServiceApplication_GetTermSetsInternal_OutputMessage

The response WSDL message for the **GetTermSetsInternal** WSDL operation.

The SOAP body contains the **GetTermSetsInternalResponse** element.

3.1.4.26.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.26.2.1 **GetTermSetsInternal**

The input data for the **GetTermSetsInternal** WSDL operation.

```

<xs:element name="GetTermSetsInternal">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
xmlns:q14="http://schemas.microsoft.com/2003/10/Serialization/" type="q14:guid"/>
      <xs:element minOccurs="1" name="termSetIds" nillable="false"
xmlns:q15="http://schemas.microsoft.com/2003/10/Serialization/Arrays" type="q15:ArrayOfint"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetIds: A list of term sets internal identifiers (1).

3.1.4.26.2.2 GetTermSetsInternalResponse

The result data for the **GetTermSetsInternal** WSDL operation.

```
<xs:element name="GetTermSetsInternalResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermSetsInternalResult" nillable="true"
type="GetTermSetRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetTermSetsInternalResult: A **GetTermSetRoot** element (section [3.1.4.26.3.1](#)) that contains details about the term sets.

3.1.4.26.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.26.3.1 GetTermSetRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

The **GetTermSetRoot** complex type contains information about term sets defined as follows.

```
<xs:complexType name="GetTermSetRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="TS" type="SerializedECMTermSetTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="RT" type="SerializedECMRootTermTableRow"/>
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult"/>
          <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.TS: A **SerializedECMTermSetTableRow** (section [2.2.4.38](#)) for every term set.

Root.NextResult: Separates the preceding set of results of one type from the next set of a different type.

Root.RT: A **SerializedECMRootTermTableRow** (section [2.2.4.28](#)) for every root term in the term sets in **Root.TS**.

Root.TP: A **SerializedECMTermPropertyTableRowForRead** element (section [2.2.4.35](#)) for each term set.

3.1.4.26.4 Simple Types

None.

3.1.4.26.5 Attributes

None.

3.1.4.26.6 Groups

None.

3.1.4.26.7 Attribute Groups

None.

3.1.4.27 GetTermSetWithAllTerms

This operation is called to retrieve the terms in a term set.

```
<wsdl:operation name="GetTermSetWithAllTerms">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetWithAllTerms"
    message="tns:IMetadataWebServiceApplication_GetTermSetWithAllTerms_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetWithAllTermsResponse"
    message="tns:IMetadataWebServiceApplication_GetTermSetWithAllTerms_OutputMessage"/>
</wsdl:operation>
```

The protocol server returns the terms as follows:

1. If either the term store partition (1) or the term set are not found, the **GetTermSetWithAllTermsResponse** element MUST contain an empty root node.
2. If the term set exists in the term store partition (1) but does not contain any terms, the **GetTermSetWithAllTermsResponse** element MUST contain five **NextResult** nodes surrounded by a root node. That is to say, there MUST NOT be any T, TL, TD, TP, TM or CT nodes in the result, as defined by **GetTermRoot** (section [2.2.4.17](#)).
3. If the term set exists in the term store partition (1) and contains at least one term, the **GetTermSetWithAllTermsResponse** element MUST contain five **NextResult** nodes surrounded by a root node, and MUST contain **T**, **TL** and **TM** nodes for each term contained in the term set, as defined by **GetTermRoot**.

The terms, if any, MUST be returned in sorted order according to their hierarchy, that is, parent terms MUST be listed before terms are children.

3.1.4.27.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.27.1.1

IMetadataWebServiceApplication_GetTermSetWithAllTerms_InputMessage

The request WSDL message for the **GetTermSetWithAllTerms** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetWithAllTerms
```

The SOAP body contains the **GetTermSetWithAllTerms** element.

3.1.4.27.1.2

IMetadataWebServiceApplication_GetTermSetWithAllTerms_OutputMessage

The response WSDL message for the **GetTermSetWithAllTerms** WSDL operation.

The SOAP body contains the **GetTermSetWithAllTermsResponse** element.

3.1.4.27.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.27.2.1 **GetTermSetWithAllTerms**

The input data for the **GetTermSetWithAllTerms** WSDL operation.

```
<xs:element name="GetTermSetWithAllTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q17="http://schemas.microsoft.com/2003/10/Serialization/" type="q17:guid"/>
      <xs:element minOccurs="1" name="termSetGuid"
        xmlns:q18="http://schemas.microsoft.com/2003/10/Serialization/" type="q18:guid"/>
      <xs:element minOccurs="1" name="includeDeprecated" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetGuid: The term set identifier.

includeDeprecated: Reserved. This parameter MUST be set to "false".

3.1.4.27.2.2 **GetTermSetWithAllTermsResponse**

The result data for the **GetTermSetWithAllTerms** WSDL operation.

```
<xs:element name="GetTermSetWithAllTermsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermSetWithAllTermsResult" nillable="true"
        type="GetTermRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

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

GetTermSetWithAllTermsResult: A **GetTermRoot** element (section [2.2.4.17](#)) that contains details of the terms in the term set.

3.1.4.27.3 Complex Types

None.

3.1.4.27.4 Simple Types

None.

3.1.4.27.5 Attributes

None.

3.1.4.27.6 Groups

None.

3.1.4.27.7 Attribute Groups

None.

3.1.4.28 GetTermsInternal

This operation is called to retrieve the specified terms.

```
<wsdl:operation name="GetTermsInternal">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsInternal" message="tns:IMetadataWebServiceApplication_GetTermsInternal_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsInternalResponse"
    message="tns:IMetadataWebServiceApplication_GetTermsInternal_OutputMessage"/>
</wsdl:operation>
```

Any term that does not exist in the specified term store partition (1) is ignored. Otherwise, the details of each specified term are returned.

3.1.4.28.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.28.1.1 IMetadataWebServiceApplication_GetTermsInternal_InputMessage

The request WSDL message for the **GetTermsInternal** WSDL operation.

The SOAP action value is:

<http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsInternal>

The SOAP body contains the **GetTermsInternal** element.

3.1.4.28.1.2 IMetadataWebServiceApplication_GetTermsInternal_OutputMessage

The response WSDL message for the **GetTermsInternal** WSDL operation.

The SOAP body contains the **GetTermsInternalResponse** element.

3.1.4.28.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.28.2.1 GetTermsInternal

The input data for the **GetTermsInternal** WSDL operation.

```
<xs:element name="GetTermsInternal">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q8="http://schemas.microsoft.com/2003/10/Serialization/" type="q8:guid"/>
      <xs:element minOccurs="1" name="termIds" nillable="false"
        xmlns:q9="http://schemas.microsoft.com/2003/10/Serialization/Arrays" type="q9:ArrayOfint"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termIds: A list of term internal identifiers (1).

3.1.4.28.2.2 GetTermsInternalResponse

The result data for the **GetTermsInternal** WSDL operation.

```
<xs:element name="GetTermsInternalResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetTermsInternalResult" nillable="true"
        type="GetTermRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetTermsInternalResult: A **GetTermRoot** element (section [2.2.4.17](#)) that contains information about the terms.

3.1.4.28.3 Complex Types

None.

3.1.4.28.4 Simple Types

None.

3.1.4.28.5 Attributes

None.

3.1.4.28.6 Groups

None.

3.1.4.28.7 Attribute Groups

None.

3.1.4.29 GetUpdateInformation

This operation is called to get information about content type package changes that happened after the specified time.

```
<wsdl:operation name="GetUpdateInformation">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetUpdateInformation"
    message="tns:IMetadataWebServiceApplication_GetUpdateInformation_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetUpdateInformationResponse"
    message="tns:IMetadataWebServiceApplication_GetUpdateInformation_OutputMessage"/>
</wsdl:operation>
```

Changes to content type packages that have been made after the specified time are returned.

3.1.4.29.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.29.1.1

IMetadataWebServiceApplication_GetUpdateInformation_InputMessage

The request WSDL message for the **GetUpdateInformation** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetUpdateInformation
```

The SOAP body contains the **GetUpdateInformation** element.

3.1.4.29.1.2

IMetadataWebServiceApplication_GetUpdateInformation_OutputMessage

The response WSDL message for the **GetUpdateInformation** WSDL operation.

The SOAP body contains the **GetUpdateInformationResponse** element.

3.1.4.29.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.29.2.1 GetUpdateInformation

The input data for the **GetUpdateInformation** WSDL operation.

```
<xs:element name="GetUpdateInformation">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q66="http://schemas.microsoft.com/2003/10/Serialization/" type="q66:guid"/>
      <xs:element minOccurs="1" name="lastUpdateTime" type="xs:dateTime"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

lastUpdateTime: A time in UTC.

3.1.4.29.2.2 GetUpdateInformationResponse

The result data for the **GetUpdateInformation** WSDL operation.

```
<xs:element name="GetUpdateInformationResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="GetUpdateInformationResult"
        xmlns:q67="http://schemas.microsoft.com/Message" type="q67:StreamBody"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetUpdateInformationResult: Specifies information about new or updated content type packages, which MUST be a base64 encoded XML document that conforms to the schema of the **GetUpdateInformationRoot** complex type (section [2.2.4.18](#)).

3.1.4.29.3 Complex Types

None.

3.1.4.29.4 Simple Types

None.

3.1.4.29.5 Attributes

None.

3.1.4.29.6 Groups

None.

3.1.4.29.7 Attribute Groups

None.

3.1.4.30 ImportPartitionData

This operation is called to import data into a term store partition (1).

```
<wsdl:operation name="ImportPartitionData">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ImportPartitionData"
    message="tns:IMetadataWebServiceApplication_ImportPartitionData_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ImportPartitionDataResponse"
    message="tns:IMetadataWebServiceApplication_ImportPartitionData_OutputMessage"/>
</wsdl:operation>
```

If the user does not have implementation specific rights to read the file at the specified file path, the protocol server MUST send a SOAP fault message containing a System.Exception. If a term store partition (1) with the specified identifier already exists and **overwriteExistingData** is "false", the protocol server MUST send a SOAP fault message containing a System.InvalidOperationException. Otherwise, the protocol server imports the implementation specific data from the specified file path.

3.1.4.30.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.30.1.1

IMetadataWebServiceApplication_ImportPartitionData_InputMessage

The request WSDL message for the **ImportPartitionData** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ImportPartitionData
```

The SOAP body contains the **ImportPartitionData** element.

3.1.4.30.1.2

IMetadataWebServiceApplication_ImportPartitionData_OutputMessage

The response WSDL message for the **ImportPartitionData** WSDL operation.

The SOAP body contains the **ImportPartitionDataResponse** element.

3.1.4.30.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.30.2.1 ImportPartitionData

The input data for the **ImportPartitionData** WSDL operation.

```
<xs:element name="ImportPartitionData">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q74="http://schemas.microsoft.com/2003/10/Serialization/" type="q74:guid"/>
      <xs:element minOccurs="1" name="filePath" nillable="false" type="xs:string"/>
      <xs:element minOccurs="1" name="overwriteExistingData" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

filePath: UNC path to the cabinet (.cab) file that contains the data to import.

overwriteExistingData: Whether an existing term store partition (1) with the identifier specified by the **rawPartitionId** parameter is overwritten by the import.

3.1.4.30.2.2 ImportPartitionDataResponse

The result data for the **ImportPartitionData** WSDL operation.

```
<xs:element name="ImportPartitionDataResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.30.3 Complex Types

None.

3.1.4.30.4 Simple Types

None.

3.1.4.30.5 Attributes

None.

3.1.4.30.6 Groups

None.

3.1.4.30.7 Attribute Groups

None.

3.1.4.31 InitiateCacheFlush

This operation is called to indicate that the protocol client needs to flush any caches that it is maintaining.

```
<wsdl:operation name="InitiateCacheFlush">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/InitiateCacheFlush"
    message="tns:IMetadataWebServiceApplication_InitiateCacheFlush_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/InitiateCacheFlushResponse"
    message="tns:IMetadataWebServiceApplication_InitiateCacheFlush_OutputMessage"/>
</wsdl:operation>
```

The protocol server adds a change log entry which will be returned by the **GetChanges** operation (section [3.1.4.7.2.1](#)). The **GetChanges** operation can be called by the client protocol to determine when client side caches have become invalid and need to be refreshed.

3.1.4.31.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.31.1.1 IMetadataWebServiceApplication_InitiateCacheFlush_InputMessage

The request WSDL message for the **InitiateCacheFlush** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/InitiateCacheFlush
```

The SOAP body contains the **InitiateCacheFlush** element.

3.1.4.31.1.2 IMetadataWebServiceApplication_InitiateCacheFlush_OutputMessage

The response WSDL message for the **InitiateCacheFlush** WSDL operation.

The SOAP body contains the **InitiateCacheFlushResponse** element.

3.1.4.31.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.31.2.1 InitiateCacheFlush

The input data for the **InitiateCacheFlush** WSDL operation.

```
<xs:element name="InitiateCacheFlush">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.31.2.2 InitiateCacheFlushResponse

The result data for the **InitiateCacheFlush** WSDL operation.

```
<xs:element name="InitiateCacheFlushResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.31.3 Complex Types

None.

3.1.4.31.4 Simple Types

None.

3.1.4.31.5 Attributes

None.

3.1.4.31.6 Groups

None.

3.1.4.31.7 Attribute Groups

None.

3.1.4.32 PublishPackage

This operation is called to publish a content type package to the specified term store partition (1).

```
<wsdl:operation name="PublishPackage">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/PublishPackage"
    message="tns:IMetadataWebServiceApplication_PublishPackage_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/PublishPackageResponse"
    message="tns:IMetadataWebServiceApplication_PublishPackage_OutputMessage"/>
</wsdl:operation>
```

The protocol server adds the content type package to the list of available content type packages for the term store partition (1).

3.1.4.32.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.32.1.1 IMetadataWebServiceApplication_PublishPackage_InputMessage

The request WSDL message for the **PublishPackage** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/PublishPackage
```

The SOAP body contains the **PublishPackage** element.

3.1.4.32.1.2 IMetadataWebServiceApplication_PublishPackage_OutputMessage

The response WSDL message for the **PublishPackage** WSDL operation.

The SOAP body contains the **PublishPackageResponse** element.

3.1.4.32.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.32.2.1 PublishPackage

The input data for the **PublishPackage** WSDL operation.

```
<xs:element name="PublishPackage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="content" nillable="false" type="xs:base64Binary"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

content: The information about the content of a content type package. The first 16 bytes are the term store partition identifier. The bytes after the first 16 bytes and before the first encountered whitespace byte are the identifier of a content type. The next 16 bytes are reserved and MUST be the GUID "B4AD3A44-D934-4c91-8D1F-463ACEADE443". The rest of the bytes are the base64 encoded content of the package. The package MUST be a valid **deployment package (1)**. The deployment package (1) MUST be compressed, as specified in [\[MS-PRIMEPF\]](#) section 1.3. The deployment package (1) MUST contain representations of a content type, all **fields (2)** of the content type, the root **folder** of the content type, and everything in the folder. The deployment package (1) MUST NOT contain any security attributes, as specified in [\[MS-PRIMEPF\]](#) section 2.2.4.4. If the content type has one or more workflow associations, the deployment package (1) MUST contain an additional **XML** file named workflowassociation.xml containing content that MUST adhere to the definition of the **WorkflowData** element in section [2.2.4.42](#).

3.1.4.32.2.2 PublishPackageResponse

The result data for the **PublishPackage** WSDL operation.

```
<xs:element name="PublishPackageResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.32.3 Complex Types

None.

3.1.4.32.4 Simple Types

None.

3.1.4.32.5 Attributes

None.

3.1.4.32.6 Groups

None.

3.1.4.32.7 Attribute Groups

None.

3.1.4.33 RemoveUsedTermSet

This operation is called to remove term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, for terms belonging to the specified term set.

```
<wsdl:operation name="RemoveUsedTermSet">
  <wsdl:input
  wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/RemoveUsedTermSet" message="tns:IMetadataWebServiceApplication_RemoveUsedTermSet_InputMessage"/>
  <wsdl:output
  wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/RemoveUsedTermSetResponse"
  message="tns:IMetadataWebServiceApplication_RemoveUsedTermSet_OutputMessage"/>
</wsdl:operation>
```

If the term set does not exist in the specified term store partition (1) this operation has no effect. Otherwise, the protocol server removes term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, for terms belonging to the specified term set.

3.1.4.33.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.33.1.1

IMetadataWebServiceApplication_RemoveUsedTermSet_InputMessage

The request WSDL message for the **RemoveUsedTermSet** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/RemoveUsedTermSet
```

The SOAP body contains the **RemoveUsedTermSet** element.

3.1.4.33.1.2

IMetadataWebServiceApplication_RemoveUsedTermSet_OutputMessage

The response WSDL message for the **RemoveUsedTermSet** WSDL operation.

The SOAP body contains the **RemoveUsedTermSetResponse** element.

3.1.4.33.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.33.2.1 **RemoveUsedTermSet**

The input data for the **RemoveUsedTermSet** WSDL operation.

```
<xs:element name="RemoveUsedTermSet">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q56="http://schemas.microsoft.com/2003/10/Serialization/" type="q56:guid"/>
      <xs:element minOccurs="1" name="termSetId"
        xmlns:q57="http://schemas.microsoft.com/2003/10/Serialization/" type="q57:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetId: Term set identifier for the term set.

3.1.4.33.2.2 **RemoveUsedTermSetResponse**

The result data for the **RemoveUsedTermSet** WSDL operation.

```
<xs:element name="RemoveUsedTermSetResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.33.3 Complex Types

None.

3.1.4.33.4 Simple Types

None.

3.1.4.33.5 Attributes

None.

3.1.4.33.6 Groups

None.

3.1.4.33.7 Attribute Groups

None.

3.1.4.34 SearchTermByLabel

This operation is called to find terms that have term labels that match a search criteria.

```
<wsdl:operation name="SearchTermByLabel">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/Search
    TermByLabel" message="tns:IMetadataWebServiceApplication_SearchTermByLabel_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/Search
    TermByLabelResponse"
    message="tns:IMetadataWebServiceApplication_SearchTermByLabel_OutputMessage"/>
</wsdl:operation>
```

First, the protocol server restricts the scope of the search as follows:

1. If the specified term set or the specified term does not exist in the term store partition (1), the protocol server **MUST** return zero terms.
2. If both a term set and a term are specified, the search is scoped to the terms that are children.
3. If only a term set is specified, the search is scoped to the terms that are members of that term set.
4. If the **getAllLocalTermSets** parameter value is "true", the search is scoped to include all local term sets. Otherwise, the search is scoped to include the local term sets in the site collection term set group specified by the **siteGroupId** parameter value.
5. If **lcid** is specified, the search is scoped to the term labels that apply to that language.
6. If the **defaultLabelOnly** parameter is "true", the search is scoped to the default term labels of the terms. Note that if **lcid** is specified, the default term label does not match unless it applies to that language.

The protocol server performs the specified case-insensitive search against the preceding restricted scope and returns the details of the terms that were found as follows:

1. Only the first **resultCollectionSize** number of terms is returned, according to an ascending alphabetical order by term label.
2. When **getFullPath** is "true", the protocol server **MUST** return the term label path information (attributes **a40**, **a42**, **a41**, and **a15** in the **SerializedECMTermSetMembershipTableRowForRead** element) in the result set. And if both

includeIdPath and **getFullPath** are "true", the protocol server MUST also include term GUID path information **a71**.

3. If **lcid** is specified, it is used to generate the value of the **a40** attribute if **getFullPath** is "true".
4. If **isOptimized** is "true", group and permission data are not returned.

3.1.4.34.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.34.1.1

IMetadataWebServiceApplication_SearchTermByLabel_InputMessage

The request WSDL message for the **SearchTermByLabel** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByLabel
```

The SOAP body contains the **SearchTermByLabel** element.

3.1.4.34.1.2

IMetadataWebServiceApplication_SearchTermByLabel_OutputMessage

The response WSDL message for the **SearchTermByLabel** WSDL operation.

The SOAP body contains the **SearchTermByLabelResponse** element.

3.1.4.34.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.34.2.1 SearchTermByLabel

The input data for the **SearchTermByLabel** WSDL operation.

```
<xs:element name="SearchTermByLabel">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q29="http://schemas.microsoft.com/2003/10/Serialization/" type="q29:guid"/>
      <xs:element minOccurs="0" name="termSetId" nillable="true" type="xs:int"/>
      <xs:element minOccurs="0" name="anchorId" nillable="true" type="xs:int"/>
      <xs:element minOccurs="1" name="label" nillable="false" type="xs:string"/>
      <xs:element minOccurs="0" name="lcid" nillable="true" type="xs:int"/>
      <xs:element minOccurs="1" name="defaultLabelOnly" type="xs:boolean"/>
      <xs:element minOccurs="1" name="includeIdPath" type="xs:boolean"/>
      <xs:element minOccurs="1" name="stringMatchOption"
        xmlns:q30="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
        type="q30:StringMatchOption"/>
      <xs:element minOccurs="1" name="resultCollectionSize" type="xs:int"/>
      <xs:element minOccurs="1" name="getFullPath" type="xs:boolean"/>
      <xs:element minOccurs="0" name="defaultLcid" nillable="true" type="xs:int"/>
      <xs:element minOccurs="1" name="isOptimized" type="xs:boolean"/>
      <xs:element minOccurs="1" name="getAllLocalTermSets" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

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

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetId: A term set internal identifier (1) used to restrict the scope of the search.

anchorId: A term internal identifier (1) used to restrict the scope of the search. This MUST be NULL if **termSetId** is NULL or empty. Otherwise, if specified, the term MUST be a member of the specified term set.

label: A value specifying the term label value to search for. It MUST be less than or equal to 255 characters in length.

lcid: An LCID used to restrict the scope of the search to a specific language.

defaultLabelOnly: Whether the search will be restricted to matching on default labels only.

includeIdPath: Whether term GUID paths are returned in the result sets. If this value is "false" or **getFullPath** is "false", the term GUID path information MUST NOT be returned. If this value is "true" and the **getFullPath** is "true", the term GUID path information MUST be returned.

stringMatchOption: The type of string match to perform on the term label value. If this value is **StringMatchOption.ExactMatch** (section [2.2.5.11](#)), the value MUST exactly match the search criteria. If this value is **StringMatchOption.StartsWith**, the value MUST begin with the search criteria.

resultCollectionSize: The maximum number of terms to retrieve. This value MUST be zero or greater.

getFullPath: A value indicating whether **term label paths** are retrieved by this operation.

defaultLcid: An LCID used for generating the **a40** attribute value in the **SerializedECMTermSetMembershipTableRowForRead** element (section [2.2.4.37](#)) for the retrieved terms.

isOptimized: Whether a subset of the data will be returned or the complete details of the terms.

getAllLocalTermSets: A value indicating whether to include all local term sets in the search scope. If the **termSetId** is not NULL, this value is ignored. Otherwise, if this value is "true", the search scope includes all the local term sets. If this value is "false", the search scope includes only the local term sets in the site collection term set group specified by the **siteGroupId** parameter value.

siteGroupId: A term internal identifier (1) of a term set group. If the **getAllLocalTermSets** parameter value is "true", this value is ignored. Otherwise if this value is not NULL, the search scope includes the local term sets under the site collection term set group specified by this value. If this value is NULL, the search scope does not include any local term sets.

3.1.4.34.2.2 SearchTermByLabelResponse

The result data for the **SearchTermByLabel** WSDL operation.

```

<xs:element name="SearchTermByLabelResponse">
  <xs:complexType>

```

```

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

```

SearchTermByLabelResult: A **SearchedTermsRoot** element (section [2.2.4.19](#)) that contains the terms matching the search criteria. This element MUST conform to the schema of the **GetTermRoot** complex type (section [2.2.4.17](#)) if the **termSetId** parameter value is not NULL. Otherwise, this element MUST conform to the schema of the **SearchedTermsRootOptimized** type (section [2.2.4.20](#)) if the **isOptimized** parameter value is "true". Otherwise, this element MUST conform to the schema of the **SearchedTermsRootStandard** type (section [2.2.4.21](#)).

3.1.4.34.3 Complex Types

None.

3.1.4.34.4 Simple Types

None.

3.1.4.34.5 Attributes

None.

3.1.4.34.6 Groups

None.

3.1.4.34.7 Attribute Groups

None.

3.1.4.35 SearchTermByProperty

This operation is called to find terms that have properties that match a search criteria.

```

<wsdl:operation name="SearchTermByProperty">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByProperty"
    message="tns:IMetadataWebServiceApplication_SearchTermByProperty_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByPropertyResponse"
    message="tns:IMetadataWebServiceApplication_SearchTermByProperty_OutputMessage"/>
</wsdl:operation>

```

First the protocol server restricts the scope of the search as follows:

1. If the specified term set does not exist in the term store partition (1), then the protocol server MUST return zero terms.
2. If a term set is specified, the search is scoped to the terms that are members of that term set.

3. Only terms that have the specified **propertyName** (case insensitive) property are considered.

If the **propertyValue** parameter is specified, the protocol server performs the specified case insensitive search against the values of those properties; otherwise, all of the terms from the restricted scope are returned.

3.1.4.35.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.35.1.1

IMetadataWebServiceApplication_SearchTermByProperty_InputMessage

The request WSDL message for the **SearchTermByProperty** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByProperty
```

The SOAP body contains the **SearchTermByProperty** element.

3.1.4.35.1.2

IMetadataWebServiceApplication_SearchTermByProperty_OutputMessage

The response WSDL message for the **SearchTermByProperty** WSDL operation.

The SOAP body contains the **SearchTermByPropertyResponse** element.

3.1.4.35.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.35.2.1 SearchTermByProperty

The input data for the **SearchTermByProperty** WSDL operation.

```
<xs:element name="SearchTermByProperty">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q36="http://schemas.microsoft.com/2003/10/Serialization/" type="q36:guid"/>
      <xs:element minOccurs="0" name="termSetId" nillable="true" type="xs:int"/>
      <xs:element minOccurs="1" name="propertyName" nillable="false" type="xs:string"/>
      <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"/>
      <xs:element minOccurs="1" name="stringMatchOption"
        xmlns:q37="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
        type="q37:StringMatchOption"/>
      <xs:element minOccurs="1" name="resultCollectionSize" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetId: A term set internal identifier (1) used to restrict the scope of the search.

propertyName: The property name to search for. The name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

propertyValue: The property value to search for. The value MUST NOT contain tab or line break. It MUST be less than or equal to 10240 characters in length.

stringMatchOption: The type of string match to perform on the term label value. If this value is **StringMatchOption.ExactMatch** (section [2.2.5.11](#)), the value MUST exactly match the search criteria. If this value is **StringMatchOption.StartsWith** then the value MUST begin with the search criteria.

resultCollectionSize: The maximum number of terms to retrieve. This parameter is intended to limit the performance impact for large searches; the order is undefined. This value MUST be zero or greater.

3.1.4.35.2 SearchTermByPropertyResponse

The result data for the **SearchTermByProperty** WSDL operation.

```
<xs:element name="SearchTermByPropertyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchTermByPropertyResult" nillable="true"
        type="SearchedTermsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SearchTermByPropertyResult: A **SearchedTermsRoot** element (section [2.2.4.19](#)) that contains the terms matching the search criteria. This element MUST conform to the schema of the **GetTermRoot** type (section [2.2.4.17](#)) if the **termSetId** parameter value is NOT NULL. Otherwise, this element MUST conform to the schema of the **SearchedTermsRootStandard** type (section [2.2.4.21](#)).

3.1.4.35.3 Complex Types

None.

3.1.4.35.4 Simple Types

None.

3.1.4.35.5 Attributes

None.

3.1.4.35.6 Groups

None.

3.1.4.35.7 Attribute Groups

None.

3.1.4.36 SearchTermSetByName

This operation is called to find term sets by name.

```
<wsdl:operation name="SearchTermSetByName">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetByName"
    message="tns:IMetadataWebServiceApplication_SearchTermSetByName_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetByNameResponse"
    message="tns:IMetadataWebServiceApplication_SearchTermSetByName_OutputMessage"/>
</wsdl:operation>
```

The protocol server returns the details about the term sets that have a name that is an exact case insensitive match of the **termSetName** in the specified LCID.

3.1.4.36.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.36.1.1

IMetadataWebServiceApplication_SearchTermSetByName_InputMessage

The request WSDL message for the **SearchTermSetByName** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetByName
```

The SOAP body contains the **SearchTermSetByName** element.

3.1.4.36.1.2

IMetadataWebServiceApplication_SearchTermSetByName_OutputMessage

The response WSDL message for the **SearchTermSetByName** WSDL operation.

The SOAP body contains the **SearchTermSetByNameResponse** element.

3.1.4.36.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.36.2.1 SearchTermSetByName

The input data for the **SearchTermSetByName** WSDL operation.

```
<xs:element name="SearchTermSetByName">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q31="http://schemas.microsoft.com/2003/10/Serialization/" type="q31:guid"/>
      <xs:element minOccurs="1" name="termSetName" nillable="false" type="xs:string"/>
      <xs:element minOccurs="1" name="lcid" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

termSetName: The name of the term set for which to search. It MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

lcid: An LCID that restricts the language in which the specified term set name will be matched. This value MUST NOT be NULL or empty.

3.1.4.36.2.2 SearchTermSetByNameResponse

The result data for the **SearchTermSetByName** WSDL operation.

```
<xs:element name="SearchTermSetByNameResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchTermSetByNameResult" nillable="true"
        type="GetGroupsAndTermSetsRoot"/>
    </xs:sequence>
  </xs:complexType>
```

</xs:element>

SearchTermSetByNameResult: A **GetGroupsAndTermSetsRoot** element (section [2.2.4.14](#)) that contains information about the term sets with names matching **termSetName**.

3.1.4.36.3 Complex Types

None.

3.1.4.36.4 Simple Types

None.

3.1.4.36.5 Attributes

None.

3.1.4.36.6 Groups

None.

3.1.4.36.7 Attribute Groups

None.

3.1.4.37 SetServiceSettings

This operation is called to set a setting for a term store partition (1).

```
<wsdl:operation name="SetServiceSettings">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/SetServiceSettings"
    message="tns:IMetadataWebServiceApplication_SetServiceSettings_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/SetServiceSettingsResponse"
    message="tns:IMetadataWebServiceApplication_SetServiceSettings_OutputMessage"/>
</wsdl:operation>
```

The protocol server stores the term store partition (1) settings that are specified.

3.1.4.37.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.37.1.1 IMetadataWebServiceApplication_SetServiceSettings_InputMessage

The request WSDL message for the **SetServiceSettings** WSDL operation.

The SOAP action value is:

<http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/SetServiceSettings>

The SOAP body contains the **SetServiceSettings** element.

3.1.4.37.1.2

IMetadataWebServiceApplication_SetServiceSettings_OutputMessage

The response WSDL message for the **SetServiceSettings** WSDL operation.

The SOAP body contains the **SetServiceSettingsResponse** element.

3.1.4.37.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.37.2.1 SetServiceSettings

The input data for the **SetServiceSettings** WSDL operation.

```
<xs:element name="SetServiceSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q60="http://schemas.microsoft.com/2003/10/Serialization/" type="q60:guid"/>
      <xs:element minOccurs="1" name="settingsXml" nillable="false" type="xs:string"/>
      <xs:element minOccurs="1" name="unpublishAllPackages" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

settingsXml: Settings for the term store, which MUST conform to the schema of the **ServiceSettingsSettingsXmlDoc** complex type (section [2.2.4.41](#)).

unpublishAllPackages: If the hub has not been changed as part of this operation by the **settingsXML** element, this value is ignored. If the hub has been changed and this value is "true", the protocol server MUST unpublish all content type packages for the former hub. If this value is "false", it MUST be ignored.

3.1.4.37.2.2 SetServiceSettingsResponse

The result data for the **SetServiceSettings** WSDL operation.

```
<xs:element name="SetServiceSettingsResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.37.3 Complex Types

None.

3.1.4.37.4 Simple Types

None.

3.1.4.37.5 Attributes

None.

3.1.4.37.6 Groups

None.

3.1.4.37.7 Attribute Groups

None.

3.1.4.38 UnpublishPackage

This operation is called to unpublish a content type package from the specified term store partition (1).

```
<wsdl:operation name="UnpublishPackage">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UnpublishPackage"
    message="tns:IMetadataWebServiceApplication_UnpublishPackage_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UnpublishPackageResponse"
    message="tns:IMetadataWebServiceApplication_UnpublishPackage_OutputMessage"/>
</wsdl:operation>
```

The protocol server removes the specified content type package from the list of available content type packages for the term store partition (1). If the specified content type package does not exist, the protocol server does not do anything.

3.1.4.38.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.38.1.1 IMetadataWebServiceApplication_UnpublishPackage_InputMessage

The request WSDL message for the **UnpublishPackage** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UnpublishPackage
```

The SOAP body contains the **UnpublishPackage** element.

3.1.4.38.1.2

IMetadataWebServiceApplication_UnpublishPackage_OutputMessage

The response WSDL message for the **UnpublishPackage** WSDL operation.

The SOAP body contains the **UnpublishPackageResponse** element.

3.1.4.38.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.38.2.1 UnpublishPackage

The input data for the **UnpublishPackage** WSDL operation.

```
<xs:element name="UnpublishPackage">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q61="http://schemas.microsoft.com/2003/10/Serialization/" type="q61:guid"/>
      <xs:element minOccurs="1" name="packageId" nillable="false" type="ContentTypeId"/>
      <xs:element minOccurs="1" name="packageType"
        xmlns:q62="http://schemas.microsoft.com/2003/10/Serialization/" type="q62:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

packageId: The identifier of the content type.

packageType: Reserved. The value MUST be "B4AD3A44-D934-4C91-8D1F-463ACEADE443".

3.1.4.38.2.2 UnpublishPackageResponse

The result data for the **UnpublishPackage** WSDL operation.

```
<xs:element name="UnpublishPackageResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.38.3 Complex Types

None.

3.1.4.38.4 Simple Types

None.

3.1.4.38.5 Attributes

None.

3.1.4.38.6 Groups

None.

3.1.4.38.7 Attribute Groups

None.

3.1.4.39 UploadStatus

This operation is called to add an entry to the content type publication log.

```
<wsdl:operation name="UploadStatus">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UploadStatus" message="tns:IMetadataWebServiceApplication_UploadStatus_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UploadStatusResponse"
    message="tns:IMetadataWebServiceApplication_UploadStatus_OutputMessage"/>
</wsdl:operation>
```

The protocol server adds the entry to the content type publication log.

3.1.4.39.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.39.1.1 IMetadataWebServiceApplication_UploadStatus_InputMessage

The request WSDL message for the **UploadStatus** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UploadStatus
```

The SOAP body contains the **UploadStatus** element.

3.1.4.39.1.2 IMetadataWebServiceApplication_UploadStatus_OutputMessage

The response WSDL message for the **UploadStatus** WSDL operation.

The SOAP body contains the **UploadStatusResponse** element.

3.1.4.39.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.39.2.1 UploadStatus

The input data for the **UploadStatus** WSDL operation.

```
<xs:element name="UploadStatus">
```

```

<xs:complexType>
  <xs:sequence>
    <xs:element minOccurs="1" name="rawPartitionId"
xmlns:q71="http://schemas.microsoft.com/2003/10/Serialization/" type="q71:guid"/>
    <xs:element minOccurs="1" name="siteUrl" nillable="false" type="xs:string"/>
    <xs:element minOccurs="1" name="objectName" nillable="false" type="xs:string"/>
    <xs:element minOccurs="1" name="status"
xmlns:q72="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.ContentTypeS
ync" type="q72:SyndicationStatus"/>
    <xs:element minOccurs="1" name="message" nillable="false" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

siteUrl: The URL of the site collection for which the log entry is generated. It MUST be less than or equal to 2000 characters in length.

objectName: The name of the object for which the log entry is generated.

status: The name of the content type publication stage at which the log entry is generated.

message: The content of the log entry.

3.1.4.39.2.2 UploadStatusResponse

The result data for the **UploadStatus** WSDL operation.

```

<xs:element name="UploadStatusResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>

```

3.1.4.39.3 Complex Types

None.

3.1.4.39.4 Simple Types

The following XML Schema simple type definitions are specific to this operation.

3.1.4.39.4.1 SyndicationStatus

Namespace:

http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.ContentTypeSync

This type indicates the name of a content type publication stage and is defined as follows.

```

<xs:simpleType name="SyndicationStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None"/>
    <xs:enumeration value="Publishing"/>
    <xs:enumeration value="TimeStampRetrieving"/>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="PackageRetrieving"/>
<xs:enumeration value="Importing"/>
<xs:enumeration value="ImportingContentType"/>
<xs:enumeration value="ImportingNonContentType"/>
<xs:enumeration value="ContentTypeUnsharing"/>
<xs:enumeration value="PreCheck"/>
<xs:enumeration value="SiteRefreshing"/>
<xs:enumeration value="WorkflowImporting"/>
<xs:enumeration value="ContentTypePolicyDirtyBagUpdating"/>
<xs:enumeration value="ContentTypeSealing"/>
<xs:enumeration value="TimeStampUpdating"/>
<xs:enumeration value="LogTrimming"/>
<xs:enumeration value="LogSynchronizing"/>
<xs:enumeration value="Unpublishing"/>
<xs:enumeration value="Failed"/>
<xs:enumeration value="Succeeded"/>
</xs:restriction>
</xs:simpleType>

```

The following table specifies the allowable values for **SyndicationStatus**.

Value	Meaning
None	Not started yet.
Publishing	Publishing a content type.
TimeStampRetrieving	Retrieving the time stamp from a content type subscriber site.
PackageRetrieving	Retrieving a content type package from term store.
Importing	Importing a package on a content type subscriber site.
ImportingContentType	Importing a content type package on a content type subscriber site.
ImportingNonContentType	Reserved. MUST NOT be used.
ContentTypeUnsharing	Marking a content type as not published to a content type subscriber site.
PreCheck	Checking prerequisites before importing on a content type subscriber site.
SiteRefreshing	Retrieving a content type subscriber site.
WorkflowImporting	Importing the workflows (2) associated with a content type on a content type subscriber site.
ContentTypePolicyDirtyBagUpdating	Updating the policy dirty bag of a content type on a content type subscriber site.
ContentTypeSealing	Making a content type read only.
TimeStampUpdating	Updating the time stamp on a content type subscriber site.
LogTrimming	Trimming the content type publishing log list to prevent it from getting too big.
LogSynchronizing	Retrieving the content type publication log.

Value	Meaning
Unpublishing	Unpublishing a content type.
Failed	Content type publication has failed to complete.
Succeeded	Content type publication has succeeded.

3.1.4.39.5 Attributes

None.

3.1.4.39.6 Groups

None.

3.1.4.39.7 Attribute Groups

None.

3.1.4.40 Write

This operation is called to perform write operations against a term store partition (1).

```
<wsdl:operation name="Write">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
    " message="tns:IMetadataWebServiceApplication_Write_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
    Response" message="tns:IMetadataWebServiceApplication_Write_OutputMessage"/>
</wsdl:operation>
```

The protocol server first performs implementation specific authorization to determine whether the requested write operations can be performed; if it determines that the caller does not have permissions, it MUST return an error.

Otherwise, the protocol server performs the requested write operations in sequence inside a transaction against the term store partition (1). If all the operations succeed, then the operation finishes successfully and the transaction is committed. If there is a failure during the processing of the write operations then the transaction is rolled back, the specified write operations are not persisted and the protocol server MUST send a SOAP fault message.

3.1.4.40.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.40.1.1 IMetadataWebServiceApplication_Write_InputMessage

The request WSDL message for the **Write** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
```

The SOAP body contains the **Write** element.

3.1.4.40.1.2 IMetadataWebServiceApplication_Write_OutputMessage

The response WSDL message for the **Write** WSDL operation.

The SOAP body contains the **WriteResponse** element.

3.1.4.40.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.40.2.1 Write

The input data for the **Write** WSDL operation.

```
<xs:element name="Write">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="data" nillable="false" type="WriteRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

data: The input collection of write operations to execute on the term store partition (1).

3.1.4.40.2.2 WriteResponse

The result data for the **Write** WSDL operation.

```
<xs:element name="WriteResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.40.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.40.3.1 WriteRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

The requested write operations for the term store partition (1). Each child element **MUST** have a **CommandAction** (section [2.2.5.2](#)) or **CommandActionBasic** **a5** attribute (section [2.2.5.3](#)) that specifies the type of write operation that is performed for that term store object and the other attributes and child elements are used as the detailed input parameters to perform that action. This operation is defined as follows.

```
<xs:complexType name="WriteRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
```



```

    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="Partition"
type="WritePartitionIndicator"/>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="G" type="SerializedECMGroupTableRow"/>
        <xs:element name="TS" type="SerializedECMTermSetTableRow"/>
        <xs:element name="T" type="SerializedECMTermTableRowForWrite"/>
      </xs:choice>
      <xs:element name="L" type="SerializedECMLanguageTableRow"/>
      <xs:element name="P" type="SerializedECMPermissionTableRow"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>

```

Root: Root input element.

Root.Partition: The term store partition (1).

Root.G: Data specifying Add, Edit or Delete operations on term set groups.

Root.TS: Data specifying Add, Edit, Delete, Copy or Move operations on term sets.

Root.T: Data specifying Add, Edit, Delete, Copy or Merge operations on terms and also specifying operations on related term labels, descriptions, properties, and the term sets of which the term is a member.

Root.L: Data specifying Add, Edit, or Delete operations on languages.

Root.P: Data specifying Add, Edit, or Delete operations on permissions.

3.1.4.40.3.2 WritePartitionIndicator

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

An identifier of a term store partition (1) defined as follows.

```

<xs:complexType name="WritePartitionIndicator">
  <xs:attribute name="Id" type="ser:guid" use="required"/>
</xs:complexType>

```

Id: The term store partition identifier for the current write operations.

3.1.4.40.3.3 SerializedECMTermTableRowForWrite

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Data specifying Add, Edit, Delete, Copy, or Merge operations on terms and also specifying operations on related term labels, descriptions, properties, and the term sets of which the term is a member. Each child element MUST have a **CommandAction** (section [2.2.5.2](#)) or **CommandActionBasic** attribute (section [2.2.5.3](#)) that specifies the type of write operation that is performed for the term store object related to this term and the other attributes and child elements that are used as the input data parameters to update properties of term store objects when performing the action. This is defined as follows.

```

<xs:complexType name="SerializedECMTermTableRowForWrite">
  <xs:sequence minOccurs="0">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="TL" type="SerializedECMTermLabelTableRowForWrite"/>
      <xs:element name="TD" type="SerializedECMTermDescriptionTableRowForWrite"/>
      <xs:element name="TP" type="SerializedECMTermPropertyTableRowForWrite"/>
      <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForWrite"/>
    </xs:choice>
  </xs:sequence>
  <xs:attribute name="a6" type="InternalIdentifier" use="required"/>
  <xs:attribute name="a0" type="ser:guid" use="required"/>
  <xs:attribute name="a8" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a9" type="ser:guid" use="optional"/>
  <xs:attribute name="a14" type="xs:string" use="optional"/>
  <xs:attribute name="a19" type="xs:dateTime" use="optional"/>
  <xs:attribute name="a20" type="xs:int" use="optional"/>
  <xs:attribute name="a21" type="xs:boolean" use="optional"/>
  <xs:attribute name="a22" type="xs:boolean" use="optional"/>
  <xs:attribute name="a17" type="xs:boolean" use="optional"/>
  <xs:attribute name="a67" type="xs:string" use="optional"/>
  <xs:attribute name="a24" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a25" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a26" type="xs:boolean" use="optional"/>
  <xs:attribute name="a74" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a27" type="xs:boolean" use="optional"/>
  <xs:attribute name="a28" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a10" type="InternalIdentifier" use="optional"/>
  <xs:attribute name="a30" type="xs:boolean" use="optional"/>
  <xs:attribute name="a55" type="xs:string" use="optional"/>
  <xs:attribute name="a5" type="CommandAction" use="required"/>
</xs:complexType>

```

TL: Data specifying write operations on the term labels for a term.

TD: Data specifying write operations on the descriptions for a term.

TP: Data specifying write operations on the properties of the current term.

TM: Data specifying write operations that affect the term sets of which the term is a member.

a6: The internal identifier (1) of the term. If the value of **a5** is "4" (Copy), the value of **a6** MUST be "-1", indicating that the value is provided by the protocol server.

a0: The identifier of the term store partition (1) to which the term belongs.

a8: The UTC time of the last modification to the term object.

a9: The identifier of the term.

a14: The name of the owner of the term.

a19: Reserved. The value MUST be ignored.

a20: Reserved. The value MUST be zero.

a21: Specifies whether the term is deprecated.

a22: Specifies whether the term is deleted.

a17: Specifies if the term is available for tagging when used in the context of the given term set for the members of the term set.

a67: A list of term identifiers, separated by a colon (:), which defines a fixed order that the terms that are children appear for the members of the term set.

a24: The internal identifier (1) of the term set containing the term.

a25: The internal identifier (1) of the parent term of the current term in the term set in the members of the term set. If the term is at the root of the term set, this MUST be zero.

a26: Whether the term is a source term. Note that if a term belongs to only one term set, that instance is considered to be the source term.

a74: The internal identifier (1) of the source term set that this term is pinned to. If the term is not pinned to any term set, this MUST be NULL. [<13>](#)

a27: This MUST be "true" if any of the write operations include changes to any of the default term labels for this term. Otherwise this attribute MUST be absent.

a28: The internal identifier (1) of the term into which this term is merged. If the value of **a5** is "5" (Merge), **a28** MUST be present. Otherwise, **a28** MUST be absent.

a10: The internal identifier (1) of the term from which this is copied. If the value of **a5** is "4" (Copy), **a10** MUST be present. Otherwise, **a10** MUST be absent. This value MUST NOT refer to a term in the keyword term set.

a30: Reserved. The value MUST be "true".

a55: Details of the term update. It MUST be the same type as **Data.E** in **ChangeDataForUpdateTerm** (section [2.2.4.43](#)). [<14>](#)

a5: A **CommandAction** (section [2.2.5.2](#)) specifying what kind of write operation is performed on this term. The value MUST NOT be "3" (Move).

If the value of **a5** is "2" (Delete) or "5" (Merge), the **a14**, **a19**, **a20**, **a21**, **a22**, **a17**, **a67**, **a25**, **a26**, **a27**, **a10**, **a30** attributes and the **TD**, **TL**, **TP** and **TM** child elements MUST all be absent.

If the value of **a5** is "5" (Merge), **a26** MUST NOT be "false", and the **a6** and **a28** values MUST NOT refer to a member of the term set of keywords or the term set of orphaned terms.

CommandAction operations here represent stored procedures described in [\[MS-EMMSTORE\]](#).

CommandAction	Stored procedure
0 (Add)	proc_ECM_CreateTerm
1 (Edit)	proc_ECM_UpdateTerm
2 (Delete)	proc_ECM_DeleteTerm
3 (Move)	<i>unused</i>
4 (Copy)	proc_ECM_CreateTerm
5 (Merge)	proc_ECM_MergeTerm

These actions only loosely correspond to conceptual operations such as "deleting" or "moving" a term. Some examples follow:

There is a conceptual rule for **reused terms** that the source term instance cannot be removed without first adding its term to the orphaned terms term set. In the protocol, this is expressed using a pair of **Root.T** elements: the first is an Edit action whose **TM** element adds the term to the orphaned terms term set, with **a25** set to "true" in both **Root.T** and **TM** elements. The second **Root.T** element is a Delete action that removes the old source term.

A similar pair of operations is used when the new source term is designated. The first **Root.T** element uses the Edit action to specify the new source term instance, with **a25** set to "true" in both **Root.T** and **TM** elements. The second **Root.T** element uses the Delete action to remove the term from the orphaned terms term set.

3.1.4.40.3.4 SerializedECMTermLabelTableRowForWrite

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

Data for term label. This element specifies a write operation on a term label and has the attributes specified as follows and the attributes of the base type **SerializedECMTermLabelTableRowBase** (section [2.2.4.32](#)). This is defined as follows.

```
<xs:complexType name="SerializedECMTermLabelTableRowForWrite">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermLabelTableRowBase">
      <xs:attribute name="a5" type="CommandActionBasic" use="required"/>
      <xs:attribute name="a35" type="xs:boolean" use="optional"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

a5: A **CommandActionBasic** (section [2.2.5.3](#)) specifying what kind of write operation is performed on this term label. The value MUST NOT be "1" (Edit).

If the value is "2" (Delete), the **a31** and **a35** attributes MUST be absent.

a35: If the term for this term label is also a member of the keyword term set and the **a31** attribute is "true", this attribute MUST be "true". Otherwise, it MUST be absent.

3.1.4.40.3.5 SerializedECMTermDescriptionTableRowForWrite

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A write operation on a description of a term defined as follows.

```
<xs:complexType name="SerializedECMTermDescriptionTableRowForWrite">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermDescriptionTableRowBase">
      <xs:attribute name="a5" type="CommandActionBasic" use="required"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

a5: A **CommandActionBasic** (section [2.2.5.3](#)) specifying what kind of write operation will be performed on this description.

3.1.4.40.3.6 SerializedECMTermPropertyTableRowForWrite

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A write operation on a property of a term defined as follows.

```
<xs:complexType name="SerializedECMTermPropertyTableRowForWrite">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermPropertyTableRowBase">
      <xs:attribute name="a5" type="CommandActionBasic" use="required"/>
      <xs:attribute name="a24" type="InternalIdentifier" use="optional"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

a5: A **CommandActionBasic** (section [2.2.5.3](#)) specifying what kind of write operation will be performed on this property.

If the value is 2 (Delete) then the a38 attribute MUST be absent.

a24: The internal identifier (1) of a term set of which the term is a member. [<15>](#)

3.1.4.40.3.7 SerializedECMTermSetMembershipTableRowForWrite

Namespace: http://schemas.microsoft.com/sharepoint/taxonomy/soap/

A write operation on the members of a term set is defined as follows.

```
<xs:complexType name="SerializedECMTermSetMembershipTableRowForWrite">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermSetMembershipTableRowBase">
      <xs:attribute name="a5" type="CommandAction" use="required"/>
      <xs:attribute name="a46" type="InternalIdentifier" use="optional"/>
      <xs:attribute name="a47" type="InternalIdentifier" use="optional"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

a5: A **CommandAction** (section [2.2.5.2](#)) specifying what kind of write operation is performed on the members of the term set. The value MUST NOT be "4" (Copy) or "5" (Merge).

If the value is "2" (Delete), the **a17**, **a26**, **a67**, **a46** and **a47** attributes MUST be absent.

a46: The internal identifier (1) of the term set from which this term set membership is moved. If the value of **a5** is "3" (Move), **a46** MUST be present. Otherwise, **a46** MUST be absent.

a47: The internal identifier (1) of the parent term from which this term set membership is moved. If the value of **a5** is "3" (Move), **a47** MUST be present. Otherwise, **a47** MUST be absent.

3.1.4.40.4 Simple Types

None.

3.1.4.40.5 Attributes

None.

3.1.4.40.6 Groups

None.

3.1.4.40.7 Attribute Groups

None.

3.1.4.41 WriteClearUsedTerms

This operation is called to remove the term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, for the specified site collection.

```
<wsdl:operation name="WriteClearUsedTerms">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteClearUsedTerms"
    message="tns:IMetadataWebServiceApplication_WriteClearUsedTerms_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteClearUsedTermsResponse"
    message="tns:IMetadataWebServiceApplication_WriteClearUsedTerms_OutputMessage"/>
</wsdl:operation>
```

The protocol server removes the term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, for the specified site collection.

3.1.4.41.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.41.1.1

IMetadataWebServiceApplication_WriteClearUsedTerms_InputMessage

The request WSDL message for the **WriteClearUsedTerms** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteClearUsedTerms
```

The SOAP body contains the **WriteClearUsedTerms** element.

3.1.4.41.1.2

IMetadataWebServiceApplication_WriteClearUsedTerms_OutputMessage

The response WSDL message for the **WriteClearUsedTerms** WSDL operation.

The SOAP body contains the **WriteClearUsedTermsResponse** element.

3.1.4.41.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.41.2.1 WriteClearUsedTerms

The input data for the **WriteClearUsedTerms** WSDL operation.

```
<xs:element name="WriteClearUsedTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q52="http://schemas.microsoft.com/2003/10/Serialization/" type="q52:guid"/>
      <xs:element minOccurs="1" name="webAppId"
        xmlns:q53="http://schemas.microsoft.com/2003/10/Serialization/" type="q53:guid"/>
      <xs:element minOccurs="1" name="contentDatabaseId"
        xmlns:q54="http://schemas.microsoft.com/2003/10/Serialization/" type="q54:guid"/>
      <xs:element minOccurs="1" name="siteId"
        xmlns:q55="http://schemas.microsoft.com/2003/10/Serialization/" type="q55:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

webAppId: Web application (1) identifier for Web application (1) that contains the site collection in which the specified term is used.

contentDatabaseId: **Content database** identifier for the site collection in which the specified term is used.

siteId: The identifier of a site collection.

3.1.4.41.2.2 WriteClearUsedTermsResponse

The result data for the **WriteClearUsedTerms** WSDL operation.

```
<xs:element name="WriteClearUsedTermsResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.41.3 Complex Types

None.

3.1.4.41.4 Simple Types

None.

3.1.4.41.5 Attributes

None.

3.1.4.41.6 Groups

None.

3.1.4.41.7 Attribute Groups

None.

3.1.4.42 WriteUsedTerm

Adds term usage information, as specified in section [\[MS-EMMSTORE\]](#) section 2.2.5.8, indicating that the specified term has been used in the specified site collection.

```
<wsdl:operation name="WriteUsedTerm">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTerm" message="tns:IMetadataWebServiceApplication_WriteUsedTerm_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTermResponse" message="tns:IMetadataWebServiceApplication_WriteUsedTerm_OutputMessage"/>
</wsdl:operation>
```

The protocol server adds term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, indicating that the specified term has been used in the specified site collection.

3.1.4.42.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.42.1.1 IMetadataWebServiceApplication_WriteUsedTerm_InputMessage

The request WSDL message for the **WriteUsedTerm** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTerm
```

The SOAP body contains the **WriteUsedTerm** element.

3.1.4.42.1.2 IMetadataWebServiceApplication_WriteUsedTerm_OutputMessage

The response WSDL message for the **WriteUsedTerm** WSDL operation.

The SOAP body contains the **WriteUsedTermResponse** element.

3.1.4.42.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.42.2.1 WriteUsedTerm

The input data for the **WriteUsedTerm** WSDL operation.

```
<xs:element name="WriteUsedTerm">
```



```

<xs:complexType>
  <xs:sequence>
    <xs:element minOccurs="1" name="rawPartitionId"
      xmlns:q40="http://schemas.microsoft.com/2003/10/Serialization/" type="q40:guid"/>
    <xs:element minOccurs="1" name="webAppId"
      xmlns:q41="http://schemas.microsoft.com/2003/10/Serialization/" type="q41:guid"/>
    <xs:element minOccurs="1" name="contentDatabaseId"
      xmlns:q42="http://schemas.microsoft.com/2003/10/Serialization/" type="q42:guid"/>
    <xs:element minOccurs="1" name="siteId"
      xmlns:q43="http://schemas.microsoft.com/2003/10/Serialization/" type="q43:guid"/>
    <xs:element minOccurs="1" name="termSetId"
      xmlns:q44="http://schemas.microsoft.com/2003/10/Serialization/" type="q44:guid"/>
    <xs:element minOccurs="1" name="termId"
      xmlns:q45="http://schemas.microsoft.com/2003/10/Serialization/" type="q45:guid"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

webAppId: Web application (1) identifier for a Web application (1) that contains the site collection in which the specified term is used.

contentDatabaseId: Content database identifier for the site collection in which the specified term is used.

siteId: Site collection identifier for the site collection in which the specified term is used.

termSetId: Term set identifier for term set to which the specified term belongs.

termId: Term identifier.

3.1.4.42.2 WriteUsedTermResponse

The result data for the **WriteUsedTerm** WSDL operation.

```

<xs:element name="WriteUsedTermResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>

```

3.1.4.42.3 Complex Types

None.

3.1.4.42.4 Simple Types

None.

3.1.4.42.5 Attributes

None.

3.1.4.42.6 Groups

None.

3.1.4.42.7 Attribute Groups

None.

3.1.4.43 WriteUsedTerms

Adds term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, indicating that the specified terms have been used in the specified site collection.

```
<wsdl:operation name="WriteUsedTerms">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTerms" message="tns:IMetadataWebServiceApplication_WriteUsedTerms_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTermsResponse"
    message="tns:IMetadataWebServiceApplication_WriteUsedTerms_OutputMessage"/>
</wsdl:operation>
```

The protocol server adds term usage information, as specified in [\[MS-EMMSTORE\]](#) section 2.2.5.8, indicating that the specified terms have been used in the specified site collection.

3.1.4.43.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.43.1.1 IMetadataWebServiceApplication_WriteUsedTerms_InputMessage

The request WSDL message for the **WriteUsedTerms** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTerms
```

The SOAP body contains the **WriteUsedTerms** element.

3.1.4.43.1.2 IMetadataWebServiceApplication_WriteUsedTerms_OutputMessage

The response WSDL message for the **WriteUsedTerms** WSDL operation.

The SOAP body contains the **WriteUsedTermsResponse** element.

3.1.4.43.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.43.2.1 WriteUsedTerms

The input data for the **WriteUsedTerms** WSDL operation.

```

<xs:element name="WriteUsedTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
xmlns:q46="http://schemas.microsoft.com/2003/10/Serialization/" type="q46:guid"/>
      <xs:element minOccurs="1" name="webAppId"
xmlns:q47="http://schemas.microsoft.com/2003/10/Serialization/" type="q47:guid"/>
      <xs:element minOccurs="1" name="contentDatabaseId"
xmlns:q48="http://schemas.microsoft.com/2003/10/Serialization/" type="q48:guid"/>
      <xs:element minOccurs="1" name="siteId"
xmlns:q49="http://schemas.microsoft.com/2003/10/Serialization/" type="q49:guid"/>
      <xs:element minOccurs="1" name="termSetIds" nillable="false"
xmlns:q50="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
type="q50:ArrayOfguid"/>
      <xs:element minOccurs="1" name="termIds" nillable="false"
xmlns:q51="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
type="q51:ArrayOfguid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

rawPartitionId: The term store partition identifier. This value MUST NOT be NULL or empty.

webAppId: Web application (1) identifier for the Web application (1) that contains the site collection in which the specified terms are used.

contentDatabaseId: Content database identifier for the site collection in which the specified terms are used.

siteId: Site collection identifier for the site collection in which the specified terms are used.

termSetIds: A list of term set identifiers. This list MUST have the same number of members as the **termIds** list, and a term set in in this **termSetIds** list MUST contain the corresponding term in the **termIds** list having the same index.

termIds: A list of term identifiers.

3.1.4.43.2.2 WriteUsedTermsResponse

The result data for the **WriteUsedTerms** WSDL operation.

```

<xs:element name="WriteUsedTermsResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>

```

3.1.4.43.3 Complex Types

None.

3.1.4.43.4 Simple Types

None.

3.1.4.43.5 Attributes

None.

3.1.4.43.6 Groups

None.

3.1.4.43.7 Attribute Groups

None.

3.1.4.44 GetChangedTermSets

Returns all term sets that have changed since a specific time. [<16>](#)

```
<wsdl:operation name="GetChangedTermSets">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangedTermSets" message="tns:IMetadataWebServiceApplication_GetChangedTermSets_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangedTermSetsResponse"
    message="tns:IMetadataWebServiceApplication_GetChangedTermSets_OutputMessage"/>
</wsdl:operation>
```

The change could be to a term in the term set or to the term set itself. This call spans all partitions in the term store.

3.1.4.44.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.44.1.1

IMetadataWebServiceApplication_GetChangedTermSets_InputMessage

The request WSDL message for the **GetChangedTermSets** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangedTermSets
```

The SOAP body contains the **GetChangedTermSets** element.

3.1.4.44.1.2

IMetadataWebServiceApplication_GetChangedTermSets_OutputMessage

The response WSDL message for the **GetChangedTermSets** WSDL operation.

The SOAP body contains the **GetChangedTermSetsResponse** element.

3.1.4.44.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.44.2.1 GetChangedTermSets

The input data for the **GetChangedTermSets** WSDL operation.

```
<xs:element name="GetChangedTermSets">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="sinceTime" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="propertyName" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

sinceTime: The time after which changed term sets should be returned.

propertyName: A filter to apply on the term sets returned. If the propertyName is not NULL, the returned term set MUST have a custom property defined with the name that matches the **propertyName** passed in. This comparison MUST be a case-insensitive match but MUST match all characters in the string.

propertyValue: A filter to apply on the term sets returned. If the propertyValue is not NULL, the returned term sets MUST have a custom property defined with a value that matches the propertyValue passed in. This comparison MUST be a case-insensitive match but MUST match all characters in the string.

3.1.4.44.2.2 GetChangedTermSetsResponse

The result data for the **GetChangedTermSets** WSDL operation.

```
<xs:element name="GetChangedTermSetsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangedTermSetsResult" nillable="true"
type="GetChangedTermSetsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetChangedTermSetsResult: A collection of term sets that have changed since the requested time.

3.1.4.44.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.44.3.1 GetChangedTermSetsRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

```
<xs:complexType name="GetChangedTermSetsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
```

```

    <xs:element minOccurs="0" maxOccurs="unbounded" name="CL">
      <xs:complexType>
        <xs:attribute name="a0" type="ser:guid" use="required"/>
        <xs:attribute name="a49" type="ser:guid" use="required"/>
        <xs:attribute name="a73" type="xs:dateTime" use="required"/>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>

```

Root: Root element.

Root.CL: Details of a changed term set.

Root.CL.a0: The term store partition identifier.

Root.CL.a49: The identifier of a term set.

Root.CL.a73: The most recent change to any termset. This value can be used for subsequent calls to GetChangedTermSets.

3.1.4.44.4 Simple Types

None.

3.1.4.44.5 Attributes

None.

3.1.4.44.6 Groups

None.

3.1.4.44.7 Attribute Groups

None.

3.1.4.45 SearchTermSetsByProperty

This operation is called to find term sets that have properties that match the search criteria. [<17>](#)

```

<wsdl:operation name="SearchTermSetsByProperty">
  <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/Search
TermSetsByProperty"
message="tns:IMetadataWebServiceApplication_SearchTermSetsByProperty_InputMessage"/>
  <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/Search
TermSetsByPropertyResponse"
message="tns:IMetadataWebServiceApplication_SearchTermSetsByProperty_OutputMessage"/>
</wsdl:operation>

```

If the term set group is not specified, the protocol server performs the specified case insensitive search in the term store partition (1). If the term set group is specified, the search is scoped to the term set group. If the term set group does not exist in the term store partition (1), then the protocol server MUST return zero term sets.

3.1.4.45.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.45.1.1

IMetadataWebServiceApplication_SearchTermSetsByProperty_InputMessage

The request WSDL message for the **SearchTermSetsByProperty** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetsByProperty
```

The SOAP body contains the **SearchTermSetsByProperty** element.

3.1.4.45.1.2

IMetadataWebServiceApplication_SearchTermSetsByProperty_OutputMessage

The response WSDL message for the **SearchTermSetsByProperty** WSDL operation.

The SOAP body contains the **SearchTermSetsByPropertyResponse** element.

3.1.4.45.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.45.2.1 SearchTermSetsByProperty

The input data for the **SearchTermSetsByProperty** WSDL operation.

```
<xs:element name="SearchTermSetsByProperty">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="rawPartitionId"
        xmlns:q34="http://schemas.microsoft.com/2003/10/Serialization/" type="q34:guid"/>
      <xs:element minOccurs="0" name="groupId" nillable="true" type="xs:int"/>
      <xs:element minOccurs="1" name="propertyName" nillable="false" type="xs:string"/>
      <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="stringMatchOption"
        xmlns:q35="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
        type="q35:StringMatchOption"/>
      <xs:element minOccurs="1" name="resultCollectionSize" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawPartitionId: A GUID used to filter the current request. This value MUST NOT be NULL or empty.

groupId: A term set group internal identifier (1) used to restrict the scope of the search.

propertyName: The property name to search for. The name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

propertyValue: The property value to search for. The value MUST NOT contain tabs or line breaks. It MUST be less than or equal to 10240 characters in length.

stringMatchOption: The type of string match to perform on the **propertyValue** value. If this value is **StringMatchOption.ExactMatch** (section [2.2.5.11](#)), the value MUST exactly match the search criteria. If this value is **StringMatchOption.StartsWith** then the value MUST begin with the search criteria.

resultCollectionSize: The maximum number of term sets to retrieve. This parameter is intended to limit the performance impact for large searches; the order is undefined. This value MUST be zero or greater.

3.1.4.45.2.2 SearchTermSetsByPropertyResponse

The result data for the **SearchTermSetsByProperty** WSDL operation.

```
<xs:element name="SearchTermSetsByPropertyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchTermSetsByPropertyResult" nillable="true"
        type="GetGroupsAndTermSetsRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SearchTermSetsByPropertyResult: A **GetGroupsAndTermSetsRoot** element (section [2.2.4.14](#)) that contains information about the term sets with property matching the search criteria.

3.1.4.45.3 Complex Types

None.

3.1.4.45.4 Simple Types

None.

3.1.4.45.5 Attributes

None.

3.1.4.45.6 Groups

None.

3.1.4.45.7 Attribute Groups

None.

3.1.4.46 SearchAllTermSetsByProperty

This operation is called to find term set properties that have properties that match the search criteria across all the tenants. [<18>](#)

```
<wsdl:operation name="SearchAllTermSetsByProperty">
  <wsdl:input
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchAllTermSetsByProperty"
    message="tns:IMetadataWebServiceApplication_SearchAllTermSetsByProperty_InputMessage"/>
  <wsdl:output
    wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchAllTermSetsByPropertyResponse"
    message="tns:IMetadataWebServiceApplication_SearchAllTermSetsByProperty_OutputMessage"/>
</wsdl:operation>
```

The protocol server MUST find all the term sets that match the search criteria and MUST return and ordered collection of the properties of those terms sets with the term sets ordered by the term set Id.

If the protocol server finds not terms sets matching the search criteria then the protocol server MUST return zero properties.

If the propertyValue is null then the protocol server MUST find all the term sets that contain the given propertyName and MUST return all the properties of those terms sets.

3.1.4.46.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.46.1.1

IMetadataWebServiceApplication_SearchAllTermSetsByProperty_InputMessage

The request WSDL message for the **SearchAllTermSetsByProperty** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchAllTermSetsByProperty
```

The SOAP body contains the **SearchAllTermSetsByProperty** element.

3.1.4.46.1.2

IMetadataWebServiceApplication_SearchAllTermSetsByProperty_OutputMessage

The response WSDL message for the **SearchAllTermSetsByProperty** WSDL operation.

The SOAP body contains the **SearchAllTermSetsByPropertyResponse** element.

3.1.4.46.2 Elements

The following XML Schema element definitions are specific to this operation.

3.1.4.46.2.1 SearchAllTermSetsByProperty

The input data for the **SearchAllTermSetsByProperty** WSDL operation.

```
<xs:element name="SearchAllTermSetsByProperty">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="1" name="propertyName" nillable="false" type="xs:string"/>
      <xs:element minOccurs="1" name="propertyValue" nillable="false" type="xs:string"/>
      <xs:element minOccurs="1" name="resultSize" type="xs:int"/>
      <xs:element minOccurs="1" name="startId" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

propertyName: The property name to search for. The name MUST NOT contain any of the following characters:

- Semicolon (;)
- Double quote (")
- Left angle bracket (<)
- Right angle bracket (>)
- Vertical bar (|)
- Ampersand (&)
- Tab

It MUST be less than or equal to 255 characters in length.

propertyValue: The property value to search for. The value MUST NOT contain tab or line break. It MUST be less than or equal to 10240 characters in length.

resultSize: The maximum number of term sets to retrieve. This parameter is intended to limit the performance impact for large searches; the order is undefined. This value MUST be zero or greater.

startId: All the term set properties returned MUST be from term sets that match the search criteria and have the term set Id greater than or equal to the specified startId.

3.1.4.46.2.2 SearchAllTermSetsByPropertyResponse

The result data for the **SearchAllTermSetsByProperty** WSDL operation.

```
<xs:element name="SearchAllTermSetsByPropertyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchAllTermSetsByPropertyResult" nillable="true"
        type="SearchAllTermSetsByPropertyRoot"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SearchAllTermSetsByPropertyResult: A **SearchAllTermSetsByPropertyRoot** element (section [3.1.4.46.3.1](#)) that contains information about the term sets with property matching the search criteria.

3.1.4.46.3 Complex Types

The following XML Schema complex type definitions are specific to this operation.

3.1.4.46.3.1 SearchAllTermSetsByPropertyRoot

Namespace: <http://schemas.microsoft.com/sharepoint/taxonomy/soap/>

Information about the properties in a term sets

```
<xs:complexType name="SearchAllTermSetsByPropertyRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="TP">
            <xs:complexType>
              <xs:attribute name="a0" type="ser:guid" use="required"/>
              <xs:attribute name="a24" type="xs:int" use="required"/>
              <xs:attribute name="a37" type="xs:string" use="required"/>
              <xs:attribute name="a38" type="xs:string" use="required"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Root: Root element.

Root.TP: A property of term set.

Root.TP.a0: The term store partition identifier.

Root.TP.a24: The term set identifier.

Root.TP.a37: Name of the property.

Root.TP.a38: Value of the property.

3.1.4.46.4 Simple Types

None.

3.1.4.46.5 Attributes

None.

3.1.4.46.6 Groups

None.

3.1.4.46.7 Attribute Groups

None.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

The following example is a request and response for creating a new term set group.

The following example is a request to create a new term set group.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write</a:Action>
    <a:MessageID>urn:uuid:6a748631-3e61-47fd-bd06-c8656b70e48f</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>9a3c5118-388a-49ef-b4c4-7ce6ad2aa4ab</correlationId>
      <locale>en-US</locale>
      <siteSubscriptionId>00000000-0000-0000-0000-000000000000</siteSubscriptionId>
    </ServiceContext>
    <a:To
s:mustUnderstand="1">http://SERVER/b77ccb6b285d41c68335fb6d8f7d8e3e/MetadataWebService.svc</a:To>
  </s:Header>
  <s:Body>
    <Write xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <data>
        <Root>
          <Partition Id="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" /><G a5="0" a6="-1"
a9="5e89a57f-e7c6-49b8-ad32-a761817c9233" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a11=""
a12="new group" a15="0" />
        </Root>
      </data>
    </Write>
  </s:Body>
</s:Envelope>
```

The following example is a response to the request to create a new term set group.

```
<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteResponse</a:Action>
    <ActivityId CorrelationId="ba16deee-f88e-4af6-b84f-b5fd96b81e14"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">9a927f0a-4f83-4e49-
becf-f8cc2fd7894f</ActivityId>
  </s:Header>
  <s:Body>
    <WriteResponse
xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"></WriteResponse>
  </s:Body>
</s:Envelope>
```

The following example is a request and response for creating a new term set.

The following example is a request to create a new term set.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write</a:Action>
    <a:MessageID>urn:uuid:adc74086-3ce6-4a84-a9e4-ce4d145f897b</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>033747f4-70e9-4250-8744-682a5b9e4f44</correlationId>
      <locale>en-US</locale>
      <siteSubscriptionId>00000000-0000-0000-0000-000000000000</siteSubscriptionId>
    </ServiceContext>
    <a:To
s:mustUnderstand="1">http://SERVER/b77ccb6b285d41c68335fb6d8f7d8e3e/MetadataWebService.svc</a:To>
  </s:Header>
  <s:Body>
    <Write xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <data>
        <Root>
          <Partition Id="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" />
          <TS a5="0" a6="-1" a9="60936ba7-8be1-43b7-83d6-87fb85be6ca9" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a12="new term set" a11="" a15="0" a16="false" a17="true" a18="" a68="" a1="3" a14="USERNAME" a67="" />
        </Root>
      </data>
    </Write>
  </s:Body>
</s:Envelope>
```

The following example is a response to the request to create a new term set.

```
<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteResponse</a:Action>
    <ActivityId CorrelationId="4e70461f-8f7c-4b92-9181-6140e569cf76"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">6793b70e-c75f-467e-8b2d-44f37942f838</ActivityId>
  </s:Header>
  <s:Body>
    <WriteResponse
xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"></WriteResponse>
  </s:Body>
</s:Envelope>
```

The following example is a request and response for creating a new term.

The following example is a request to create a new term.

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write</a:Action>
    <a:MessageID>urn:uuid:3a86e6a6-6466-48c1-9cb5-c71f17d5276e</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>d392da82-08fb-4a5c-a277-1eea029db935</correlationId>
      <locale>en-US</locale>
      <siteSubscriptionId>00000000-0000-0000-0000-000000000000</siteSubscriptionId>
    </ServiceContext>
    <a:To
s:mustUnderstand="1">http://SERVER/b77ccb6b285d41c68335fb6d8f7d8e3e/MetadataWebService.svc</a:To>
  </s:Header>
  <s:Body>
    <Write xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <data>
        <Root>
          <Partition Id="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" />
          <T a5="0" a6="-1" a9="019bfde5-af07-4532-8f39-64774b5bfe92" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a14="USERNAME" a19="2009-06-29T21:44:27.487297Z" a20="0" a21="false" a17="true" a67="" a24="4" a26="true"><TL a5="0" a31="true" a32="term #1" a33="1033" a35="false" />
          </T>
        </Root>
      </data>
    </Write>
  </s:Body>
</s:Envelope>

```

The following example is a request to a response to create a new term.

```

<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteResponse</a:Action>
    <ActivityId CorrelationId="191ecf08-3479-4880-bf51-571d1adf3de3"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">f9df67b3-e0e9-4ee4-8c20-86a7d7c4c629</ActivityId>
  </s:Header>
  <s:Body>
    <WriteResponse
xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"></WriteResponse>
  </s:Body>
</s:Envelope>

```

The following example is a request and response for editing the description of an existing term.

The following example is a request to edit the description of an existing term.

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write</a:Action>
    <a:MessageID>urn:uuid:50aeb41e-2d6c-48d5-acdb-156ad493caa4</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>8142658a-1b6f-4cbb-8130-2b84f2609fa1</correlationId>
      <locale>en-US</locale>
      <siteSubscriptionId>00000000-0000-0000-0000-000000000000</siteSubscriptionId>
    </ServiceContext>
    <a:To
s:mustUnderstand="1">http://SERVER/b77ccb6b285d41c68335fb6d8f7d8e3e/MetadataWebService.svc</a:To>
  </s:Header>
  <s:Body>
    <Write xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <data>
        <Root>
          <Partition Id="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" />
          <T a5="1" a6="4" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a8="2009-06-29T21:45:07.513Z" a14="USERNAME" a19="2009-06-29T21:44:31.15Z" a20="0" a21="false" a17="true" a67="" a24="4" a26="true"><TD a5="0" a11="Sample term description" a33="1033" /><TM a5="1" a24="4" a17="true" a67="" a26="true" />
          </T>
        </Root>
      </data>
    </Write>
  </s:Body>
</s:Envelope>

```

The following example is a response to a request to edit the description of an existing term.

```

<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteResponse</a:Action>
    <ActivityId CorrelationId="cecebb73-dca5-483f-b658-4ad4f30907df"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">ce16a80e-65d6-47ab-83b6-9fca95cc31b3</ActivityId>
  </s:Header>
  <s:Body>
    <WriteResponse xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
    </WriteResponse>
  </s:Body>
</s:Envelope>

```

The following example is a request and response for retrieving a term set by GUID.

The following example is a request to retrieve a term set by GUID.


```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSets</a:Action>
    <a:MessageID>urn:uuid:7637ed0a-4250-43a6-82f4-016270fced49</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>033747f4-70e9-4250-8744-682a5b9e4f44</correlationId>
      <locale>en-US</locale>
      <siteSubscriptionId>00000000-0000-0000-0000-000000000000</siteSubscriptionId>
    </ServiceContext>
    <a:To
s:mustUnderstand="1">http://SERVER/b77ccb6b285d41c68335fb6d8f7d8e3e/MetadataWebService.svc</a:To>
  </s:Header>
  <s:Body>
    <GetTermSets xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <rawPartitionId>8CDCD08F-1C05-4d17-AE04-FC19E918E32B</rawPartitionId>
      <termSetGuids xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:guid>60936ba7-8be1-43b7-83d6-87fb85be6ca9</b:guid>
      </termSetGuids>
    </GetTermSets>
  </s:Body>
</s:Envelope>

```

The following example is a response to a request to retrieve a term set by GUID.

```

<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsResponse</a:Action>
    <ActivityId CorrelationId="40439e5b-e097-488f-90f0-8a4d680207ba"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">9b90d173-3614-4e83-
bd66-32c6b3c1c95b</ActivityId>
  </s:Header>
  <s:Body>
    <GetTermSetsResponse xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <GetTermSetsResult>
        <Root>
          <G a6="3" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a9="5e89a57f-e7c6-49b8-
ad32-a761817c9233" a12="new group" a11="" a8="2009-06-29T21:44:13.397Z" a7="2009-06-
29T21:43:55.197Z" a15="0" />
          <NextResult />
          <NextResult />
          <GTSIds a1="3" a6="4" />
          <NextResult />
          <TS a6="4" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a7="2009-06-
29T21:44:13.397Z" a8="2009-06-29T21:44:13.397Z" a14="USERNAME" a9="60936ba7-8be1-43b7-83d6-
87fb85be6ca9" a12="new term set" a11="" a15="0" a16="False" a17="True" a18="" a68="" a1="3"
/>
          <NextResult />
        </Root>
      </GetTermSetsResult>
    </GetTermSetsResponse>
  </s:Body>
</s:Envelope>

```

```

    </Root>
  </GetTermSetsResult>
</GetTermSetsResponse>
</s:Body>
</s:Envelope>

```

The following example is a request and response for searching for a term based on a term label.

The following example is a request to search for a term based on a term label.

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnl
y/SearchTermByLabel</a:Action>
    <a:MessageID>urn:uuid:4978e393-2f00-46d1-b9de-d4b63b16adcc</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>ef836e6f-a1fd-4a45-aa76-82afee2f1bc8</correlationId>
      <locale>en-US</locale>
      <siteSubscriptionId>00000000-0000-0000-0000-000000000000</siteSubscriptionId>
    </ServiceContext>
    <a:To
s:mustUnderstand="1">http://SERVER/b77ccb6b285d41c68335fb6d8f7d8e3e/MetadataWebService.svc</a
:To>
  </s:Header>
  <s:Body>
    <SearchTermByLabel xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <rawPartitionId>8CDCD08F-1C05-4d17-AE04-FC19E918E32B</rawPartitionId>
      <termSetId i:nil="true" xmlns:i="http://www.w3.org/2001/XMLSchema-
instance"></termSetId>
      <anchorId i:nil="true" xmlns:i="http://www.w3.org/2001/XMLSchema-
instance"></anchorId>
      <label>term #1</label>
      <lcid>1033</lcid>
      <defaultLabelOnly>false</defaultLabelOnly>
      <stringMatchOption>StartsWith</stringMatchOption>
      <resultCollectionSize>20</resultCollectionSize>
      <getFullPath>true</getFullPath>
      <defaultLcid i:nil="true" xmlns:i="http://www.w3.org/2001/XMLSchema-
instance"></defaultLcid>
      <isOptimized>true</isOptimized>
    </SearchTermByLabel>
  </s:Body>
</s:Envelope>

```

The following example is a response to a request to search for a term based on a term label.

```

<s:Envelope xmlns:a="http://www.w3.org/2005/08/addressing"
xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>

```

```
<a:Action
s:mustUnderstand="1">http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnl
y/SearchTermByLabelResponse</a:Action>
  <ActivityId CorrelationId="6e446b6c-bf65-4814-blec-8aec17be73fa"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">82d80524-be41-4173-
867d-e3c7edd75030</ActivityId>
  </s:Header>
  <s:Body>
    <SearchTermByLabelResponse
xmlns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/">
      <SearchTermByLabelResult>
        <Root>
          <TS a6="4" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a7="2009-06-
29T21:44:13.397Z" a8="2009-06-29T21:44:31.15Z" a14="USERNAME" a9="60936ba7-8be1-43b7-83d6-
87fb85be6ca9" a12="new term set" a11="" a15="0" a16="False" a17="True" a18="" a68="" a1="3"
/><NextResult /><T a6="3" a0="8CDCD08F-1C05-4d17-AE04-FC19E918E32B" a7="2009-06-
29T21:44:27.567Z" a8="2009-06-29T21:44:27.567Z" a14="USERNAME" a9="019bfde5-af07-4532-8f39-
64774b5bfe92" a19="2009-06-29T21:44:27.567Z" a20="0" a21="False" a22="False" /><NextResult
/><TL a34="3" a33="1033" a32="term #1" a31="True" /><NextResult /><NextResult
/><TM a24="4" a34="3" a39="3" a25="0" a17="True" a26="True" a40="" a71="5E89A57F-E7C6-49B8-
AD32-A761817C9233|60936BA7-8BE1-43B7-83D6-87FB85BE6CA9|019BFDE5-AF07-4532-8F39-64774B5BFE92"
a42="1033|new term set" a41="60936ba7-8be1-43b7-83d6-87fb85be6ca9" a15="0" />
        <NextResult />
      </Root>
    </SearchTermByLabelResult>
  </SearchTermByLabelResponse>
</s:Body>
</s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

Preliminary

6 Appendix A: Full WSDL

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

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:tns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:i0="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"
name="MetadataWebServiceApplication"
targetNamespace="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema xmlns:tns="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"
xmlns:mst="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
xmlns:mstc="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.ContentType
Sync" xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/sharepoint/taxonomy/soap/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
      <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays" />
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy" />
      <xs:import namespace="http://schemas.microsoft.com/Message" />
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.ContentTypeS
ync" />
      <xs:element name="GetSessionData">
        <xs:complexType>
          <xs:sequence>
            <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q1:guid" />
            <xs:element minOccurs="0" name="lcid" type="xs:int" />
            <xs:element minOccurs="0" name="systemGroupName" nillable="true" type="xs:string"
/>
            <xs:element minOccurs="0" name="systemGroupDescription" nillable="true"
type="xs:string" />
            <xs:element minOccurs="0" name="keywordsTermsetName" nillable="true"
type="xs:string" />
            <xs:element minOccurs="0" name="keywordsTermsetDescription" nillable="true"
type="xs:string" />
            <xs:element minOccurs="0" name="orphanedTermsTermsetName" nillable="true"
type="xs:string" />
            <xs:element minOccurs="0" name="orphanedTermsTermsetDescription" nillable="true"
type="xs:string" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetSessionDataResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="GetSessionDataResult" nillable="true"
type="xs:string" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="GetGroupByGuid">
        <xs:complexType>
          <xs:sequence>
```

```

        <xs:element xmlns:q2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q2:guid" />
        <xs:element xmlns:q3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="groupGuid" type="q3:guid" />
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetGroupByGuidResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetGroupByGuidResult" nillable="true"
type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetGroups">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q4="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q4:guid" />
            <xs:element xmlns:q5="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="groupIds" nillable="true" type="q5:ArrayOfint" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetGroupsResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetGroupsResult" nillable="true" type="xs:string"
/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetTerm">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q6="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q6:guid" />
            <xs:element xmlns:q7="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="termGuid" type="q7:guid" />
            <xs:element minOccurs="0" name="termSetId" type="xs:int" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetTermResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetTermResult" nillable="true" type="xs:string"
/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetTermsInternal">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q8="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q8:guid" />
            <xs:element xmlns:q9="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termIds" nillable="true" type="q9:ArrayOfint" />
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

```

        </xs:complexType>
    </xs:element>
    <xs:element name="GetTermsInternalResponse">
        <xs:complexType>
            <xs:sequence>
                <xs:element minOccurs="0" name="GetTermsInternalResult" nillable="true"
type="xs:string" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="GetTerms">
        <xs:complexType>
            <xs:sequence>
                <xs:element xmlns:q10="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q10:guid" />
                <xs:element xmlns:q11="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termGuids" nillable="true" type="q11:ArrayOfguid" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="GetTermsResponse">
        <xs:complexType>
            <xs:sequence>
                <xs:element minOccurs="0" name="GetTermsResult" nillable="true" type="xs:string"
/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="GetTermSets">
        <xs:complexType>
            <xs:sequence>
                <xs:element xmlns:q12="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q12:guid" />
                <xs:element xmlns:q13="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termSetGuids" nillable="true" type="q13:ArrayOfguid" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="GetTermSetsResponse">
        <xs:complexType>
            <xs:sequence>
                <xs:element minOccurs="0" name="GetTermSetsResult" nillable="true"
type="xs:string" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="GetTermSetsInternal">
        <xs:complexType>
            <xs:sequence>
                <xs:element xmlns:q14="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q14:guid" />
                <xs:element xmlns:q15="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termSetIds" nillable="true" type="q15:ArrayOfint" />
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="GetTermSetsInternalResponse">
        <xs:complexType>
            <xs:sequence>

```

```

        <xs:element minOccurs="0" name="GetTermSetsInternalResult" nillable="true"
type="xs:string" />
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetSortedChildTermIds">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q16="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q16:guid" />
            <xs:element minOccurs="0" name="termSetId" type="xs:int" />
            <xs:element minOccurs="0" name="parentTermId" type="xs:int" />
            <xs:element minOccurs="0" name="locale" type="xs:int" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetSortedChildTermIdsResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetSortedChildTermIdsResult" nillable="true"
type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetTermSetWithAllTerms">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q17="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q17:guid" />
            <xs:element xmlns:q18="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="termSetGuid" type="q18:guid" />
            <xs:element minOccurs="0" name="includeDeprecated" type="xs:boolean" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetTermSetWithAllTermsResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetTermSetWithAllTermsResult" nillable="true"
type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetDescendentTerms">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q19="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q19:guid" />
            <xs:element minOccurs="0" name="termSetId" type="xs:int" />
            <xs:element minOccurs="0" name="termId" type="xs:int" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetDescendentTermsResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetDescendentTermsResult" nillable="true"
type="xs:string" />
        </xs:sequence>
    </xs:complexType>

```



```

</xs:element>
<xs:element name="GetChangesForListSync">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="sinceTime" type="xs:dateTime" />
      <xs:element xmlns:q20="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="webAppId" type="q20:guid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChangesForListSyncResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesForListSyncResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChangesForFullListSync">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="sinceTime" type="xs:dateTime" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChangesForFullListSyncResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesForFullListSyncResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChanges">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" nillable="true" type="q21:guid" />
      <xs:element minOccurs="0" name="sinceTime" type="xs:dateTime" />
      <xs:element minOccurs="0" name="groupId" nillable="true" type="xs:int" />
      <xs:element minOccurs="0" name="termSetId" nillable="true" type="xs:int" />
      <xs:element
xmlns:q22="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
minOccurs="0" name="changedItemType" nillable="true" type="q22:ChangedItemType" />
      <xs:element
xmlns:q23="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
minOccurs="0" name="changedOperationType" nillable="true" type="q23:ChangedOperationType" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChangesResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangesResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChangesOverInterval">
  <xs:complexType>

```

```

        <xs:sequence>
          <xs:element xmlns:q24="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q24:guid" />
          <xs:element xmlns:q25="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="sinceTimeAgo" type="q25:duration" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetChangesOverIntervalResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" name="GetChangesOverIntervalResult" nillable="true"
type="xs:string" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetChangeTime">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:q26="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q26:guid" />
          <xs:element xmlns:q27="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="groupGuid" nillable="true" type="q27:guid" />
          <xs:element xmlns:q28="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="termSetGuid" nillable="true" type="q28:guid" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GetChangeTimeResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" name="GetChangeTimeResult" nillable="true"
type="xs:string" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="SearchTermByLabel">
      <xs:complexType>
        <xs:sequence>
          <xs:element xmlns:q29="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q29:guid" />
          <xs:element minOccurs="0" name="termSetId" nillable="true" type="xs:int" />
          <xs:element minOccurs="0" name="anchorId" nillable="true" type="xs:int" />
          <xs:element minOccurs="0" name="label" nillable="true" type="xs:string" />
          <xs:element minOccurs="0" name="lcid" nillable="true" type="xs:int" />
          <xs:element minOccurs="0" name="defaultLabelOnly" type="xs:boolean" />
          <xs:element minOccurs="0" name="includeIdPath" type="xs:boolean" />
          <xs:element
xmlns:q30="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
minOccurs="0" name="stringMatchOption" type="q30:StringMatchOption" />
          <xs:element minOccurs="0" name="resultCollectionSize" type="xs:int" />
          <xs:element minOccurs="0" name="getFullPath" type="xs:boolean" />
          <xs:element minOccurs="0" name="defaultLcid" nillable="true" type="xs:int" />
          <xs:element minOccurs="0" name="isOptimized" type="xs:boolean" />
          <xs:element minOccurs="0" name="getAllLocalTermSets" type="xs:boolean" />
          <xs:element minOccurs="0" name="siteGroupId" nillable="true" type="xs:int" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="SearchTermByLabelResponse">

```

```

    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="SearchTermByLabelResult" nillable="true"
type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SearchTermSetByName">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q31="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q31:guid" />
        <xs:element minOccurs="0" name="termSetName" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="lcid" type="xs:int" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SearchTermSetByNameResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="SearchTermSetByNameResult" nillable="true"
type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetTermSetsByLabel">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q32="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q32:guid" />
        <xs:element xmlns:q33="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="labels" nillable="true" type="q33:ArrayOfstring" />
        <xs:element minOccurs="0" name="lcid" nillable="true" type="xs:int" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetTermSetsByLabelResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="GetTermSetsByLabelResult" nillable="true"
type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SearchTermSetsByProperty">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q34="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q34:guid" />
        <xs:element minOccurs="0" name="groupId" nillable="true" type="xs:int" />
        <xs:element minOccurs="0" name="propertyName" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"
/>
        <xs:element
xmlns:q35="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
minOccurs="0" name="stringMatchOption" type="q35:StringMatchOption" />
        <xs:element minOccurs="0" name="resultCollectionSize" type="xs:int" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>

```

```

<xs:element name="SearchTermSetsByPropertyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchTermSetsByPropertyResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SearchTermByProperty">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q36="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q36:guid" />
      <xs:element minOccurs="0" name="termSetId" nillable="true" type="xs:int" />
      <xs:element minOccurs="0" name="propertyName" nillable="true" type="xs:string" />
      <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"
/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element xmlns:q37="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
minOccurs="0" name="stringMatchOption" type="q37:StringMatchOption" />
  <xs:element minOccurs="0" name="resultCollectionSize" type="xs:int" />
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="SearchTermByPropertyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchTermByPropertyResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetSitesContainingTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q38="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q38:guid" />
      <xs:element xmlns:q39="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termSetIdMappings" nillable="true"
type="q39:ArrayOfKeyValueOfguidArrayOfguidox8ie0cg" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetSitesContainingTermsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetSitesContainingTermsResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetChangedTermSets">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="sinceTime" type="xs:dateTime" />
      <xs:element minOccurs="0" name="propertyName" nillable="true" type="xs:string" />
      <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"
/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

</xs:element>
<xs:element name="GetChangedTermSetsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetChangedTermSetsResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SearchAllTermSetsByProperty">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="propertyName" nillable="true" type="xs:string" />
      <xs:element minOccurs="0" name="propertyValue" nillable="true" type="xs:string"
/>
      <xs:element minOccurs="0" name="resultSize" type="xs:int" />
      <xs:element minOccurs="0" name="startId" type="xs:int" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SearchAllTermSetsByPropertyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="SearchAllTermSetsByPropertyResult"
nillable="true" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="Write">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="data" nillable="true" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="WriteResponse">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="WriteUsedTerm">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q40="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q40:guid" />
      <xs:element xmlns:q41="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="webAppId" type="q41:guid" />
      <xs:element xmlns:q42="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="contentDatabaseId" type="q42:guid" />
      <xs:element xmlns:q43="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="q43:guid" />
      <xs:element xmlns:q44="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="termSetId" type="q44:guid" />
      <xs:element xmlns:q45="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="termId" type="q45:guid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="WriteUsedTermResponse">
  <xs:complexType>

```

```

    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="WriteUsedTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q46="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q46:guid" />
      <xs:element xmlns:q47="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="webAppId" type="q47:guid" />
      <xs:element xmlns:q48="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="contentDatabaseId" type="q48:guid" />
      <xs:element xmlns:q49="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="q49:guid" />
      <xs:element xmlns:q50="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termSetIds" nillable="true" type="q50:ArrayOfguid" />
      <xs:element xmlns:q51="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="termIds" nillable="true" type="q51:ArrayOfguid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="WriteUsedTermsResponse">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="WriteClearUsedTerms">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q52="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q52:guid" />
      <xs:element xmlns:q53="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="webAppId" type="q53:guid" />
      <xs:element xmlns:q54="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="contentDatabaseId" type="q54:guid" />
      <xs:element xmlns:q55="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="q55:guid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="WriteClearUsedTermsResponse">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="RemoveUsedTermSet">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q56="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q56:guid" />
      <xs:element xmlns:q57="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="termSetId" type="q57:guid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="RemoveUsedTermSetResponse">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>

```

```

<xs:element name="DeleteServiceSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q58="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q58:guid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteServiceSettingsResponse">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="GetServiceSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q59="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q59:guid" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetServiceSettingsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetServiceSettingsResult" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetServiceApplicationSettings">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="GetServiceApplicationSettingsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetServiceApplicationSettingsResult"
nillable="true" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetServiceSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q60="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q60:guid" />
      <xs:element minOccurs="0" name="settingsXml" nillable="true" type="xs:string" />
      <xs:element minOccurs="0" name="unpublishAllPackages" type="xs:boolean" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetServiceSettingsResponse">
  <xs:complexType>
    <xs:sequence />
  </xs:complexType>
</xs:element>
<xs:element name="InitiateCacheFlush">
  <xs:complexType>

```

```

        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="InitiateCacheFlushResponse">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="PublishPackage">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="content" nillable="true" type="xs:base64Binary"
/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="PublishPackageResponse">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="UnpublishPackage">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q61="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q61:guid" />
            <xs:element minOccurs="0" name="packageId" nillable="true" type="xs:string" />
            <xs:element xmlns:q62="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="packageType" type="q62:guid" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UnpublishPackageResponse">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="DownloadPackage">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q63="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q63:guid" />
            <xs:element minOccurs="0" name="packageId" nillable="true" type="xs:string" />
            <xs:element xmlns:q64="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="packageType" type="q64:guid" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="DownloadPackageResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q65="http://schemas.microsoft.com/Message"
name="DownloadPackageResult" type="q65:StreamBody" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetUpdateInformation">
    <xs:complexType>
        <xs:sequence>

```



```

        <xs:element xmlns:q66="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q66:guid" />
        <xs:element minOccurs="0" name="lastUpdateTime" type="xs:dateTime" />
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetUpdateInformationResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q67="http://schemas.microsoft.com/Message"
name="GetUpdateInformationResult" type="q67:StreamBody" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetApplicationLog">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q68="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q68:guid" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetApplicationLogResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q69="http://schemas.microsoft.com/Message"
name="GetApplicationLogResult" type="q69:StreamBody" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ClearApplicationLog">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q70="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q70:guid" />
            <xs:element minOccurs="0" name="endTime" type="xs:dateTime" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ClearApplicationLogResponse">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="UploadStatus">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q71="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q71:guid" />
            <xs:element minOccurs="0" name="siteUrl" nillable="true" type="xs:string" />
            <xs:element minOccurs="0" name="objectName" nillable="true" type="xs:string" />
            <xs:element
xmlns:q72="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.ContentTypes
ync" minOccurs="0" name="status" type="q72:SyndicationStatus" />
            <xs:element minOccurs="0" name="message" nillable="true" type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UploadStatusResponse">
    <xs:complexType>

```

```

        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="GetServiceApplicationName">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="GetServiceApplicationNameResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetServiceApplicationNameResult" nillable="true"
type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetIsServiceApplicationPartitioned">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="GetIsServiceApplicationPartitionedResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetIsServiceApplicationPartitionedResult"
type="xs:boolean" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ExportPartitionData">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q73="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q73:guid" />
            <xs:element minOccurs="0" name="filePath" nillable="true" type="xs:string" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ExportPartitionDataResponse">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="ImportPartitionData">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q74="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q74:guid" />
            <xs:element minOccurs="0" name="filePath" nillable="true" type="xs:string" />
            <xs:element minOccurs="0" name="overwriteExistingData" type="xs:boolean" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ImportPartitionDataResponse">
    <xs:complexType>
        <xs:sequence />
    </xs:complexType>
</xs:element>
<xs:element name="ClearPartitionData">

```

```

    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q75="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="rawPartitionId" type="q75:guid" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ClearPartitionDataResponse">
    <xs:complexType>
      <xs:sequence />
    </xs:complexType>
  </xs:element>
  <xs:simpleType name="GroupType">
    <xs:restriction base="xs:int">
      <xs:enumeration value="0" />
      <xs:enumeration value="1" />
      <xs:enumeration value="2" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="TermSetType">
    <xs:restriction base="xs:int">
      <xs:enumeration value="0" />
      <xs:enumeration value="1" />
      <xs:enumeration value="2" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="CommandAction">
    <xs:restriction base="xs:int">
      <xs:enumeration value="0" />
      <xs:enumeration value="1" />
      <xs:enumeration value="2" />
      <xs:enumeration value="3" />
      <xs:enumeration value="4" />
      <xs:enumeration value="5" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="CommandActionBasic">
    <xs:restriction base="CommandAction">
      <xs:enumeration value="0" />
      <xs:enumeration value="1" />
      <xs:enumeration value="2" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="InternalIdentifier">
    <xs:restriction base="xs:int" />
  </xs:simpleType>
  <xs:simpleType name="LCID">
    <xs:restriction base="xs:int" />
  </xs:simpleType>
  <xs:simpleType name="Rights">
    <xs:restriction base="xs:unsignedLong">
      <xs:minInclusive value="0" />
      <xs:maxInclusive value="273" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="ContentTypeId">
    <xs:restriction base="xs:string">
      <xs:pattern value="0x([0-9A-Fa-f] [1-9A-Fa-f] | [1-9A-Fa-f] [0-9A-Fa-f] | 00[0-9A-Fa-
f]{32})*" />
    </xs:restriction>
  </xs:simpleType>

```

```

    <xs:minLength value="2" />
    <xs:maxLength value="1026" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="GetApplicationLogRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="AL">
            <xs:complexType>
              <xs:attribute name="a63" type="xs:string" use="required" />
              <xs:attribute name="a64" type="xs:string" use="optional" />
              <xs:attribute name="a65" type="mstc:SyndicationStatus" use="required" />
              <xs:attribute name="a66" type="xs:string" use="required" />
              <xs:attribute name="a7" type="xs:dateTime" use="required" />
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GetUpdateInformationRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="P">
            <xs:complexType>
              <xs:attribute name="PID" type="ContentTypeId" use="required" />
              <xs:attribute name="PType" type="ser:guid" use="required" />
              <xs:attribute name="PP" type="xs:boolean" use="required" />
            </xs:complexType>
          </xs:element>
          <xs:element name="T" type="xs:dateTime" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="WritePartionIndicator">
  <xs:attribute name="Id" type="ser:guid" use="required" />
</xs:complexType>
<xs:complexType name="ServiceSettings">
  <xs:attribute name="HubUri" type="xs:string" use="required" />
  <xs:attribute name="RptOn" type="xs:boolean" use="required" />
  <xs:attribute name="TSId" type="ser:guid" use="required" />
  <xs:attribute name="CacheSec" type="xs:int" use="optional" />
  <xs:attribute name="MaxChan" type="xs:int" use="optional" />
</xs:complexType>
<xs:complexType name="ServiceSettingsSettingsXmlDoc">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="MetadataSettings"
type="ServiceSettings" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="SerializedECMSvcServiceSettingsTableRow">
  <xs:attribute name="a62" type="xs:string" use="required" />

```

```

</xs:complexType>
<xs:complexType name="SystemGroupIdIndicator">
  <xs:attribute name="a9" type="ser:guid" use="required" />
</xs:complexType>
<xs:complexType name="KeywordTermSetIdIndicator">
  <xs:attribute name="a9" type="ser:guid" use="required" />
</xs:complexType>
<xs:complexType name="OrphanedTermSetIdIndicator">
  <xs:attribute name="a9" type="ser:guid" use="required" />
</xs:complexType>
<xs:complexType name="NewPartitionIndicator">
  <xs:attribute name="new" type="xs:boolean" use="required" />
</xs:complexType>
<xs:complexType name="SerializedECMLanguageTableRow">
  <xs:attribute name="a0" type="ser:guid" use="required" />
  <xs:attribute name="a59" type="LCID" use="required" />
  <xs:attribute name="a58" type="xs:boolean" use="optional" />
  <xs:attribute name="a5" type="CommandActionBasic" use="optional" />
</xs:complexType>
<xs:complexType name="SerializedECMPermissionTableRow">
  <xs:attribute name="a2" type="xs:string" use="required" />
  <xs:attribute name="a3" type="xs:string" use="optional" />
  <xs:attribute name="a4" type="Rights" use="optional" />
  <xs:attribute name="a1" type="InternalIdentifier" use="optional" />
  <xs:attribute name="a0" type="ser:guid" use="optional" />
  <xs:attribute name="a5" type="CommandActionBasic" use="optional" />
</xs:complexType>
<xs:complexType name="SerializedECMGroupTableRow">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="P"
type="SerializedECMPermissionTableRow" />
  </xs:sequence>
  <xs:attribute name="a6" type="InternalIdentifier" use="required" />
  <xs:attribute name="a0" type="ser:guid" use="required" />
  <xs:attribute name="a7" type="xs:dateTime" use="optional" />
  <xs:attribute name="a8" type="xs:dateTime" use="optional" />
  <xs:attribute name="a9" type="ser:guid" use="optional" />
  <xs:attribute name="a12" type="xs:string" use="optional" />
  <xs:attribute name="a11" type="xs:string" use="optional" />
  <xs:attribute name="a15" type="GroupType" use="optional" />
  <xs:attribute name="a5" type="CommandActionBasic" use="optional" />
</xs:complexType>
<xs:complexType name="SerializedECMTermSetTableRow">
  <xs:attribute name="a6" type="InternalIdentifier" use="required" />
  <xs:attribute name="a0" type="ser:guid" use="required" />
  <xs:attribute name="a7" type="xs:dateTime" use="optional" />
  <xs:attribute name="a8" type="xs:dateTime" use="optional" />
  <xs:attribute name="a9" type="ser:guid" use="optional" />
  <xs:attribute name="a14" type="xs:string" use="optional" />
  <xs:attribute name="a12" type="xs:string" use="optional" />
  <xs:attribute name="a11" type="xs:string" use="optional" />
  <xs:attribute name="a15" type="TermSetType" use="optional" />
  <xs:attribute name="a16" type="xs:boolean" use="optional" />
  <xs:attribute name="a17" type="xs:boolean" use="optional" />
  <xs:attribute name="a18" type="xs:string" use="optional" />
  <xs:attribute name="a68" type="xs:string" use="optional" />
  <xs:attribute name="a1" type="InternalIdentifier" use="optional" />
  <xs:attribute name="a67" type="xs:string" use="optional" />
  <xs:attribute name="a10" type="InternalIdentifier" use="optional" />

```

```

    <xs:attribute name="a5" type="CommandAction" use="optional" />
  </xs:complexType>
  <xs:complexType name="SerializedECMTermTableRowForRead">
    <xs:attribute name="a6" type="InternalIdentifier" use="required" />
    <xs:attribute name="a0" type="ser:guid" use="required" />
    <xs:attribute name="a7" type="xs:dateTime" use="optional" />
    <xs:attribute name="a8" type="xs:dateTime" use="optional" />
    <xs:attribute name="a9" type="ser:guid" use="optional" />
    <xs:attribute name="a14" type="xs:string" use="optional" />
    <xs:attribute name="a19" type="xs:dateTime" use="optional" />
    <xs:attribute name="a20" type="xs:int" use="optional" />
    <xs:attribute name="a21" type="xs:boolean" use="optional" />
    <xs:attribute name="a22" type="xs:boolean" use="optional" />
  </xs:complexType>
  <xs:complexType name="SerializedECMTermTableRowForWrite">
    <xs:sequence minOccurs="0">
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="TL" type="SerializedECMTermLabelTableRowForWrite" />
        <xs:element name="TD" type="SerializedECMTermDescriptionTableRowForWrite" />
        <xs:element name="TP" type="SerializedECMTermPropertyTableRowForWrite" />
        <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForWrite" />
      </xs:choice>
    </xs:sequence>
    <xs:attribute name="a6" type="InternalIdentifier" use="required" />
    <xs:attribute name="a0" type="ser:guid" use="required" />
    <xs:attribute name="a8" type="xs:dateTime" use="optional" />
    <xs:attribute name="a9" type="ser:guid" use="optional" />
    <xs:attribute name="a14" type="xs:string" use="optional" />
    <xs:attribute name="a19" type="xs:dateTime" use="optional" />
    <xs:attribute name="a20" type="xs:int" use="optional" />
    <xs:attribute name="a21" type="xs:boolean" use="optional" />
    <xs:attribute name="a22" type="xs:boolean" use="optional" />
    <xs:attribute name="a17" type="xs:boolean" use="optional" />
    <xs:attribute name="a67" type="xs:string" use="optional" />
    <xs:attribute name="a24" type="InternalIdentifier" use="optional" />
    <xs:attribute name="a25" type="InternalIdentifier" use="optional" />
    <xs:attribute name="a26" type="xs:boolean" use="optional" />
    <xs:attribute name="a74" type="InternalIdentifier" use="optional" />
    <xs:attribute name="a27" type="xs:boolean" use="optional" />
    <xs:attribute name="a28" type="InternalIdentifier" use="optional" />
    <xs:attribute name="a10" type="InternalIdentifier" use="optional" />
    <xs:attribute name="a30" type="xs:boolean" use="optional" />
    <xs:attribute name="a55" type="xs:string" use="optional" />
    <xs:attribute name="a5" type="CommandAction" use="required" />
  </xs:complexType>
  <xs:complexType name="SerializedECMTermLabelTableRowBase">
    <xs:attribute name="a33" type="LCID" use="required" />
    <xs:attribute name="a32" type="xs:string" use="required" />
    <xs:attribute name="a31" type="xs:boolean" use="optional" />
  </xs:complexType>
  <xs:complexType name="SerializedECMTermLabelTableRowForRead">
    <xs:complexContent mixed="false">
      <xs:extension base="SerializedECMTermLabelTableRowBase">
        <xs:attribute name="a34" type="InternalIdentifier" use="required" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="SerializedECMTermLabelTableRowForWrite">
    <xs:complexContent mixed="false">

```

```

    <xs:extension base="SerializedECMTermLabelTableRowBase">
      <xs:attribute name="a5" type="CommandActionBasic" use="required" />
      <xs:attribute name="a35" type="xs:boolean" use="optional" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="SerializedECMTermDescriptionTableRowBase">
  <xs:attribute name="a33" type="LCID" use="required" />
  <xs:attribute name="a11" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="SerializedECMTermDescriptionTableRowForRead">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermDescriptionTableRowBase">
      <xs:attribute name="a34" type="InternalIdentifier" use="required" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="SerializedECMTermDescriptionTableRowForWrite">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermDescriptionTableRowBase">
      <xs:attribute name="a5" type="CommandActionBasic" use="required" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="SerializedECMTermPropertyTableRowBase">
  <xs:attribute name="a37" type="xs:string" use="required" />
  <xs:attribute name="a38" type="xs:string" use="optional" />
</xs:complexType>
<xs:complexType name="SerializedECMTermPropertyTableRowForRead">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermPropertyTableRowBase">
      <xs:attribute name="a34" type="InternalIdentifier" use="required" />
      <xs:attribute name="a24" type="InternalIdentifier" use="required" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="SerializedECMTermPropertyTableRowForWrite">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermPropertyTableRowBase">
      <xs:attribute name="a5" type="CommandActionBasic" use="required" />
      <xs:attribute name="a24" type="InternalIdentifier" use="optional" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="SerializedECMTermSetMembershipTableRowBase">
  <xs:attribute name="a24" type="InternalIdentifier" use="required" />
  <xs:attribute name="a25" type="InternalIdentifier" use="optional" />
  <xs:attribute name="a17" type="xs:boolean" use="optional" />
  <xs:attribute name="a26" type="xs:boolean" use="optional" />
  <xs:attribute name="a67" type="xs:string" use="optional" />
  <xs:attribute name="a74" type="InternalIdentifier" use="optional" />
</xs:complexType>
<xs:complexType name="SerializedECMTermSetMembershipTableRowForRead">
  <xs:complexContent mixed="false">
    <xs:extension base="SerializedECMTermSetMembershipTableRowBase">
      <xs:attribute name="a34" type="InternalIdentifier" use="required" />
      <xs:attribute name="a39" type="xs:string" use="required" />
      <xs:attribute name="a40" type="xs:string" use="optional" />
      <xs:attribute name="a71" type="xs:string" use="optional" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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        <xs:attribute name="a43" type="ser:guid" use="optional" />
        <xs:attribute name="a42" type="xs:string" use="optional" />
        <xs:attribute name="a41" type="ser:guid" use="optional" />
        <xs:attribute name="a15" type="TermSetType" use="optional" />
    </xs:extension>
</xs:complexType>
</xs:complexType>
<xs:complexType name="SerializedECMTermSetMembershipTableRowForWrite">
    <xs:complexContent mixed="false">
        <xs:extension base="SerializedECMTermSetMembershipTableRowBase">
            <xs:attribute name="a5" type="CommandAction" use="required" />
            <xs:attribute name="a46" type="InternalIdentifier" use="optional" />
            <xs:attribute name="a47" type="InternalIdentifier" use="optional" />
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:complexType name="SerializedECMGroupIdsTableRow">
    <xs:attribute name="a6" type="InternalIdentifier" use="required" />
</xs:complexType>
<xs:complexType name="SerializedECMGroupTermSetIdsTableRow">
    <xs:attribute name="a1" type="InternalIdentifier" use="required" />
    <xs:attribute name="a6" type="InternalIdentifier" use="required" />
</xs:complexType>
<xs:complexType name="SerializedECMRootTermTableRow">
    <xs:attribute name="a24" type="InternalIdentifier" use="required" />
    <xs:attribute name="a34" type="InternalIdentifier" use="required" />
</xs:complexType>
<xs:complexType name="SerializedECMChildTermTableRow">
    <xs:attribute name="a25" type="InternalIdentifier" use="required" />
    <xs:attribute name="a24" type="InternalIdentifier" use="required" />
    <xs:attribute name="a57" type="InternalIdentifier" use="required" />
</xs:complexType>
<xs:complexType name="WriteRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="1" maxOccurs="1" name="Partition"
type="WritePartitionIndicator" />
                    <xs:choice minOccurs="0" maxOccurs="unbounded">
                        <xs:element name="G" type="SerializedECMGroupTableRow" />
                        <xs:element name="TS" type="SerializedECMTermSetTableRow" />
                        <xs:element name="T" type="SerializedECMTermTableRowForWrite" />
                    </xs:choice>
                    <xs:element name="L" type="SerializedECMLanguageTableRow" />
                    <xs:element name="P" type="SerializedECMPermissionTableRow" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="GetSessionDataRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="L" type="SerializedECMLanguageTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="GIds" type="SerializedECMGroupIdsTableRow" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>

```



```

        <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        <xs:element name="P" type="SerializedECMPermissionTableRow" />
        <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        <xs:element minOccurs="0" maxOccurs="1" name="SGId"
type="SystemGroupIdIndicator" />
        <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        <xs:element minOccurs="0" maxOccurs="1" name="KTSId"
type="KeywordTermSetIdIndicator" />
        <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        <xs:element minOccurs="0" maxOccurs="1" name="OTSID"
type="OrphanedTermSetIdIndicator" />
        <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        <xs:element minOccurs="1" maxOccurs="1" name="CL"
type="SerializedECMChangeLogTableTimeOnlyRow" />
        <xs:element minOccurs="1" maxOccurs="1" name="partition"
type="NewPartitionIndicator" />
    </xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:complexType name="GetServiceSettingsRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="SS" type="SerializedECMServiceSettingsTableRow" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="GetGroupsRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="G" type="SerializedECMGroupTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="P" type="SerializedECMPermissionTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="GTSIds" type="SerializedECMGroupTermSetIdsTableRow" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:simpleType name="UserName">
    <xs:restriction base="xs:string">
        <xs:length value="255" />
    </xs:restriction>
</xs:simpleType>
<xs:complexType name="SerializedECMChangeLogTableRow">
    <xs:attribute name="a0" type="ser:guid" use="required" />
    <xs:attribute name="a48" type="ser:guid" use="optional" />
    <xs:attribute name="a49" type="ser:guid" use="optional" />
    <xs:attribute name="a50" type="ser:guid" use="optional" />
    <xs:attribute name="a51" type="InternalIdentifier" use="optional" />
    <xs:attribute name="a52" type="xs:int" use="required" />

```

```

<xs:attribute name="a53" type="xs:int" use="required" />
<xs:attribute name="a54" type="xs:dateTime" use="required" />
<xs:attribute name="a55" type="xs:string" use="optional" />
<xs:attribute name="a56" type="UserName" use="optional" />
</xs:complexType>
<xs:complexType name="GetChangesRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="CL"
type="SerializedECMChangeLogTableRow" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="SerializedECMChangeLogTableTimeOnlyRow">
  <xs:attribute name="a54" type="xs:dateTime" use="optional" />
</xs:complexType>
<xs:complexType name="GetChangeTimeRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="CL"
type="SerializedECMChangeLogTableTimeOnlyRow" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GetTermRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="T" type="SerializedECMTermTableRowForRead" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element name="TL" type="SerializedECMTermLabelTableRowForRead" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element minOccurs="0" name="TD"
type="SerializedECMTermDescriptionTableRowForRead" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForRead" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element minOccurs="0" name="TP"
type="SerializedECMTermPropertyTableRowForRead" />
          <xs:element minOccurs="0" maxOccurs="1" name="NextResult" />
          <xs:element minOccurs="0" name="CT" type="SerializedECMChildTermTableRow" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GetTermSetRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>

```

```

    <xs:sequence>
      <xs:element name="TS" type="SerializedECMTermSetTableRow" />
      <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
      <xs:element name="RT" type="SerializedECMRootTermTableRow" />
      <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
      <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="SearchAllTermSetsByPropertyRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="TP">
            <xs:complexType>
              <xs:attribute name="a0" type="ser:guid" use="required" />
              <xs:attribute name="a24" type="xs:int" use="required" />
              <xs:attribute name="a37" type="xs:string" use="required" />
              <xs:attribute name="a38" type="xs:string" use="required" />
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GetChangedTermSetsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="CL">
            <xs:complexType>
              <xs:attribute name="a0" type="ser:guid" use="required" />
              <xs:attribute name="a49" type="ser:guid" use="required" />
              <xs:attribute name="a73" type="xs:dateTime" use="required" />
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GetGroupsAndTermSetsRoot">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Root">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="G" type="SerializedECMGroupTableRow" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element name="P" type="SerializedECMPermissionTableRow" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element name="GTSIds" type="SerializedECMGroupTermSetIdsTableRow" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
          <xs:element name="TS" type="SerializedECMTermSetTableRow" />
          <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

        <xs:element name="RT" type="SerializedECMRootTermTableRow" />
        <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
        <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead" />
    </xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="SearchedTermsRootOptimized">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="0" maxOccurs="unbounded" name="TS"
type="SerializedECMTermSetTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="T" type="SerializedECMTermTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TL" type="SerializedECMTermLabelTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TD" type="SerializedECMTermDescriptionTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="CT" type="SerializedECMChildTermTableRow" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="SearchedTermsRootStandard">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="G" type="SerializedECMGroupTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="P" type="SerializedECMPermissionTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="GTSIds" type="SerializedECMGroupTermSetIdsTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TS" type="SerializedECMTermSetTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="RT" type="SerializedECMRootTermTableRow" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="T" type="SerializedECMTermTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TL" type="SerializedECMTermLabelTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TD" type="SerializedECMTermDescriptionTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TM" type="SerializedECMTermSetMembershipTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="TP" type="SerializedECMTermPropertyTableRowForRead" />
                    <xs:element minOccurs="1" maxOccurs="1" name="NextResult" />
                    <xs:element name="CT" type="SerializedECMChildTermTableRow" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>

```

```

        </xs:complexType>
    </xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="SearchedTermsRoot">
    <xs:sequence>
        <xs:any />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="HACKFakeTypeForcesAllSearchRootTypesToShared">
    <xs:sequence>
        <xs:element name="s1" type="GetTermRoot" />
        <xs:element name="s2" type="SearchedTermsRootOptimized" />
        <xs:element name="s3" type="SearchedTermsRootStandard" />
    </xs:sequence>
</xs:complexType>
<xs:simpleType name="ChangeDataForAddOrDeleteLanguage">
    <xs:restriction base="LCID" />
</xs:simpleType>
<xs:complexType name="ChangeDataForSetDefaultLanguage">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Data">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="1" maxOccurs="1" name="FromLanguage" type="LCID" />
                    <xs:element minOccurs="1" maxOccurs="1" name="ToLanguage" type="LCID" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForAddTermSetMembership">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Data">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier" />
                    <xs:element minOccurs="0" maxOccurs="1" name="SourceId" type="InternalIdentifier" />
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForMoveOrUpdateTermSetMembership">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Data">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier" />
                    <xs:element minOccurs="1" maxOccurs="1" name="STSId" type="InternalIdentifier" />
                    <xs:element minOccurs="1" maxOccurs="1" name="SPTId" type="InternalIdentifier" />
                    <xs:element minOccurs="0" maxOccurs="unbounded" name="row">
                        <xs:complexType>
                            <xs:attribute name="TId" type="InternalIdentifier" use="required" />

```

```

        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForAddTermSet">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="FromTermSetId"
type="InternalIdentifier" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForUpdateTermSet">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="FromGroupGuid" type="ser:guid"
/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForUpdateTerm">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="E" type="xs:string" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForDeleteTerm">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="PTId" type="InternalIdentifier"
/>
          <xs:element minOccurs="1" maxOccurs="unbounded" name="row">
            <xs:complexType>
              <xs:attribute name="TId" type="InternalIdentifier" use="required" />
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

<xs:complexType name="ChangeDataForMergeTerm">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="TTid" type="InternalIdentifier"
/>
          <xs:element minOccurs="1" maxOccurs="1" name="PTid" type="InternalIdentifier"
/>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="row">
            <xs:complexType>
              <xs:attribute name="Tid" type="InternalIdentifier" use="required" />
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForAddUsedTerm">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="SiteGuid" type="ser:guid" />
          <xs:element minOccurs="1" maxOccurs="1" name="TermSetId" type="ser:guid" />
          <xs:element minOccurs="1" maxOccurs="1" name="TermId" type="ser:guid" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ChangeDataForRestoreTermStore">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Data">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="IsFullFarmRestore"
type="xs:boolean" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="WorkflowData">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="WorkflowAssociations">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="unbounded" name="WorkflowAssociation">
            <xs:complexType>
              <xs:sequence>
                <xs:element minOccurs="1" maxOccurs="1" name="object">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:choice minOccurs="19" maxOccurs="19">
                        <xs:element minOccurs="16" maxOccurs="16" name="sFld">
                          <xs:complexType mixed="true">
                            <xs:sequence minOccurs="0" maxOccurs="1">

```

```

        <xs:element minOccurs="23" maxOccurs="23" name="sFld">
            <xs:complexType>
                <xs:simpleContent>
                    <xs:extension base="xs:string">
                        <xs:attribute name="type" type="xs:string"
use="required" />
                    </xs:extension>
                </xs:simpleContent>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
    <xs:attribute name="type" type="xs:string" use="required"
/>
    <xs:attribute name="name" type="xs:string" use="required"
/>
</xs:complexType>
</xs:element>
<xs:element minOccurs="3" maxOccurs="3" name="fld">
    <xs:complexType>
        <xs:simpleContent>
            <xs:extension base="xs:string">
                <xs:attribute name="type" type="xs:string"
use="required" />
                <xs:attribute name="name" type="xs:string"
use="required" />
            </xs:extension>
        </xs:simpleContent>
    </xs:complexType>
</xs:element>
</xs:choice>
</xs:sequence>
<xs:attribute name="type" type="xs:string" use="required" />
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="GetChangesForListSyncRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="0" maxOccurs="unbounded" name="T">
                        <xs:complexType>
                            <xs:attribute name="a0" type="ser:guid" use="required" />
                            <xs:attribute name="a60" type="ser:guid" use="required" />
                            <xs:attribute name="a48" type="ser:guid" use="optional" />
                            <xs:attribute name="a49" type="ser:guid" use="optional" />
                            <xs:attribute name="a50" type="ser:guid" use="optional" />
                            <xs:attribute name="a51" type="InternalIdentifier" use="optional" />
                            <xs:attribute name="a52" type="xs:int" use="required" />
                            <xs:attribute name="a53" type="xs:int" use="required" />
                            <xs:attribute name="a54" type="xs:dateTime" use="required" />
                            <xs:attribute name="a55" type="xs:string" use="optional" />
                        </xs:complexType>
                    </xs:element>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>

```



```

        <xs:attribute name="a62" type="xs:string" use="required" />
    </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="GetChangesForFullListSyncRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="0" maxOccurs="unbounded" name="T">
                        <xs:complexType>
                            <xs:attribute name="a0" type="ser:guid" use="required" />
                            <xs:attribute name="a48" type="ser:guid" use="optional" />
                            <xs:attribute name="a49" type="ser:guid" use="optional" />
                            <xs:attribute name="a50" type="ser:guid" use="optional" />
                            <xs:attribute name="a51" type="InternalIdentifier" use="optional" />
                            <xs:attribute name="a52" type="xs:int" use="required" />
                            <xs:attribute name="a53" type="xs:int" use="required" />
                            <xs:attribute name="a54" type="xs:dateTime" use="required" />
                            <xs:attribute name="a55" type="xs:string" use="optional" />
                            <xs:attribute name="a56" type="UserName" use="optional" />
                        </xs:complexType>
                    </xs:element>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="GetSortedChildTermIdsRoot">
    <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="Root">
            <xs:complexType>
                <xs:sequence>
                    <xs:element minOccurs="0" maxOccurs="unbounded" name="T">
                        <xs:complexType>
                            <xs:attribute name="a9" type="ser:guid" use="required" />
                        </xs:complexType>
                    </xs:element>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
</xs:schema>
<xs:schema xmlns:tns="http://schemas.microsoft.com/2003/10/Serialization/"
    attributeFormDefault="qualified" elementFormDefault="qualified"
    targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/"
    xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="anyType" nillable="true" type="xs:anyType" />
    <xs:element name="anyURI" nillable="true" type="xs:anyURI" />
    <xs:element name="base64Binary" nillable="true" type="xs:base64Binary" />
    <xs:element name="boolean" nillable="true" type="xs:boolean" />
    <xs:element name="byte" nillable="true" type="xs:byte" />
    <xs:element name="dateTime" nillable="true" type="xs:dateTime" />
    <xs:element name="decimal" nillable="true" type="xs:decimal" />

```

```

<xs:element name="double" nillable="true" type="xs:double" />
<xs:element name="float" nillable="true" type="xs:float" />
<xs:element name="int" nillable="true" type="xs:int" />
<xs:element name="long" nillable="true" type="xs:long" />
<xs:element name="QName" nillable="true" type="xs:QName" />
<xs:element name="short" nillable="true" type="xs:short" />
<xs:element name="string" nillable="true" type="xs:string" />
<xs:element name="unsignedByte" nillable="true" type="xs:unsignedByte" />
<xs:element name="unsignedInt" nillable="true" type="xs:unsignedInt" />
<xs:element name="unsignedLong" nillable="true" type="xs:unsignedLong" />
<xs:element name="unsignedShort" nillable="true" type="xs:unsignedShort" />
<xs:element name="char" nillable="true" type="tns:char" />
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  <xs:restriction base="xs:int" />
</xs:simpleType>
<xs:element name="duration" nillable="true" type="tns:duration" />
<xs:simpleType name="duration">
  <xs:restriction base="xs:duration">
    <xs:pattern value="\-?P(\d*)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?" />
    <xs:minInclusive value="-P10675199DT2H48M5.4775808S" />
    <xs:maxInclusive value="P10675199DT2H48M5.4775807S" />
  </xs:restriction>
</xs:simpleType>
<xs:element name="guid" nillable="true" type="tns:guid" />
<xs:simpleType name="guid">
  <xs:restriction base="xs:string">
    <xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}" />
  </xs:restriction>
</xs:simpleType>
<xs:attribute name="FactoryType" type="xs:QName" />
<xs:attribute name="Id" type="xs:ID" />
<xs:attribute name="Ref" type="xs:IDREF" />
</xs:schema>
<xs:schema xmlns:tns="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
  xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
  elementFormDefault="qualified"
  targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
  <xs:complexType name="ArrayOfint">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int" />
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfint" nillable="true" type="tns:ArrayOfint" />
  <xs:complexType name="ArrayOfguid">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="guid" type="ser:guid" />
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfguid" nillable="true" type="tns:ArrayOfguid" />
  <xs:complexType name="ArrayOfstring">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfstring" nillable="true" type="tns:ArrayOfstring" />

```

```

<xs:complexType name="ArrayOfKeyValueOfguidArrayOfguidox8ieOcg">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded"
name="KeyValueOfguidArrayOfguidox8ieOcg">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Key" type="ser:guid" />
          <xs:element name="Value" nillable="true" type="tns:ArrayOfguid" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfKeyValueOfguidArrayOfguidox8ieOcg" nillable="true"
type="tns:ArrayOfKeyValueOfguidArrayOfguidox8ieOcg" />
</xs:schema>
<xs:schema
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
elementFormDefault="qualified"
targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="ChangedItemType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Unknown" />
      <xs:enumeration value="Term" />
      <xs:enumeration value="TermSet" />
      <xs:enumeration value="Group" />
      <xs:enumeration value="TermStore" />
      <xs:enumeration value="Site" />
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="ChangedItemType" nillable="true" type="tns:ChangedItemType" />
  <xs:simpleType name="ChangedOperationType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Unknown" />
      <xs:enumeration value="Add" />
      <xs:enumeration value="Edit" />
      <xs:enumeration value="Delete" />
      <xs:enumeration value="Move" />
      <xs:enumeration value="Copy" />
      <xs:enumeration value="PathChange" />
      <xs:enumeration value="Merge" />
      <xs:enumeration value="Import" />
      <xs:enumeration value="Restore" />
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="ChangedOperationType" nillable="true" type="tns:ChangedOperationType" />
</xs:schema>
<xs:simpleType name="StringMatchOption">
  <xs:restriction base="xs:string">
    <xs:enumeration value="StartsWith" />
    <xs:enumeration value="ExactMatch" />
  </xs:restriction>
</xs:simpleType>
<xs:element name="StringMatchOption" nillable="true" type="tns:StringMatchOption" />
</xs:schema>
<xs:schema xmlns:tns="http://schemas.microsoft.com/Message"
elementFormDefault="qualified" targetNamespace="http://schemas.microsoft.com/Message"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="StreamBody">

```

```

        <xs:restriction base="xs:base64Binary" />
    </xs:simpleType>
</xs:schema>
<xs:schema
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.ContentTypeS
ync" elementFormDefault="qualified"
targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.SharePoint.Taxonomy.Conten
tTypeSync" xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:simpleType name="SyndicationStatus">
        <xs:restriction base="xs:string">
            <xs:enumeration value="None" />
            <xs:enumeration value="Publishing" />
            <xs:enumeration value="TimeStampRetrieving" />
            <xs:enumeration value="PackageRetrieving" />
            <xs:enumeration value="Importing" />
            <xs:enumeration value="ImportingContentType" />
            <xs:enumeration value="ImportingNonContentType" />
            <xs:enumeration value="ContentTypeUnsharing" />
            <xs:enumeration value="PreCheck" />
            <xs:enumeration value="SiteRefreshing" />
            <xs:enumeration value="WorkflowImporting" />
            <xs:enumeration value="ContentTypePolicyDirtyBagUpdating" />
            <xs:enumeration value="ContentTypeSealing" />
            <xs:enumeration value="TimeStampUpdating" />
            <xs:enumeration value="LogTrimming" />
            <xs:enumeration value="LogSynchronizing" />
            <xs:enumeration value="Unpublishing" />
            <xs:enumeration value="Failed" />
            <xs:enumeration value="Succeeded" />
        </xs:restriction>
    </xs:simpleType>
    <xs:element name="SyndicationStatus" nillable="true" type="tns:SyndicationStatus" />
</xs:schema>
</wsdl:types>
<wsdl:message name="IMetadataWebServiceApplication_GetSessionData_InputMessage">
    <wsdl:part name="parameters" element="i0:GetSessionData" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetSessionData_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetSessionDataResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetGroupByGuid_InputMessage">
    <wsdl:part name="parameters" element="i0:GetGroupByGuid" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetGroupByGuid_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetGroupByGuidResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetGroups_InputMessage">
    <wsdl:part name="parameters" element="i0:GetGroups" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetGroups_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetGroupsResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetTerm_InputMessage">
    <wsdl:part name="parameters" element="i0:GetTerm" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetTerm_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetTermResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetTermsInternal_InputMessage">

```

```

    <wsdl:part name="parameters" element="i0:GetTermsInternal" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermsInternal_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetTermsInternalResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTerms_InputMessage">
    <wsdl:part name="parameters" element="i0:GetTerms" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTerms_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetTermsResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermSets_InputMessage">
    <wsdl:part name="parameters" element="i0:GetTermSets" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermSets_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetTermSetsResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermSetsInternal_InputMessage">
    <wsdl:part name="parameters" element="i0:GetTermSetsInternal" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermSetsInternal_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetTermSetsInternalResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetSortedChildTermIds_InputMessage">
    <wsdl:part name="parameters" element="i0:GetSortedChildTermIds" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetSortedChildTermIds_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetSortedChildTermIdsResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermSetWithAllTerms_InputMessage">
    <wsdl:part name="parameters" element="i0:GetTermSetWithAllTerms" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetTermSetWithAllTerms_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetTermSetWithAllTermsResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetDescendentTerms_InputMessage">
    <wsdl:part name="parameters" element="i0:GetDescendentTerms" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetDescendentTerms_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetDescendentTermsResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetChangesForListSync_InputMessage">
    <wsdl:part name="parameters" element="i0:GetChangesForListSync" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetChangesForListSync_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetChangesForListSyncResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetChangesForFullListSync_InputMessage">
    <wsdl:part name="parameters" element="i0:GetChangesForFullListSync" />
  </wsdl:message>
  <wsdl:message
name="IMetadataWebServiceApplication_GetChangesForFullListSync_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetChangesForFullListSyncResponse" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetChanges_InputMessage">
    <wsdl:part name="parameters" element="i0:GetChanges" />
  </wsdl:message>
  <wsdl:message name="IMetadataWebServiceApplication_GetChanges_OutputMessage">
    <wsdl:part name="parameters" element="i0:GetChangesResponse" />
  </wsdl:message>

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</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetChangesOverInterval_InputMessage">
  <wsdl:part name="parameters" element="i0:GetChangesOverInterval" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetChangesOverInterval_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetChangesOverIntervalResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetChangeTime_InputMessage">
  <wsdl:part name="parameters" element="i0:GetChangeTime" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetChangeTime_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetChangeTimeResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermByLabel_InputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermByLabel" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermByLabel_OutputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermByLabelResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermSetByName_InputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermSetByName" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermSetByName_OutputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermSetByNameResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetTermSetsByLabel_InputMessage">
  <wsdl:part name="parameters" element="i0:GetTermSetsByLabel" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetTermSetsByLabel_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetTermSetsByLabelResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermSetsByProperty_InputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermSetsByProperty" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermSetsByProperty_OutputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermSetsByPropertyResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermByProperty_InputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermByProperty" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SearchTermByProperty_OutputMessage">
  <wsdl:part name="parameters" element="i0:SearchTermByPropertyResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetSitesContainingTerms_InputMessage">
  <wsdl:part name="parameters" element="i0:GetSitesContainingTerms" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetSitesContainingTerms_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetSitesContainingTermsResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetChangedTermSets_InputMessage">
  <wsdl:part name="parameters" element="i0:GetChangedTermSets" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetChangedTermSets_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetChangedTermSetsResponse" />
</wsdl:message>
<wsdl:message
name="IMetadataWebServiceApplication_SearchAllTermSetsByProperty_InputMessage">
  <wsdl:part name="parameters" element="i0:SearchAllTermSetsByProperty" />
</wsdl:message>

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<wsdl:message
name="IMetadataWebServiceApplication_SearchAllTermSetsByProperty_OutputMessage">
  <wsdl:part name="parameters" element="i0:SearchAllTermSetsByPropertyResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_Write_InputMessage">
  <wsdl:part name="parameters" element="i0:Write" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_Write_OutputMessage">
  <wsdl:part name="parameters" element="i0:WriteResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_WriteUsedTerm_InputMessage">
  <wsdl:part name="parameters" element="i0:WriteUsedTerm" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_WriteUsedTerm_OutputMessage">
  <wsdl:part name="parameters" element="i0:WriteUsedTermResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_WriteUsedTerms_InputMessage">
  <wsdl:part name="parameters" element="i0:WriteUsedTerms" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_WriteUsedTerms_OutputMessage">
  <wsdl:part name="parameters" element="i0:WriteUsedTermsResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_WriteClearUsedTerms_InputMessage">
  <wsdl:part name="parameters" element="i0:WriteClearUsedTerms" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_WriteClearUsedTerms_OutputMessage">
  <wsdl:part name="parameters" element="i0:WriteClearUsedTermsResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_RemoveUsedTermSet_InputMessage">
  <wsdl:part name="parameters" element="i0:RemoveUsedTermSet" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_RemoveUsedTermSet_OutputMessage">
  <wsdl:part name="parameters" element="i0:RemoveUsedTermSetResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_DeleteServiceSettings_InputMessage">
  <wsdl:part name="parameters" element="i0>DeleteServiceSettings" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_DeleteServiceSettings_OutputMessage">
  <wsdl:part name="parameters" element="i0>DeleteServiceSettingsResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetServiceSettings_InputMessage">
  <wsdl:part name="parameters" element="i0:GetServiceSettings" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetServiceSettings_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetServiceSettingsResponse" />
</wsdl:message>
<wsdl:message
name="IMetadataWebServiceApplication_GetServiceApplicationSettings_InputMessage">
  <wsdl:part name="parameters" element="i0:GetServiceApplicationSettings" />
</wsdl:message>
<wsdl:message
name="IMetadataWebServiceApplication_GetServiceApplicationSettings_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetServiceApplicationSettingsResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SetServiceSettings_InputMessage">
  <wsdl:part name="parameters" element="i0:SetServiceSettings" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_SetServiceSettings_OutputMessage">
  <wsdl:part name="parameters" element="i0:SetServiceSettingsResponse" />

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</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_InitiateCacheFlush_InputMessage">
  <wsdl:part name="parameters" element="i0:InitiateCacheFlush" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_InitiateCacheFlush_OutputMessage">
  <wsdl:part name="parameters" element="i0:InitiateCacheFlushResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_PublishPackage_InputMessage">
  <wsdl:part name="parameters" element="i0:PublishPackage" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_PublishPackage_OutputMessage">
  <wsdl:part name="parameters" element="i0:PublishPackageResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_UnpublishPackage_InputMessage">
  <wsdl:part name="parameters" element="i0:UnpublishPackage" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_UnpublishPackage_OutputMessage">
  <wsdl:part name="parameters" element="i0:UnpublishPackageResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_DownloadPackage_InputMessage">
  <wsdl:part name="parameters" element="i0:DownloadPackage" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_DownloadPackage_OutputMessage">
  <wsdl:part name="parameters" element="i0:DownloadPackageResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetUpdateInformation_InputMessage">
  <wsdl:part name="parameters" element="i0:GetUpdateInformation" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetUpdateInformation_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetUpdateInformationResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetApplicationLog_InputMessage">
  <wsdl:part name="parameters" element="i0:GetApplicationLog" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetApplicationLog_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetApplicationLogResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ClearApplicationLog_InputMessage">
  <wsdl:part name="parameters" element="i0:ClearApplicationLog" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ClearApplicationLog_OutputMessage">
  <wsdl:part name="parameters" element="i0:ClearApplicationLogResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_UploadStatus_InputMessage">
  <wsdl:part name="parameters" element="i0:UploadStatus" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_UploadStatus_OutputMessage">
  <wsdl:part name="parameters" element="i0:UploadStatusResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_GetServiceApplicationName_InputMessage">
  <wsdl:part name="parameters" element="i0:GetServiceApplicationName" />
</wsdl:message>
<wsdl:message
name="IMetadataWebServiceApplication_GetServiceApplicationName_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetServiceApplicationNameResponse" />
</wsdl:message>
<wsdl:message
name="IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_InputMessage">
  <wsdl:part name="parameters" element="i0:GetIsServiceApplicationPartitioned" />

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</wsdl:message>
<wsdl:message
name="IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_OutputMessage">
  <wsdl:part name="parameters" element="i0:GetIsServiceApplicationPartitionedResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ExportPartitionData_InputMessage">
  <wsdl:part name="parameters" element="i0:ExportPartitionData" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ExportPartitionData_OutputMessage">
  <wsdl:part name="parameters" element="i0:ExportPartitionDataResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ImportPartitionData_InputMessage">
  <wsdl:part name="parameters" element="i0:ImportPartitionData" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ImportPartitionData_OutputMessage">
  <wsdl:part name="parameters" element="i0:ImportPartitionDataResponse" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ClearPartitionData_InputMessage">
  <wsdl:part name="parameters" element="i0:ClearPartitionData" />
</wsdl:message>
<wsdl:message name="IMetadataWebServiceApplication_ClearPartitionData_OutputMessage">
  <wsdl:part name="parameters" element="i0:ClearPartitionDataResponse" />
</wsdl:message>
<wsdl:portType name="IMetadataWebServiceApplication">
  <wsdl:operation name="GetSessionData">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSessionData" message="i0:IMetadataWebServiceApplication_GetSessionData_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSessionDataResponse" message="i0:IMetadataWebServiceApplication_GetSessionData_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetGroupByGuid">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupByGuid" message="i0:IMetadataWebServiceApplication_GetGroupByGuid_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupByGuidResponse" message="i0:IMetadataWebServiceApplication_GetGroupByGuid_OutputMessage" />
      </wsdl:operation>
    <wsdl:operation name="GetGroups">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroups" message="i0:IMetadataWebServiceApplication_GetGroups_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGroupsResponse" message="i0:IMetadataWebServiceApplication_GetGroups_OutputMessage" />
      </wsdl:operation>
    <wsdl:operation name="GetTerm">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm" message="i0:IMetadataWebServiceApplication_GetTerm_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermResponse" message="i0:IMetadataWebServiceApplication_GetTerm_OutputMessage" />
      </wsdl:operation>
    <wsdl:operation name="GetTermsInternal">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsInternal" message="i0:IMetadataWebServiceApplication_GetTermsInternal_InputMessage" />

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    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsInternalResponse"
message="i0:IMetadataWebServiceApplication_GetTermsInternal_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetTerms">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerms" message="i0:IMetadataWebServiceApplication_GetTerms_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermsResponse" message="i0:IMetadataWebServiceApplication_GetTerms_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetTermSets">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSets" message="i0:IMetadataWebServiceApplication_GetTermSets_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsResponse" message="i0:IMetadataWebServiceApplication_GetTermSets_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetTermSetsInternal">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsInternal" message="i0:IMetadataWebServiceApplication_GetTermSetsInternal_InputMessage" />
    </wsdl:operation>
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsInternalResponse"
message="i0:IMetadataWebServiceApplication_GetTermSetsInternal_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetSortedChildTermIds">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSortedChildTermIds"
message="i0:IMetadataWebServiceApplication_GetSortedChildTermIds_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSortedChildTermIdsResponse"
message="i0:IMetadataWebServiceApplication_GetSortedChildTermIds_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetTermSetWithAllTerms">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetWithAllTerms"
message="i0:IMetadataWebServiceApplication_GetTermSetWithAllTerms_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetWithAllTermsResponse"
message="i0:IMetadataWebServiceApplication_GetTermSetWithAllTerms_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetDescendentTerms">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetDescendentTerms" message="i0:IMetadataWebServiceApplication_GetDescendentTerms_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetDescendentTermsResponse"
message="i0:IMetadataWebServiceApplication_GetDescendentTerms_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetChangesForListSync">

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    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForListSync"
message="i0:IMetadataWebServiceApplication_GetChangesForListSync_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForListSyncResponse"
message="i0:IMetadataWebServiceApplication_GetChangesForListSync_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetChangesForFullListSync">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForFullListSync"
message="i0:IMetadataWebServiceApplication_GetChangesForFullListSync_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesForFullListSyncResponse"
message="i0:IMetadataWebServiceApplication_GetChangesForFullListSync_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetChanges">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChanges"
message="i0:IMetadataWebServiceApplication_GetChanges_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesResponse"
message="i0:IMetadataWebServiceApplication_GetChanges_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetChangesOverInterval">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesOverInterval"
message="i0:IMetadataWebServiceApplication_GetChangesOverInterval_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesOverIntervalResponse"
message="i0:IMetadataWebServiceApplication_GetChangesOverInterval_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetChangeTime">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangeTime"
message="i0:IMetadataWebServiceApplication_GetChangeTime_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangeTimeResponse"
message="i0:IMetadataWebServiceApplication_GetChangeTime_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="SearchTermByLabel">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByLabel"
message="i0:IMetadataWebServiceApplication_SearchTermByLabel_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByLabelResponse"
message="i0:IMetadataWebServiceApplication_SearchTermByLabel_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="SearchTermSetByName">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetByName"
message="i0:IMetadataWebServiceApplication_SearchTermSetByName_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/Search

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TermSetByNameResponse"
message="i0:IMetadataWebServiceApplication_SearchTermSetByName_OutputMessage" />
  </wsdl:operation>
  <wsdl:operation name="GetTermSetsByLabel">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsByLabel" message="i0:IMetadataWebServiceApplication_GetTermSetsByLabel_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsByLabelResponse"
message="i0:IMetadataWebServiceApplication_GetTermSetsByLabel_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="SearchTermSetsByProperty">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetsByProperty"
message="i0:IMetadataWebServiceApplication_SearchTermSetsByProperty_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetsByPropertyResponse"
message="i0:IMetadataWebServiceApplication_SearchTermSetsByProperty_OutputMessage" />
      </wsdl:operation>
      <wsdl:operation name="SearchTermByProperty">
        <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByProperty" message="i0:IMetadataWebServiceApplication_SearchTermByProperty_InputMessage" />
        <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByPropertyResponse"
message="i0:IMetadataWebServiceApplication_SearchTermByProperty_OutputMessage" />
        </wsdl:operation>
        <wsdl:operation name="GetSitesContainingTerms">
          <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSitesContainingTerms"
message="i0:IMetadataWebServiceApplication_GetSitesContainingTerms_InputMessage" />
          <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSitesContainingTermsResponse"
message="i0:IMetadataWebServiceApplication_GetSitesContainingTerms_OutputMessage" />
          </wsdl:operation>
          <wsdl:operation name="GetChangedTermSets">
            <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangedTermSets" message="i0:IMetadataWebServiceApplication_GetChangedTermSets_InputMessage" />
            <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangedTermSetsResponse"
message="i0:IMetadataWebServiceApplication_GetChangedTermSets_OutputMessage" />
            </wsdl:operation>
            <wsdl:operation name="SearchAllTermSetsByProperty">
              <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchAllTermSetsByProperty"
message="i0:IMetadataWebServiceApplication_SearchAllTermSetsByProperty_InputMessage" />
              <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchAllTermSetsByPropertyResponse"
message="i0:IMetadataWebServiceApplication_SearchAllTermSetsByProperty_OutputMessage" />
              </wsdl:operation>
              <wsdl:operation name="Write">

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    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
" message="i0:IMetadataWebServiceApplication_Write_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
Response" message="i0:IMetadataWebServiceApplication_Write_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="WriteUsedTerm">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
UsedTerm" message="i0:IMetadataWebServiceApplication_WriteUsedTerm_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
UsedTermResponse" message="i0:IMetadataWebServiceApplication_WriteUsedTerm_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="WriteUsedTerms">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
UsedTerms" message="i0:IMetadataWebServiceApplication_WriteUsedTerms_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
UsedTermsResponse" message="i0:IMetadataWebServiceApplication_WriteUsedTerms_OutputMessage"
/>
    </wsdl:operation>
    <wsdl:operation name="WriteClearUsedTerms">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
ClearUsedTerms" message="i0:IMetadataWebServiceApplication_WriteClearUsedTerms_InputMessage"
/>
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write
ClearUsedTermsResponse"
message="i0:IMetadataWebServiceApplication_WriteClearUsedTerms_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="RemoveUsedTermSet">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Remov
eUsedTermSet" message="i0:IMetadataWebServiceApplication_RemoveUsedTermSet_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Remov
eUsedTermSetResponse"
message="i0:IMetadataWebServiceApplication_RemoveUsedTermSet_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="DeleteServiceSettings">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/DeleteServiceSettings"
message="i0:IMetadataWebServiceApplication_DeleteServiceSettings_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/DeleteServiceSettingsResponse"
message="i0:IMetadataWebServiceApplication_DeleteServiceSettings_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetServiceSettings">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/GetServiceSettings"
message="i0:IMetadataWebServiceApplication_GetServiceSettings_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/GetServiceSettingsResponse"
message="i0:IMetadataWebServiceApplication_GetServiceSettings_OutputMessage" />

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    </wsdl:operation>
    <wsdl:operation name="GetServiceApplicationSettings">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/GetServiceApplicationSettings"
message="i0:IMetadataWebServiceApplication_GetServiceApplicationSettings_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/GetServiceApplicationSettingsResponse"
message="i0:IMetadataWebServiceApplication_GetServiceApplicationSettings_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="SetServiceSettings">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/SetServiceSettings"
message="i0:IMetadataWebServiceApplication_SetServiceSettings_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/SetServiceSettingsResponse"
message="i0:IMetadataWebServiceApplication_SetServiceSettings_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="InitiateCacheFlush">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/InitiateCacheFlush"
message="i0:IMetadataWebServiceApplication_InitiateCacheFlush_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/InitiateCacheFlushResponse"
message="i0:IMetadataWebServiceApplication_InitiateCacheFlush_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="PublishPackage">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/PublishPackage" message="i0:IMetadataWebServiceApplication_PublishPackage_InputMessage"
/>
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/PublishPackageResponse"
message="i0:IMetadataWebServiceApplication_PublishPackage_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="UnpublishPackage">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/UnpublishPackage"
message="i0:IMetadataWebServiceApplication_UnpublishPackage_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/UnpublishPackageResponse"
message="i0:IMetadataWebServiceApplication_UnpublishPackage_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="DownloadPackage">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/DownloadPackage"
message="i0:IMetadataWebServiceApplication_DownloadPackage_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/DownloadPackageResponse"
message="i0:IMetadataWebServiceApplication_DownloadPackage_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetUpdateInformation">

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    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetUpdateInformation"
message="i0:IMetadataWebServiceApplication_GetUpdateInformation_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetUpdateInformationResponse"
message="i0:IMetadataWebServiceApplication_GetUpdateInformation_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetApplicationLog">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetApplicationLog"
message="i0:IMetadataWebServiceApplication_GetApplicationLog_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetApplicationLogResponse"
message="i0:IMetadataWebServiceApplication_GetApplicationLog_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="ClearApplicationLog">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearApplicationLog"
message="i0:IMetadataWebServiceApplication_ClearApplicationLog_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearApplicationLogResponse"
message="i0:IMetadataWebServiceApplication_ClearApplicationLog_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="UploadStatus">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UploadStatus" message="i0:IMetadataWebServiceApplication_UploadStatus_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UploadStatusResponse"
message="i0:IMetadataWebServiceApplication_UploadStatus_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetServiceApplicationName">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationName"
message="i0:IMetadataWebServiceApplication_GetServiceApplicationName_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationNameResponse"
message="i0:IMetadataWebServiceApplication_GetServiceApplicationName_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="GetIsServiceApplicationPartitioned">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetIsServiceApplicationPartitioned"
message="i0:IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetIsServiceApplicationPartitionedResponse"
message="i0:IMetadataWebServiceApplication_GetIsServiceApplicationPartitioned_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="ExportPartitionData">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica

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tion/ExportPartitionData"
message="i0:IMetadataWebServiceApplication_ExportPartitionData_InputMessage" />
  <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/ExportPartitionDataResponse"
message="i0:IMetadataWebServiceApplication_ExportPartitionData_OutputMessage" />
  </wsdl:operation>
  <wsdl:operation name="ImportPartitionData">
    <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/ImportPartitionData"
message="i0:IMetadataWebServiceApplication_ImportPartitionData_InputMessage" />
    <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/ImportPartitionDataResponse"
message="i0:IMetadataWebServiceApplication_ImportPartitionData_OutputMessage" />
    </wsdl:operation>
    <wsdl:operation name="ClearPartitionData">
      <wsdl:input
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/ClearPartitionData"
message="i0:IMetadataWebServiceApplication_ClearPartitionData_InputMessage" />
      <wsdl:output
wsam:Action="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplica
tion/ClearPartitionDataResponse"
message="i0:IMetadataWebServiceApplication_ClearPartitionData_OutputMessage" />
      </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="CustomBinding_IMetadataWebServiceApplication"
type="i0:IMetadataWebServiceApplication">
      <soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
      <wsdl:operation name="GetSessionData">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSess
ionData" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGroupByGuid">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGrou
pByGuid" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetGroups">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetGrou
ps" style="document" />
        <wsdl:input>
          <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal" />

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        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetTerm">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetTermsInternal">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
sInternal" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetTerms">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
s" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetTermSets">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
Sets" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetTermSetsInternal">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
SetsInternal" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetSortedChildTermIds">

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    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSort
edChildTermIds" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetTermSetWithAllTerms">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTerm
SetWithAllTerms" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetDescendentTerms">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetDesc
endentTerms" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetChangesForListSync">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChan
gesForListSync" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetChangesForFullListSync">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChan
gesForFullListSync" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetChanges">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChan
ges" style="document" />
    <wsdl:input>
        <soap:body use="literal" />

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    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetChangesOverInterval">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangesOverInterval" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetChangeTime">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChangeTime" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="SearchTermByLabel">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermByLabel" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="SearchTermSetByName">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchTermSetByName" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetTermSetsByLabel">
    <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetTermSetsByLabel" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>

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    <wsdl:operation name="SearchTermSetsByProperty">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchT
ermSetsByProperty" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="SearchTermByProperty">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchT
ermByProperty" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetSitesContainingTerms">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetSite
sContainingTerms" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetChangedTermSets">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/GetChan
gedTermSets" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="SearchAllTermSetsByProperty">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadOnly/SearchA
llTermSetsByProperty" style="document" />
      <wsdl:input>
        <soap:body use="literal" />
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" />
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="Write">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/Write"
style="document" />
      <wsdl:input>

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        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="WriteUsedTerm">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTerm" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="WriteUsedTerms">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteUsedTerms" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="WriteClearUsedTerms">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/WriteClearUsedTerms" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="RemoveUsedTermSet">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IDataAccessReadWrite/RemoveUsedTermSet" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="DeleteServiceSettings">
    <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DeleteServiceSettings" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>

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</wsdl:operation>
<wsdl:operation name="GetServiceSettings">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceSettings" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetServiceApplicationSettings">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationSettings" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="SetServiceSettings">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/SetServiceSettings" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="InitiateCacheFlush">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/InitiateCacheFlush" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="PublishPackage">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/PublishPackage" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="UnpublishPackage">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UnpublishPackage" style="document" />

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    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="DownloadPackage">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/DownloadPackage" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetUpdateInformation">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetUpdateInformation" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetApplicationLog">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetApplicationLog" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="ClearApplicationLog">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearApplicationLog" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="UploadStatus">
  <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/UploadStatus" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>

```

```

        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetServiceApplicationName">
        <soap:operation
            soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetServiceApplicationName" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetIsServiceApplicationPartitioned">
        <soap:operation
            soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/GetIsServiceApplicationPartitioned" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="ExportPartitionData">
        <soap:operation
            soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ExportPartitionData" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="ImportPartitionData">
        <soap:operation
            soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ImportPartitionData" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="ClearPartitionData">
        <soap:operation
            soapAction="http://schemas.microsoft.com/sharepoint/taxonomy/soap/IMetadataWebServiceApplication/ClearPartitionData" style="document" />
        <wsdl:input>
            <soap:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap: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® SharePoint® Server 2010
- Microsoft® SharePoint® Server 15 Technical Preview

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

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

[<1> Section 2.2.4:](#) This type is not supported in SharePoint Server 2010.

[<2> Section 2.2.4:](#) The Microsoft implementation stores this log for informational purposes for administrators to view.

[<3> Section 2.2.4.12:](#) The Microsoft implementation stores this log for informational purposes for administrators to view.

[<4> Section 2.2.4.22:](#) This type is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<5> Section 2.2.4.36:](#) This attribute is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<6> Section 2.2.4.43:](#) This type is not supported in SharePoint Server 2010.

[<7> Section 3.1.4:](#) This message is applicable only to SharePoint Server 15 Technical Preview.

[<8> Section 3.1.4:](#) This operation is available only in SharePoint Server 15 Technical Preview.

[<9> Section 3.1.4:](#) This operation is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<10> Section 3.1.4.19.3.1:](#) This parameter is only applicable to SharePoint Server 15.

[<11> Section 3.1.4.19.3.6:](#) This type is available only in SharePoint Server 15 Technical Preview.

[<12> Section 3.1.4.25:](#) The Microsoft implementation does not include terms that have been deprecated or marked as not available for tagging.

[<13> Section 3.1.4.40.3.3:](#) This attribute is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<14> Section 3.1.4.40.3.3:](#) This attribute is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<15> Section 3.1.4.40.3.6:](#) This attribute is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<16> Section 3.1.4.44:](#) This message is applicable only to SharePoint Server 15 Technical Preview.

[<17> Section 3.1.4.45](#): This operation is not supported in Microsoft(R) SharePoint(R) Server 2010.

[<18> Section 3.1.4.46](#): This operation is available only in SharePoint Server 15 Technical Preview.

Preliminary

8 Change Tracking

This section identifies changes that were made to the [MS-EMMWCF] protocol document between the June 2011 and January 2012 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- The removal of a document from the documentation set.
- Changes made for template compliance.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the language and formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated**.

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

The changes made to this document are listed in the following table. For more information, please contact protocol@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
2.2.1 Namespaces	Removed unused namespaces.	N	Content removed.
2.2.4 Complex Types	Added a description and a product behavior note for ChangeDataForUpdateTerm.	N	Content updated.
2.2.4 Complex Types	Added a description for SerializedECMChangeLogTableTimeOnlyRow.	N	Content updated.
2.2.4.14 GetGroupsAndTermSetsRoot	Added a description for Root.TP.	N	New protocol syntax added due to protocol revision.
2.2.4.17 GetTermRoot	Clarified that the Root.CT is a SerializedECMChildTermTableRow for each term that is an immediate child of the terms.	N	Content updated.
2.2.4.17 GetTermRoot	Changed Root.TM from after Root.TP to before Root.TP.	N	New protocol syntax

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
			added due to protocol revision .
2.2.4.17 GetTermRoot	Updated minoccurs values.	N	Content updated .
2.2.4.20 SearchedTermsRootOptimized	Changed Root.TM from after Root.TP to in front of Root.TP.	N	Protocol syntax updated due to protocol revision .
2.2.4.21 SearchedTermsRootStandard	Changed Root.TM from after Root.TP to in front of Root.TP.	N	Protocol syntax updated due to protocol revision .
2.2.4.22 SerializedECMChangeLogTableRow	Updated the references to ChangedItemType and ChangedOperationType to use numeric values rather than string values.	N	Content updated .
2.2.4.22 SerializedECMChangeLogTableRow	Updated type information for a52 and a53.	N	Content updated .
2.2.4.23 SerializedECMChildTermTableRow	Clarified the a25 value if the term has no parent term.	N	Content updated .
2.2.4.35 SerializedECMTermPropertyTableRowForRead	Added a new attribute a24.	N	New protocol syntax added due to protocol revision .
2.2.4.36 SerializedECMTermSetMembershipTableRowBase	Added a new attribute a74.	N	New protocol syntax added due to protocol revision .

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
			.
2.2.4.37 SerializedECMTermSetMembershipTableRowF orRead	Added a43 attribute.	N	New content added.
2.2.4.38 SerializedECMTermSetTableRow	Clarified what the delimiter is for attribute a18.	N	Content updated .
2.2.4.43 ChangeDataForUpdateTerm	Added information about ChangeDataForUpdateTerm.	N	Protocol syntax updated due to protocol revision .
3.1.4 Message Processing Events and Sequencing Rules	Added new descriptions and product behavior notes for GetChangedTermSets, SearchAllTermSetsByProperty, and SearchTermSetsByProperty.	N	New content added.
3.1.4.7 GetChanges	Updated the reference to changedItemType and changedOperationType to use a numeric value rather than a string value.	N	Content updated .
3.1.4.7.4.2 ChangedOperationType	Updated the references to ChangedItemType and ChangedOperationType to use numeric values rather than string values.	N	Content updated .
3.1.4.8.3.1 GetChangesForFullListSyncRoot	Updated type information for a52 and a53.	N	Content updated .
3.1.4.9.3.1 GetChangesForListSyncRoot	Updated type information for a52 and a53.	N	Content updated .
3.1.4.14 GetGroups	Updated the response information to read it cannot contain GetGroupsResult elements instead of GetGroupByGuidResultlts when the store partition does not exist.	N	Content updated .
3.1.4.19 GetSessionData	Added content to the updated GetSessionData method to cover the new "partition" element and "new" attribute.	N	New content added.
3.1.4.19.2.1	Clarified length restrictions for	N	Content

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
GetSessionData	systemGroupName, keywordsTermsetName and orphanedTermsTermsetName.		updated .
3.1.4.19.3.1 GetSessionDataRoot	Added Root.CL and Root.partition.	N	New content added.
3.1.4.19.3.6 NewPartitionIndicator	Added a new section and a product behavior note to describe NewPartitionIndicator.	Y	New content added.
3.1.4.21 GetSortedChildTermIds	Clarified the behavior if more than one label is available for a locale.	N	Content updated .
3.1.4.23 GetTerms	Updated the description to indicate that the term must exist in the term store partition.	N	Content updated .
3.1.4.26.3.1 GetTermSetRoot	Added Root.TP.	N	New protocol syntax added due to protocol revision .
3.1.4.40.3.3 SerializedECMTermTableRowForWrite	Added a new attribute a74.	N	New protocol syntax added due to protocol revision .
3.1.4.40.3.3 SerializedECMTermTableRowForWrite	Added a new attribute a55.	N	New protocol syntax added due to protocol revision .
3.1.4.40.3.4 SerializedECMTermLabelTableRowForWrite	Clarified that a5 must not be "1" (Edit).	N	Content updated .
3.1.4.40.3.6 SerializedECMTermPropertyTableRowForWrite	Added a new attribute a24.	N	New protocol syntax added

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
			due to protocol revision .
3.1.4.41.2.1 WriteClearUsedTerms	Updated the XML.	N	Content updated .
3.1.4.42.2.1 WriteUsedTerm	Updated the XML.	N	Content updated .
3.1.4.43.2.1 WriteUsedTerms	Clarified the one-to-one correspondence of the "termSetIds" and "termIDs" list elements.	Y	Content updated .
3.1.4.43.2.1 WriteUsedTerms	Updated the XML.	N	Content updated .
3.1.4.44 GetChangedTermSets	Added new section, a product behavior note, and subsections for messages, elements and complex types for GetChangedTermSets.	N	New content added.
3.1.4.45 SearchTermSetsByProperty	Added new section, a product behavior note, and subsections for messages and elements for SearchTermSetsByProperty.	Y	New protocol syntax added due to protocol revision .
3.1.4.46 SearchAllTermSetsByProperty	Added new section, a product behavior note, and subsections for messages, elements and complex types for SearchAllTermSetsByPropertyRoot.	Y	New content added.
6 Appendix A: Full WSDL	Updated several parameter definitions where minOccurs should be 1 and was previously 0, to match section 3.1.4, and updated the WS-Addressing namespace to match section 2.2.1.	N	Protocol syntax updated .
6 Appendix A: Full WSDL	Updated nillable values on WSDL elements to be consistent.	N	Content updated .
Z Appendix B: Product Behavior	Updated the products list.	N	New content added.

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