[MS-EDINTWS]:

eDiscovery Internal Web Service Protocol

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Revision Summary

Date	Revision History	Revision Class	Comments
1/20/2012	0.1	New	Released new document.
4/11/2012	0.1	No Change	No changes to the meaning, language, or formatting of the technical content.
7/16/2012	0.1	No Change	No changes to the meaning, language, or formatting of the technical content.
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8/24/2015	2.0	Major	Significantly changed the technical content.

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eDiscovery Internal Web Service Protocol
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1 Introduction

The eDiscovery Internal Web Service Protocol enables a protocol client to perform UI interaction operations in support of an electronic discovery (eDiscovery) application.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in [RFC2119]. Sections 1.5 and 1.9 are also normative but do not contain those terms. All other sections and examples in this specification are informative.

1.1 Glossary

The following terms are specific to this document:

crawl log: A set of properties that provides information about the results of crawling a display URL. The information includes whether the crawl was successful, the content source of the display URL, and the level, message, time, and identifier for any errors that occur.

discovery case: A site that contains information relevant to an electronic discovery (eDiscovery) case such as a custodian, a **discovery source**, and saved searches.

discovery source: A repository of documents and other types of content that are relevant to the electronic discovery (eDiscovery) case.

file system: A system that enables applications to store and retrieve files on storage devices. Files are placed in a hierarchical structure. The file system specifies naming conventions for files and the format for specifying the path to a file in the tree structure. Each file system consists of one or more drivers and DLLs that define the data formats and features of the file system. File systems can exist on the following storage devices: diskettes, hard disks, jukeboxes, removable optical disks, and tape backup units.

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

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

legal hold: A restriction that prevents a document from being modified or transactions from being entered for a record.

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

search query: A complete set of conditions that are used to generate search results, including query text, sort order, and ranking parameters.

site: A group of related webpages that is hosted by a server on the World Wide Web or an intranet. Each website has its own entry points, metadata, administration settings, and workflows. Also referred to as web site.

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

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

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

SOAP envelope: A container for SOAP message information and the root element of a **SOAP** document. See [SOAP1.2-1/2007] section 5.1 for more information.

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

SOAP Message: The data encapsulated in a SOAP envelope that flows back and forth between a protocol client and a web service, as described in [SOAP1.1].

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

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

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

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

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

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

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

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

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

1.2   References

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

1.2.1 Normative References

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

[MS-KQL] Microsoft Corporation, "Keyword Query Language Structure Protocol".

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

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

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

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

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

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

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

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

[XMLSCHEMA2] Biron, P.V., 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

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

1.3 Overview

This protocol enables a protocol client to perform UI interaction operations in support of an application that manages a **discovery case**. For example, it enables a protocol client to validate whether the identifier of a location that a user has entered is a valid location to use as a **discovery source** or to update statistics for the discovery case once a discovery source is added.

1.4 Relationship to Other Protocols

This protocol uses **Simple Object Access Protocol (SOAP)** over **Hypertext Transfer Protocol (HTTP)**, as described in [RFC2616], and SOAP over **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as described in [RFC2818], as shown in the following layering diagram.
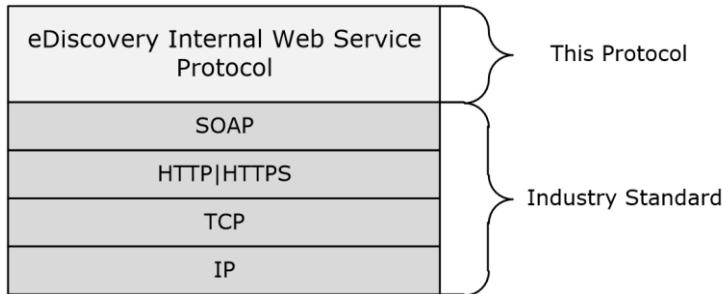
Figure 1: This protocol in relation to other protocols.

1.5   Prerequisites/Preconditions

This protocol operates against a site that is identified by a **URL** that is known by protocol clients. The protocol server endpoint is formed by appending "/_vti_bin/discoveryinternalservice.asmx" to the URL of the **site**, for example http://contoso.com/Repository/_vti_bin/discoveryinternalservice.asmx.

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

1.6   Applicability Statement

This protocol is designed to be used in low throughput, that is less than one client request per second, situations by protocol clients that provide an appropriate asynchronous UI experience.

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 Simple Object Access Protocol (SOAP) 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.

2 Messages

2.1 Transport

Protocol servers MUST support Simple Object Access Protocol (SOAP) over HTTP. Protocol servers SHOULD additionally support SOAP over HTTPS for securing communication with clients.

Protocol messages MUST be formatted as specified either in [SOAP1.1] (Section 4, **SOAP envelope**) or in [SOAP1.2/1] (Section 5, **SOAP Message** Construct). Protocol server faults MUST be returned either using HTTP status codes as specified in [RFC2616] (Section 10, Status Code Definitions) or using **SOAP faults** as specified either in [SOAP1.1] (Section 4.4, SOAP Fault) or in [SOAP1.2/1](Section 5.4 SOAP Fault).

2.2 Common Message Syntax

This section contains common definitions that are used by this protocol. The syntax of the definitions uses **XML schema**, as specified in [XMLSCHEMA1] and [XMLSCHEMA2], and **WSDL**, as specified in [WSDL].

2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
http	http://schemas.xmlsoap.org/wsdl/http/	
s1	http://microsoft.com/wsdl/types/	
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
soap12	http://schemas.xmlsoap.org/wsdl/soap12/	[SOAP1.2/1] [SOAP1.2/2]
tns	http://schemas.microsoft.com/sharepoint/discovery/soap/	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

2.2.2 Messages

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

2.2.3 Elements

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
ArrayOfString	The **ArrayOfString** complex type represents an array of string values.
SourceValidation	

2.2.4.1 ArrayOfString

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

The **ArrayOfString** complex type represents an array of string values.

```
<xs:complexType name="ArrayOfString" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

string: A single string value.

2.2.4.2 SourceValidation

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

```
<xs:complexType name="SourceValidation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="WebId"
xmlns:s1="http://microsoft.com/wsdl/types/" type="s1:guid"/>
    <xs:element minOccurs="1" maxOccurs="1" name="SiteId"
xmlns:s1="http://microsoft.com/wsdl/types/" type="s1:guid"/>
    <xs:element minOccurs="1" maxOccurs="1" name="FederationId"
xmlns:s1="http://microsoft.com/wsdl/types/" type="s1:guid"/>
    <xs:element minOccurs="1" maxOccurs="1" name="ExternalFederationId"
xmlns:s1="http://microsoft.com/wsdl/types/" type="s1:guid"/>
    <xs:element minOccurs="0" maxOccurs="1" name="SmtpAddress" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ExternalEndPoint" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="SourceType" type="tns:SourceType"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ContainerId" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsValid" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Query" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsLocation" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsTopLevelSiteCollection"
type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsMembershipGroup" type="xs:boolean"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ValidationText" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="Title" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="DisplayId" type="xs:string"/>
    <xs:element minOccurs="0" maxOccurs="1" name="InputText" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

WebId:

SiteId:

FederationId:

ExternalFederationId:

SmtpAddress:

ExternalEndPoint:

SourceType:

ContainerId:

IsValid:

Query:

IsLocation:

IsTopLevelSiteCollection:

IsMembershipGroup:

ValidationText:

Title:

DisplayId:

InputText:

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
guid	
SourceType	

2.2.5.1 guid

Namespace: http://microsoft.com/wsdl/types/

```
<xs:simpleType name="guid" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"/>
  </xs:restriction>
</xs:simpleType>
```

2.2.5.2 SourceType

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

```
<xs:simpleType name="SourceType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Exchange"/>
    <xs:enumeration value="SharePointLegacy"/>
    <xs:enumeration value="SharePoint15"/>
    <xs:enumeration value="FileShare"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **SourceType** simple type.

Value	Meaning
Exchange	
SharePointLegacy	
SharePoint15	
FileShare	

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3 Protocol Details

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

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 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.

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

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

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

3.1 Server Details

3.1.1 Abstract Data Model

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

The protocol server maintains a multiple collections of discovery cases, for example lawsuits for 2005-2010 and lawsuits for 2000-2005.

For each case, the protocol server maintains a list of discovery sources, that are applicable to the scope of the discovery case. For example, if a case were about Contoso vs. Fabrikam, an exemplary discovery source might be the email **mailbox** for the executives of Contoso. The protocol server also maintains internal state about actions that need to be performed for discovery sources, such as when a given discovery source should be placed on **legal hold**, as well as the status of whether those actions have been performed.

In addition, the protocol server maintains a list of **search queries** applicable to the discovery sources of a given case, as well as metadata about when those search queries have been exported, that is downloaded.

The protocol server maintains a set of statistics, such as the number of items and the size of those items, that apply to the entire discovery sources, as well as the size when filtered using the list of applicable search queries.

The protocol server also maintains a directory of valid email mailboxes.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

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

Operation	Description
CopySavedSearch	This operation is used by the protocol client to copy a search query within a discovery case.
GetExportStatistics	This operation is used by the protocol client to get the statistics for search queries in a discovery case.
ParseKQLQueryForStats	This operation is used by the protocol client to get a list of component search queries for a given search query.
UpdateSourceErrorInfo	This operation is used by the protocol client to update status info for discovery sources in a discovery case.
UpdateStatistics	This operation is used by the protocol client to update the statistics for search queries in a discovery case.
ValidateHoldableSource	
ValidateSource	This operation is used by the protocol clients to verify whether the provided location can be used as a discovery source or not.

3.1.4.1 ValidateSource

This operation is used by the protocol clients to verify whether the provided location can be used as a discovery source or not.

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

```
<wsdl:operation name="ValidateSource" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input message="tns:ValidateSourceSoapIn"/>
  <wsdl:output message="tns:ValidateSourceSoapOut"/>
</wsdl:operation>
```

The protocol client sends a **ValidateSourceSoapIn** (section 3.1.4.1.1.1) request message and the protocol server responds with a **ValidateSourceSoapOut** (section 3.1.4.1.1.2) response message as follows:

▪ If **location** is empty, the protocol server sets **IsValid** to true and returns.

▪ If **isLocation** is true, the protocol server determines whether the **location** is a **Web site** that the protocol server can use as a discovery source.

▪ Otherwise, the protocol server determines whether the **location** is a valid email mailbox that the protocol server can use as a discovery source.

- The protocol server sets the value of **IsValid** to true if it is determined as a valid discovery source.

- If **IsValid** is true, the protocol server provides additional metadata that identifies the location.

3.1.4.1.1 Messages

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

Message	Description
ValidateSourceSoapIn	The request WSDL message for the **ValidateSource** WSDL operation.
ValidateSourceSoapOut	The response WSDL message for the **ValidateSource** WSDL operation.

3.1.4.1.1.1 ValidateSourceSoapIn

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

The **SOAP action** value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateSource
```

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

3.1.4.1.1.2 ValidateSourceSoapOut

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

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

3.1.4.1.2 Elements

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

Element	Description
ValidateSource	The input data for the **ValidateSource** WSDL operation.
ValidateSourceResponse	The result data for the **ValidateSource** WSDL operation.

3.1.4.1.2.1 ValidateSource

The **ValidateSource** element specifies the input data for the **ValidateSource** WSDL operation.

```
<xs:element name="ValidateSource" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="location" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="isLocation" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
```

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

location: The location to verify.

isLocation: Whether the **location** is a Web site or **file system** (versus an email mailbox).

3.1.4.1.2.2   ValidateSourceResponse

The **ValidateSourceResponse** element specifies the result data for the **ValidateSource** WSDL operation.

```
    <xs:element name="ValidateSourceResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="ValidateSourceResult"
    type="tns:SourceValidation"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

ValidateSourceResult: The result of source validation.

3.1.4.1.3 Complex Types

None.

3.1.4.1.3.1   SourceValidation

3.1.4.1.4 Simple Types

None.

3.1.4.1.4.1   guid

3.1.4.1.4.2   SourceType

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 CopySavedSearch

This operation is used by the protocol client to copy a search query within a discovery case.

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

```
    <wsdl:operation name="CopySavedSearch" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
      <wsdl:input message="tns:CopySavedSearchSoapIn"/>
```

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

The protocol client sends a **CopySavedSearchSoapIn** (section 3.1.4.2.1.1) request message and the protocol server responds with a **CopySavedSearchSoapOut** (section 3.1.4.2.1.2) response message as follows:

▪ The protocol server copies the search query identified by the specified **selectedId** and persists a copy.

3.1.4.2.1 Messages

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

Message	Description
CopySavedSearchSoapIn	The request WSDL message for the **CopySavedSearch** WSDL operation.
CopySavedSearchSoapOut	The response WSDL message for the **CopySavedSearch** WSDL operation.

3.1.4.2.1.1   CopySavedSearchSoapIn

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

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/CopySavedSearch
```

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

3.1.4.2.1.2   CopySavedSearchSoapOut

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

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

3.1.4.2.2 Elements

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

Element	Description
CopySavedSearch	The input data for the **CopySavedSearch** WSDL operation.
CopySavedSearchResponse	The result data for the **CopySavedSearch** WSDL operation.

3.1.4.2.2.1   CopySavedSearch

The **CopySavedSearch** element specifies the input data for the **CopySavedSearch** WSDL operation.

```
<xs:element name="CopySavedSearch" xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

```
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="selectedId" type="xs:int"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

selectedId: The identifier of the search query.

3.1.4.2.2.2   CopySavedSearchResponse

The **CopySavedSearchResponse** element specifies the result data for the **CopySavedSearch** WSDL operation.

```
    <xs:element name="CopySavedSearchResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:complexType>
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="CopySavedSearchResult" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

CopySavedSearchResult: If successful, the server will return an empty string value. Otherwise, the server will return the failure message.

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 ParseKQLQueryForStats

This operation is used by the protocol client to get a list of component search queries for a given search query.

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

```
    <wsdl:operation name="ParseKQLQueryForStats" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
      <wsdl:input message="tns:ParseKQLQueryForStatsSoapIn"/>
      <wsdl:output message="tns:ParseKQLQueryForStatsSoapOut"/>
    </wsdl:operation>
```

The protocol client sends a **ParseKQLQueryForStatsSoapIn** (section 3.1.4.3.1.1) request message and the protocol server responds with a **ParseKQLQueryForStatsSoapOut** (section 3.1.4.3.1.2) response message as follows:

- The protocol server verifies whether the **query** is empty; if the query is empty, it returns no components.

- Otherwise, the protocol server parses the query into a tree based on the Boolean operators in the **query**. It returns the top-level components of that tree. For example, if the **query** is "abc OR (def AND deg)", components can include "abc" and "def AND deg".

3.1.4.3.1 Messages

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

Message	Description
ParseKQLQueryForStatsSoapIn	The request WSDL message for the **ParseKQLQueryForStats** WSDL operation.
ParseKQLQueryForStatsSoapOut	The response WSDL message for the **ParseKQLQueryForStats** WSDL operation.

3.1.4.3.1.1 ParseKQLQueryForStatsSoapIn

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

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/ParseKQLQueryForStats
```

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

3.1.4.3.1.2 ParseKQLQueryForStatsSoapOut

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

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

3.1.4.3.2 Elements

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

Element	Description
ParseKQLQueryForStats	The input data for the **ParseKQLQueryForStats** WSDL operation.
ParseKQLQueryForStatsResponse	The result data for the **ParseKQLQueryForStats** WSDL operation.

3.1.4.3.2.1 ParseKQLQueryForStats

The **ParseKQLQueryForStats** element specifies the input data for the **ParseKQLQueryForStats** WSDL operation.

```
<xs:element name="ParseKQLQueryForStats" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="query" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

query: The KQL search query, as specified in [MS-KQL].

3.1.4.3.2.2   ParseKQLQueryForStatsResponse

The **ParseKQLQueryForStatsResponse** element specifies the result data for the
ParseKQLQueryForStats WSDL operation.

```
<xs:element name="ParseKQLQueryForStatsResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="ParseKQLQueryForStatsResult"
type="tns:ArrayOfString"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ParseKQLQueryForStatsResult: A list of query components.

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 UpdateSourceErrorInfo

This operation is used by the protocol client to update status info for discovery sources in a discovery
case.

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

```
<wsdl:operation name="UpdateSourceErrorInfo" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input message="tns:UpdateSourceErrorInfoSoapIn"/>
  <wsdl:output message="tns:UpdateSourceErrorInfoSoapOut"/>
</wsdl:operation>
```

The protocol client sends a **UpdateSourceErrorInfoSoapIn** (section 3.1.4.4.1.1) request message and the protocol server responds with a **UpdateSourceErrorInfoSoapOut** (section 3.1.4.4.1.2) response message as follows:

- For each discovery source corresponding to the specified **selectedIds**, the protocol server determines the status. For example, the protocol server examines the **crawl log** to determine whether there were errors processing the discovery source.

3.1.4.4.1 Messages

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

Message	Description
UpdateSourceErrorInfoSoapIn	The request WSDL message for the **UpdateSourceErrorInfo** WSDL operation.
UpdateSourceErrorInfoSoapOut	The response WSDL message for the **UpdateSourceErrorInfo** WSDL operation.

3.1.4.4.1.1 UpdateSourceErrorInfoSoapIn

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

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/UpdateSourceErrorInfo
```

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

3.1.4.4.1.2 UpdateSourceErrorInfoSoapOut

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

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

3.1.4.4.2 Elements

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

Element	Description
UpdateSourceErrorInfo	The input data for the **UpdateSourceErrorInfo** WSDL operation.
UpdateSourceErrorInfoResponse	The result data for the **UpdateSourceErrorInfo** WSDL operation.

3.1.4.4.2.1 UpdateSourceErrorInfo

The **UpdateSourceErrorInfo** element specifies the input data for the **UpdateSourceErrorInfo** WSDL operation.

```
<xs:element name="UpdateSourceErrorInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

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

selectedIds: The list of identifiers for discovery sources, delimited by the character '|'.

3.1.4.4.2.2   UpdateSourceErrorInfoResponse

The **UpdateSourceErrorInfoResponse** element specifies the result data for the **UpdateSourceErrorInfo** WSDL operation.

```
  <xs:element name="UpdateSourceErrorInfoResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="UpdateSourceErrorInfoResult"
type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
```

UpdateSourceErrorInfoResult: If successful, the server will return an empty string value. Otherwise, the server will return the failure message.

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 UpdateStatistics

This operation is used by the protocol client to update the statistics for search queries in a discovery case.

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

```
  <wsdl:operation name="UpdateStatistics" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
    <wsdl:input message="tns:UpdateStatisticsSoapIn"/>
    <wsdl:output message="tns:UpdateStatisticsSoapOut"/>
```

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

The protocol client sends a **UpdateStatisticsSoapIn** (section 3.1.4.5.1.1) request message and the protocol server responds with a **UpdateStatisticsSoapOut** (section 3.1.4.5.1.2) response message as follows:

▪ For each search query corresponding to the specified **selectedIds**, the protocol server performs the search query and persists the updated statistics, such as the number of items and their size.

3.1.4.5.1 Messages

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

Message	Description
UpdateStatisticsSoapIn	The request WSDL message for the **UpdateStatistics** WSDL operation.
UpdateStatisticsSoapOut	The response WSDL message for the **UpdateStatistics** WSDL operation.

3.1.4.5.1.1   UpdateStatisticsSoapIn

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

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/UpdateStatistics
```

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

3.1.4.5.1.2   UpdateStatisticsSoapOut

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

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

3.1.4.5.2 Elements

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

Element	Description
UpdateStatistics	The input data for the **UpdateStatistics** WSDL operation.
UpdateStatisticsResponse	The result data for the **UpdateStatistics** WSDL operation.

3.1.4.5.2.1   UpdateStatistics

The **UpdateStatistics** element specifies the input data for the **UpdateStatistics** WSDL operation.

```
<xs:element name="UpdateStatistics" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
```

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

selectedIds: The list of identifiers for search queries, delimited by the character '|'.

3.1.4.5.2.2   UpdateStatisticsResponse

The **UpdateStatisticsResponse** element specifies the result data for the **UpdateStatistics** WSDL operation.

```
<xs:element name="UpdateStatisticsResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="UpdateStatisticsResult"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UpdateStatisticsResult: If successful, the server will return an empty string value. Otherwise, the server will return the failure message.

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 GetExportStatistics

This operation is used by the protocol client to get the statistics for search queries in a discovery case.

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

```
<wsdl:operation name="GetExportStatistics" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input message="tns:GetExportStatisticsSoapIn"/>
  <wsdl:output message="tns:GetExportStatisticsSoapOut"/>
</wsdl:operation>
```

The protocol client sends a **GetExportStatisticsSoapIn** request message and the protocol server responds with a **GetExportStatisticsSoapOut** response message as follows:

• For each search query corresponding to the specified selectedIds, the protocol server performs the search query and returns statistics, such as the number of items and their size.

3.1.4.6.1 Messages

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

Message	Description
GetExportStatisticsSoapIn	The request WSDL message for the **GetExportStatistics** WSDL operation.
GetExportStatisticsSoapOut	The response WSDL message for the **GetExportStatistics** WSDL operation.

3.1.4.6.1.1 GetExportStatisticsSoapIn

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

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/GetExportStatistics
```

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

3.1.4.6.1.2 GetExportStatisticsSoapOut

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

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

3.1.4.6.2 Elements

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

Element	Description
GetExportStatistics	The input data for the **GetExportStatistics** WSDL operation.
GetExportStatisticsResponse	The result data for the **GetExportStatistics** WSDL operation.

3.1.4.6.2.1 GetExportStatistics

The **GetExportStatistics** element specifies the input data for the **GetExportStatistics** WSDL operation.

```
<xs:element name="GetExportStatistics" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="queries" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
```
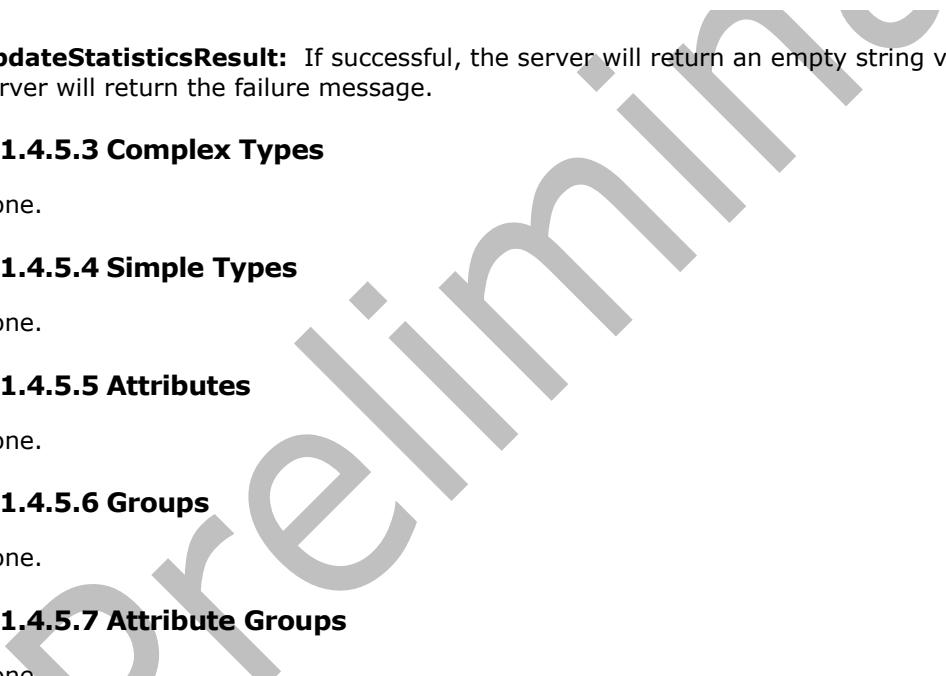
```
      </xs:element>
```

queries: The list of identifiers for search queries, delimited by the character '|'.

3.1.4.6.2.2 GetExportStatisticsResponse

The **GetExportStatisticsResponse** element specifies the result data for the **GetExportStatistics** WSDL operation.

```
<xs:element name="GetExportStatisticsResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="GetExportStatisticsResult"
type="tns:ArrayOfString"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetExportStatisticsResult: An array of strings containing the statistics, such as the number of items and their size.

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 ValidateHoldableSource

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

```
<wsdl:operation name="ValidateHoldableSource" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input message="tns:ValidateHoldableSourceSoapIn"/>
  <wsdl:output message="tns:ValidateHoldableSourceSoapOut"/>
</wsdl:operation>
```

3.1.4.7.1 Messages

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

Message	Description
ValidateHoldableSourceSoapIn	The request WSDL message for the **ValidateHoldableSource** WSDL operation.
ValidateHoldableSourceSoapOut	The response WSDL message for the **ValidateHoldableSource** WSDL operation.

3.1.4.7.1.1 ValidateHoldableSourceSoapIn

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

The SOAP action value is:

```
http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateHoldableSource
```

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

3.1.4.7.1.2 ValidateHoldableSourceSoapOut

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

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

3.1.4.7.2 Elements

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

Element	Description
ValidateHoldableSource	The input data for the **ValidateHoldableSource** WSDL operation.
ValidateHoldableSourceResponse	The result data for the **ValidateHoldableSource** WSDL operation.

3.1.4.7.2.1 ValidateHoldableSource

The **ValidateHoldableSource** element specifies the input data for the **ValidateHoldableSource** WSDL operation.

```
<xs:element name="ValidateHoldableSource" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="location" type="xs:string"/>
      <xs:element minOccurs="1" maxOccurs="1" name="isLocation" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

location:

isLocation:

3.1.4.7.2.2 ValidateHoldableSourceResponse

The **ValidateHoldableSourceResponse** element specifies the result data for the
ValidateHoldableSource WSDL operation.

```
<xs:element name="ValidateHoldableSourceResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="1" name="ValidateHoldableSourceResult"
type="tns:SourceValidation"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ValidateHoldableSourceResult:

3.1.4.7.3 Complex Types

None.

3.1.4.7.4 Simple Types

None.

3.1.4.7.5 Attributes

None.

3.1.4.7.6 Groups

None.

3.1.4.7.7 Attribute Groups

None.

3.1.5   Timer Events

None.

3.1.6   Other Local Events

None.

4   Protocol Examples

4.1   Validate Source

In this example the protocol client sends the following request to validate a location with the URL
http://contoso.com:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Body>
    <ValidateSource
xmlns="http://schemas.microsoft.com/sharepoint/discovery/soap/">
      <location>http://contoso.com</location>
      <isLocation>true</isLocation>
    </ValidateSource>
  </soap:Body>
</soap:Envelope>
```

The protocol server responds as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://www.w3.org/2003/05/soap-
envelope">
  <soap:Body>
    <ValidateSourceResponse xmlns="http://schemas.microsoft.com/sharepoint/discovery/soap/">
      <ValidateSourceResult>
        <WebId>1bcd3e3a-ba41-49f7-b0a7-1291732e23ea</WebId>
        <FederationId>00000000-0000-0000-0000-000000000000</FederationId>
        <ExternalFederationId></ExternalFederationId>
        <SmtpAddress></SmtpAddress>
        <ContainerId>http://contoso.com</ContainerId>
        <IsValid>true</IsValid>
        <Query> </Query>
        <IsLocation>true</IsLocation>
        <ValidationText>Validated</ValidationText>
        <Title>Contoso</Title>
      </ValidateSourceResult>
    </ValidateSourceResponse>
  </soap:Body>

</soap:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

For ease of implementation, the full WSDL is provided in this appendix.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
xmlns:s1="http://microsoft.com/wsdl/types/"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:tns="http://schemas.microsoft.com/sharepoint/discovery/soap/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schemas.microsoft.com/sharepoint/discovery/soap/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:documentation>This web service is designed for the source picker
control</wsdl:documentation>
  <wsdl:types>
    <xs:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/sharepoint/discovery/soap/">
      <xs:import namespace="http://microsoft.com/wsdl/types/"/>
      <xs:element name="ValidateSource">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="location" type="xs:string"/>
            <xs:element minOccurs="1" maxOccurs="1" name="isLocation" type="xs:boolean"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="ValidateSourceResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="ValidateSourceResult"
type="tns:SourceValidation"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:complexType name="SourceValidation">
        <xs:sequence>
          <xs:element minOccurs="1" maxOccurs="1" name="WebId" type="s1:guid"/>
          <xs:element minOccurs="1" maxOccurs="1" name="SiteId" type="s1:guid"/>
          <xs:element minOccurs="1" maxOccurs="1" name="FederationId" type="s1:guid"/>
          <xs:element minOccurs="1" maxOccurs="1" name="ExternalFederationId"
type="s1:guid"/>
          <xs:element minOccurs="0" maxOccurs="1" name="SmtpAddress" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="ExternalEndPoint" type="xs:string"/>
          <xs:element minOccurs="1" maxOccurs="1" name="SourceType" type="tns:SourceType"/>
          <xs:element minOccurs="0" maxOccurs="1" name="ContainerId" type="xs:string"/>
          <xs:element minOccurs="1" maxOccurs="1" name="IsValid" type="xs:boolean"/>
          <xs:element minOccurs="0" maxOccurs="1" name="Query" type="xs:string"/>
          <xs:element minOccurs="1" maxOccurs="1" name="IsLocation" type="xs:boolean"/>
          <xs:element minOccurs="1" maxOccurs="1" name="IsTopLevelSiteCollection"
type="xs:boolean"/>
          <xs:element minOccurs="1" maxOccurs="1" name="IsMembershipGroup"
type="xs:boolean"/>
          <xs:element minOccurs="0" maxOccurs="1" name="ValidationText" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="Title" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="DisplayId" type="xs:string"/>
          <xs:element minOccurs="0" maxOccurs="1" name="InputText" type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
      <xs:simpleType name="SourceType">
        <xs:restriction base="xs:string">
          <xs:enumeration value="Exchange"/>
          <xs:enumeration value="SharePointLegacy"/>
          <xs:enumeration value="SharePoint15"/>
          <xs:enumeration value="FileShare"/>
        </xs:restriction>
      </xs:simpleType>
```

```xml
        <xs:element name="ValidateHoldableSource">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="location" type="xs:string"/>
              <xs:element minOccurs="1" maxOccurs="1" name="isLocation" type="xs:boolean"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ValidateHoldableSourceResponse">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="ValidateHoldableSourceResult"
  type="tns:SourceValidation"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="GetExportStatistics">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="queries" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="GetExportStatisticsResponse">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="GetExportStatisticsResult"
  type="tns:ArrayOfString"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:complexType name="ArrayOfString">
          <xs:sequence>
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  type="xs:string"/>
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        </xs:complexType>
        <xs:element name="CopySavedSearch">
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        <xs:element name="CopySavedSearchResponse">
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  type="xs:string"/>
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          </xs:complexType>
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            <xs:sequence>
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  type="xs:string"/>
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          </xs:complexType>
        </xs:element>
        <xs:element name="UpdateSourceErrorInfo">
          <xs:complexType>
```

```
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                <xs:element minOccurs="0" maxOccurs="1" name="selectedIds" type="xs:string"/>
              </xs:sequence>
            </xs:complexType>
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          <xs:element name="UpdateSourceErrorInfoResponse">
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              <xs:sequence>
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    type="xs:string"/>
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            </xs:complexType>
          </xs:element>
          <xs:element name="ParseKQLQueryForStats">
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              <xs:sequence>
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    type="tns:ArrayOfString"/>
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            <xs:restriction base="xs:string">
              <xs:pattern value="[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-
    9a-fA-F]{12}"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:schema>
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          <wsdl:input message="tns:ValidateSourceSoapIn"/>
          <wsdl:output message="tns:ValidateSourceSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="ValidateHoldableSource">
          <wsdl:input message="tns:ValidateHoldableSourceSoapIn"/>
          <wsdl:output message="tns:ValidateHoldableSourceSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="GetExportStatistics">
          <wsdl:input message="tns:GetExportStatisticsSoapIn"/>
          <wsdl:output message="tns:GetExportStatisticsSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="CopySavedSearch">
          <wsdl:input message="tns:CopySavedSearchSoapIn"/>
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        </wsdl:operation>
        <wsdl:operation name="UpdateStatistics">
          <wsdl:input message="tns:UpdateStatisticsSoapIn"/>
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        <wsdl:operation name="UpdateSourceErrorInfo">
          <wsdl:input message="tns:UpdateSourceErrorInfoSoapIn"/>
          <wsdl:output message="tns:UpdateSourceErrorInfoSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="ParseKQLQueryForStats">
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        </wsdl:operation>
      </wsdl:portType>
```

```
    <wsdl:binding name="Discovery_x0020_internal_x0020_web_x0020_serviceSoap"
type="tns:Discovery_x0020_internal_x0020_web_x0020_serviceSoap">
        <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="ValidateSource">
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soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateSource"
style="document"/>
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            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ValidateHoldableSource">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateHoldableSource"
style="document"/>
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            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
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style="document"/>
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          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="CopySavedSearch">
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style="document"/>
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            <soap:body use="literal"/>
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          <wsdl:output>
            <soap:body use="literal"/>
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        </wsdl:operation>
        <wsdl:operation name="UpdateStatistics">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/UpdateStatistics"
style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="UpdateSourceErrorInfo">
          <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/UpdateSourceErrorInfo"
style="document"/>
          <wsdl:input>
            <soap:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap:body use="literal"/>
          </wsdl:output>
        </wsdl:operation>
```

```
      <wsdl:operation name="ParseKQLQueryForStats">
        <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ParseKQLQueryForStats"
style="document"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
  </wsdl:binding>
  <wsdl:binding name="Discovery_x0020_internal_x0020_web_x0020_serviceSoap12"
type="tns:Discovery_x0020_internal_x0020_web_x0020_serviceSoap">
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      <wsdl:operation name="ValidateSource">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateSource"
style="document"/>
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        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="ValidateHoldableSource">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateHoldableSource"
style="document"/>
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          <soap12:body use="literal"/>
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        <wsdl:output>
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        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="GetExportStatistics">
        <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/GetExportStatistics"
style="document"/>
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          <soap12:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
          <soap12:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="CopySavedSearch">
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style="document"/>
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          <soap12:body use="literal"/>
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      </wsdl:operation>
      <wsdl:operation name="UpdateStatistics">
        <soap12:operation
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style="document"/>
        <wsdl:input>
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        <wsdl:output>
          <soap12:body use="literal"/>
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```

```
        </wsdl:operation>
        <wsdl:operation name="UpdateSourceErrorInfo">
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style="document"/>
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          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal"/>
          </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ParseKQLQueryForStats">
          <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ParseKQLQueryForStats"
style="document"/>
          <wsdl:input>
            <soap12:body use="literal"/>
          </wsdl:input>
          <wsdl:output>
            <soap12:body use="literal"/>
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    <wsdl:message name="CopySavedSearchSoapOut">
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    <wsdl:message name="GetExportStatisticsSoapIn">
      <wsdl:part name="parameters" element="tns:GetExportStatistics"/>
    </wsdl:message>
    <wsdl:message name="GetExportStatisticsSoapOut">
      <wsdl:part name="parameters" element="tns:GetExportStatisticsResponse"/>
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      <wsdl:part name="parameters" element="tns:ParseKQLQueryForStats"/>
    </wsdl:message>
    <wsdl:message name="ParseKQLQueryForStatsSoapOut">
      <wsdl:part name="parameters" element="tns:ParseKQLQueryForStatsResponse"/>
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      <wsdl:part name="parameters" element="tns:UpdateSourceErrorInfo"/>
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    <wsdl:message name="UpdateSourceErrorInfoSoapOut">
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    </wsdl:message>
    <wsdl:message name="UpdateStatisticsSoapOut">
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    <wsdl:message name="ValidateHoldableSourceSoapOut">
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    </wsdl:message>
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      <wsdl:part name="parameters" element="tns:ValidateSource"/>
    </wsdl:message>
    <wsdl:message name="ValidateSourceSoapOut">
      <wsdl:part name="parameters" element="tns:ValidateSourceResponse"/>
    </wsdl:message>
</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 2013

▪   Microsoft SharePoint Server 2016 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.

8 Change Tracking

This section identifies changes that were made to this document since the last release. 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.

- The removal of a document from the documentation set.

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 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 changes were introduced. Minor editorial and formatting changes may have been made, but the technical content of the document is identical to the last released version.

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.

- 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 dochelp@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
7 Appendix B: Product Behavior	Updated list of supported products.	Y	Content updated due to protocol revision.

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