[MS-EDINTWS]:
eDiscovery Internal Web Service Protocol Specification

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Revision Summary

Date	Revision History	Revision Class	Comments
01/20/2012	0.1	New	Released new document.
04/11/2012	0.1	No change	No changes to the meaning, language, or formatting of the technical content.
07/16/2012	0.1	No change	No changes to the meaning, language, or formatting of the technical content.
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10/08/2012	1.0	Major	Significantly changed the technical content.

Table of Contents

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 RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

1.1   Glossary

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

file system
GUID
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)

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

crawl log
discovery case
discovery source
email address
legal hold
mailbox
membership group
search query
Simple Object Access Protocol (SOAP)
site
site collection
SOAP action
SOAP body
SOAP envelope
SOAP fault
SOAP Message
Uniform Resource Locator (URL)
web service
Web Services Description Language (WSDL)
website
WSDL message
WSDL operation
XML namespace
XML namespace prefix
XML schema

The following terms are specific to this document:

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

1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the technical 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.

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

[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".

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.ietf.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.
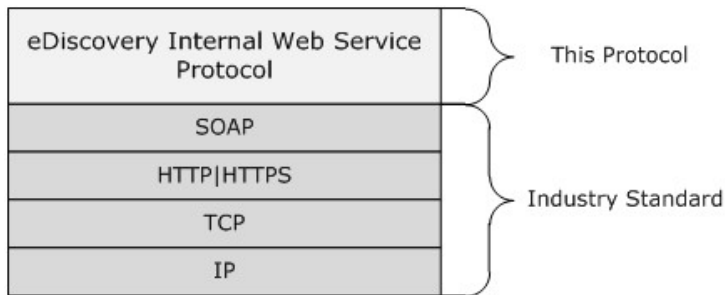
Figure 1: This protocol in relation to other protocols.

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 (1)**, 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.

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.

2.2.5 Simple Types

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

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3   Protocol Details

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

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.
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.

```
<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 (2)** 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 (2) 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

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

Complex type	Description
SourceValidation	The result of source validation.

3.1.4.1.3.1 SourceValidation

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

The **SourceValidation** complex type contains information about source validation of a location to verify if it can be used as a discovery source or not. For valid sources, it additionally contains metadata about the location that can be used to identify it as a discovery source.

```
<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: The identifier of the Web site (2). MUST be non-empty if **IsLocation** is true; otherwise, MUST be ignored.

SiteId: The identifier of the **site collection** containing the Web site (2). MUST be non-empty if **IsLocation** is true; otherwise, MUST be ignored.

FederationId: The identifier of the system that contains the discovery source.

ExternalFederationId: The identifier of the external system that can perform actions on the discovery source. MUST be non-empty if **IsLocation** is false; otherwise, MUST be ignored.

SmtpAddress: The SMTP **e-mail address** of an email inbox. MUST be non-empty if **IsLocation** is false; otherwise, MUST be ignored.

ExternalEndPoint: The **Web service** URL of the external system that can perform actions on the discovery source.

SourceType: The source type of the discovery source. MUST be of type **SourceType** (section 3.1.4.1.4.2)

ContainerId: The identifier of the location. MUST be a non-empty URL if **IsLocation** is true; otherwise, MUST be a non-empty identifier of the email mailbox.

IsValid: Whether the location is valid or not. Note that all other values MUST be ignored if **IsValid** is false.

Query: Reserved. MUST be ignored.

IsLocation: Whether the location is a Web site (2) or file system (versus an email mailbox).

IsTopLevelSiteCollection: Whether the Web site (2) contains multiple site collections. MUST be ignored if **IsLocation** is false.

IsMembershipGroup: If **IsLocation** is false, specifies whether the location is a **membership group**. Otherwise, MUST be ignored.

ValidationText: A human-readable string that provides more information about the validation of the discovery source. For example, if there was an error during the validation process, this string gives more detail about the problem.

Title: The title of the discovery source.

DisplayId: The display name of the discovery source.

InputText: The string used to search for the location.

3.1.4.1.4 Simple Types

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

Simple type	Description
guid	Represents a **GUID**.
SourceType	Specifies the type of a discovery source.

3.1.4.1.4.1 guid

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

The **guid** simple type contains a GUID.

```
<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>
```

3.1.4.1.4.2 SourceType

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

Specifies the type of a discovery source.

```
<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	The discovery source is a mailbox stored in an Exchange Server
SharePointLegacy	The discovery source is a Web site (2) in Microsoft® SharePoint® Server 2010 or Microsoft® Office SharePoint® Server 2007 server indexed by Microsoft® SharePoint® Server 2013 search system.
SharePoint15	The discovery source is a Web site (2) in SharePoint Server 2013 server.
FileShare	The discovery source is a file system indexed by SharePoint Server 2013 search system.

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.

```
<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.

```
<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.

```
<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.

```
<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.

```
<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.

3.1.5   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
<?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
<?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"?>
<wsdl:definitions xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
xmlns:tns="http://schemas.microsoft.com/sharepoint/discovery/soap/"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:s1="http://microsoft.com/wsdl/types/" 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">
```

```xml
        <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>
      <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>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
  type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
      <xs:element name="CopySavedSearch">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="1" name="selectedId" type="xs:int"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="CopySavedSearchResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="CopySavedSearchResult"
  type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="UpdateStatistics">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="selectedIds" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="UpdateStatisticsResponse">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="1" name="UpdateStatisticsResult"
  type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="UpdateSourceErrorInfo">
```

```
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="selectedIds" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="UpdateSourceErrorInfoResponse">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="UpdateSourceErrorInfoResult"
  type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ParseKQLQueryForStats">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="query" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ParseKQLQueryForStatsResponse">
          <xs:complexType>
            <xs:sequence>
              <xs:element minOccurs="0" maxOccurs="1" name="ParseKQLQueryForStatsResult"
  type="tns:ArrayOfString"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:schema>
      <xs:schema elementFormDefault="qualified"
  targetNamespace="http://microsoft.com/wsdl/types/">
        <xs:simpleType name="guid">
          <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>
    </wsdl:types>
    <wsdl:message name="ValidateSourceSoapIn">
      <wsdl:part name="parameters" element="tns:ValidateSource"/>
    </wsdl:message>
    <wsdl:message name="ValidateSourceSoapOut">
      <wsdl:part name="parameters" element="tns:ValidateSourceResponse"/>
    </wsdl:message>
    <wsdl:message name="GetExportStatisticsSoapIn">
      <wsdl:part name="parameters" element="tns:GetExportStatistics"/>
    </wsdl:message>
    <wsdl:message name="GetExportStatisticsSoapOut">
      <wsdl:part name="parameters" element="tns:GetExportStatisticsResponse"/>
    </wsdl:message>
    <wsdl:message name="CopySavedSearchSoapIn">
      <wsdl:part name="parameters" element="tns:CopySavedSearch"/>
    </wsdl:message>
    <wsdl:message name="CopySavedSearchSoapOut">
      <wsdl:part name="parameters" element="tns:CopySavedSearchResponse"/>
    </wsdl:message>
    <wsdl:message name="UpdateStatisticsSoapIn">
```

```
          <wsdl:part name="parameters" element="tns:UpdateStatistics"/>
        </wsdl:message>
        <wsdl:message name="UpdateStatisticsSoapOut">
          <wsdl:part name="parameters" element="tns:UpdateStatisticsResponse"/>
        </wsdl:message>
        <wsdl:message name="UpdateSourceErrorInfoSoapIn">
          <wsdl:part name="parameters" element="tns:UpdateSourceErrorInfo"/>
        </wsdl:message>
        <wsdl:message name="UpdateSourceErrorInfoSoapOut">
          <wsdl:part name="parameters" element="tns:UpdateSourceErrorInfoResponse"/>
        </wsdl:message>
        <wsdl:message name="ParseKQLQueryForStatsSoapIn">
          <wsdl:part name="parameters" element="tns:ParseKQLQueryForStats"/>
        </wsdl:message>
        <wsdl:message name="ParseKQLQueryForStatsSoapOut">
          <wsdl:part name="parameters" element="tns:ParseKQLQueryForStatsResponse"/>
        </wsdl:message>
        <wsdl:portType name="Discovery_x0020_internal_x0020_web_x0020_serviceSoap">
          <wsdl:operation name="ValidateSource">
            <wsdl:input message="tns:ValidateSourceSoapIn"/>
            <wsdl:output message="tns:ValidateSourceSoapOut"/>
          </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"/>
            <wsdl:output message="tns:CopySavedSearchSoapOut"/>
          </wsdl:operation>
          <wsdl:operation name="UpdateStatistics">
            <wsdl:input message="tns:UpdateStatisticsSoapIn"/>
            <wsdl:output message="tns:UpdateStatisticsSoapOut"/>
          </wsdl:operation>
          <wsdl:operation name="UpdateSourceErrorInfo">
            <wsdl:input message="tns:UpdateSourceErrorInfoSoapIn"/>
            <wsdl:output message="tns:UpdateSourceErrorInfoSoapOut"/>
          </wsdl:operation>
          <wsdl:operation name="ParseKQLQueryForStats">
            <wsdl:input message="tns:ParseKQLQueryForStatsSoapIn"/>
            <wsdl:output message="tns:ParseKQLQueryForStatsSoapOut"/>
          </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">
            <soap:operation
      soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateSource"
      style="document"/>
            <wsdl:input>
              <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
              <soap:body use="literal"/>
            </wsdl:output>
          </wsdl:operation>
          <wsdl:operation name="GetExportStatistics">
```

```
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/GetExportStatistics"
style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="CopySavedSearch">
      <soap:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/CopySavedSearch"
style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </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">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="ValidateSource">
```

```
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/ValidateSource"
style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetExportStatistics">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/GetExportStatistics"
style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="CopySavedSearch">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/CopySavedSearch"
style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="UpdateStatistics">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/UpdateStatistics"
style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="UpdateSourceErrorInfo">
      <soap12:operation
soapAction="http://schemas.microsoft.com/sharepoint/discovery/soap/UpdateSourceErrorInfo"
style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </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"/>
        </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 2013

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

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

8 Change Tracking

This section identifies changes that were made to the [MS-EDINTWS] protocol document between the September 2012 and October 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
1 Introduction	Updated all preliminary information in the document.	Y	Content updated.
3 Protocol Details	Added new content for section 3 to describe general client side behavior.	N	New content added.

9 Index