[MS-ADMWS]:
Search Service Administration Web Service Protocol Specification

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Revision Summary

Date	Revision History	Revision Class	Comments
04/04/2008	0.1		Initial Availability
06/27/2008	1.0	Major	Revised and edited the technical content
10/06/2008	1.01	Editorial	Revised and edited the technical content
12/12/2008	1.02	Editorial	Revised and edited the technical content
07/13/2009	1.03	Major	Changes made for template compliance
08/28/2009	1.04	Editorial	Revised and edited the technical content
11/06/2009	1.05	Editorial	Revised and edited the technical content
02/19/2010	2.0	Editorial	Revised and edited the technical content
03/31/2010	2.01	Editorial	Revised and edited the technical content
04/30/2010	2.02	Editorial	Revised and edited the technical content
06/07/2010	2.03	Editorial	Revised and edited the technical content
06/29/2010	2.04	Editorial	Changed language and formatting in the technical content.
07/23/2010	2.05	Minor	Clarified the meaning of the technical content.
09/27/2010	2.05	No change	No changes to the meaning, language, or formatting of the technical content.
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12/17/2010	2.06	Editorial	Changed language and formatting in the technical content.
03/18/2011	2.06	No change	No changes to the meaning, language, or formatting of the technical content.
06/10/2011	2.06	No change	No changes to the meaning, language, or formatting of the technical content.
01/20/2012	2.7	Minor	Clarified the meaning of the technical content.
04/11/2012	2.7	No change	No changes to the meaning, language, or formatting of the technical content.

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1   Introduction

This document specifies the Search Service Administration Web Service Protocol. This protocol enables the protocol client to configure and control the indexing functions of the search system. It allows the protocol client to define the scope of indexing by configuring starting points and restriction rules, credentials used during indexing by the protocol server, and control when the indexing process takes place.

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]:

Active Directory
anonymous authentication
certificate
directory service (DS)
domain
domain name
drive letter
GUID
HRESULT
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
share
Universal Naming Convention (UNC)
X.509

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

access URL
anchor content source
anchor crawl
authority hops
binary large object (BLOB)
Business Data Connectivity (BDC)
configuration database
content source
cookie
crawl
crawl account
crawl mapping
crawl queue
crawl rule
crawler
delete crawl
display URL
exclusion list

file
folder
forms authentication
full crawl
full-text index catalog
host hop
HTTP GET
HTTP POST
inclusion list
incremental crawl
index server
item
metadata index
page hop
portal content project
query component
query server
search catalog
search database
search query
search service account
security trimmer
Shared Services Provider (SSP)
Simple Object Access Protocol (SOAP)
site
SOAP action
SOAP body
SOAP fault
start address
Uniform Resource Identifier (URI)
Uniform Resource Locator (URL)
URL encode
URL space
user profile
user profile import
Web application
Web server
Web service
Web Services Description Language (WSDL)
Web site
WSDL message
XML namespace
XML namespace prefix

The following terms are specific to this document:

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

1.2 References

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

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site, http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624, as an additional source.

[MS-CIPROP] Microsoft Corporation, "Index Propagation Protocol Specification".

[MS-NRTP] Microsoft Corporation, ".NET Remoting: Core Protocol Specification".

[MS-TSCH] Microsoft Corporation, "Task Scheduler Service Remoting Protocol Specification".

[MS-UPSIMP] Microsoft Corporation, "User Profile Import 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

[RFC2396] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifiers (URI): Generic Syntax", RFC 2396, August 1998, http://www.ietf.org/rfc/rfc2396.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/

Release: Tuesday, April 10, 2012

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 Protocol Overview (Synopsis)

The Search Service Administration Web Service protocol enables a protocol client to configure and control the **crawl** function of the search service's **index server**.

A crawl process involves traversal of the **URL space** by discovering and following the links from **items.** Before a crawl can be started, the URL space is defined by specifying a set of **start address URLs** and a set of rules that prevent the crawl from following links beyond desired boundaries of the potentially infinite unrestricted URL space, for example to prevent it from crawling the Internet.

During a crawl, the index server typically produces a set of data structures, such as the **full-text index catalog** and the **metadata index** that can be used to efficiently serve **search queries**.

Another specialized application of the crawl process is to perform a **user profile import.** More details on **user profile** imports can be found in [MS-UPSIMP].

A typical scenario for using this protocol involves the following steps:

- Configuring one or more **content sources** containing at least one start address.

- Configuring zero or more **crawl rules**.

- Starting a crawl.

- Configuring a user profile import by specifying one or more user profile import accounts.

- Starting a user profile import.

1.4 Relationship to Other Protocols

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

The following diagram shows the underlying messaging and transport stack used by the protocol:
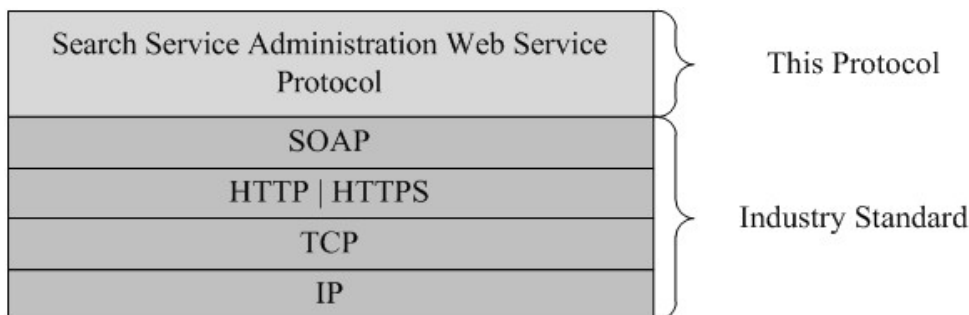
Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a **Web site(2)** that is identified by a URL that is known by protocol clients. The protocol server endpoint is formed by concatenating the URL of the Web site with an ending `/' character, the name of the **SSP**, and "/Search/SearchAdmin.asmx" together, for example http://www.contoso.com:56737/SharedServices1/Search/SearchAdmin.asmx.

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

1.6 Applicability Statement

This protocol is designed for configuring index server with not more than 500 content sources and 100 crawl rules.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses multiple transports with SOAP as specified in section 2.1.

- **Localization:** This protocol includes text strings in various messages. Localization considerations for such strings are specified in section 2.2 and section 3.1.4.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The **WSDL** in this specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL might specify differences 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**, **present**, and **not null**.

2.1 Transport

Protocol servers MUST support SOAP over HTTP. Protocol servers MAY additionally support SOAP over HTTPS for securing communication with clients.

Protocol messages MUST be formatted as specified either in [SOAP1.1], section 4, or in [SOAP1.2/1], section 5. Protocol server faults MUST be returned either using HTTP Status Codes as specified in [RFC2616], section 10, or using **SOAP faults** as specified either in [SOAP1.1], section 4.4 or in [SOAP1.2/1] , section 5.4. The version of the SOAP fault returned MUST correspond to the version of SOAP used for the request **WSDL message**.

2.2 Common Message Syntax

This section contains common definitions used by this protocol. The syntax of the definitions uses XML Schema as defined in [XMLSCHEMA1] and [XMLSCHEMA2], and WSDL as defined 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
s	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1]
soap12	http://schemas.xmlsoap.org/wsdl/soap12/	[SOAP1.2/1] [SOAP1.2/2]
mime	http://schemas.xmlsoap.org/wsdl/mime/	
tns	http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService	
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tm	http://microsoft.com/wsdl/mime/textMatching/	
(none)	http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService	
soapenc	http://schemas.xmlsoap.org/soap/encoding/	

Prefix	Namespace URI	Reference
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]

2.2.2 Messages

The operations defined in section 3.1.4 MAY return a SOAP fault. A SOAP fault element is used to carry error and status information within a SOAP message when there is API misuse or where there are configuration failures.

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	An array of arbitrary string values.
ContentSourceDynamicPropsInternal	The crawl status of a content source with respect to the most recent crawl.
CrawlRuleInternal	The crawl rule properties.
ContentSourceInternal	The content source properties configured by the protocol client.

2.2.4.1 ArrayOfString

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

```
<s:complexType name="ArrayOfString">
  <s:sequence>
    <s:element name="string" type="s:string" nillable ="true" minOccurs="0"
maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
```

string: A single string value.

2.2.4.2 ContentSourceDynamicPropsInternal

The **ContentSourceDynamicPropsInternal** type represents crawl status information for a content source.

```
<s:complexType name="ContentSourceDynamicPropsInternal">
  <s:sequence>
    <s:element name="crawlStatus" type="s:int"/>
```

```
      <s:element name="crawlStarted" type="s:dateTime"/>
      <s:element name="crawlCompleted" type="s:dateTime"/>
      <s:element name="errorCount" type="s:int"/>
      <s:element name="crawlSuccesses" type="s:int"/>
    </s:sequence>
  </s:complexType>
```

crawlStatus: The crawl status. MUST be one of the following values:

Value	Meaning
0	No crawl is in progress.
1	A **full crawl** is in progress.
2	The crawl is paused, and no further activity will take place for the current crawl until the crawl is resumed.
4	The crawl is resuming after system startup.
5	The crawler application is shutting down, because the search service was stopped.
6	An **incremental crawl** is in progress.
8	The crawl is being stopped. The request to stop the crawl has been received, but the crawl hasn't stopped yet.
9	The crawl is being paused. The request to pause the crawl has been received, but the crawl hasn't paused yet.

crawlStarted: The start time for the most recent crawl. If no crawls have been started for the content source yet, this element MUST contain the value of 1899-12-30T00:00:00.

crawlCompleted: The end time of the last finished crawl. If the content source has not been crawled, this element MUST contain the value of 1899-12-30T00:00:00.

errorCount: The number of items that the crawler failed to get crawl during the most recent crawl. **errorCount** MUST be greater than or equal to 0. If no crawls have been performed on the content source, the number MUST be 0.

crawlSuccesses: The number of items successfully crawled during the most recent crawl of the content source. **crawlSuccesses** MUST be greater than or equal to 0. If no crawls have been performed on the content source, the number MUST be 0.

2.2.4.3   CrawlRuleInternal

The **CrawlRuleInternal** type represents the properties for a crawl rule.

```
  <s:complexType name="CrawlRuleInternal">
    <s:sequence>
      <s:element name="path" type="s:string" minOccurs="0"/>
      <s:element name="type" type="s:int"/>
      <s:element name="authenticationType" type="s:int"/>
      <s:element name="accountName" type="s:string" minOccurs="0"/>
      <s:element name="contentClass" type="s:string" minOccurs="0"/>
```

```
<s:element name="suppressIndexing" type="s:boolean"/>
<s:element name="followComplexUrls" type="s:boolean"/>
<s:element name="crawlAsHttp" type="s:boolean"/>
<s:element name="enabled" type="s:boolean"/>
<s:element name="pluggableSecurityTrimmerId" type="s:int"/>
<s:element name="authUrl" type="s:string" minOccurs="0"/>
<s:element name="authData" type="s:string" minOccurs="0"/>
<s:element name="miscData" type="tns:ArrayOfString" minOccurs="0"/>
<s:element name="accountLastModified" type="s:dateTime"/>
</s:sequence>
```

</s:complexType>

path: A crawl rule path expression. MUST be present, and the length MUST be greater than 0 and less than 2048 characters. MUST be either a **Universal Naming Convention (UNC)** path or a URL, with the following characters allowed: '*' and '?'.

type: The crawl rule type. MUST be one of the following values:

Value	Meaning
0	Inclusion rule. URLs matching the **path** are included in the crawl.
1	Exclusion rule. URLs matching the **path** are not included in the crawl.

authenticationType: The authentication type for accessing matching URLs. MUST be one of the following values:

Value	Meaning
0	Default access.
1	Integrated authentication.
2	Basic authentication. The user name and password are required for this authentication type.
3	Authentication using a **certificate (1)**. A valid client certificate name is required for this authentication type.
4	**forms authentication**. A valid URL for **HTTP POST** or **HTTP GET**, public and private parameters, and a list of error pages are used by this authentication type.
5	**Cookie** based authentication. Private parameters and a list of error pages are used by this authentication type.

Default access implies integrated authentication using credentials of the default **crawl account** for the crawler application.

accountName: If present, the length MUST be less than 256 characters. This element MUST be interpreted differently depending on the value of **authenticationType**. The following table specifies interpretation and restrictions for this element:

authenticationType value	accountName interpretation
0	MUST be ignored.
1	The user name for integrated authentication.
2	The user name for basic authentication.
3	The **X.509** certificate name.
4	MUST be ignored.
5	MUST be ignored.

contentClass: Arbitrary metadata for the crawl rule. If present, the length MUST be less than 1024 characters.

suppressIndexing: MUST be one of the following values:

Value	Meaning
false	The protocol server MUST crawl any URLs that match the URL specified for the crawl rule's **path**.
true	The protocol server MUST NOT crawl any URLs that match the URL specified for the crawl rule's **path**.

followComplexUrls: Specifies the crawl behavior on the matched URLs with a **query component (1)**. MUST be one of the following values:

Value	Meaning
false	Matching URLs with a query component (1) MUST be followed during the crawl.
true	Matching URLs with a query component (1) MUST be discarded during the crawl.

crawlAsHttp: Specifies whether to use the HTTP protocol to crawl matching links with the http: scheme. MUST be one of the following values:

Value	Meaning
false	The protocol server crawls matching URLs with http: scheme using any protocol available for the repository.
true	The protocol server crawls matching URLs with http: scheme using the HTTP protocol.

enabled: Specifies whether the crawl rule is enabled or disabled. Disabled crawl rules are ignored by the protocol server. MUST be one of the following values:

Value	Meaning
false	The crawl rule is disabled.
true	The crawl rule is enabled.

pluggableSecurityTrimmerId: The **security trimmer** identifier.

authUrl: If **authenticationType** is 4, **authUrl** contains the URL for the forms authentication type. If present, the length MUST be less than 2048 characters. The forms authentication type implies an HTTP GET or an HTTP POST to the authentication URL, as specified in [RFC2616], to obtain the authorization cookie. If **authenticationType** is set to 0, 1, 2, 3 or 5, this element MUST not be interpreted.

authData: If **authenticationType** is 4, this element represents the public authentication parameters for **authUrl**, according to the format of the HTTP form in **authUrl.** If **authenticationType** is set to 0, 1, 2, 3 or 5, this element MUST not be interpreted.

miscData: If **authenticationType** is set to 4 or to 5, this element represents a collection of error page URLs. When requests to retrieve content get redirected by item repositories during a crawl, these error page URLs are used to determine authentication errors. If **authenticationType** is set to 0, 1, 2 or 3, this element MUST not be interpreted.

accountLastModified: The latest time credentials were set or modified for this rule.

2.2.4.4   ContentSourceInternal

The **ContentSourceInternal** type represents the properties and status information for a content source.

```
<s:complexType name="ContentSourceInternal">
  <s:sequence>
    <s:element name="id" type="s:int"/>
    <s:element name="systemCreated" type="s:boolean"/>
    <s:element name="type" type="s:int"/>
    <s:element name="name" type="s:string" minOccurs="0"/>
    <s:element name="wssCrawlStyle" type="s:int"/>
    <s:element name="metadata" type="s:string" minOccurs="0"/>
    <s:element name="followDirectories" type="s:boolean"/>
    <s:element name="pageDepth" type="s:int"/>
    <s:element name="siteDepth" type="s:int"/>
    <s:element name="startAddresses" type="tns:ArrayOfString" minOccurs="0"/>
    <s:element name="throttleStart" type="s:int"/>
    <s:element name="throttleDuration" type="s:int"/>
    <s:element name="fullCrawlTrigger" type="s:base64Binary" minOccurs="0"/>
    <s:element name="incCrawlTrigger" type="s:base64Binary" minOccurs="0"/>
    <s:element name="nextIncCrawlStart" type="s:dateTime"/>
    <s:element name="nextFullCrawlStart" type="s:dateTime"/>
    <s:element name="incScheduleDescription" type="s:string" minOccurs="0"/>
    <s:element name="fullScheduleDescription" type="s:string" minOccurs="0"/>
    <s:element name="dynamic" type="tns:ContentSourceDynamicPropsInternal" minOccurs="0"/>
  </s:sequence>
</s:complexType>
```

id: The content source identifier. The identifier MUST be greater than 0.

systemCreated: Specifies whether the content source was created automatically by the system or if the protocol client created it using this protocol. MUST be one of the following values.

Value	Meaning
True	The content source was automatically created after server installation.
False	The content source was created by the protocol client using this protocol.

type: The content source type. MUST be one of the following values.

Value	Meaning
0	Web sites
1	**Sites (2)**
2	Lotus Notes database
3	**File shares**
4	Exchange public folders
5	Custom
6	**Business Data Connectivity (BDC)**

name: The content source name. MUST be present, and the length of the name MUST be greater than 0 characters and less than or equal to 255 characters.

wssCrawlStyle: The scope of start addresses. MUST be one of the following values.

Value	Meaning
0	All **Web applications (1)** pointed to by the start addresses are to be crawled.
1	Only sites pointed to by the start addresses are to be crawled.

metadata: An arbitrary custom string that the protocol client associated with the content source. If present, the length MUST be less than 1024 characters. The utilization of the metadata string depends on the protocol client implementation details.

followDirectories: Specifies how items are discovered by the crawler during the crawl. MUST be one of the following values.

Value	Meaning
true	Items are discovered through **folder** links.
false	Items are discovered through hyperlinks.

pageDepth: The maximum number of **page hops** allowed when this content source is crawled. The number MUST be greater than or equal to 0. If there is no limit, the number MUST be 2147483647.

siteDepth: The maximum number of **host hops** allowed when this content source is crawled. The number MUST be greater than or equal to 0. If there is no limit, the number MUST be 2147483647.

startAddresses: An array of zero or more start addresses. This element MUST be present. Each element in the array MUST contain a single URL or UNC path of a start address, and the length MUST be less than 2048 characters.

throttleStart: This element is unused. **throttleStart** SHOULD contain 0 and MUST be ignored by the protocol server.

throttleDuration: This element is unused. **throttleDuration** SHOULD contain 0 and MUST be ignored by the protocol server.

fullCrawlTrigger: If this element is present, it MUST contain a trigger as defined in [MS-TSCH], section 2.4.2.11 for the full crawl schedule. If this element is not present, it means that the trigger is not defined.

incCrawlTrigger: If this element is present, it MUST contain a trigger as defined in [MS-TSCH], 2.4.2.11 for the incremental crawl schedule. If this element is not present, it means that the trigger is not defined.

nextIncCrawlStart: The start time of the next scheduled incremental crawl. If there is no incremental crawl scheduled, this element MUST contain the value 9999-12-31T23:59:59.9999999.

nextFullCrawlStart: The start time of the next scheduled full crawl. If there is no full crawl scheduled, this element MUST contain the value 9999-12-31T23:59:59.9999999.

incScheduleDescription: The text description for an incremental crawl schedule. If the **incCrawlTrigger** element is present, this element MUST also be present. If the **incCrawlTrigger** element is not present, this element MUST NOT be present.

fullScheduleDescription: The text description for a full crawl schedule. If the **fullCrawlTrigger** element is present, this element MUST be also be present. If the **fullCrawlTrigger** element is not present, this element MUST NOT be present.

dynamic: This element MUST be present and MUST contain the content source status information as specified in section 2.2.4.2.

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.

2.2.9   Exception Types

This section specifies exceptions that are used by this protocol. The exception definitions in this section use the notation specified in [MS-NRTP], section 2.2.5. The instructions to map the exceptions to the SOAP Format [SOAP1.1] are specified in [SOAP1.1], section 4.4 or in [SOAP1.2/1], section 5.4.

2.2.9.1   ConcurrencyException

The **ConcurrencyException** exception type is a derived class of **System.Exception** as specified in [MS-NRTP], section 2.2.2.7.

The type name is "Microsoft.Office.Server.Search.Administration".

The library name is "Microsoft.Office.Server.Search, Version=12.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c".

There are no members other than those inherited from the **System.Exception** class.

```
Namespace Microsoft.Office.Server.Search.Administration
{
  Class ConcurrencyException:System.Exception
  {
  }
}
```

A **ConcurrencyException** is thrown when multiple protocol clients send conflicting requests to the protocol server.

2.2.9.2   UpdatedConcurrencyException

The **UpdatedConcurrencyException** exception type is a derived class of the **ConcurrencyException** class as specified in section 2.2.9.1.

The type name is "Microsoft.Office.Server.Search.Administration".

The library name is "Microsoft.Office.Server.Search, Version=12.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c".

There are no members other than those inherited from the **ConcurrencyException** class.

```
Namespace Microsoft.Office.Server.Search.Administration
{
  Class
UpdatedConcurrencyException:Microsoft.Office.Server.Search.Administration.ConcurrencyExceptio
n
  {
  }
}
```

An **UpdatedConcurrencyException** is thrown when the protocol server receives conflicting update requests from multiple protocol clients.

2.2.9.3 DeletedConcurrencyException

The **DeletedConcurrencyException** exception type is a derived class of **ConcurrencyException** as specified in section 2.2.9.1.

The type name is "Microsoft.Office.Server.Search.Administration". The library name is "Microsoft.Office.Server.Search, Version=12.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c".

There are no members other than those inherited from the **ConcurrencyException** class.

```
Namespace Microsoft.Office.Server.Search.Administration
{
  Class
DeletedConcurrencyException:Microsoft.Office.Server.Search.Administration.ConcurrencyExceptio
n
  {
  }
}
```

A **DeletedConcurrencyException** is thrown when protocol server receives a request to operate on an object already deleted.

2.2.9.4 ExternalException

The **ExternalException** exception type is a derived class of **SystemException** as specified in [MS-NRTP], section 2.2.2.8. The library name of the class is "mscorlib". There are no members other than those inherited from the **SystemException** class.

```
Namespace System.Runtime.InteropServices
{
  Class ExternalException:System.SystemException
  {
  }
}
```

2.2.9.5 COMException

The **COMException** exception type is a derived class of **ExternalException** as specified in section 2.2.9.4 of this document. The library name of the class is "mscorlib". There are no members other than those inherited from the **ExternalException** class.

```
Namespace System.Runtime.InteropServices
{
  Class COMException:System.SystemException.ExternalException
  {
  }
}
```

2.2.9.6 KeyNotFoundException

The **KeyNotFoundException** exception type is a derived class of **SystemException** as specified in [MS-NRTP], section 2.2.2.8. The library name of the class is "mscorlib". There are no members other than those inherited from the **SystemException** class. This class has an additional constraint that the **HRESULT** MUST be the hex value 0x80131577.

```
Namespace System.Collections.Generic
{
  Class KeyNotFoundException:System.SystemException
  {
  }
}
```

2.2.9.7 ArgumentException

The **ArgumentException** exception type is a derived class of **SystemException** as specified in [MS-NRTP], section 2.2.2.8. The library name of the class is "mscorlib". There is one member other than those inherited from the **SystemException** class. This class has an additional constraint that the HRESULT MUST be the hex value 0x80070057.

```
Namespace System
{
  Class ArgumentException:System.SystemException
  {
    String ParamName;
  }
}
```

ParamName: The parameter name of the argument which caused this exception to be raised.

2.2.9.8 InvalidEnumArgumentException

The **InvalidEnumArgumentException** exception type is a derived class of **ArgumentException** as specified in section 2.2.9.7 of this document. The library name of the class is "mscorlib". There are no members other than those inherited from the **ArgumentException** class.

```
Namespace System
{
  Class InvalidEnumArgumentException:System.ArgumentException
  {
  }
}
```

2.2.9.9 InvalidOperationException

The **InvalidOperationException** exception type is a derived class of **SystemException** as specified in [MS-NRTP] section 2.2.2.8. The library name of the class is "mscorlib". There are no members other than those inherited from the **SystemException** class. This class has an additional constraint that the HRESULT MUST be the hex value 0x80131509.

```
Namespace System
{
  Class InvalidOperationException:System.SystemException
  {
  }
}
```

3   Protocol Details

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The WSDL in this specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL might specify differences 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**, **present**, and **not null**.

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

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

This protocol allows protocol servers to notify protocol clients of application-level faults 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.

This protocol allows protocol servers to perform implementation-specific localization of text in various messages. Except where specified, the localization of this text is an implementation-specific behavior of the protocol server and not significant for interoperability

3.1   SearchApplicationWebService Soap Server Details

3.1.1   Abstract Data Model

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

3.1.1.1   Object hierarchy

The protocol server maintains a hierarchy of objects representing state of the Search Service Administration Web Service protocol. The properties of these objects affect the behavior of the index server during the crawl.
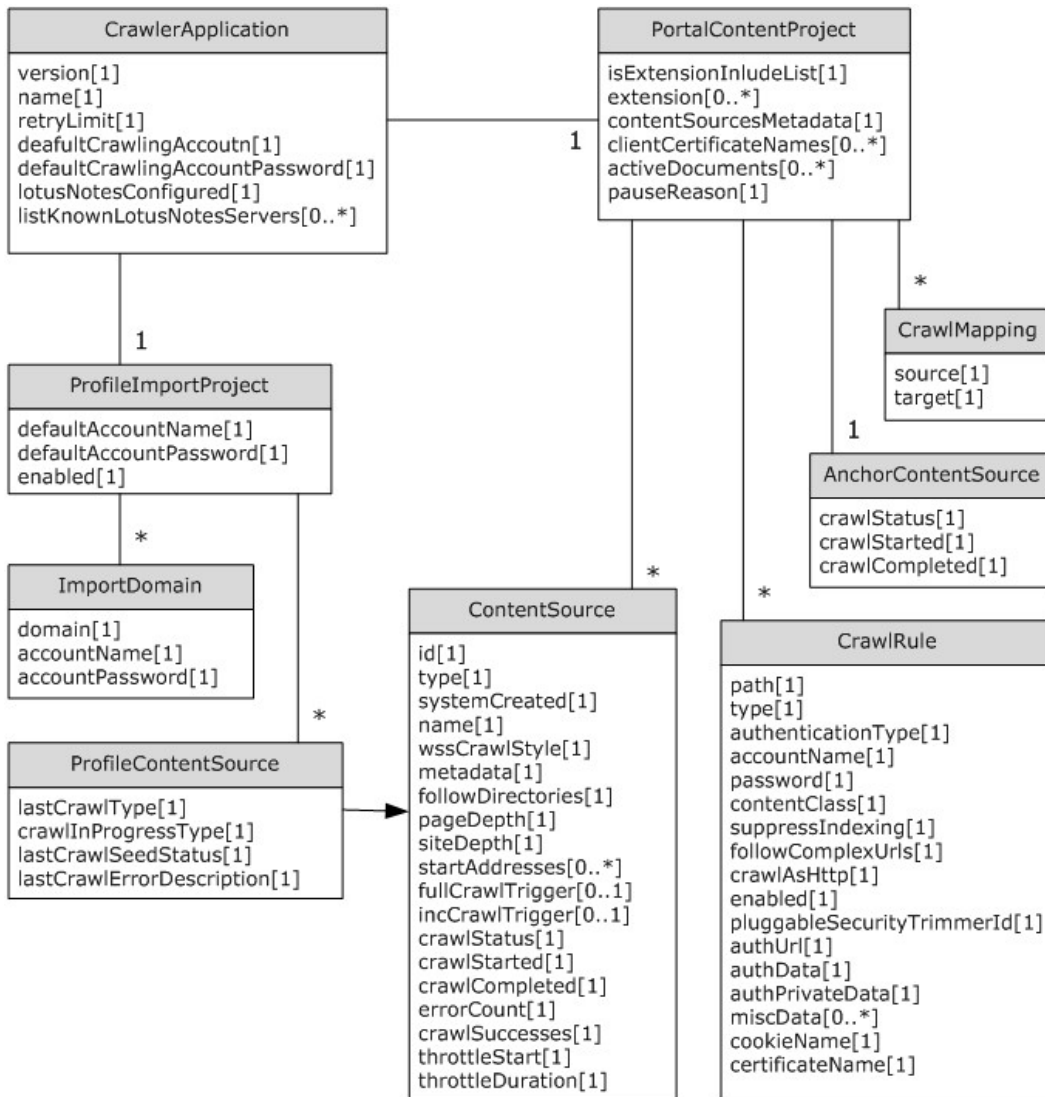
Figure 2: Object hierarchy

3.1.1.2   Crawler Application

This is the top level object of the hierarchy. There is one instance of the crawler application per SSP. Accordingly, there is one instance of the server endpoint for this protocol, the **Web service** URL.

version: The configuration version of this crawler application. The version is incremented whenever the application state is updated by the protocol client. Any method that updates of the application state requires the last known configuration version from the protocol client. If the protocol client version does not match with the current application version, the operation fails. This will typically happen when multiple protocol clients try to update the application state at the same time.

name: A **GUID** that uniquely identifies the crawler application.

retryLimit: The number of times the index server will retry fetching the item from any content source, (for example, a **Web server**) during the crawl in case certain types of recoverable protocol errors occur, for example, timeouts.

defaultCrawlingAccount: The name of the default crawl account that the index server uses to authenticate itself during the crawl when no other account is specified in a matching crawl rule.

defaultCrawlingAccountPassword: The password required for authentication of the **defaultCrawlingAccount**.

lotusNotesConfigured: If true, the Lotus Notes configuration was complete. This is specific for crawl configuration of the Lotus Notes content source. The configuration details for a Lotus Notes content source is specific to the implementation of the index server, but as far as this protocol is concerned the protocol server MUST be aware when the Lotus Notes configuration took place and communicate this information to the protocol client.

listKnownLotusNotesServers: The list of known Lotus Notes server names. This is specific for crawl configuration for Lotus Notes content sources.

3.1.1.3   Portal Content Project

The crawler application contains exactly one instance of the **portal content project**. This object's properties control the index server behavior and state during crawls for all types of content source except for the user profile content source.

extension: A list of file name extensions recognized by the index server. The index server parses all links discovered during the crawl and extracts the file extension from them. The file extension is checked against the **extension** list. Depending on the setting of **isExtensionIncludeList** property the link is discarded or added to the **crawl queue**.

isExtensionIncludeList: A Boolean value that specifies whether the list of file extensions in **extension** is an **inclusion list** or an **exclusion list**. If true, **extension** is an inclusion list; otherwise, **extension** is an exclusion list.

contentSourcesMetadata: A custom metadata string associated with the portal content project. The value of this property is ignored by the protocol server, but can be interpreted by the protocol client to associate arbitrary metadata with the collection of content sources.

clientCertificateNames: The list of names of X.509 client certificates used by crawl rules with authentication type of 3.

activeDocuments: The list of URLs of items currently being crawled by the index server.

pauseReason: A 32-bit number that contains the set of reasons why the **search catalog** is paused. Each bit indicates a particular reason. If there is more than one reason why the search catalog was paused, multiple bits corresponding to the reasons are turned on. The search catalog is resumed when all bits are turned off. MUST only turn on the following bits:

Value	Meaning
0x00000001	Paused because of certain unspecified internal event not initiated by the protocol client.
0x00000002	Paused because of certain unspecified internal event not initiated by the protocol client.
0x00000004	Paused for backup.

Value	Meaning
0x00000008	Paused for **query server** initialization as described in [MS-CIPROP], section 3.
0x00000010	Paused because of an unresponsive query server.

3.1.1.4   Content Source

The portal content project contains a collection of zero or more content source objects. This object represents a content source that be used to start a crawl on the index server.

id: The unique identifier of the content source in the collection. Assigned by the protocol server when a new content source is added.

type: The content source type. This type is used by the **crawler** as a hint to determine which technology to use to crawl the repository pointed to by the start addresses. MUST be one of the following values:

Value	Meaning
0	Web sites
1	Sites
2	Lotus Notes database
3	File shares
4	Exchange public folders
5	Custom
6	Business Data Connectivity (BDC)

systemCreated: If true, the content source was created during the initial system configuration and cannot be deleted by the protocol client. Any content sources added by the protocol client will have the **systemCreated** set to false.

name: The content source name. This is the label intended to be displayed in user interface.

wssCrawlStyle: The type of the crawl performed while crawling sites. If 0, then the entire Web applications pointed to by start addresses are crawled. If 1, then only the specific sites pointed by the start addresses are crawled without enumerating all sites in the Web application.

metadata: The arbitrary metadata associated by the protocol client with the content source. The value of this property is ignored by the protocol server, but can be interpreted by the protocol client to associate arbitrary metadata with the collection of content sources.

followDirectories: If true, only links provided by the repository being crawled are followed during the crawl, and links discovered within items are discarded. If false, only links discovered within items are followed.

pageDepth: The maximum permitted depth of the URL space traversal, including traversal within a single site or across different sites. Whenever a link is followed by the index server during the crawl the depth counter is incremented. The depth counter cannot increase beyond the **pageDepth** of the

content source. For example, if the **pageDepth** is 1 and Page A links to Page B, which links to Pages C and D, then neither pages C nor D will be crawled because the depth counter would exceed **pageDepth**.

siteDepth: The depth of the URL space traversal in terms of **authority hops**. This is analogous to the **pageDepth** variable, but at a **domain** level. A server domain hop is made when a link points to a URL from a different server domain. Whenever a link is followed by the index server during the crawl to a different host (or item repository server), the site depth counter is incremented. The site depth counter cannot exceed the **siteDepth** of the content source

startAddresses: A list of start address URLs. The first step of starting the crawl is to add the start address URLs to the crawl queue. The crawl then begins by following links from these start addresses.

fullCrawlTrigger: Defines the full crawl schedule. The crawl can be started either by explicit request from the protocol client, or automatically, at specified points of time, according to the schedule.

incCrawlTrigger: Defines the incremental crawl schedule.

crawlStatus: Identifies whether a crawl for this content source is idle, paused, stopped, or running. Also identifies what type of crawl it is, (full crawl or incremental crawl).

crawlStarted: The timestamp of when the most recent crawl was started for this content source.

crawlCompleted: The timestamp of when the most recent crawl was finished for this content source.

errorCount: The number of items, (during the most recent crawl), where the crawler attempted to crawl the items, but did not succeed.

crawlSuccesses: The number of items successfully crawled during the most recent crawl.

throttleStart: This property is not interpreted by the protocol server. It can be set and retrieved by the protocol client.

throttleDuration: This property is not interpreted by the protocol server. It can be set and retrieved by the protocol client.

3.1.1.5 Crawl Rule

The portal content project contains an ordered collection of zero or more crawl rule objects. Crawl rules are used to selectively restrict the URL space of the crawl. When a new link is discovered during the crawl, only the portion of the link up to, but not including, the query component (1) is checked against the crawl rules to determine if the item should be included or excluded from the crawl.

Crawl rules contain a wildcard expression that can be matched against the URL of the link. All characters in the link are matched exactly against the expression, except the wildcards. Only two wildcard characters are allowed: '*' and '?'. The '*' wildcard character matches 0 or more arbitrary characters. The '?' wildcard character matches any single character.

Because of the presence of the wildcards in the crawl rules, the evaluation order of the rules is important. The first rule found to match the link determines the crawl behavior for that link.

The crawl rule can also specify authentication parameters for accessing items that match certain URLs.

path: The wildcard expression of the crawl rule. This also serves as a unique identifier of the crawl rule in the collection.

type: If 0, the links matching the crawl rule are included in the crawl URL Space; otherwise, excluded.

authenticationType: The authentication type the index server will use for the matching URLs. The following authentication types MUST be supported by the server:

Value	Meaning
0	Default access
1	Integrated authentication
2	Basic authentication
3	Authentication using certificates
4	Forms authentication
5	Cookie based authentication

Default access implies integrated authentication using credentials of the default crawl account for the crawler application.

The following examples of possible implementation of various authentication types by the index server are provided for information only. The details are specific to the protocol server implementation.

- Integrated authentication using the account credentials specified for the crawl rule.

- Basic authentication MAY be accomplished by passing the account and the password to the item repository in plaintext.

- Authentication using certificates MAY be accomplished by presenting to the item repository a valid client certificate by the index server.

- Forms authentication MAY be accomplished by issuing an HTTP GET or HTTP POST against a specified form URL with required fields, acquiring a cookie from the form server and presenting the cookie in subsequent HTTP requests.

- Cookie based authentication MAY be accomplished by presenting a persistent cookie in the HTTP requests to the item repository.

accountName: The user name for integrated authentication or basic authentication.

password: The account password for integrated authentication or basic authentication, or private authentication parameters for forms authentication.

contentClass: Arbitrary metadata for the crawl rule. The content of this property can be interpreted by the index server as additional context used during the crawl of a particular item repository. As far

as this protocol is concerned, the value of this property can be modified and retrieved by the protocol client.

suppressIndexing: If true, content of the URLs matching the crawl rule are not crawled, even if the crawl rule **type** is set to 0, (include). The links discovered from the matching URLs can still be followed during the crawl. If false, content of the URLS matching the crawl rule are crawled.

followComplexUrls: If true, links that have query components (1) are followed by the crawl. Otherwise, links that have query components (1) are discarded, even if the crawl rule type is 0.

crawlAsHttp: If true, matching links with an HTTP: scheme are crawled using the HTTP protocol, regardless of the default protocol normally used to crawl the repository. Crawling with the HTTP protocol implies that the process relies on discovered links instead of getting the repository to provide the set of links that need to be crawled. If false, matching links are crawled using protocols appropriate for the repository.

enabled: If true, the crawl rule is enabled; otherwise, the crawl rule is disabled.

pluggableSecurityTrimmerId: The protocol server can interpret this property as an identifier of a component that can validate if a user issuing the search query has read permission on the item. Any item corresponding to the link matching this crawl rule will be assigned the security trimmer identifier if the **pluggableSecurityTrimmerId** was set for the crawl rule.

authUrl: When **authenticationType** is 4, this is the URL used for forms authentication. Otherwise, this element MUST be ignored.

authData: When **authenticationType** is 4, this is the portion of the opaque authentication **BLOB** used for forms authentication that does not need to be stored securely. Otherwise, this element MUST be ignored.

authPrivateData: When **authenticationType** is 4, this is the portion of the opaque authentication BLOB used for forms authentication that needs to be stored securely. Otherwise, this element MUST be ignored.

authMethod: When **authenticationType** is 4, this is the HTTP method, (HTTP GET or HTTP POST), used for forms authentication. Otherwise, this element MUST be ignored.

miscData: When **authenticationType** is 4 or 5, this is a list of error page URLs used to identify authentication errors. Otherwise, this element MUST be ignored.

cookieName: When **authenticationType** is 5, this is the opaque cookie used for cookie based authentication. Otherwise, this element MUST be ignored.

certificateName: When **authenticationType** is 3, this is the X.509 certificate used for authentication. Otherwise, this element MUST be ignored.

3.1.1.6 Anchor Content Source

The portal content project contains a single instance of the **anchor content source**. The anchor content source represents the status of the **anchor crawl**.

crawlStatus: The status of the anchor crawl. **crawlStatus** specifies whether the anchor crawl is currently in progress or not.

crawlStarted: The timestamp of when the last anchor crawl started.

crawlCompleted: The timestamp of when the last anchor crawl finished.

3.1.1.7   Crawl Mapping

The portal content project contains a collection of zero or more **crawl mapping** objects. Each crawled item has two URLs: **access URL** and **display URL**. The index server uses the access URL to obtain the item from the item repository, and it uses the display URL as a URL of the item to store in the metadata index. The display URL is returned to the users if the URL is requested in the search query. During the crawl the access URL and display URL of every item is checked against the crawl mapping objects. The match occurs if any prefix of the URL that covers complete path segments as described in [RFC2396], section 3.3, is equal to the **Source** or **Target** property of the mapping. If multiple mappings match the URL, the mapping that matches the longest prefix is chosen. For example, http://site/pathseg1/pathseg2/file.htm matches http://site, or http://site/pathseg1, or http://site/pathseg1/pathseg2, but does not match http://site/pathse or http://saite/pathseg1/path.

If the access URL matches the **Source** property of the mapping, the matching prefix will be replaced by the **Target** property to construct the display URL. The suffix of the URL will be preserved.

The crawl mappings collection does not allow mappings with duplicate **Source** or **Target** properties.

- **Source:** source URL prefix for access URLs.

- **Target:** target URL prefix for the display URLs.

3.1.1.8   User Profile Import Project

The user profile import project contains configuration used by the index server to perform a user profile import from the **Active Directory** or any other repository of directory data. The crawler application contains a single instance of the user profile import project.

defaultAccountName: The user name used for authentication of the index server during the user profile import.

defaultAccountPassword: The password for the default account.

Enabled: If true, user profile import is enabled; otherwise it is disabled.

3.1.1.9   User Profile Content Source

The user profile import project contains exactly two user profile content sources, (with names "PEOPLE_IMPORT" and "PEOPLE_DL_IMPORT"). Each user profile content source contains the same properties as a section 3.1.1.4, with a single start address, and in addition has four more properties, which are:

lastCrawlType: If 0, no user profile import has been performed on the user profile content source before. If 1, the last user profile import was a full user profile import. If 2, the last user profile import was an incremental user profile import.

crawlInProgressType: The current user profile import type. If 0, no user profile import is currently in process. If 1, the current user profile import is a full user profile import. If 2, the current user profile import is an incremental user profile import.

lastCrawlSeedStatus: The crawl error code for the start address URL from the most recent crawl if the start address was not crawled successfully, otherwise, the value of this property will be 0.

lastCrawlErrorDescription: The description for the **lastCrawlSeedStatus**.

3.1.1.10 User Profile Import Domain

The user profile import project contains one or more user profile import domains. The user profile import domains specify what domains from the **directory service (DS)** are imported during the user profile import. The interpretation of the domain depends on the DS. In the case of Active Directory, there can be multiple domains defined in the directory, and only some of them are needed for the user profile import.

Domain: The **domain name** of the user profile import domain.

accountName: The user name used by the index server for authentication during a user profile import for this domain.

accountPassword: The password for the account specified in **accountName.**

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

Operation	Description
ActivateCrawlRule	Activates a crawl rule.
ActivateProfileImport	Activates a user profile import.
AddApp	Not used.
AddContentSource	Creates a new content source.
AddCrawlMapping	Creates a new crawl mapping.
AddCrawlRule	Creates a new crawl rule.
AddExtension	Adds a new file extension.
AddSitePath	Not used.
AddSiteRestriction	Not used.
BackupRegistry	Backs up the server configuration.
CatalogPauseCrawlRequest	Requests that the crawl be paused.
CatalogPauseStatus	Returns the pause status of a search catalog
CatalogResumeCrawlRequest	Requests that a crawl be resumed.
CleanUnreferencedSiteRestrictions	Removes unreferenced user profile import domains.

Operation	Description
ClearExtensionList	Removes all file extensions for the portal content project.
ConfigurePropagationShare	Not used.
DefaultInstallationIndexLocation	Not used.
DismountApp	Dismounts the crawler application.
EditContentSource	Modifies a content source's properties.
GetContentSource	Retrieves a content source's properties.
GetContentSources	Retrieves all the content sources for a specified search catalog.
GetContentState	Retrieves the crawler application's properties.
GetCrawlMappings	Retrieves the list of all the crawl mappings.
GetCrawlRuleList	Retrieves the list of all the crawl rules.
GetExtensionList	Retrieves the list of all the file extensions.
GetGathererApplications	Not used.
GetImportAccounts	Retrieves all the user names for the user profile import.
GetImportStatus	Retrieves the current status of the user profile import.
GetPropagationInternal	Not used.
GetSiteRestrictionList	Not used.
GetVersion	Retrieves the crawler application's current configuration version.
IndexSize	Retrieves the size of the full-text index catalog.
IPAddress	Not used.
IsCatalogPauseCompleted	Retrieves the status of the request to pause the crawl.
IsDeleteCrawlInProgress	Retrieves the status of any **delete crawl** requests.
IsExtensionIncludeList	Retrieves the property indicating whether the file extensions list is an inclusion list or an exclusion list.
IsMounted	Not used.
IsPropagationShareConfigured	Not used.
ListKnownLotusNotesDatabases	Retrieves the list of all Lotus Notes databases known to the protocol server.
MountApp	Not used.
PauseCrawl	Requests that the protocol server pause the crawl.
RefreshAnchorContentSource	Retrieves the current status of the anchor content source.

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Operation	Description
RefreshContentSource	Retrieves the current status of the specified content source.
RemoveAllGathererApplications	Not used.
RemoveApp	Removes the crawler application state from the protocol server.
RemoveContentSource	Removes a content source.
RemoveCrawlMapping	Removes a crawl mapping.
RemoveCrawlRule	Removes a crawl rule.
RemoveExtension	Removes a file extension.
RemoveQueryServer	Not used.
RemoveSitePath	Not used.
RemoveSiteRestriction	Not used.
ResetApp	Resets the crawler application.
ResumeCrawl	Requests that a crawl be resumed.
SearchDatabaseCleanup<1>	Enables **search database** cleanup.
SetContentSourcesMetadata	Updates the metadata property for the portal content project.
SetCrawlRuleCredentials	Updates the account for a crawl rule.
SetCrawlRulePriority	Updates the priority of a crawl rule.
SetDefaultGatheringAccount	Updates the default crawl account.
SetDefaultImportAccount	Updates the default user profile import account.
SetImportAccount	Updates the user profile import account on a specified user profile import domain.
SetIsExtensionIncludeList	Toggles the state of the file extensions list between an inclusion list and an exclusion list.
SetRetryLimit	Updates the retry limit property of the crawler application.
StartCrawl	Requests that the protocol server start a crawl.
StartFullImport	Requests that the protocol server start a full user profile import.
StartIncrementalImport	Request that the protocol server start an incremental user profile import.
StartRankingUpdate	Requests that the protocol server start an anchor crawl.
StopCrawl	Requests that the protocol server stop a crawl.
StopImport	Requests that the protocol server stop a user profile import.
SystemDrive	Not used.

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Operation	Description
TestCrawlRule	Checks whether a URL matches a specified crawl rule.
TestCrawlRules	Returns the first crawl rule that matches the specified URL.
UpdateCrawlRule	Updates a crawl rule's properties.
ValidateApplicationPath<2>	Validates that a folder path is a viable location to host a full-text index catalog.
ValidatePath	Not used.
ValidateScheduleTrigger	Validates that a trigger as defined in [MS-TSCH], section 2.4.2.11, can be used to schedule a crawl.

3.1.4.1 ActivateCrawlRule

This operation is used to enable an existing crawl rule.

```
<wsdl:operation name="ActivateCrawlRule">
        <wsdl:input message="ActivateCrawlRuleSoapIn"/>
        <wsdl:output message="ActivateCrawlRuleSoapOut"/>
</wsdl:operation>
```

The protocol client sends an ActivateCrawlRuleSoapIn request message and the server responds with an ActivateCrawlRuleSoapOut response message, as follows:

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server MUST normalize the **path** element from the request message as follows:

  - If the path is empty or contains only white-space characters, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d34.

  - If the length of the path is greater than or equal to 2048 characters, the protocol server MUST throw a SOAP fault message containing COMException with the **HRESULT** field set to 0x80040d14.

  - If the path is a UNC path expression, the protocol server MUST convert it to the URL with a "file" URL scheme as described in [RFC2396], section 3.1.

  - If the path is not a UNC path expression, the protocol server MUST replace all '\' characters with the '/' character.

  - If the URL scheme, as described in [RFC2396], section 3.1 is not specified in the path, the protocol server MUST prepend path with the "http" scheme.

- If prepending the path with the "http" scheme causes the length of the resulting path to become greater than or equal to 2048 characters, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80010105.

- If the host name in the path contains a '@' character, a '#' character, a '|' character, or a white-space character, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d50.

- If the URL scheme as described in [RFC2396], section 3.1 in the path is "http" or "https", the protocol server MUST convert it to a **URL-encoded** string.

- If the crawl rule identified by normalized path does not exist, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

- The protocol server MUST set the **enabled** property of the crawl rule to true.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **ActivateCrawlRuleResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.1.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.1.1.1   ActivateCrawlRuleSoapIn

This is the request message for the ActivateCrawlRule operation.

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

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ActivateCraw
lRule
```

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

3.1.4.1.1.2   ActivateCrawlRuleSoapOut

This is a response message for the ActivateCrawlRule operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ActivateCraw
lRule
```

The SOAP body contains an ActivateCrawlRuleResponse element.

3.1.4.1.2   Elements

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

3.1.4.1.2.1 ActivateCrawlRule

The **ActivateCrawlRule** element contains parameters for the [ActivateCrawlRule](#) operation.

```
<s:element name="ActivateCrawlRule">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

path: A crawl rule path expression. MUST be present, and the length MUST be greater than 0, and less than 2048 characters.

The protocol client SHOULD obtain this value from one of the following methods:

- [AddCrawlRule](#)

- [GetCrawlRuleList](#)

- [TestCrawlRules](#)

Otherwise, there is no guarantee that the protocol server will be able to identify the crawl rule, because the path of the crawl rule can be normalized by the protocol server.

3.1.4.1.2.2 ActivateCrawlRuleResponse

The **ActivateCrawlRuleResponse** element contains the result of [ActivateCrawlRule](#) operation.

```
<s:element name="ActivateCrawlRuleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ActivateCrawlRuleResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ActivateCrawlRuleResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.2 ActivateProfileImport

This operation is used to enable or disable the user profile import project.

```
<wsdl:operation name="ActivateProfileImport">
        <wsdl:input message="ActivateProfileImportSoapIn"/>
        <wsdl:output message="ActivateProfileImportSoapOut"/>
</wsdl:operation>
```

The protocol client sends an ActivateProfileImportSoapIn request message and the protocol server responds with an ActivateProfileImportSoapOut response message, as follows:

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server sets the enabled property of the user profile import project to the value of the **enable** element from the request message.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the ActivateProfileImportResult element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.2.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.2.1.1 ActivateProfileImportSoapIn

This is the request message for ActivateProfileImport operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ActivateProf
ileImport
```

The SOAP body contains an ActivateProfileImport element.

3.1.4.2.1.2 ActivateProfileImportSoapOut

This message is a response message for ActivateProfileImport operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ActivateProf
ileImport
```

The SOAP body contains an ActivateProfileImportResponse element.

3.1.4.2.2 Elements

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

3.1.4.2.2.1 ActivateProfileImport

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

```
<s:element name="ActivateProfileImport">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="enable" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

enable: If true, the user profile import project needs to be enabled, otherwise, disabled.

3.1.4.2.2.2 ActivateProfileImportResponse

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

```
<s:element name="ActivateProfileImportResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ActivateProfileImportResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ActivateProfileImportResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.3 AddApp

This operation is not used and MUST NOT be invoked.

3.1.4.4 AddContentSource

This operation is used to create a new content source in the crawler application's portal content project.

```
<wsdl:operation name="AddContentSource">
        <wsdl:input message="AddContentSourceSoapIn"/>
        <wsdl:output message="AddContentSourceSoapOut"/>
</wsdl:operation>
```

The protocol client sends an AddContentSourceSoapIn request message and the protocol server responds with an AddContentSourceSoapOut response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server creates a new content source with the properties type and name set to the values of the corresponding elements in the request message.

- The **id** property of the newly created content source MUST be unique within the collection of content sources.

- If the content source is created successfully, the protocol server MUST return the content source identifier in the **AddContentSourceResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.4.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.4.1.1 AddContentSourceSoapIn

This is the request message for AddContentSource operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddContentSo
urce
```

The SOAP body contains an AddContentSource element.

3.1.4.4.1.2 AddContentSourceSoapOut

This is a response message for AddContentSource operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddContentSo
urce
```

The SOAP body contains an AddContentSourceResponse element.

3.1.4.4.2 Elements

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

3.1.4.4.2.1 AddContentSource

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

```
<s:element name="AddContentSource">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="catalog" type="s:int"/>
      <s:element name="type" type="s:int"/>
      <s:element name="name" type="s:string" minOccurs="0"/>
    </s:sequence>
```

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

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

catalog: This element MUST contain the value 0.

type: The content source type. MUST be one of the following values:

Value	Meaning
0	Web sites
1	Sites
2	Lotus Notes database
3	File shares
4	Exchange public folders
5	Custom
6	Business Data Connectivity (BDC)

name: The content source name. This element MUST be present. The length of the content source name MUST be less than or equal to 255 characters. The specified name MUST be unique among the content source names existing in the portal content project.

3.1.4.4.2.2   AddContentSourceResponse

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

```
<s:element name="AddContentSourceResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="AddContentSourceResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

AddContentSourceResult: Identifier of the newly created content source. MUST be greater than 0.

3.1.4.5   AddCrawlMapping

This operation creates a new crawl mapping for the portal content project.

```
<wsdl:operation name="AddCrawlMapping">
        <wsdl:input message="AddCrawlMappingSoapIn"/>
        <wsdl:output message="AddCrawlMappingSoapOut"/>
</wsdl:operation>
```

The protocol client sends an AddCrawlMappingSoapIn request message and the protocol server responds with an AddCrawlMappingSoapOut response message, as follows:

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

- The protocol server MUST normalize the source and target strings as follows:

  ▪Trim the leading and trailing spaces.

  ▪Remove the final character if it is the back slash ('\') character, or the forward slash ('/') character.

  ▪If the source and target strings become the same, (case insensitive), after the previous step, the protocol server MUST throw a SOAP fault message containing a COMException, with the HRESULT field set to 0x80040d40.

  ▪If the URL scheme as described in [RFC2396], section 3.1 is not present, and string is not an UNC path, the protocol server MUST prepend the path with the "http" scheme.

  ▪If the URL scheme, as described in [RFC2396], section 3.1 is "file", convert the string to a UNC path, removing "file" prefix from the string, and replacing every forward slash ('/') character with the back slash ('\') character.

  ▪If the URL scheme, as described in [RFC2396], section 3.1 is "http" or "https", replace every back slash ('\') character with the forward slash ('/') character.

  ▪When normalization fails, if the failure is because of string exceeding maximum length, the protocol server MUST throw a SOAP fault message containing COMException with the **HRESULT** field set to 0x80040d14. Otherwise, the protocol server MUST throw a SOAP fault message containing COMException with the **HRESULT** field set to 0x80040d40.

  ▪If the crawl mapping for the same normalized source or target exists, the protocol server MUST throw a SOAP fault message containing a COMException, with the **HRESULT** field set to 0x80040d02.

- The protocol server MUST then create a new crawl mapping and append it to the mappings collection in the portal content project with the **source** property set to the normalized source, and the **target** property set to the normalized target.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **AddCrawlMappingResult** element in the response message.

On error, the protocol server MUST throw a SOAP fault message.

3.1.4.5.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.5.1.1 AddCrawlMappingSoapIn

This is the request message for AddCrawlMapping operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddCrawlMapp
ing
```

The SOAP body contains an AddCrawlMapping element.

3.1.4.5.1.2 AddCrawlMappingSoapOut

This is a response message for AddCrawlMapping operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddCrawlMapp
ing
```

The SOAP body contains an AddCrawlMappingResponse element.

3.1.4.5.2 Elements

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

3.1.4.5.2.1 AddCrawlMapping

The AddCrawlMapping element represents parameters for the AddCrawlMapping operation.

```
<s:element name="AddCrawlMapping">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="source" type="s:string" minOccurs="0"/>
      <s:element name="target" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

source: The access URL prefix. This element MUST be present and its contents MUST be less than 2048 characters in length.

target: The display URL prefix. This element MUST be present and its contents MUST be less than 2048 characters in length.

3.1.4.5.2.2 AddCrawlMappingResponse

The **AddCrawlMappingResponse** element represents the result for the AddCrawlMapping operation.

```
<s:element name="AddCrawlMappingResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="AddCrawlMappingResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

AddCrawlMappingResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.6 AddCrawlRule

This operation is used to create a new crawl rule for the portal content project.

```
<wsdl:operation name="AddCrawlRule">
        <wsdl:input message="AddCrawlRuleSoapIn"/>
        <wsdl:output message="AddCrawlRuleSoapOut"/>
</wsdl:operation>
```

The protocol client sends an AddCrawlRuleSoapIn request message and the protocol server responds with an AddCrawlRuleSoapOut response message, as follows:

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server MUST normalize the **path** element of the request message the same way it normalizes the path element of the ActivateCrawlRule operation request message.

- If a crawl rule with the same normalized path already exists in the portal content project, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d02.

- If the protocol server has not thrown an exception, it MUST now create a new crawl rule with:

    ▪**path** property set to the normalized path.

    ▪**type** property set to the value of the isIncludeRule element from the request message

    ▪**enabled** property set to true.

- The protocol server MUST add the created crawl rule to the end of the crawl rules collection in the portal content project.

- If the crawl rule was successfully added, the protocol server MUST return the normalized **path** property of the newly created crawl rule in the **AddCrawlRuleResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.6.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.6.1.1 AddCrawlRuleSoapIn

This is the request message for the AddCrawlRule operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddCrawlRule
```

The SOAP body contains an AddCrawlRule element.

3.1.4.6.1.2 AddCrawlRuleSoapOut

This is a response message for the AddCrawlRule operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddCrawlRule
```

The SOAP body contains an AddCrawlRuleResponse element.

3.1.4.6.2 Elements

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

3.1.4.6.2.1 AddCrawlRule

The **AddCrawlRule** element contains parameters for the AddCrawlRule operation.

```
<s:element name="AddCrawlRule">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="isIncludeRule" type="s:boolean"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

isIncludeRule: An interpretation of the rule which MUST contain one of the values specified in the following table:

Value	Meaning
0	Inclusion rule. URLs matching the **path** are included in the crawl.
1	Exclusion rule. URLs matching the **path** are not included in the crawl.

path: A crawl rule path expression. MUST be present and the length MUST be greater than 0 and less than 2048 characters.

3.1.4.6.2.2 AddCrawlRuleResponse

The **AddCrawlRuleResponse** element contains the result of the AddCrawlRule operation.

```
<s:element name="AddCrawlRuleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="AddCrawlRuleResult" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

AddCrawlRuleResult: The normalized crawl rule path expression used by the protocol server. MUST be present and the length MUST be greater than 0 and less than 2048 characters.

3.1.4.7 AddExtension

This operation is used to add a file extension to the file extensions collection contained in the portal content project.

```
<wsdl:operation name="AddExtension">
        <wsdl:input message="AddExtensionSoapIn"/>
        <wsdl:output message="AddExtensionSoapOut"/>
</wsdl:operation>
```

The protocol client sends an AddExtensionSoapIn request message and the protocol server responds with an AddExtensionSoapOut response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

▪ The protocol server first removes any leading or trailing white-space characters from the **ext** element of the request message.

▪ The protocol server then removes the first character of the **ext** element if it is the '.' character.

- If the **ext** element becomes empty, contains any white-space character, or contains any of the invalid characters ('.', '/', '?', '*', ':', '\', '#'), the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d45.

- If the file extension specified by the **ext** element already exists in the list, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040D02.

- The protocol server adds the file extension specified by the **ext** element to the portal content project's list of extensions.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **AddExtensionResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.7.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.7.1.1 AddExtensionSoapIn

This message is the request message for AddExtension operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddExtension
```

The SOAP body contains an AddExtension element.

3.1.4.7.1.2 AddExtensionSoapOut

This is a response message for AddExtension operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/AddExtension
```

The SOAP body contains an AddExtensionResponse element.

3.1.4.7.2 Elements

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

3.1.4.7.2.1 AddExtension

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

```
<s:element name="AddExtension">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
```

```
      <s:element name="ext" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

ext: A file extension. MUST be present, and the length MUST be greater than 0 and less than 16 characters.

3.1.4.7.2.2 AddExtensionResponse

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

```
<s:element name="AddExtensionResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="AddExtensionResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

AddExtensionResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.8 AddSitePath

This operation is not used and MUST NOT be invoked.

3.1.4.9 AddSiteRestriction

This operation is not used and MUST NOT be invoked.

3.1.4.10 BackupRegistry

This operation is used to notify the protocol server to save the configuration of the crawler application, including all contained objects and collections defined in the crawler application.

```
<wsdl:operation name="BackupRegistry">
        <wsdl:input message="BackupRegistrySoapIn"/>
        <wsdl:output message="BackupRegistrySoapOut"/>
</wsdl:operation>
```

The protocol client sends a BackupRegistrySoapIn request message and the protocol server responds with a BackupRegistrySoapOut response message, as follows:

- The protocol server starts backing up the configuration of the crawler application to the **configuration database** right away or after a delay as specified in the **backupNow** element of the request message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.10.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.10.1.1 BackupRegistrySoapIn

This is the request message for BackupRegistry operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/BackupRegist
ry
```

The SOAP body contains a BackupRegistry element.

3.1.4.10.1.2 BackupRegistrySoapOut

This is a response message for BackupRegistry operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/BackupRegist
ry
```

The SOAP body contains a BackupRegistryResponse element.

3.1.4.10.2 Elements

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

3.1.4.10.2.1 BackupRegistry

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

```
<s:element name="BackupRegistry">
  <s:complexType>
    <s:sequence>
      <s:element name="backupNow" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

backupNow: If true, the crawler application configuration MUST be backed up immediately; otherwise with a delay of 15 seconds.

3.1.4.10.2.2 BackupRegistryResponse

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

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

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

3.1.4.11   CatalogPauseCrawlRequest

This operation is used to pause any crawl activity on the index server, including relevance computation, and update the **pauseReason** property of the portal content project.

```
<wsdl:operation name="CatalogPauseCrawlRequest">
        <wsdl:input message="CatalogPauseCrawlRequestSoapIn"/>
        <wsdl:output message="CatalogPauseCrawlRequestSoapOut"/>
</wsdl:operation>
```

The protocol client sends a CatalogPauseCrawlRequestSoapIn request message and the protocol server responds with a CatalogPauseCrawlRequestSoapOut response message, as follows:

- If the reason specified by the **reason** element of the request message is not one of the allowed values, the protocol server SHOULD throw a SOAP fault message containing an InvalidEnumArgumentException.

- If the pause reason specified in the **reason** element of the request message is already in the pause reasons stored in the **pauseReason** property of the portal content project, the protocol server MUST return right away.

- The protocol server MUST pause all crawl activities and add the pause reason specified in the **reason** element of the request message to the set of current pause reasons stored in the **pauseReason** property.

- When a request comes in to start a new crawl, the protocol server MUST pause the new crawl as well if the **pauseReason** property of the portal content project contains any pause reason.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.11.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.11.1.1   CatalogPauseCrawlRequestSoapIn

This is the request message CatalogPauseCrawlRequest operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CatalogPause
CrawlRequest
```

The SOAP body contains a CatalogPauseCrawlRequest element.

3.1.4.11.1.2   CatalogPauseCrawlRequestSoapOut

This is a response message for **CatalogPauseCrawlRequest** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CatalogPause
CrawlRequest
```

The SOAP body contains a CatalogPauseCrawlRequestResponse element.

3.1.4.11.2 Elements

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

3.1.4.11.2.1 CatalogPauseCrawlRequest

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

```
<s:element name="CatalogPauseCrawlRequest">
  <s:complexType>
    <s:sequence>
      <s:element name="reason" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

reason: The reason for pausing crawls. SHOULD be one of the following values:

Value	Meaning
4	Pause crawl because of back-up/restore process.
8	Pause crawl because of query server initialization as described in [MS-CIPROP], section 3.

3.1.4.11.2.2 CatalogPauseCrawlRequestResponse

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

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

3.1.4.12 CatalogPauseStatus

This operation is used to retrieve the **pauseReason** property of the portal content project.

```
<wsdl:operation name="CatalogPauseStatus">
        <wsdl:input message="CatalogPauseStatusSoapIn"/>
        <wsdl:output message="CatalogPauseStatusSoapOut"/>
</wsdl:operation>
```

The protocol client sends a CatalogPauseStatusSoapIn request message and the protocol server responds with a CatalogPauseStatusSoapOut response message, as follows:

- On success, the protocol server MUST return the **pauseReason** property of the portal content project, in the **CatalogPauseStatusResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.12.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.12.1.1 CatalogPauseStatusSoapIn

This is the request message for CatalogPauseStatus operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CatalogPause
Status
```

The SOAP body contains a CatalogPauseStatus element.

3.1.4.12.1.2 CatalogPauseStatusSoapOut

This is a response message for CatalogPauseStatus operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CatalogPause
Status
```

The SOAP body contains a CatalogPauseStatusResponse element.

3.1.4.12.2 Elements

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

3.1.4.12.2.1 CatalogPauseStatus

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

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

3.1.4.12.2.2 CatalogPauseStatusResponse

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

```
<s:element name="CatalogPauseStatusResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="CatalogPauseStatusResult" type="s:int"/>
```

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

CatalogPauseStatusResult: The pause reasons for the crawler application. The possible value SHOULD be derived from the bit wise OR of one or more of the following values:

Value	Meaning
0x00000004	Because of back-up/restore.
0x00000008	Because of query server initialization as described in [MS-CIPROP], section 3.
0x00000010	Because of an unresponsive query server.

If no pause reason is currently set, the protocol server MUST return 0x00000000.

3.1.4.13   CatalogResumeCrawlRequest

This operation is used to update the **pauseReason** property of the: portal content project and to resume any previously paused crawl activity if there is no more pause reason remaining.

```
  <wsdl:operation name="CatalogResumeCrawlRequest">
          <wsdl:input message="CatalogResumeCrawlRequestSoapIn"/>
          <wsdl:output message="CatalogResumeCrawlRequestSoapOut"/>
  </wsdl:operation>
```

The protocol client sends a CatalogResumeCrawlRequestSoapIn request message and the protocol server responds with a CatalogResumeCrawlRequestSoapOut response message, as follows:

- If the reason specified by the reason element of the request message is not one of the allowed values, the protocol server SHOULD throw a SOAP fault message containing an InvalidEnumArgumentException.

- If the pause reason specified in the **reason** element of the request message is not in the pause reasons stored in the **pauseReason** property of the portal content project, the protocol server MUST return right away.

- Otherwise, the protocol server MUST update **pauseReason** property by removing the pause reason specified in the **reason** element of the request message from the pause reasons stored in the **pauseReason** property of the portal content project.

- If the **pauseReason** property becomes empty, the protocol server MUST resume any paused crawl.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.13.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.13.1.1 CatalogResumeCrawlRequestSoapIn

This is the request message for CatalogResumeCrawlRequest operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CatalogResum
eCrawlRequest
```

The SOAP body contains a CatalogResumeCrawlRequest element.

3.1.4.13.1.2 CatalogResumeCrawlRequestSoapOut

This is a response message for CatalogResumeCrawlRequest operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CatalogResum
eCrawlRequest
```

The SOAP body contains a CatalogResumeCrawlRequestResponse element.

3.1.4.13.2 Elements

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

3.1.4.13.2.1 CatalogResumeCrawlRequest

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

```
<s:element name="CatalogResumeCrawlRequest">
  <s:complexType>
    <s:sequence>
      <s:element name="reason" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

reason: The reason for pausing crawls. SHOULD be one of the following values:

Value	Meaning
4	Pause crawl because of back-up/restore process.
8	Pause crawl because of query server initialization as described in [MS-CIPROP], section 3.

3.1.4.13.2.2 CatalogResumeCrawlRequestResponse

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

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

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

3.1.4.14   CleanUnreferencedSiteRestrictions

This operation is used to remove user profile import domains that are not present in the specified list of domains.

```
<wsdl:operation name="CleanUnreferencedSiteRestrictions">
        <wsdl:input message="CleanUnreferencedSiteRestrictionsSoapIn"/>
        <wsdl:output message="CleanUnreferencedSiteRestrictionsSoapOut"/>
</wsdl:operation>
```

The protocol client sends a CleanUnreferencedSiteRestrictionsSoapIn request message and the protocol server responds with a CleanUnreferencedSiteRestrictionsSoapOut response message, as follows:

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

- The protocol server removes all user profile import domains from the user profile import projects that are not listed in one of the elements of the **domains** array element of the request message.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **CleanUnreferencedSiteRestrictionsResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.14.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.14.1.1   CleanUnreferencedSiteRestrictionsSoapIn

This is the request message for CleanUnreferencedSiteRestrictions operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CleanUnrefer
encedSiteRestrictions
```

The SOAP body contains a CleanUnreferencedSiteRestrictions element.

3.1.4.14.1.2   CleanUnreferencedSiteRestrictionsSoapOut

This is a response message for CleanUnreferencedSiteRestrictions operation.

Release: Tuesday, April 10, 2012

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/CleanUnrefer
encedSiteRestrictions
```

The SOAP body contains a CleanUnreferencedSiteRestrictionsResponse element.

3.1.4.14.2 Elements

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

3.1.4.14.2.1 CleanUnreferencedSiteRestrictions

The **CleanUnreferencedSiteRestrictions** element represents parameters for the CleanUnreferencedSiteRestrictions operation.

```
<s:element name="CleanUnreferencedSiteRestrictions">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="domains" type="tns:ArrayOfString" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

domains: An array of zero or more domain names for the user profile import domains to be kept. This element MUST be present. Each element in the array represents a single name of a user profile import domain. If the **domains** element is empty, that is the array does not have any element, the protocol server MUST remove all import domains from the user profile import project.

3.1.4.14.2.2 CleanUnreferencedSiteRestrictionsResponse

The **CleanUnreferencedSiteRestrictions** element represents the result of CleanUnreferencedSiteRestrictions operation.

```
<s:element name="CleanUnreferencedSiteRestrictionsResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="CleanUnreferencedSiteRestrictionsResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

CleanUnreferencedSiteRestrictionsResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.15 ClearExtensionList

This operation is used to empty the list of file extensions recognized by the index server.

```
<wsdl:operation name="ClearExtensionList">
        <wsdl:input message="ClearExtensionListSoapIn"/>
        <wsdl:output message="ClearExtensionListSoapOut"/>
</wsdl:operation>
```

The protocol client sends a ClearExtensionListSoapIn request message and the protocol server responds with a ClearExtensionListSoapOut response message, as follows:

- On receipt, the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

- The protocol server clears the extension property of the portal content project.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **ClearExtensionListResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.15.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.15.1.1   ClearExtensionListSoapIn

This is the request message for ClearExtensionList operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ClearExtensi
onList
```

The SOAP body contains a ClearExtensionList element.

3.1.4.15.1.2   ClearExtensionListSoapOut

This is a response message for ClearExtensionList operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ClearExtensi
onList
```

The SOAP body contains a ClearExtensionListResponse element.

3.1.4.15.2 Elements

3.1.4.15.2.1 ClearExtensionList

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

```
<s:element name="ClearExtensionList">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.15.2.2 ClearExtensionListResponse

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

```
<s:element name="ClearExtensionListResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ClearExtensionListResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ClearExtensionListResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.16 ConfigurePropagationShare

This operation is not used and MUST NOT be invoked.

3.1.4.17 DefaultInstallationIndexLocation

This operation is not used and MUST NOT be invoked.

3.1.4.18 DismountApp

This operation is used to dismount the crawler application. Dismounting of the crawler application means removing all state associated with the crawler application from the volatile memory, while preserving the persistent state.

```
<wsdl:operation name="DismountApp">
        <wsdl:input message="DismountAppSoapIn"/>
        <wsdl:output message="DismountAppSoapOut"/>
</wsdl:operation>
```

The protocol client sends a [DismountAppSoapIn](#) request message and the protocol server responds with a [DismountAppSoapOut](#) response message, as follows:

- If the **applicationName** element is not present in the request message or the crawler application with the name specified by the **applicationName** element does not exist, the protocol server MUST return an empty [DismountAppResponse](#) element.

- Otherwise, the protocol server removes the crawler application and all the objects it contains from the volatile memory. After that an empty DismountAppResponse element MUST be returned.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.18.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.18.1.1 DismountAppSoapIn

This is the request message for [DismountApp](#) operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/DismountApp
```

The SOAP body contains a [DismountApp](#) element.

3.1.4.18.1.2 DismountAppSoapOut

This is a response message for [DismountApp](#) operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/DismountApp
```

The SOAP body contains a [DismountAppResponse](#) element.

3.1.4.18.2 Elements

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

3.1.4.18.2.1 DismountApp

The **DismountApp** element represents parameters for [DismountApp](#) operation.

```
<s:element name="DismountApp">
  <s:complexType>
    <s:sequence>
      <s:element name="applicationName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
```

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

applicationName: The crawler application name. This element MUST be present.

3.1.4.18.2.2   DismountAppResponse

The **DismountAppResponse** element represents the result of [DismountApp](#) operation.

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

3.1.4.19   EditContentSource

This operation is used to edit the content source properties in the crawler application's portal content project.

```
<wsdl:operation name="EditContentSource">
        <wsdl:input message="EditContentSourceSoapIn"/>
        <wsdl:output message="EditContentSourceSoapOut"/>
</wsdl:operation>
```

The protocol client sends an [EditContentSourceSoapIn](#) request message and the protocol server responds with a [EditContentSourceSoapOut](#) response message, as follows:

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an [UpdatedConcurrencyException](#).

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- If the content source with the identifier specified in the **id** element in the request message does not exist, the protocol server MUST throw a SOAP fault message containing a [DeletedConcurrencyException](#).

- The protocol server MUST normalize each element of the **startAddress** array element from the request message as follows:

  - If the string is not a valid **URI** or UNC path, the protocol server MUST throw SOAP fault message containing **UriFormatException**.

  - Convert the scheme to lowercase.

  - Convert the host name to lowercase.

  - Remove the default and empty port numbers.

  - Remove all trailing '/' characters.

  - If the string represents a local path, the protocol server MUST throw a SOAP fault message containing a [COMException](#) with the **HRESULT** field set to 0x80040db2.

- If the scheme is http or https, convert to a URL escaped string.

- If the scheme is a file or the string is a UNC path then if the character '*' is present in the string, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d60.

- If the scheme is file, convert the string to a UNC path, and replace every '/' character with the '\' character.

- If the scheme is other than file, replace every '\' character with the '/' character.

- If there are any duplicate elements of the **startAddress** array element in the request message, the protocol server MUST throw a SOAP fault message containing an ArgumentException.

- If values of any of the elements of the **startAddress** array elements in the request message already exist as start addresses in another content source, and the **wssCrawlStyle** element of the request message is not 1, the protocol server MUST throw a SOAP fault message containing an ArgumentException with the *ParamName* parameter set to the duplicate value.

- If the **wssCrawlStyle** element in the request message is set to 0, but there is another content source with a **wssCrawlStyle** property of 1 that contains a start address with the same host name as the host name of one of the elements of the **startAddresses** array element in the request message, the protocol server MUST throw a SOAP fault message containing an ArgumentException with the *ParamName* parameter set to the value of the failing element of the **startAddresses** array element.

- The protocol server updates the content source's **name**, **wssCrawlStyle**, **metadata**, **followDirectories**, **startAddress**, **fullCrawlTrigger** and **incCrawlTrigger** properties to the values specified in the corresponding elements in the request message, the **pageDepth** property to the value specified in the **enumerationDepth** element in the request message, and the **siteDepth** property to the value specified in the **hostDepth** element in the request message.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **EditContentSourceResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.19.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.19.1.1 EditContentSourceSoapIn

This is a request message for EditContentSource operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/EditContentS
ource
```

The SOAP body contains an EditContentSource element.

3.1.4.19.1.2 EditContentSourceSoapOut

This is the response message for EditContentSource operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/EditContentS
ource
```

The SOAP body contains an EditContentSourceResponse element.

3.1.4.19.2 Elements

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

3.1.4.19.2.1 EditContentSource

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

```
<s:element name="EditContentSource">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="id" type="s:int"/>
      <s:element name="name" type="s:string" minOccurs="0"/>
      <s:element name="metadata" type="s:string" minOccurs="0"/>
      <s:element name="hostDepth" type="s:int"/>
      <s:element name="enumerationDepth" type="s:int"/>
      <s:element name="followDirectories" type="s:boolean"/>
      <s:element name="wssCrawlStyle" type="s:int"/>
      <s:element name="throttleStart" type="s:int"/>
      <s:element name="throttleDuration" type="s:int"/>
      <s:element name="startAddresses" type="tns:ArrayOfString" minOccurs="0"/>
      <s:element name="fullCrawlTrigger" type="s:base64Binary" minOccurs="0"/>
      <s:element name="incCrawlTrigger" type="s:base64Binary" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

id: The content source identifier. The identifier MUST be greater than 0.

name: The content source name. This element MUST be present. Length of the content source name MUST be greater than 0 characters, and less than or equal to 255 characters. The specified name MUST be unique among the content source names existing in the portal content project.

metadata: Arbitrary metadata associated by the protocol client with the content source.. If present, the length MUST be less than 1024 characters. The value of this property is ignored by the protocol server, but can be interpreted by the protocol client to associate arbitrary metadata with the content source collection.

hostDepth: The number of host hops allowed when crawling this content source. The value MUST be greater than or equal to 0. For unlimited host hops the number MUST be 2147483647.

enumerationDepth: The maximum number of page hops allowed when crawling this content source. The number MUST be greater than or equal to 0. For unlimited page hops the number MUST be 2147483647.

followDirectories: Determines how URLs are discovered during the crawl. If true, URLs are discovered through directory links; otherwise, URLs are discovered through links.

wssCrawlStyle: The scope of the start addresses. This property only applies to start addresses with URLs pointing to sites.

MUST be one of the following values:

Value	Meaning
0	All parts of Web applications should be crawled.
1	Only the specific sites pointed to by the start addresses are crawled – the crawl does not enumerate all sites within the Web application.

throttleStart: The protocol server updates the **throttleStart** property of the content source, but does not interpret its value. SHOULD be set to 0.

throttleDuration: The protocol server updates the **throttleDuration** property of the content source, but does not interpret its value. SHOULD be set to 0.

startAddresses: An array of zero or more start addresses. This element MUST be present. Each element of the **startAddresses** array element MUST contain a single URL or UNC path that corresponds to a start address.

fullCrawlTrigger: A trigger as defined in [MS-TSCH], section 2.4.2.11 Triggers for scheduling full crawls. If this element is present, the content of the element MUST be a Base64 encoded trigger structure. If this element is not present, the protocol server SHOULD NOT define a schedule for the full crawl.

incCrawlTrigger: A Trigger as defined in [MS-TSCH], section 2.4.2.11 Triggers for scheduling incremental crawls. If this element is present, the content of the element MUST be Base64 encoded trigger structure. If this element is not present, the protocol server SHOULD NOT define a schedule for the incremental crawl.

3.1.4.19.2.2 EditContentSourceResponse

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

```
<s:element name="EditContentSourceResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="EditContentSourceResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

EditContentSourceResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.20   GetContentSource

This operation is used to get the current user profile content source properties and last user profile import information from the crawler application's user profile import project.

```
<wsdl:operation name="GetContentSource">
        <wsdl:input message="GetContentSourceSoapIn"/>
        <wsdl:output message="GetContentSourceSoapOut"/>
</wsdl:operation>
```

The protocol client sends a GetContentSourceSoapIn request message and the protocol server responds with a GetContentSourceSoapOut response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server looks up a user profile content source by the name specified in the **contentSourceName** element of the request message. If the user profile content source does not exists, the protocol server MUST throw a SOAP fault message.

▪ On success, the protocol server return the settings and last user profile import information for the user profile content source in the **GetContentSourceResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.20.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.20.1.1   GetContentSourceSoapIn

This is the request message for GetContentSource operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetContentSo
urce
```

The SOAP body contains a GetContentSource element.

3.1.4.20.1.2   GetContentSourceSoapOut

This is a response message for GetContentSource operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetContentSo
urce
```

The SOAP body contains a GetContentSourceResponse element.

3.1.4.20.2 Elements

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

3.1.4.20.2.1 GetContentSource

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

```
<s:element name="GetContentSource">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="catalog" type="s:int"/>
      <s:element name="contentSourceName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

catalog: This element MUST contain the value 1.

contentSourceName: This element MUST be present and MUST contain either "PEOPLE_IMPORT" or "PEOPLE_DL_IMPORT".

3.1.4.20.2.2 GetContentSourceResponse

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

```
<s:element name="GetContentSourceResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetContentSourceResult" type="tns:ContentSourceInternal"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetContentSourceResult: This element MUST be present and MUST contain current user profile content source properties and last user profile import information, as specified in ContentSourceInternal.

3.1.4.21 GetContentSources

This operation is used to get information about all the content sources for the specified project of the crawler application.

```
<wsdl:operation name="GetContentSources">
        <wsdl:input message="GetContentSourcesSoapIn"/>
        <wsdl:output message="GetContentSourcesSoapOut"/>
</wsdl:operation>
```

The protocol client sends a GetContentSourcesSoapIn request message and the protocol server responds with a GetContentSourcesSoapOut response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server MUST obtain the properties of every content source in the project specified by **catalog** element in the request message.

▪ If the properties were successfully returned, the protocol server MUST return the properties of all content sources the **GetContentSourcesResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.21.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.21.1.1 GetContentSourcesSoapIn

This is the request message for GetContentSources operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetContentSo
urces
```

The SOAP body contains a GetContentSources element.

3.1.4.21.1.2 GetContentSourcesSoapOut

This is a response message for GetContentSources operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetContentSo
urces
```

The SOAP body contains a GetContentSourcesResponse element.

3.1.4.21.2 Elements

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

3.1.4.21.2.1 GetContentSources

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

```
<s:element name="GetContentSources">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="catalog" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

catalog: This element MUST contain a type of the project. MUST be one of the following values:

Value	Meaning
0	Portal content project
1	User profile import project

3.1.4.21.2.2 GetContentSourcesResponse

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

```
<s:element name="GetContentSourcesResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetContentSourcesResult" type="tns:ContentSourcesInternal"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetContentSourcesResult: All content sources for the catalog are specified in the request.

3.1.4.21.3 Complex Types

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

3.1.4.21.3.1 ContentSourcesInternal

The definition of the **ContentSourcesInternal** complex type is as follows:

```
<s:complexType name="ContentSourcesInternal">
  <s:sequence>
    <s:element name="contentSourcesInternal" type="tns:ArrayOfContentSourceInternal"
minOccurs="0"/>
    <s:element name="metadata" type="s:string" minOccurs="0"/>
  </s:sequence>
```

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

contentSourcesInternal: This element MUST be present and MUST contain properties of each content source.

metadata: Arbitrary metadata associated by the protocol client with the content source. If present, the length MUST be less than 1024 characters. The value of this property is ignored by the protocol server, but can be interpreted by the protocol client to associate arbitrary metadata with the content source collection.

3.1.4.21.3.2   ArrayOfContentSourceInternal

The **ArrayOfContentSourceInternal** complex type represents an array of elements of a size equal to the number of content sources present in the project. Each element MUST contain the properties for a content source.

The definition of the **ArrayOfContentSourceInternal** complex type is as follows:

```
<s:complexType name="ArrayOfContentSourceInternal">
  <s:sequence>
    <s:element name="ContentSourceInternal" type="tns:ContentSourceInternal" nillable="true"
minOccurs="0" maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
```

ContentSourceInternal: This element MUST be present and MUST NOT be null, and MUST contain a single content source's properties, according to the ContentSourceInternal common type.

3.1.4.22   GetContentState

This operation is used to retrieve the states and various properties of the crawler application and the portal content project.

```
<wsdl:operation name="GetContentState">
        <wsdl:input message="GetContentStateSoapIn"/>
        <wsdl:output message="GetContentStateSoapOut"/>
</wsdl:operation>
```

The protocol client sends a GetContentStateSoapIn request message and the protocol server responds with a GetContentStateSoapOut response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ On success, the protocol server MUST return the states and various properties of the crawler application and the portal content project in the **GetContentStateResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.22.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.22.1.1 GetContentStateSoapIn

This is the request message for **GetContentState** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetContentSt
ate
```

The SOAP body contains a [GetContentState](#) element.

3.1.4.22.1.2 GetContentStateSoapOut

This is a response message for **GetContentState** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetContentSt
ate
```

The SOAP body contains a [GetContentStateResponse](#) element.

3.1.4.22.2 Elements

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

3.1.4.22.2.1 GetContentState

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

```
<s:element name="GetContentState">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.22.2.2 GetContentStateResponse

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

```
<s:element name="GetContentStateResponse">
  <s:complexType>
```

```
  <s:sequence>
    <s:element name="GetContentStateResult" type="tns:ContentStateInternal" minOccurs="0"/>
  </s:sequence>
</s:complexType>
</s:element>
```

GetContentStateResult: Properties of the crawler application and the portal content project. This element MUST be present and MUST conform to the schema of the ContentStateInternal complex type.

3.1.4.22.3 Complex Types

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

3.1.4.22.3.1 ContentStateInternal

The definition of the **ContentStateInternal** type is as follows:

```
<s:complexType name="ContentStateInternal">
  <s:sequence>
    <s:element name="retryLimit" type="s:int"/>
    <s:element name="lotusNotesConfigured" type="s:boolean"/>
    <s:element name="defaultGatheringAccount" type="s:string" minOccurs="0"/>
    <s:element name="clientCertificateNames" type="tns:ArrayOfString" minOccurs="0"/>
    <s:element name="activeDocuments" type="tns:ArrayOfString" minOccurs="0"/>
    <s:element name="listKnownLotusNotesServers" type="tns:ArrayOfString" minOccurs="0"/>
  </s:sequence>
</s:complexType>
```

The purpose of the following properties is detailed in the Abstract Data Model (section 3.1.1.2):

retryLimit: The **retryLimit** property of the crawler application.

lotusNotesConfigured: The **lotusNotesConfigured** property of the crawler application.

defaultGatheringAccount: The **defaultCrawlingAccount** property of the crawler application. This element MUST be present.

clientCertificateNames: The **clientCertificateNames** property of the portal content project. This element MUST be present and MUST conform to the schema of the ArrayOfString complex type.

activeDocuments: The **activeDocuments** property of the portal content project. This element MUST be present and MUST conform to the schema of the ArrayOfString complex type.

listKnownLotusNotesServers: The **listKnownLotusNotesServers** property of the crawler application. If the **lotusNotesConfigured** property of the crawler application is true**,** this element MUST be present and MUST conform to the schema of the ArrayOfString complex type.

3.1.4.23 GetCrawlMappings

This method is used to retrieve all crawl mappings that exist in the portal content project.

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

Release: Tuesday, April 10, 2012

```
            <wsdl:input message="GetCrawlMappingsSoapIn"/>
            <wsdl:output message="GetCrawlMappingsSoapOut"/>
    </wsdl:operation>
```

The protocol client sends a GetCrawlMappingsSoapIn request message and the protocol server responds with a GetCrawlMappingsSoapOut response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ On success, the protocol server MUST return all crawl mappings existing in the portal content project in the **GetCrawlMappingsResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.23.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.23.1.1 GetCrawlMappingsSoapIn

This is the request message for **GetCrawlMappings** (section 3.1.4.23) operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetCrawlMapp
ings
```

The SOAP body contains a GetCrawlMappings element.

3.1.4.23.1.2 GetCrawlMappingsSoapOut

This is a response message for GetCrawlMappings operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetCrawlMapp
ings
```

The SOAP body contains a GetCrawlMappingsResponse element.

3.1.4.23.2 Elements

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

3.1.4.23.2.1 GetCrawlMappings

The **GetCrawlMappings** element represents the parameter for the GetCrawlMappings operation.

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

```
   <s:complexType>
     <s:sequence>
       <s:element name="versionIn" type="s:int"/>
     </s:sequence>
   </s:complexType>
 </s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.23.2.2 GetCrawlMappingsResponse

The **GetCrawlMappingsResponse** element represents results for the **GetCrawlMappings** operation.

```
 <s:element name="GetCrawlMappingsResponse">
   <s:complexType>
     <s:sequence>
       <s:element name="GetCrawlMappingsResult" type="tns:ArrayOfCrawlMappingInternal"
 minOccurs="0"/>
     </s:sequence>
   </s:complexType>
 </s:element>
```

GetCrawlMappingsResult: An array of crawl mappings. This element MUST be present.

3.1.4.23.3 Complex Types

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

3.1.4.23.3.1 ArrayOfCrawlMappingInternal

The **ArrayOfCrawlMappingInternal** complex type represents an array of zero or more elements, each containing a single crawl mapping. Each crawl mapping MUST be presented once.

```
 <s:complexType name="ArrayOfCrawlMappingInternal">
   <s:sequence>
     <s:element name="CrawlMappingInternal" type="tns:CrawlMappingInternal" nillable="true"
 minOccurs="0" maxOccurs="unbounded"/>
   </s:sequence>
 </s:complexType>
```

CrawlMappingInternal: A single crawl mapping. If present, this element MUST NOT be null.

3.1.4.23.3.2 CrawlMappingInternal

This element represents a crawl mapping.

```
 <s:complexType name="CrawlMappingInternal">
   <s:sequence>
     <s:element name="source" type="s:string" minOccurs="0"/>
     <s:element name="target" type="s:string" minOccurs="0"/>
```

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

source: An access URL prefix. This element MUST be present and its content MUST be less than 2048 characters in length.

target: A display URL prefix. This element MUST be present and its content MUST be less than 2048 characters in length.

3.1.4.24 GetCrawlRuleList

This operation is used to retrieve the portal content project's list of crawl rules.

```
<wsdl:operation name="GetCrawlRuleList">
        <wsdl:input message="GetCrawlRuleListSoapIn"/>
        <wsdl:output message="GetCrawlRuleListSoapOut"/>
</wsdl:operation>
```

The protocol client sends a GetCrawlRuleListSoapIn request message and the protocol server responds with a GetCrawlRuleListSoapOut response message, as follows:

On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- If the operation succeeds, the protocol server MUST return all crawl rules in the **GetCrawlRuleListResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.24.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.24.1.1 GetCrawlRuleListSoapIn

This is the request message for the GetCrawlRuleList operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetCrawlRule
List
```

The SOAP body contains a GetCrawlRuleList element.

3.1.4.24.1.2 GetCrawlRuleListSoapOut

This is a response message for the GetCrawlRuleList. operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetCrawlRule
List
```

The SOAP body contains a GetCrawlRuleListResponse element.

3.1.4.24.2   Elements

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

3.1.4.24.2.1   GetCrawlRuleList

This element represents parameters for GetCrawlRuleList operation.

```
<s:element name="GetCrawlRuleList">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.24.2.2   GetCrawlRuleListResponse

This element represents the result of GetCrawlRuleList operation.

```
<s:element name="GetCrawlRuleListResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetCrawlRuleListResult" type="tns:ArrayOfCrawlRuleInternal"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetCrawlRuleListResult: The list of crawl rules. This element MUST be present if there is at least one crawl rule.

3.1.4.24.3   Complex Types

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

3.1.4.24.3.1   ArrayOfCrawlRuleInternal

This complex type represents an ordered list of crawl rules with the ordering of the **CrawlRuleInternal** elements the same as the ordering of the crawl rules in the portal content project.

```
<s:complexType name="ArrayOfCrawlRuleInternal">
```

```
   <s:sequence>
     <s:element name="CrawlRuleInternal" type="tns:CrawlRuleInternal" nillable="true"
minOccurs="0" maxOccurs="unbounded"/>
   </s:sequence>
</s:complexType>
```

CrawlRuleInternal: The properties of a crawl rule. If present, this element MUST NOT be null.

3.1.4.25 GetExtensionList

This operation is used to retrieve the portal content project's list of file extensions.

```
<wsdl:operation name="GetExtensionList">
        <wsdl:input message="GetExtensionListSoapIn"/>
        <wsdl:output message="GetExtensionListSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server returns all file extensions from the portal content project's extension list in the **GetExtensionListResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.25.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.25.1.1 GetExtensionListSoapIn

This is the request message for **GetExtensionList** operation

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetExtension
List
```

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

3.1.4.25.1.2 GetExtensionListSoapOut

This is a response message for **GetExtensionList** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetExtension
List
```

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

3.1.4.25.2 Elements

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

3.1.4.25.2.1 GetExtensionList

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

```
<s:element name="GetExtensionList">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.25.2.2 GetExtensionListResponse

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

```
<s:element name="GetExtensionListResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetExtensionListResult" type="tns:ArrayOfString" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetExtensionListResult: An array of zero or more file extensions that the protocol server returns to the protocol client. This element MUST be present. Each element of the **GetExtensionListResult** array element MUST NOT be null and MUST contain one file extension**.**

3.1.4.26 GetGathererApplications

This operation is not used and MUST NOT be invoked.

3.1.4.27 GetImportAccounts

This operation is used to retrieve the default user profile import account and the user profile import accounts for all user profile import domains.

```
<wsdl:operation name="GetImportAccounts">
        <wsdl:input message="GetImportAccountsSoapIn"/>
```

```
            <wsdl:output message="GetImportAccountsSoapOut"/>
    </wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an <u>UpdatedConcurrencyException</u>.

- On success, the protocol server returns, in the **GetImportAccountsResult** element of the response message, a list of user profile import accounts for all user profile import domains along with three special accounts in the first, second, and last positions of the list. The first entry of the list MUST contain an account element with its value set to the default content access account and an empty domain element. The second entry of the list MUST contain an account element with its value set to the default user profile import account and an empty domain element. The last entry of the list MUST contain a domain element with its value set to the identifier of the SSP hosting the crawler application and an account element with its value set to the default user profile import account.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.27.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.27.1.1 GetImportAccountsSoapIn

This is the request message for **GetImportAccounts** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetImportAcc
ounts
```

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

3.1.4.27.1.2 GetImportAccountsSoapOut

This is a response message for **GetImportAccounts** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetImportAcc
ounts
```

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

3.1.4.27.2 Elements

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

3.1.4.27.2.1 GetImportAccounts

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

```
<s:element name="GetImportAccounts">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.27.2.2 GetImportAccountsResponse

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

```
<s:element name="GetImportAccountsResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetImportAccountsResult" type="tns:ArrayOfImportDomainAccount"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetImportAccountsResult: The user profile import accounts. This element MUST be present and MUST conform to the schema of the ArrayOfImportDomainAccount complex type.

3.1.4.27.3 Complex Types

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

3.1.4.27.3.1 ArrayOfImportDomainAccount

The definition of the **ArrayOfImportDomainAccount** type is as follows:

```
<s:complexType name="ArrayOfImportDomainAccount">
  <s:sequence>
    <s:element name="ImportDomainAccount" type="tns:ImportDomainAccount" nillable="true"
minOccurs="0" maxOccurs="unbounded"/>
  </s:sequence>
</s:complexType>
```

ImportDomainAccount: A user profile import account. If present, this element MUST conform to the schema of the ImportDomainAccount complex type.

3.1.4.27.3.2 ImportDomainAccount

The definition of the **ImportDomainAccount** type is as follows:

```
<s:complexType name="ImportDomainAccount">
  <s:sequence>
    <s:element name="domain" type="s:string" minOccurs="0"/>
    <s:element name="account" type="s:string" minOccurs="0"/>
  </s:sequence>
</s:complexType>
```

domain: The domain name of an user profile import domain. This element MUST be present.

account: The user profile import account for the user profile import domain. This element MUST be present.

3.1.4.28   GetImportStatus

This operation is used to retrieve the user profile import status of a user profile content source.

```
<wsdl:operation name="GetImportStatus">
        <wsdl:input message="GetImportStatusSoapIn"/>
        <wsdl:output message="GetImportStatusSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an <u>UpdatedConcurrencyException</u>.

▪ On success, the protocol server returns, in the **GetImportStatusResult** element of the response message, the user profile import status of the user profile content source specified by the **contentSourceName** element of the request message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.28.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.28.1.1   GetImportStatusSoapIn

This is the request message for **GetImportStatus** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetImportSta
tus
```

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

3.1.4.28.1.2   GetImportStatusSoapOut

This is a response message for **GetImportStatus** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetImportSta
tus
```

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

3.1.4.28.2 Elements

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

3.1.4.28.2.1 GetImportStatus

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

```
<s:element name="GetImportStatus">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSourceName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

contentSourceName: The user profile content source name for which to get the status. This element MUST be present. MUST be one of the following values:

Value	Meaning
PEOPLE_IMPORT	The user profile content source name.
PEOPLE_DL_IMPORT	The distribution list import content source name.

3.1.4.28.2.2 GetImportStatusResponse

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

```
<s:element name="GetImportStatusResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetImportStatusResult" type="tns:StartAddressDynamicPropsInternal"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetImportStatusResult: The user profile import status of a user profile content source. This element MUST be present and MUST conform to the schema of the StartAddressDynamicPropsInternal complex type.

3.1.4.28.3 Complex Types

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

3.1.4.28.3.1 StartAddressDynamicPropsInternal

The definition of the **StartAddressDynamicPropsInternal** type is as follows:

```
<s:complexType name="StartAddressDynamicPropsInternal">
  <s:sequence>
    <s:element name="lastCrawlType" type="s:int"/>
    <s:element name="crawlInProgressType" type="s:int"/>
    <s:element name="lastCrawlSeedStatus" type="s:int"/>
    <s:element name="lastCrawlErrorDescription" type="s:string" minOccurs="0"/>
  </s:sequence>
</s:complexType>
```

lastCrawlType: The type of the last user profile import. If 0, no user profile import has been performed on the user profile content source. If 1, the last user profile import was a full user profile import. If 2, the last user profile import was an incremental user profile import.

crawlInProgressType: The type of current user profile import. If 0, there is no profile import in progress. If 1, the current user profile import is a full user profile import. If 2, the current user profile import is an incremental user profile import.

lastCrawlSeedStatus: The crawl error code for the start address URL from the most recent crawl if the start address was not crawled successfully; otherwise, the value of this property will be 0.

lastCrawlErrorDescription: If present, the text description of the **lastCrawlSeedStatus**.

3.1.4.29 GetPropagationInternal

This operation is not used and MUST NOT be invoked.

3.1.4.30 GetSiteRestrictionList

This operation is not used and MUST NOT be invoked.

3.1.4.31 GetVersion

This operation is used to retrieve the configuration version of the crawler application.

```
<wsdl:operation name="GetVersion">
        <wsdl:input message="GetVersionSoapIn"/>
        <wsdl:output message="GetVersionSoapOut"/>
</wsdl:operation>
```

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

▪ On success, the protocol server MUST return the configuration version property of the crawler application in the **GetVersionResult** element in the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.31.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.31.1.1 GetVersionSoapIn

This is the request message for the **GetVersion** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetVersion
```

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

3.1.4.31.1.2 GetVersionSoapOut

This is a response message for the **GetVersion** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/GetVersion
```

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

3.1.4.31.2 Elements

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

3.1.4.31.2.1 GetVersion

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

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

3.1.4.31.2.2 GetVersionResponse

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

```
<s:element name="GetVersionResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="GetVersionResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

GetVersionResult: The updated configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.32 IndexSize

This operation is used to retrieve the size of the crawler application's full-text index catalog directory on disk for the host SSP of this operation.

```
<wsdl:operation name="IndexSize">
        <wsdl:input message="IndexSizeSoapIn"/>
        <wsdl:output message="IndexSizeSoapOut"/>
</wsdl:operation>
```

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

▪ If the full-text index catalog does not exist, the protocol server MUST return zero in the **IndexSizeResult** element of the response message.

▪ On success, the protocol server returns the size of the full-text index catalog, in bytes, in the **IndexSizeResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.32.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.32.1.1 IndexSizeSoapIn

This is the request message for **IndexSize** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IndexSize
```

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

3.1.4.32.1.2 IndexSizeSoapOut

This is a response message for **IndexSize** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IndexSize
```

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

3.1.4.32.2 Elements

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

3.1.4.32.2.1 IndexSize

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

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

3.1.4.32.2.2 IndexSizeResponse

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

```
<s:element name="IndexSizeResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="IndexSizeResult" type="s:long"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

IndexSizeResult: The size of the full-text index catalog in bytes.

3.1.4.33 IPAddress

This operation is not used and MUST NOT be invoked.

3.1.4.34 IsCatalogPauseCompleted

This operation is used to check if the action of pausing all crawls on the portal content project for the specified reason has been finished.

```
<wsdl:operation name="IsCatalogPauseCompleted">
        <wsdl:input message="IsCatalogPauseCompletedSoapIn"/>
        <wsdl:output message="IsCatalogPauseCompletedSoapOut"/>
</wsdl:operation>
```

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

- If the value of the crawl pause reason is successfully retrieved, the protocol server MUST return whether the **pauseReason** property on the **portal content project** contains the reason specified in the reason element of the request message in the **IsCatalogPauseCompletedResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.34.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.34.1.1 IsCatalogPauseCompletedSoapIn

This is the request message for **IsCatalogPauseCompleted** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IsCatalogPau
seCompleted
```

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

3.1.4.34.1.2 IsCatalogPauseCompletedSoapOut

This is a response message for **IsCatalogPauseCompleted** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IsCatalogPau
seCompleted
```

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

3.1.4.34.2 Elements

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

3.1.4.34.2.1 IsCatalogPauseCompleted

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

```
<s:element name="IsCatalogPauseCompleted">
  <s:complexType>
    <s:sequence>
      <s:element name="reason" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

reason: The reason for pausing all crawls. SHOULD be one of the following values:

Value	Meaning
4	Because of back-up/restore.
8	Because of query server initialization as described in [MS-CIPROP], section 3.

3.1.4.34.2.2 IsCatalogPauseCompletedResponse

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

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

```
   <s:complexType>
     <s:sequence>
       <s:element name="IsCatalogPauseCompletedResult" type="s:boolean"/>
     </s:sequence>
   </s:complexType>
</s:element>
```

IsCatalogPauseCompletedResult: If true, indicates the operation to pause all crawls for the given reason has been finished; otherwise false.

3.1.4.35 IsDeleteCrawlInProgress

This operation is used to check if a delete crawl in the crawler application is in progress.

```
<wsdl:operation name="IsDeleteCrawlInProgress">
        <wsdl:input message="IsDeleteCrawlInProgressSoapIn"/>
        <wsdl:output message="IsDeleteCrawlInProgressSoapOut"/>
</wsdl:operation>
```

The protocol client sends an **IsDeleteCrawlInProgressSoapIn** request message and the protocol server responds with a **IsDeleteCrawlInProgressSoapOut** response message, as follows:

▪ On success, the protocol server MUST return whether a delete crawl is in progress in the **IsDeleteCrawlInProgressResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.35.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.35.1.1 IsDeleteCrawlInProgressSoapIn

This is the request message for **IsDeleteCrawlInProgress** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IsDeleteCraw
lInProgress
```

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

3.1.4.35.1.2 IsDeleteCrawlInProgressSoapOut

This is a response message for **IsDeleteCrawlInProgress** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IsDeleteCraw
lInProgress
```

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

3.1.4.35.2 Elements

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

3.1.4.35.2.1 IsDeleteCrawlInProgress

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

```
<s:element name="IsDeleteCrawlInProgress">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.35.2.2 IsDeleteCrawlInProgressResponse

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

```
<s:element name="IsDeleteCrawlInProgressResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="IsDeleteCrawlInProgressResult" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

IsDeleteCrawlInProgressResult: If true, indicates that a delete crawl is in progress, otherwise false.

3.1.4.36 IsExtensionIncludeList

This operation is used to determine whether the file extensions list in the portal content project is an inclusion list or an exclusion list.

```
<wsdl:operation name="IsExtensionIncludeList">
        <wsdl:input message="IsExtensionIncludeListSoapIn"/>
        <wsdl:output message="IsExtensionIncludeListSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server returns the **IsExtensionIncludeListResult** property of the [portal content project](#) in the **IsExtensionIncludeListResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.36.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.36.1.1 IsExtensionIncludeListSoapIn

This is the request message for **IsExtensionIncludeList** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IsExtensionI
ncludeList
```

The SOAP body contains an IsExtensionIncludeList element.

3.1.4.36.1.2 IsExtensionIncludeListSoapOut

This is a response message for **IsExtensionIncludeList** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/IsExtensionI
ncludeList
```

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

3.1.4.36.2 Elements

3.1.4.36.2.1 IsExtensionIncludeList

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

```
<s:element name="IsExtensionIncludeList">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.36.2.2 IsExtensionIncludeListResponse

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

```
<s:element name="IsExtensionIncludeListResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="IsExtensionIncludeListResult" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

IsExtensionIncludeListResult: The type of the file extensions list. If true, the file extensions list is an exclusion list, otherwise, the file extensions list is an inclusion list.

3.1.4.37   IsMounted

This operation is not used and MUST NOT be invoked.

3.1.4.38   IsPropagationShareConfigured

This operation is not used and MUST NOT be invoked.

3.1.4.39   ListKnownLotusNotesDatabases

This operation is used to retrieve a list of known Lotus Notes database names for a given Lotus Notes server name.

```
<wsdl:operation name="ListKnownLotusNotesDatabases">
        <wsdl:input message="ListKnownLotusNotesDatabasesSoapIn"/>
        <wsdl:output message="ListKnownLotusNotesDatabasesSoapOut"/>
</wsdl:operation>
```

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

▪ If the **lotusNotesConfigured** property of the crawler application is not true, the protocol server MUST throw SOAP fault message containing InvalidOperationException.

▪ On success, the protocol server returns, in the **ListKnownLotusNotesDatabasesResult** element the response message, the known Lotus Notes database names for the Lotus Notes server name specified in the serverName element of the request message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.39.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.39.1.1   ListKnownLotusNotesDatabasesSoapIn

This is the request message for **ListKnownLotusNotesDatabases** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ListKnownLot
usNotesDatabases
```

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

3.1.4.39.1.2   ListKnownLotusNotesDatabasesSoapOut

This is a response message for **ListKnownLotusNotesDatabases** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ListKnownLot
usNotesDatabases
```

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

3.1.4.39.2   Elements

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

3.1.4.39.2.1   ListKnownLotusNotesDatabases

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

```
<s:element name="ListKnownLotusNotesDatabases">
  <s:complexType>
    <s:sequence>
      <s:element name="serverName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

serverName: Lotus Notes server name for which the Lotus Notes database names MUST be retrieved. This element MUST be present and MUST NOT be empty.

3.1.4.39.2.2   ListKnownLotusNotesDatabasesResponse

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

```
<s:element name="ListKnownLotusNotesDatabasesResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ListKnownLotusNotesDatabasesResult" type="tns:ArrayOfString"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ListKnownLotusNotesDatabasesResult: A list of Lotus Notes database names. This element MUST be present and MUST conform to the schema of ArrayOfString complex type.

3.1.4.40   MountApp

This operation is not used and MUST NOT be invoked.

3.1.4.41   PauseCrawl

This operation is used to pause a crawl of a content source of the portal content project.

```
<wsdl:operation name="PauseCrawl">
       <wsdl:input message="PauseCrawlSoapIn"/>
       <wsdl:output message="PauseCrawlSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ If there is no content source with the content source identifier specified by the **contentSource** element of the request message, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

▪ The protocol server MUST try to pause the crawl for the content source with the identifier specified in the **contentSource** element of the request message.

▪ If the crawl is in a state where it cannot be paused or is already paused, the protocol server MUST ignore the pause request and return the current crawl status in the **PauseCrawlResult** element the response message.

▪ On success, the protocol server MUST return the current crawl status in the **PauseCrawlResult** element the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.41.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.41.1.1   PauseCrawlSoapIn

This is the request message for **PauseCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/PauseCrawl
```

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

3.1.4.41.1.2   PauseCrawlSoapOut

This is a response message for **PauseCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/PauseCrawl
```

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

3.1.4.41.2 Elements

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

3.1.4.41.2.1 PauseCrawl

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

```
<s:element name="PauseCrawl">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSource" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

contentSource: The identifier of the content source for which to pause the crawl.

3.1.4.41.2.2 PauseCrawlResponse

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

```
<s:element name="PauseCrawlResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="PauseCrawlResult" type="tns:ContentSourceDynamicPropsInternal"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

PauseCrawlResult: The status of the most recent crawl. This element MUST be present and MUST conform to the schema of the ContentSourceDynamicPropsInternal complex type.

3.1.4.42 RefreshAnchorContentSource

This method is used to retrieve the current status of the anchor content source of the portal content project.

```
<wsdl:operation name="RefreshAnchorContentSource">
        <wsdl:input message="RefreshAnchorContentSourceSoapIn"/>
        <wsdl:output message="RefreshAnchorContentSourceSoapOut"/>
```

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

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an [UpdatedConcurrencyException](#).

▪ On success, the protocol server returns the current anchor content source status in the **RefreshAnchorContentSourceResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.42.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.42.1.1   RefreshAnchorContentSourceSoapIn

This is the request message for **RefreshAnchorContentSource** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RefreshAnchorContentSource
```

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

3.1.4.42.1.2   RefreshAnchorContentSourceSoapOut

This is a response message for **RefreshAnchorContentSource** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RefreshAnchorContentSource
```

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

3.1.4.42.2 Elements

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

3.1.4.42.2.1   RefreshAnchorContentSource

The **RefreshAnchorContentSource** element represents parameters for the **RefreshAnchorContentSource** operation.

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

```
   <s:complexType>
     <s:sequence>
       <s:element name="versionIn" type="s:int"/>
     </s:sequence>
   </s:complexType>
 </s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.42.2.2   RefreshAnchorContentSourceResponse

The **RefreshAnchorContentSourceResponse** element represents the result of the **RefreshAnchorContentSource** operation.

```
<s:element name="RefreshAnchorContentSourceResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RefreshAnchorContentSourceResult"
type="tns:ContentSourceDynamicPropsInternal" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

RefreshAnchorContentSourceResult: The status of the anchor content source. This element MUST be present and MUST conform to the schema of the ContentSourceDynamicPropsInternal complex type. The errorCount element in the **ContentSourceDynamicPropsInternal** element of the **RefreshAnchorContentSourceResult** element MUST contain 0. The element **crawlSuccesses** MUST contain 0.

3.1.4.43   RefreshContentSource

This operation is used to retrieve the current status of a content source from the portal content project.

```
<wsdl:operation name="RefreshContentSource">
        <wsdl:input message="RefreshContentSourceSoapIn"/>
        <wsdl:output message="RefreshContentSourceSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ If the content source specified by the identifier in the request message does not exist in the portal content project, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

- On success, the protocol server MUST return current content source status in the **RefreshContentSourceResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.43.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.43.1.1   RefreshContentSourceSoapIn

This is the request message for **RefreshContentSource** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RefreshConte
ntSource
```

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

3.1.4.43.1.2   RefreshContentSourceSoapOut

This is a response message for **RefreshContentSource** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RefreshConte
ntSource
```

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

3.1.4.43.2   Elements

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

3.1.4.43.2.1   RefreshContentSource

The **RefreshContentSource** element represents parameters for the **RefreshContentSource** operation.

```
<s:element name="RefreshContentSource">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="id" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

id: The content source identifier. MUST be greater than 0.

3.1.4.43.2.2   RefreshContentSourceResponse

The **RefreshContentSourceResponse** element represents the result of the
RefreshContentSource operation.

```
<s:element name="RefreshContentSourceResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RefreshContentSourceResult"
type="tns:ContentSourceDynamicPropsInternal" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

RefreshContentSourceResult: The status of the content source. This element MUST be present
and MUST conform to the schema of the ContentSourceDynamicPropsInternal complex type.

3.1.4.44   RemoveAllGathererApplications

This operation is not used and MUST NOT be invoked.

3.1.4.45   RemoveApp

This operation is used to remove a crawler application and the full-text index catalog belonging to it.

```
<wsdl:operation name="RemoveApp">
        <wsdl:input message="RemoveAppSoapIn"/>
        <wsdl:output message="RemoveAppSoapOut"/>
</wsdl:operation>
```

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

- If a crawler application with the name specified by the applicationName element of the request
  message exists, the protocol server MUST remove the application, all the objects contained
  within the application, and the full-text index catalog belonging to the application.

- If the specified application is absent, the protocol server SHOULD NOT consider the absence a
  failure and SHOULD continue.

- If a folder exists at the location specified by the path resulting from combining the
  indexLocation element of the request message and the **applicationName** element of the
  request message, the protocol server MUST remove the folder as well.

- If the specified folder is absent, the server SHOULD NOT consider the absence a failure and
  SHOULD continue.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.45.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.45.1.1 RemoveAppSoapIn

This is the request message for **RemoveApp** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveApp
```

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

3.1.4.45.1.2 RemoveAppSoapOut

This is a response message for **RemoveApp** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveApp
```

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

3.1.4.45.2 Elements

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

3.1.4.45.2.1 RemoveApp

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

```
<s:element name="RemoveApp">
  <s:complexType>
    <s:sequence>
      <s:element name="applicationName" type="s:string" minOccurs="0"/>
      <s:element name="indexLocation" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

applicationName: Name of the crawler application. This element MUST be present.

indexLocation: The path to the folder to be removed on the index server. This element MUST be present.

3.1.4.45.2.2 RemoveAppResponse

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

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

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

3.1.4.46 RemoveContentSource

This operation is used to remove a content source from the portal content project in the crawler application.

```
<wsdl:operation name="RemoveContentSource">
        <wsdl:input message="RemoveContentSourceSoapIn"/>
        <wsdl:output message="RemoveContentSourceSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

- The protocol server MUST look up a content source by the identifier specified in the **id** element in the request message. If the content source does not exist, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

- The protocol server removes the content source.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **RemoveContentSourceResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.46.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.46.1.1 RemoveContentSourceSoapIn

This is the request message for removing **RemoveContentSource** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveConten
tSource
```

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

3.1.4.46.1.2 RemoveContentSourceSoapOut

This is a response message for **RemoveContentSource** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveConten
tSource
```

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

3.1.4.46.2   Elements

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

3.1.4.46.2.1   RemoveContentSource

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

```
<s:element name="RemoveContentSource">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="catalog" type="s:int"/>
      <s:element name="id" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

catalog: This element MUST contain the value 0.

id: This element MUST contain the content source identifier. The identifier MUST be greater than 0.

3.1.4.46.2.2   RemoveContentSourceResponse

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

```
<s:element name="RemoveContentSourceResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RemoveContentSourceResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

RemoveContentSourceResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.47   RemoveCrawlMapping

This method is used to remove a crawl mapping from the portal content project.

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

```
        <wsdl:input message="RemoveCrawlMappingSoapIn"/>
        <wsdl:output message="RemoveCrawlMappingSoapOut"/>
    </wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

▪ If no crawl mapping can be found which has an access URL matching the source element in the request message, the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d06.

▪ If the crawl mapping exists, the protocol server MUST remove the crawl mapping from the portal content project.

▪ On success, the protocol server MUST return the updated configuration version of the crawler application in the **RemoveCrawlMappingResult** element in the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.47.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.47.1.1   RemoveCrawlMappingSoapIn

This is the request message for **RemoveCrawlMapping** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveCrawlM
apping
```

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

3.1.4.47.1.2   RemoveCrawlMappingSoapOut

This is a response message for **RemoveCrawlMapping** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveCrawlM
apping
```

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

3.1.4.47.2 Elements

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

3.1.4.47.2.1 RemoveCrawlMapping

The **RemoveCrawlMapping** element represents parameters for the **RemoveCrawlMapping** operation.

```
<s:element name="RemoveCrawlMapping">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="source" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

source: The access URL prefix. This element MUST be present and its content MUST be less than 2048 characters in length. It MUST match an access URL of an existing crawl mapping.

3.1.4.47.2.2 RemoveCrawlMappingResponse

The **RemoveCrawlMappingResult** element represents the result of the **RemoveCrawlMapping** operation.

```
<s:element name="RemoveCrawlMappingResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RemoveCrawlMappingResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

RemoveCrawlMappingResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.48 RemoveCrawlRule

This operation removes a crawl rule from the portal content project.

```
<wsdl:operation name="RemoveCrawlRule">
        <wsdl:input message="RemoveCrawlRuleSoapIn"/>
        <wsdl:output message="RemoveCrawlRuleSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server MUST normalize the **path** element of the request message the same way it normalizes the **path** element of the ActivateCrawlRule operation request message.

- Then, the protocol server MUST try to find an exact match for the crawl rule in the crawl rules collection of the portal content project by the normalized path.

- If the crawl rule is not found the protocol server MUST throw a SOAP fault message containing a COMException with the **HRESULT** field set to 0x80040d06.

- If the crawl rule is found, the protocol server MUST remove the crawl rule from the portal content project.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **RemoveCrawlRuleResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.48.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.48.1.1 RemoveCrawlRuleSoapIn

This is the request message for the **RemoveCrawlRule** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveCrawlR
ule
```

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

3.1.4.48.1.2 RemoveCrawlRuleSoapOut

This is a response message for the **RemoveCrawlRule** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveCrawlR
ule
```

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

3.1.4.48.2 Elements

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

3.1.4.48.2.1 RemoveCrawlRule

The **RemoveCrawlRule** element contains the parameters for the **RemoveCrawlRule** operation.

```
<s:element name="RemoveCrawlRule">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

path: The path expression of the crawl rule which MUST be present and MUST have a length greater than 0 and less than 2048 characters.

3.1.4.48.2.2 RemoveCrawlRuleResponse

The **RemoveCrawlRuleResponse** element contains the result of the **RemoveCrawlRule** operation.

```
<s:element name="RemoveCrawlRuleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RemoveCrawlRuleResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

RemoveCrawlRuleResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.49 RemoveExtension

This operation is used to remove a file extension from the *extensions* list defined for the portal content project.

```
<wsdl:operation name="RemoveExtension">
        <wsdl:input message="RemoveExtensionSoapIn"/>
        <wsdl:output message="RemoveExtensionSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- If the file extension specified by ext element in the request message does not exist in the list, the protocol server MUST send a SOAP fault message containing a [COMException](#) with **HRESULT** field set to 0x80040d06.

- The protocol server removes a file extension specified by the **ext** element in the request message from extension list property of the portal content project.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **RemoveExtensionResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.49.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.49.1.1 RemoveExtensionSoapIn

This is the request message for **RemoveExtension** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveExtension
```

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

3.1.4.49.1.2 RemoveExtensionSoapOut

This is a response message for **RemoveExtension** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/RemoveExtension
```

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

3.1.4.49.2 Elements

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

3.1.4.49.2.1 RemoveExtension

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

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

```
          <s:element name="versionIn" type="s:int"/>
          <s:element name="ext" type="s:string" minOccurs="0"/>
        </s:sequence>
      </s:complexType>
    </s:element>
```

versionIn: The configuration version of the crawler application. This element MUST be present and MUST contain a value greater than or equal to zero.

ext: file extension . MUST be present. Length MUST be greater than 0 and less than 16 characters.

3.1.4.49.2.2   RemoveExtensionResponse

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

```
<s:element name="RemoveExtensionResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="RemoveExtensionResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

RemoveExtensionResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to 0.

3.1.4.50   RemoveQueryServer

This operation is not used and MUST NOT be invoked.

3.1.4.51   RemoveSitePath

This operation is not used and MUST NOT be invoked.

3.1.4.52   RemoveSiteRestriction

This operation is not used and MUST NOT be invoked.

3.1.4.53   ResetApp

This operation is used to reset the existing crawler application that is not dismounted on the index server. Any state acquired by the crawler application during previously conducted crawls, as well as all the full-text index catalog will get removed.

```
<wsdl:operation name="ResetApp">
        <wsdl:input message="ResetAppSoapIn"/>
        <wsdl:output message="ResetAppSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an <u>UpdatedConcurrencyException</u>.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- Then, the protocol server removes all data acquired during all crawls within the crawler application.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **ResetAppResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.53.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.53.1.1 ResetAppSoapIn

This is the request message for **ResetApp** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ResetApp
```

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

3.1.4.53.1.2 ResetAppSoapOut

This is a response message for **ResetApp** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ResetApp
```

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

3.1.4.53.2 Elements

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

3.1.4.53.2.1 ResetApp

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

```
<s:element name="ResetApp">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
    </s:sequence>
```

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

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.53.2.2 ResetAppResponse

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

```
<s:element name="ResetAppResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ResetAppResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ResetAppResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.54 ResumeCrawl

This operation is used to resume a crawl of a content source of the portal content project.

```
<wsdl:operation name="ResumeCrawl">
        <wsdl:input message="ResumeCrawlSoapIn"/>
        <wsdl:output message="ResumeCrawlSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- If there is no content source with the identifier specified in the **contentSource** element of the request message, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

- The protocol server MUST try to resume a crawl for the content source with the identifier specified in the **contentSource** element of the request message.

- If the crawl is in a state where it cannot be resumed or is already resumed, the protocol server MUST ignore the resume request and return the current crawl status in the **ResumeCrawlResult** element the response message.

- On success, the protocol server MUST return the current crawl status in the **ResumeCrawlResult** element the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.54.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.54.1.1   ResumeCrawlSoapIn

This is the request message for **ResumeCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ResumeCrawl
```

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

3.1.4.54.1.2   ResumeCrawlSoapOut

This is a response message for **ResumeCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ResumeCrawl
```

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

3.1.4.54.2   Elements

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

3.1.4.54.2.1   ResumeCrawl

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

```
<s:element name="ResumeCrawl">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSource" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

contentSource: The identifier of the content source for which to resume the crawl.

3.1.4.54.2.2   ResumeCrawlResponse

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

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

```
   <s:complexType>
     <s:sequence>
       <s:element name="ResumeCrawlResult" type="tns:ContentSourceDynamicPropsInternal"
 minOccurs="0"/>
     </s:sequence>
   </s:complexType>
 </s:element>
```

ResumeCrawlResult: The status of the most recent crawl. This element MUST be present and MUST conform to the schema of <u>ContentSourceDynamicPropsInternal</u> complex type.

3.1.4.55 SearchDatabaseCleanup

This operation is used to enable or disable the search database clean up step during service startup. Clean up step SHOULD include operations for optimization of the search database such as deleting unused data, and so on. The complete list of these operations is up to the protocol server implementation.

```
 <wsdl:operation name="SearchDatabaseCleanup">
        <wsdl:input message="SearchDatabaseCleanupSoapIn"/>
        <wsdl:output message="SearchDatabaseCleanupSoapOut"/>
 </wsdl:operation>
```

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

- The protocol server MUST enable or disable search database clean up according to the value of the enable element of the request message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.55.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.55.1.1 SearchDatabaseCleanupSoapIn

This is the request message for **SearchDatabaseCleanup** operation.

The SOAP action value of the message is defined as:

```
 http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SearchDataba
 seCleanup
```

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

3.1.4.55.1.2 SearchDatabaseCleanupSoapOut

This is a response message for **SearchDatabaseCleanup** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SearchDataba
seCleanup
```

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

3.1.4.55.2   Elements

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

3.1.4.55.2.1   SearchDatabaseCleanup

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

```
<s:element name="SearchDatabaseCleanup">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="enable" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

enable: If true, indicates the search database clean up step during service startup is enabled, otherwise disabled.

3.1.4.55.2.2   SearchDatabaseCleanupResponse

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

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

3.1.4.56   SetContentSourcesMetadata

This operation is used to set the metadata property associated with the portal content project. This metadata string in intended for protocol client use only, the protocol server just stores it without interpreting. Once set, metadata string can be obtained by calling GetContentSources operation.

```
<wsdl:operation name="SetContentSourcesMetadata">
        <wsdl:input message="SetContentSourcesMetadataSoapIn"/>
        <wsdl:output message="SetContentSourcesMetadataSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an [UpdatedConcurrencyException](#).

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server sets the **contentSourcesMetadata** property of the [portal content project](#) with the metadata value specified in the request message.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetContentSourcesMetadataResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.56.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.56.1.1 SetContentSourcesMetadataSoapIn

This is the request message for **SetContentSources** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetContentSo
urcesMetadata
```

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

3.1.4.56.1.2 SetContentSourcesMetadataSoapOut

This is a response message for **SetContentSources** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetContentSo
urcesMetadata
```

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

3.1.4.56.2 Elements

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

3.1.4.56.2.1 SetContentSourcesMetadata

The **SetContentSourcesMetadata** element represents parameters for the **SetContentSourcesMetadata** operation.

```
<s:element name="SetContentSourcesMetadata">
  <s:complexType>
```

```
   <s:sequence>
     <s:element name="versionIn" type="s:int"/>
     <s:element name="metadata" type="s:string" minOccurs="0"/>
   </s:sequence>
 </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

metadata: : Arbitrary metadata associated by the protocol client with the content source. If present, the length MUST be less than 1024 characters. The value of this property is ignored by the protocol server, but can be interpreted by the protocol client to associate arbitrary metadata with the content source collection.

3.1.4.56.2.2   SetContentSourcesMetadataResponse

The **SetContentSourcesMetadataResponse** element represents the result for the **SetContentSourcesMetadata** operation.

```
<s:element name="SetContentSourcesMetadataResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetContentSourcesMetadataResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetContentSourcesMetadataResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.57   SetCrawlRuleCredentials

This operation is used to configure the authentication method and crawl account for a crawl rule.

```
<wsdl:operation name="SetCrawlRuleCredentials">
      <wsdl:input message="SetCrawlRuleCredentialsSoapIn"/>
      <wsdl:output message="SetCrawlRuleCredentialsSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

▪ The protocol server MUST normalize the path element of the request message the same way it normalizes the path element of the ActivateCrawlRule operation request message

- If there is no crawl rule in the crawl rule collection which has a URL equal to the normalized path, the protocol server MUST throw SOAP fault message containing DeletedConcurrencyException.

- The protocol server updates the **authType** property of the crawl rule from the corresponding parameter of the method.

  - If the **authType** is 0, the protocol server MUST set the **accountName** property of the crawl rule to empty string, and the **password** property of the crawl rule to an empty string.

  - If the **authType** is 1, the protocol server MUST set the **accountName** property of the crawl rule to the value of **authString1**, and the **password** property of the crawl rule to the value of **authString2**. The protocol server MUST validate the correctness of the credentials on the index server. If credentials are invalid, the protocol server MUST throw SOAP fault message containing a COMException.

  - If the authType is 2, the protocol server MUST set the **accountName** property of the crawl rule to the value of **authString1** element, and the **password** property of the crawl rule to the value of **authString2** element.

  - If the authType is 3, the protocol server MUST set the **certificateName** property of the crawl rule to the value of **authString1** element.

  - If the authType is 4, the protocol server MUST set the **password** property of the crawl rule to the value of the **authString1** element. Then, the protocol server MUST extract and sets the **authUrl**, **authData**, **authMethod** and **miscData** properties of the crawl rule from the value of the **authString2** element.

  - If the **authType** is 5, the protocol server MUST set the **cookieName** property of the crawl rule to the value of the **authString1** element, and sets the **miscData** property of the crawl rule to the value of the **authString2** element.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetCrawlRuleCredentialsResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.57.1   Messages

The following WSDL message definitions are specific to this operation.

3.1.4.57.1.1   SetCrawlRuleCredentialsSoapIn

This is the request message for **SetCrawlRuleCredentials** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetCrawlRule
Credentials
```

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

3.1.4.57.1.2   SetCrawlRuleCredentialsSoapOut

This is a response message for **SetCrawlRuleCredentials** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetCrawlRule
Credentials
```

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

3.1.4.57.2   Elements

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

3.1.4.57.2.1   SetCrawlRuleCredentials

The **SetCrawlRuleCredentials** element represents the parameters for the
SetCrawlRuleCredentials operation.

```
<s:element name="SetCrawlRuleCredentials">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
      <s:element name="authType" type="s:int"/>
      <s:element name="authString1" type="s:string" minOccurs="0"/>
      <s:element name="authString2" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value
greater than or equal to zero.

path The path expression corresponding to the URL of the crawl rule. MUST be present and length
MUST be greater than 0 and less than 2048 characters. It MUST correspond to a path of a crawl
rule in the crawler application's crawl rule collection.

authType: The type of the authentication to access matching URLs. MUST have one of the following
values:

Value	Meaning
0	Default access
1	Integrated Windows authentication
2	Basic authentication
3	Authentication using certificates
4	Forms authentication
5	Cookie based authentication

Default access implies integrated authentication using credentials of the default crawl account for
the crawler application.

authString1:

▪ If **authType** is 0, the protocol server MUST ignore this element.

▪ If **authType** is 1 or 2, the value of the element represents the user name, and the length MUST be less than 256 characters.

▪ If **authType** is 3, this element represents a certificate name.

▪ If **authType** is 4, this element represents the portion of the forms authentication request data that MUST be stored securely by the protocol server.

▪ If **authType** is 5, this element represents the cookie for the cookie based authentication.

authString2:

▪ If **authType** is 0 or 3, the protocol server MUST ignore this element.

▪ If **authType** is 1 or 2, this element represents the password for the account specified in **authString1**.

▪ If **authType** is 4, this element contains the information corresponding to **authUrl**, **authData**, **miscData**, and **authMethod** properties of the of the crawl rule used for forms authentication in the format specified in the following table:

Property	Format
authString2	auth_url_and_method ";" requestParams ";"error_pages
auth_url_and_method	method_flag requestUrl
method_flag	"" / "p$" / "g$" / "P$" / "G$"
error_pages	*(errorPage ";")

▪ **requestUrl** corresponds to the **authUrl** property of the of the crawl rule.

▪ **requestParams** corresponds to the **authData** property of the of the crawl rule.

▪ **error_pages** corresponds to the **miscData** property of the of the crawl rule.

▪ Empty, "p$", and "P$" method_flag values correspond to a HTTP POST **authMethod** property of the of the crawl rule.

▪ "g$", and "G$" method_flag values correspond to a HTTP GET **authMethod** property of the of the crawl rule.

▪ To perform forms authentication, the protocol server sends request data (format: requestParams "&" authString1) to the resource located at **requestUrl** using either HTTP GET or HTTP POST depending on the value of method_flag.

The following example illustrates the format of this element:

```
g$http://www.contoso.com:56737/login.aspx;<requestParams>;<errorPage1>;<errorPage2>
```

If **authType** is 5, this element represents a list of error pages URLs in the format specified in the following table:

Property	Format
authString2	";;" error_pages
error_pages	*(errorPage ";")

The following example illustrates the format of this element:

```
;;<errorPage1>;<errorPage2>
```

3.1.4.57.2.2   SetCrawlRuleCredentialsResponse

The **SetCrawlRuleCredentialsResponse** element represents the result of the **SetCrawlRuleCredentials** operation.

```
<s:element name="SetCrawlRuleCredentialsResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetCrawlRuleCredentialsResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetCrawlRuleCredentialsResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.58   SetCrawlRulePriority

This operation is used to modify the order of the crawl rules in the ordered collection of the crawl rules in the portal content project.

```
<wsdl:operation name="SetCrawlRulePriority">
        <wsdl:input message="SetCrawlRulePrioritySoapIn"/>
        <wsdl:output message="SetCrawlRulePrioritySoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.

- If the **currentPriority** is the same as the **newPriority**, the protocol server MUST return the updated configuration version of the crawler application in the **SetCrawlRulePriorityResult** element in the response message.

- If the priorities are different, the protocol server MUST try to find a match for the **path** element's value against the crawl rules in the crawl rules collection of the portal content project.

- If no matching crawl rule is found the protocol server MUST throw a SOAP fault message containing a [COMException](#) with the HRESULT field set to 0x80040d06.

- If the crawl rule is found, the protocol server moves the crawl rule to the position computed by adding the value obtained by subtracting **currentPriority** from **newPriority** to the current index of the crawl rule.

  - If the new index is greater than the size of the collection, the crawl rule MUST be inserted last.

  - If the new index is less than 0 the crawl rule MUST be inserted at the first position.

  - Otherwise, the crawl rule MUST be inserted at the new index position in the crawl rules collection.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetCrawlRulePriorityResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.58.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.58.1.1 SetCrawlRulePrioritySoapIn

This is the request message for the **SetCrawlRulePriority** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetCrawlRule
Priority
```

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

3.1.4.58.1.2 SetCrawlRulePrioritySoapOut

This is a response message for the **SetCrawlRulePriority** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetCrawlRule
Priority
```

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

3.1.4.58.2 Elements

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

3.1.4.58.2.1 SetCrawlRulePriority

The **SetCrawlRulePriority** element contains parameters of the **SetCrawlRulePriority** operation.

```
<s:element name="SetCrawlRulePriority">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
      <s:element name="currentPriority" type="s:int"/>
      <s:element name="newPriority" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

path: The path expression corresponding to the URL of the crawl rule. MUST be present and MUST have length between 0 and 2048.

currentPriority: Any value. The difference between the **newPriority** element and the **currentPriority** element is used as an offset to the current position of the crawl rule to modify its priority.

newPriority: Any value. The difference between the **newPriority** element and the **currentPriority** element is used as an offset to the current position of the crawl rule to modify its priority.

3.1.4.58.2.2 SetCrawlRulePriorityResponse

The **SetCrawlRulePriorityResponse** element contains the result of the **SetCrawlRulePriority** operation.

```
<s:element name="SetCrawlRulePriorityResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetCrawlRulePriorityResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetCrawlRulePriorityResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.59 SetDefaultGatheringAccount

This operation is used to set the default crawl account for the crawler application.

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

```
            <wsdl:input message="SetDefaultGatheringAccountSoapIn"/>
            <wsdl:output message="SetDefaultGatheringAccountSoapOut"/>
    </wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

▪ If the value of the account element in the request message is NULL or empty, the protocol server MUST set the **defaultCrawlingAccount** properties of the crawler application to empty. The protocol server then MUST use the **search service account** as the default crawl account.

▪ If the value of the account element in the request message is not a valid user name or if an user with such a name does not exist, the protocol server MUST throw a **SOAP fault** message containing a COMException.

▪ If the value of the password element in the request message is not the correct password for the non-NULL and non-empty value of the account element in the request message, the protocol server MUST throw SOAP fault message containing a COMException.

▪ Otherwise, the protocol server sets the **defaultCrawlingAccount** and **defaultCrawlingAccountPassword** properties of the crawler application to the account and password values from the request message respectively.

▪ On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetDefaultGatheringAccountResult** element in the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.59.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.59.1.1 SetDefaultGatheringAccountSoapIn

This is the request message for **SetDefaultGatheringAccount** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetDefaultGa
theringAccount
```

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

3.1.4.59.1.2 SetDefaultGatheringAccountSoapOut

This is a response message for **SetDefaultGatheringAccount** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetDefaultGa
theringAccount
```

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

3.1.4.59.2 Elements

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

3.1.4.59.2.1 SetDefaultGatheringAccount

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

```
<s:element name="SetDefaultGatheringAccount">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="account" type="s:string" minOccurs="0"/>
      <s:element name="password" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

account: The user name. This element MUST be present, and the length MUST be less than 256 characters.

password: The password for the account. This element MUST be present.

3.1.4.59.2.2 SetDefaultGatheringAccountResponse

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

```
<s:element name="SetDefaultGatheringAccountResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetDefaultGatheringAccountResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetDefaultGatheringAccountResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.60 SetDefaultImportAccount

This operation is used to set the default user profile import account for the user profile import project.

```
<wsdl:operation name="SetDefaultImportAccount">
        <wsdl:input message="SetDefaultImportAccountSoapIn"/>
        <wsdl:output message="SetDefaultImportAccountSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

- If the value of the **userID** element in the request message is NULL or empty, the protocol server MUST set both the **defaultAccountName** and **defaultAccountPassword** properties of the user profile import project to empty and will use **anonymous authentication** during the user profile import.

- Otherwise, the protocol server sets the **defaultAccountName** and **defaultAccountPassword** properties of the user profile import project to the userID and password values from the request message respectively.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetDefaultImportAccountResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.60.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.60.1.1 SetDefaultImportAccountSoapIn

This is the request message for **SetDefaultImportAccount** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetDefaultImportAccount
```

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

3.1.4.60.1.2 SetDefaultImportAccountSoapOut

This is a response message for **SetDefaultImportAccount** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetDefaultImportAccount
```

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

3.1.4.60.2 Elements

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

3.1.4.60.2.1 SetDefaultImportAccount

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

```
<s:element name="SetDefaultImportAccount">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="userID" type="s:string" minOccurs="0"/>
      <s:element name="password" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

userID: The user name used for authenticating the index server during the user profile import. This element MUST be present.

password: The default user profile import account password. This element MUST be present.

3.1.4.60.2.2 SetDefaultImportAccountResponse

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

```
<s:element name="SetDefaultImportAccountResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetDefaultImportAccountResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetDefaultImportAccountResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.61 SetImportAccount

This operation is used to set the user profile import account of a user profile import domain for the user profile import project.

```
<wsdl:operation name="SetImportAccount">
        <wsdl:input message="SetImportAccountSoapIn"/>
        <wsdl:output message="SetImportAccountSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

▪ If the import domain specified by the **domain** element of the request message does not exist in the user profile import project, the protocol server MUST create it first.

▪ If the value of the **userID** element in the request message is NULL or empty, the protocol server sets both the **accountName** and **accountPassword** properties of the user profile import domain specified by the domain element of the request message to NULL and will use anonymous authentication during the user profile import of that user profile import domain.

▪ Otherwise, the protocol server sets the **accountName** and **accountPassword** properties of the user profile import domain specified by the domain element of the request message to the **userID** and **password** element values of the request message respectively.

▪ On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetImportAccountResult** element in the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.61.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.61.1.1 SetImportAccountSoapIn

This is the request message for **SetImportAccount** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetImportAcc
ount
```

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

3.1.4.61.1.2 SetImportAccountSoapOut

This is a response message for **SetImportAccount** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetImportAcc
ount
```

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

3.1.4.61.2   Elements

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

3.1.4.61.2.1   SetImportAccount

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

```
<s:element name="SetImportAccount">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="domain" type="s:string" minOccurs="0"/>
      <s:element name="userID" type="s:string" minOccurs="0"/>
      <s:element name="password" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

domain: The domain name for which to set the user profile import account. This element MUST be present.

userID: The user name used for authentication of the index server during the user profile import. This element MUST be present.

password: The user profile import account password. This element MUST be present.

3.1.4.61.2.2   SetImportAccountResponse

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

```
<s:element name="SetImportAccountResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetImportAccountResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetImportAccountResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.62 SetIsExtensionIncludeList

This operation is used to set whether the list of file extensions in the portal content project is an inclusion list or an exclusion list.

```
<wsdl:operation name="SetIsExtensionIncludeList">
        <wsdl:input message="SetIsExtensionIncludeListSoapIn"/>
        <wsdl:output message="SetIsExtensionIncludeListSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1.

▪ The protocol server sets the **isExtensionIncludeList** property of the portal content project to the **isInclude** value from a request message.

▪ On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetIsExtensionIncludeListResponse** element in the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.62.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.62.1.1 SetIsExtensionIncludeListSoapIn

This is the request message for **SetIsExtensionIncludeList** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetIsExtensi
onIncludeList
```

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

3.1.4.62.1.2 SetIsExtensionIncludeListSoapOut

This is a response message for **SetIsExtensionIncludeList** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetIsExtensi
onIncludeList
```

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

3.1.4.62.2 Elements

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

3.1.4.62.2.1 SetIsExtensionIncludeList

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

```
<s:element name="SetIsExtensionIncludeList">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="isInclude" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

isInclude: The type of the file extensions list. If true, the file extensions list is an inclusion list; otherwise, the file extensions list is an exclusion list.

3.1.4.62.2.2 SetIsExtensionIncludeListResponse

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

```
<s:element name="SetIsExtensionIncludeListResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetIsExtensionIncludeListResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetIsExtensionIncludeListResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.63 SetRetryLimit

This operation is used to set the retry limit for the crawler application.

```
<wsdl:operation name="SetRetryLimit">
        <wsdl:input message="SetRetryLimitSoapIn"/>
        <wsdl:output message="SetRetryLimitSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

- The protocol server sets the **retryLimit** property of the crawler application to the **retryLimit** value from the request message.

- On success, the protocol server MUST return the updated configuration version of the crawler application in the **SetRetryLimitResult** element in the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.63.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.63.1.1 SetRetryLimitSoapIn

This is the request message for **SetRetryLimit** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetRetryLimi
t
```

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

3.1.4.63.1.2 SetRetryLimitSoapOut

This is a response message for **SetRetryLimit** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/SetRetryLimi
t
```

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

3.1.4.63.2 Elements

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

3.1.4.63.2.1 SetRetryLimit

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

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

```
            <s:element name="versionIn" type="s:int"/>
            <s:element name="retryLimit" type="s:int"/>
        </s:sequence>
    </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

retryLimit: The number of times to retry, MUST be greater than or equal to zero.

3.1.4.63.2.2   SetRetryLimitResponse

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

```
<s:element name="SetRetryLimitResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="SetRetryLimitResult" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

SetRetryLimitResult: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

3.1.4.64   StartCrawl

This operation is used to begin a crawl of a content source of the portal content project.

```
<wsdl:operation name="StartCrawl">
        <wsdl:input message="StartCrawlSoapIn"/>
        <wsdl:output message="StartCrawlSoapOut"/>
</wsdl:operation>
```

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

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ If there is no content source with the identifier specified in the **contentSource** element of the request message, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

▪ If a full crawl is specified in the request message's **type** element, the protocol server MUST attempt to begin a full crawl for the specified content source.

▪ If an incremental crawl is specified in the request message's **type** element, and the specified content source has not been crawled before, or the last crawl of the content source was stopped before it finished, the protocol server MUST attempt to start a full crawl for the content source.

- If an incremental crawl is specified in the request message's **type** element, and the specified content source has been crawled before, and the last crawl was not stopped before it finished, the protocol server MUST attempt to start an incremental crawl for the content source.

- If the crawl is in a state where it cannot be started or is already started, the protocol server MUST ignore the start request and return the current crawl status in the **StartCrawlResult** element the response message.

- On success, the protocol server MUST return the current crawl status in the **StartCrawlResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.64.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.64.1.1 StartCrawlSoapIn

This is the request message for **StartCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartCrawl
```

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

3.1.4.64.1.2 StartCrawlSoapOut

This is a response message for **StartCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartCrawl
```

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

3.1.4.64.2 Elements

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

3.1.4.64.2.1 StartCrawl

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

```
<s:element name="StartCrawl">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSource" type="s:int"/>
      <s:element name="type" type="s:int"/>
    </s:sequence>
```

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

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

contentSource: The identifier of the content source for which to start the crawl.

type: The type of the crawl to start. If 0, a full crawl; otherwise, an incremental crawl.

3.1.4.64.2.2 StartCrawlResponse

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

```
<s:element name="StartCrawlResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="StartCrawlResult" type="tns:ContentSourceDynamicPropsInternal"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

StartCrawlResult: The status of the most recent crawl. This element MUST be present and MUST conform to the schema of the <u>ContentSourceDynamicPropsInternal</u> complex type.

3.1.4.65 StartFullImport

This operation is used to begin a full user profile import of the specified user profile content source.

```
<wsdl:operation name="StartFullImport">
        <wsdl:input message="StartFullImportSoapIn"/>
        <wsdl:output message="StartFullImportSoapOut"/>
</wsdl:operation>
```

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

▪ The protocol server begins the full user profile import for the user profile content source specified by the **contentSourceName** element of the request message.

▪ If the user profile import is in a state where it cannot be started or is already started, the protocol server MUST ignore the start request.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.65.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.65.1.1 StartFullImportSoapIn

This is the request message for **StartFullImport** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartFullImp
ort
```

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

3.1.4.65.1.2 StartFullImportSoapOut

This is a response message for **StartFullImport** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartFullImp
ort
```

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

3.1.4.65.2 Elements

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

3.1.4.65.2.1 StartFullImport

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

```
<s:element name="StartFullImport">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSourceName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: This value MUST be ignored by the protocol server.

contentSourceName: The user profile content source for which to start the full user profile import. This element MUST be present. MUST be one of the following values:

Value	Meaning
PEOPLE_IMPORT	Start the user profile import.
PEOPLE_DL_IMPORT	Start the distribution list import.

3.1.4.65.2.2 StartFullImportResponse

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

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

3.1.4.66 StartIncrementalImport

This operation is used to begin an incremental user profile import of the specified user profile content source.

```
<wsdl:operation name="StartIncrementalImport">
        <wsdl:input message="StartIncrementalImportSoapIn"/>
        <wsdl:output message="StartIncrementalImportSoapOut"/>
</wsdl:operation>
```

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

- The protocol server begins the incremental user profile import of the user profile content source specified by the **contentSourceName** element of the request message.

- If the user profile import is in a state where it cannot be started or is already started, the protocol server MUST ignore the start request.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.66.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.66.1.1 StartIncrementalImportSoapIn

This is the request message for **StartIncrementalImport** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartIncreme
ntalImport
```

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

3.1.4.66.1.2 StartIncrementalImportSoapOut

This is a response message for **StartIncrementalImport** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartIncreme
ntalImport
```

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

3.1.4.66.2   Elements

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

3.1.4.66.2.1   StartIncrementalImport

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

```
<s:element name="StartIncrementalImport">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSourceName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: This value MUST be ignored by the protocol server.

contentSourceName: The user profile content source name for which to start the incremental user profile import. This element MUST be present. MUST be one of the following values:

Value	Meaning
PEOPLE_IMPORT	Start the user profile import.
PEOPLE_DL_IMPORT	Start the distribution list import.

3.1.4.66.2.2   StartIncrementalImportResponse

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

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

3.1.4.67   StartRankingUpdate

This operation is used to start the anchor crawl of the anchor content source.

```
<wsdl:operation name="StartRankingUpdate">
        <wsdl:input message="StartRankingUpdateSoapIn"/>
        <wsdl:output message="StartRankingUpdateSoapOut"/>
</wsdl:operation>
```

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

▪ The protocol server starts anchor crawl of the anchor content source.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.67.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.67.1.1 StartRankingUpdateSoapIn

This is the request message for **StartRankingUpdate** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartRanking
Update
```

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

3.1.4.67.1.2 StartRankingUpdateSoapOut

This is a response message for **StartRankingUpdate** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StartRanking
Update
```

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

3.1.4.67.2 Elements

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

3.1.4.67.2.1 StartRankingUpdate

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

```
<s:element name="StartRankingUpdate">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="type" type="tns:RankingUpdateType"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

type: This element MUST conform to the schema of [RankingUpdateType](#) simple type.

3.1.4.67.2.2 StartRankingUpdateResponse

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

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

3.1.4.67.3 Complex Types

None.

3.1.4.67.4 Simple Types

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

3.1.4.67.4.1 RankingUpdateType

The definition of the **RankingUpdateType** type is as follows:

```
<s:simpleType name="RankingUpdateType">
  <s:restriction base="s:string">
    <s:enumeration value="FullUpdate"/>
  </s:restriction>
</s:simpleType>
```

FullUpdate is the only allowable values for this type.

3.1.4.68 StopCrawl

This operation is used to stop a crawl of a content source of the portal content project.

```
<wsdl:operation name="StopCrawl">
        <wsdl:input message="StopCrawlSoapIn"/>
        <wsdl:output message="StopCrawlSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an [UpdatedConcurrencyException](#).

- If there is no content source with the identifier specified in the **contentSource** element of the request message, the protocol server MUST throw SOAP fault message containing a [DeletedConcurrencyException](#).

- The protocol server MUST try to stop the crawl of the content source with the identifier specified in the **contentSource** element of the request message.

- If the crawl is in a state where it cannot be stopped or is already stopped, the protocol server MUST ignore the stop request and return the current crawl status in the **StopCrawlResult** element the response message.

- On success, the protocol server MUST return the current crawl status in the **StopCrawlResult** element the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.68.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.68.1.1 StopCrawlSoapIn

This is the request message for **StopCrawl** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StopCrawl
```

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

3.1.4.68.1.2 StopCrawlSoapOut

This is a response message for **StopCrawl** operation**.**

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StopCrawl
```

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

3.1.4.68.2 Elements

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

3.1.4.68.2.1 StopCrawl

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

```
<s:element name="StopCrawl">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSource" type="s:int"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

contentSource: The identifier of the content source for which to stop the crawl.

3.1.4.68.2.2 StopCrawlResponse

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

```
<s:element name="StopCrawlResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="StopCrawlResult" type="tns:ContentSourceDynamicPropsInternal"
minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

StopCrawlResult: The status of the most recent crawl. This element MUST be present and MUST conform to the schema of the ContentSourceDynamicPropsInternal complex type.

3.1.4.69 StopImport

This operation is used to stop a user profile import of the specified user profile content source.

```
<wsdl:operation name="StopImport">
        <wsdl:input message="StopImportSoapIn"/>
        <wsdl:output message="StopImportSoapOut"/>
</wsdl:operation>
```

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

- The protocol server stops the user profile import of the user profile content source specified by the **contentSourceName** element of the request message.

- If the user profile import is in a state where it cannot be stopped or is already stopped, the protocol server MUST ignore the stop request.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.69.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.69.1.1 StopImportSoapIn

This is the request message for **StopImport** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StopImport
```

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

3.1.4.69.1.2 StopImportSoapOut

This is a response message for **StopImport** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/StopImport
```

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

3.1.4.69.2 Elements

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

3.1.4.69.2.1 StopImport

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

```
<s:element name="StopImport">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="contentSourceName" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

contentSourceName: Name of the user profile content source for which to stop the import. This element MUST be present. MUST have one of the following values:

Value	Meaning
PEOPLE_IMPORT	Start the user profile import.
PEOPLE_DL_IMPORT	Start the distribution list import.

3.1.4.69.2.2 StopImportResponse

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

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

3.1.4.70 SystemDrive

This operation is not used and MUST NOT be invoked.

3.1.4.71 TestCrawlRule

This operation is used to check if a specified URL matches the specified crawl rule.

```
<wsdl:operation name="TestCrawlRule">
        <wsdl:input message="TestCrawlRuleSoapIn"/>
        <wsdl:output message="TestCrawlRuleSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- The protocol server MUST normalize the **path** element of the request message the same way it normalizes the **path** element of the ActivateCrawlRule operation request message.

- The protocol server MUST try to find the crawl rule in the crawl rules collection of the portal content project by the value of the normalized path. (The **path** element represents the crawl rule the protocol client wishes to test).

- If no matching crawl rule is found, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

- If a matching crawl rule is found, the protocol server first normalizes the URL specified by the **url** element of the request message the same way it normalizes the **path** element of the ActivateCrawlRule operation request message.

- The protocol server then matches the normalized URL with the crawl rule and MUST return true in the **TestCrawlRuleResult** element of the response message if the URL matches the crawl rule, and false in the **TestCrawlRuleResult** element of the response message if the URL does not match.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.71.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.71.1.1 TestCrawlRuleSoapIn

This is the request message for the **TestCrawlRule** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/TestCrawlRul
e
```

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

3.1.4.71.1.2 TestCrawlRuleSoapOut

This is a response message for the **TestCrawlRule** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/TestCrawlRul
e
```

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

3.1.4.71.2 Elements

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

3.1.4.71.2.1 TestCrawlRule

TestCrawlRule element contains parameters for the **TestCrawlRule** operation.

```
<s:element name="TestCrawlRule">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
      <s:element name="url" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

path: The path expression of the **crawl rule** that the protocol client wishes to test. MUST be present and the length MUST be greater than 0 and less than 2048 characters.

url: A URL to test against the crawl rule. MUST be present and the length MUST be greater than 0 and less than 2048 characters.

3.1.4.71.2.2 TestCrawlRuleResponse

The **TestCrawlRuleResponse** element contains the result of the **TestCrawlRule** operation.

```
<s:element name="TestCrawlRuleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="TestCrawlRuleResult" type="s:boolean"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

TestCrawlRuleResult: True, if the URL matched the crawl rule; otherwise, false.

3.1.4.72 TestCrawlRules

This operation is used to find the first crawl rule in the portal content project's crawl rules collection that matches a specified URL**.**

```
<wsdl:operation name="TestCrawlRules">
        <wsdl:input message="TestCrawlRulesSoapIn"/>
        <wsdl:output message="TestCrawlRulesSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- If there are no crawl rules in the portal content project's crawl rules collection, the protocol server MUST return an empty string in the **TestCrawlRulesResult** element of the response message.

- Otherwise, the protocol server MUST first normalize the URL specified by the **url** element of the request message the same way it normalizes the **path** element of the ActivateCrawlRule operation request message.

- Then, the protocol server MUST check the normalized URL against all crawl rules in the collection and return the path expression of the first matching crawl rule.

- Otherwise, if the URL does not match any of the crawl rules the protocol server MUST return empty string in the **TestCrawlRulesResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.72.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.72.1.1 TestCrawlRulesSoapIn

This is the request message for the **TestCrawlRules** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/TestCrawlRul
es
```

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

3.1.4.72.1.2 TestCrawlRulesSoapOut

This is a response message for the **TestCrawlRules** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/TestCrawlRul
es
```

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

3.1.4.72.2 Elements

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

3.1.4.72.2.1 TestCrawlRules

The **TestCrawlRules** element contains parameters for the **TestCrawlRules** operation.

```
<s:element name="TestCrawlRules">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="url" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

url: A URL to test against the crawl rules. MUST be present and the length MUST be greater than 0 and less than 2048 characters.

3.1.4.72.2.2 TestCrawlRulesResponse

The **TestCrawlRulesResponse** element contains the result of the **TestCrawlRules** operation.

```
<s:element name="TestCrawlRulesResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="TestCrawlRulesResult" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

TestCrawlRulesResult: The path expression of the crawl rule that matched the specified URL. This element MUST be present, and the value of this element MUST be empty string if there are no matching crawl rules.

3.1.4.73 UpdateCrawlRule

This operation is used to update a crawl rule for the portal content project.

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

```
   <wsdl:input message="UpdateCrawlRuleSoapIn"/>
   <wsdl:output message="UpdateCrawlRuleSoapOut"/>
 </wsdl:operation>
```

The protocol client sends an **UpdateCrawlRuleSoapIn** request message and the protocol server responds with a **UpdateCrawlRuleSoapOut** response message, as follows:

▪ On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

▪ The protocol server then updates the current configuration version of the crawler application to the value of **versionIn**+1**.**

▪ Then, the protocol server MUST normalize the *path* parameter of the operation the same way it normalizes the **path** element of the ActivateCrawlRule operation request message. Then, if a crawl rule with the same normalized path does not exist in the portal content project, the protocol server MUST throw a SOAP fault message containing a DeletedConcurrencyException.

▪ Then, the protocol server MUST update the properties of the crawl rule using the elements of the *rule* parameter, setting the **path** (normalized the same way as the preceding path parameter), **type**, **suppressIndexing**, **followComplexUrls**, **crawlAsHttp**, **contentClass**, and **PluggableSecurityTrimmerId** properties of the crawl rule to the values of the corresponding elements of the *rule* parameter. Other elements of the *rule* parameter MUST be ignored.

On success, the protocol server MUST return the updated **path** property of the crawl rule in the **UpdateCrawlRuleResult** element of the response message.

▪ On error, the protocol server MUST throw a SOAP fault message.

3.1.4.73.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.73.1.1 UpdateCrawlRuleSoapIn

This is the request message for the **UpdateCrawlRule** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/UpdateCrawlR
ule
```

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

3.1.4.73.1.2 UpdateCrawlRuleSoapOut

This is a response message for the **UpdateCrawlRule** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/UpdateCrawlR
ule
```

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

3.1.4.73.2 Elements

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

3.1.4.73.2.1 UpdateCrawlRule

The **UpdateCrawlRule** element contains parameters for the **UpdateCrawlRule** operation.

```
<s:element name="UpdateCrawlRule">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="path" type="s:string" minOccurs="0"/>
      <s:element name="rule" type="tns:CrawlRuleInternal" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

path: The path expression of the crawl rule that needs to be updated. MUST be present and length MUST be greater than 0 and less than 2048 characters.

rule: The new values of the crawl rule properties. This element MUST be present.

3.1.4.73.2.2 UpdateCrawlRuleResponse

The **UpdateCrawlRuleResponse** element contains the result of **UpdateCrawlRule** operation.

```
<s:element name="UpdateCrawlRuleResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="UpdateCrawlRuleResult" type="s:string" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

UpdateCrawlRuleResult: The updated crawl rule path expression. MUST be present and length MUST be greater than 0 and less than 2048 characters.

3.1.4.74 ValidateApplicationPath

This operation is used to validate that a folder path is a viable location to host a full-text index catalog.

```
<wsdl:operation name="ValidateApplicationPath">
    <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Validates a file system
path and a minimum amount of free disk space.</wsdl:documentation>
    <wsdl:input message="ValidateApplicationPathSoapIn" />
    <wsdl:output message="ValidateApplicationPathSoapOut" />
</wsdl:operation>
```

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

- If the format of the path element of the request message does not conform to the format of a valid folder path on the protocol server, the protocol server MUST throw SOAP fault message containing an [ArgumentException](#).

- If the path element is greater than 139 characters in length, or is a relative path, or does not specify a local drive on the protocol server, or specifies a local drive that is not present, or specifies the root folder on the local drive, or specifies removable media, the protocol server MUST throw SOAP fault message containing an ArgumentException.

- If the local drive on the protocol server does not have at least the amount of free space, in bytes, as specified by the **minFreeDiskSpace** element of the request message, the protocol server MUST throw SOAP fault message containing an ArgumentException.

- On success, the protocol server MUST send a **ValidateApplicationPathResponse** response with the value of the **ValidateApplicationPathResult** element set to the free drive space, in bytes, of the local drive on the protocol server for the folder path specified in the path element of the request message.

On success, the protocol server MUST return the free drive space, in bytes, of the local drive on the protocol server in the **ValidateApplicationPathResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.74.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.74.1.1 ValidateApplicationPathSoapIn

This is the request message for **ValidateApplicationPath** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ValidateAppl
icationPath
```

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

3.1.4.74.1.2 ValidateApplicationPathSoapOut

This is a response message for **ValidateApplicationPath** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ValidateAppl
icationPath
```

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

3.1.4.74.2 Elements

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

3.1.4.74.2.1 ValidateApplicationPath

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

```
<s:element name="ValidateApplicationPath">
  <s:complexType>
    <s:sequence>
      <s:element name="path" type="s:string" minOccurs="0"/>
      <s:element name="minFreeDiskSpace" type="s:long"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

path: The folder path on the protocol server. This element MUST be present. The value of this element MUST NOT be NULL and MUST NOT be empty. It MUST begin with a **drive letter**, and the length MUST be less than 140 characters.

minFreeDiskSpace: MUST be one of the following values:

Value	Meaning
Positive	The minimum free drive space required, in bytes.
Zero or Negative	Minimum free drive space required is zero byte.

3.1.4.74.2.2 ValidateApplicationPathResponse

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

```
<s:element name="ValidateApplicationPathResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ValidateApplicationPathResult" type="s:long"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ValidateApplicationPathResult: Free disk drive space, in bytes, of the local drive on the protocol server containing the specified folder path. This value MUST be zero or positive.

3.1.4.75 ValidatePath

This operation is not used and MUST NOT be invoked.

3.1.4.76 ValidateScheduleTrigger

This operation is used to validate that a trigger, as specified in [MS-TSCH], section 2.4.2.11 Triggers, can be used to schedule a crawl.

```
<wsdl:operation name="ValidateScheduleTrigger">
        <wsdl:input message="ValidateScheduleTriggerSoapIn"/>
        <wsdl:output message="ValidateScheduleTriggerSoapOut"/>
</wsdl:operation>
```

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

- On receipt the protocol server validates the **versionIn** value from the request message. If it doesn't match the current configuration version of the crawler application, the protocol server MUST throw a SOAP fault message containing an UpdatedConcurrencyException.

- Then, the protocol server tries to confirm that the trigger specified in the **trigger** element of the request message is a valid trigger for scheduling a crawl.

- On success, the protocol server MUST return details about the trigger in the **ValidateScheduleTriggerResult** element of the response message.

- On error, the protocol server MUST throw a SOAP fault message.

3.1.4.76.1 Messages

The following WSDL message definitions are specific to this operation.

3.1.4.76.1.1 ValidateScheduleTriggerSoapIn

This is the request message for **ValidateScheduleTrigger** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ValidateSche
duleTrigger
```

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

3.1.4.76.1.2 ValidateScheduleTriggerSoapOut

This is a response message for **ValidateScheduleTrigger** operation.

The SOAP action value of the message is defined as:

```
http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/ValidateSche
duleTrigger
```

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

3.1.4.76.2   Elements

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

3.1.4.76.2.1   ValidateScheduleTrigger

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

```
<s:element name="ValidateScheduleTrigger">
  <s:complexType>
    <s:sequence>
      <s:element name="versionIn" type="s:int"/>
      <s:element name="trigger" type="s:base64Binary" minOccurs="0"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

versionIn: The configuration version of the crawler application. This element MUST contain a value greater than or equal to zero.

trigger: A trigger, as specified in [MS-TSCH], section 2.4.2.11 Triggers to be validated. This element MUST be present and MUST be Base64 encoded.

3.1.4.76.2.2   ValidateScheduleTriggerResponse

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

```
<s:element name="ValidateScheduleTriggerResponse">
  <s:complexType>
    <s:sequence>
      <s:element name="ValidateScheduleTriggerResult" type="tns:TriggerUpdate"/>
    </s:sequence>
  </s:complexType>
</s:element>
```

ValidateScheduleTriggerResult: The trigger details, as specified in [MS-TSCH], section 2.4.2.11 Triggers. This element MUST conform to the schema of the TriggerUpdate complex type.

3.1.4.76.3   Complex Types

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

3.1.4.76.3.1   TriggerUpdate

The definition of the **TriggerUpdate** type is as follows:

```
<s:complexType name="TriggerUpdate">
  <s:sequence>
    <s:element name="description" type="s:string" minOccurs="0"/>
    <s:element name="nextStart" type="s:dateTime"/>
```

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

description: Description of the trigger, as specified in [MS-TSCH], section 2.4.2.11 Triggers. This element MUST be present if the trigger has a description.

nextStart: The next start time of the trigger, as specified in [MS-TSCH], section 2.4.2.11 Triggers.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 Create and Configure a Content Source

Creating a content source typically involves the following messages:

1. Obtaining the current configuration version of the crawler application.

2. Retrieving the list of existing content sources.

3. Validation a crawl trigger.

4. Adding a new content source.

5. Updating the content source properties.

4.1.1 GetVersion

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetVersion
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService" />
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetVersionResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <GetVersionResult>170</GetVersionResult>
    </GetVersionResponse>
  </soap:Body>
</soap:Envelope>
```

4.1.2 GetContentSources

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
```

```
      <GetContentSources
  xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
        <versionIn>170</versionIn>
        <catalog>0</catalog>
      </GetContentSources>
    </soap:Body>
  </soap:Envelope>
```

Response message:

```
  <?xml version="1.0" encoding="utf-8"?>
  <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <soap:Body>
      <GetContentSourcesResponse
  xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
        <GetContentSourcesResult>
          <contentSourcesInternal>
            <ContentSourceInternal>
              <id>4</id>
              <systemCreated>true</systemCreated>
              <type>1</type>
              <name>Local Office SharePoint Server sites</name>
              <wssCrawlStyle>0</wssCrawlStyle>
              <metadata />
              <followDirectories>false</followDirectories>
              <pageDepth>2147483647</pageDepth>
              <siteDepth>0</siteDepth>
              <startAddresses>
                <string>http://servername:500</string>
                <string>http://servername</string>
                <string>sps3://servername:500</string>
              </startAddresses>
              <throttleStart>0</throttleStart>
              <throttleDuration>0</throttleDuration>
              <nextIncCrawlStart>9999-12-31T23:59:59.9999999</nextIncCrawlStart>
              <nextFullCrawlStart>9999-12-31T23:59:59.9999999</nextFullCrawlStart>
              <dynamic>
                <crawlStatus>0</crawlStatus>
                <crawlStarted>2008-02-16T14:24:12</crawlStarted>
                <crawlCompleted>2008-02-16T14:24:32</crawlCompleted>
                <errorCount>0</errorCount>
                <crawlSuccesses>0</crawlSuccesses>
              </dynamic>
            </ContentSourceInternal>
          </contentSourcesInternal>
          <metadata />
        </GetContentSourcesResult>
      </GetContentSourcesResponse>
    </soap:Body>
  </soap:Envelope>
```

4.1.3 ValidateScheduleTrigger

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <ValidateScheduleTrigger
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>170</versionIn>
      <trigger>MAAAANgHAgAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAQAAAAAAAAAAAAA</trigger>
    </ValidateScheduleTrigger>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <ValidateScheduleTriggerResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <ValidateScheduleTriggerResult>
        <description>At 12:00 AM every day, starting 2/16/2008</description>
        <nextStart>2008-02-17T00:00:00</nextStart>
      </ValidateScheduleTriggerResult>
    </ValidateScheduleTriggerResponse>
  </soap:Body>
</soap:Envelope>
```

4.1.4 AddContentSource

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <AddContentSource
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>170</versionIn>
      <catalog>0</catalog>
      <type>3</type>
      <name>Documents</name>
    </AddContentSource>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <AddContentSourceResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <AddContentSourceResult>12</AddContentSourceResult>
    </AddContentSourceResponse>
  </soap:Body>
</soap:Envelope>
```

4.1.5 EditContentSource

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <EditContentSource
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>172</versionIn>
      <id>12</id>
      <name>Documents</name>
      <metadata />
      <hostDepth>0</hostDepth>
      <enumerationDepth>2147483647</enumerationDepth>
      <followDirectories>true</followDirectories>
      <wssCrawlStyle>0</wssCrawlStyle>
      <throttleStart>0</throttleStart>
      <throttleDuration>0</throttleDuration>
      <startAddresses>
        <string>http://www.microsoft.com</string>
      </startAddresses>

<incCrawlTrigger>MAAAANgHAgAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAQAAAAAAAAAAAAAA</incCrawlTr
igger>
    </EditContentSource>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <EditContentSourceResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <EditContentSourceResult>173</EditContentSourceResult>
    </EditContentSourceResponse>
  </soap:Body>
```

```
    </soap:Envelope>
```

4.2 Create a Crawl Rule

Creating a crawl rule is illustrated by the following steps:

1. Getting the current list of crawl rules.

2. Creating a new crawl rule.

3. Updating properties of the new crawl rule.

4. Setting crawl account on the crawl rule.

4.2.1 GetCrawlRuleList

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetCrawlRuleList
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>173</versionIn>
    </GetCrawlRuleList>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetCrawlRuleListResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <GetCrawlRuleListResult />
    </GetCrawlRuleListResponse>
  </soap:Body>
</soap:Envelope>
```

4.2.2 AddCrawlRule

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
```

```
    <AddCrawlRule
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>173</versionIn>
      <isIncludeRule>true</isIncludeRule>
      <path>http://www.microsoft.com/*</path>
    </AddCrawlRule>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <AddCrawlRuleResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <AddCrawlRuleResult>http://www.microsoft.com/*</AddCrawlRuleResult>
    </AddCrawlRuleResponse>
  </soap:Body>
</soap:Envelope>
```

4.2.3 UpdateCrawlRule

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <UpdateCrawlRule
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>174</versionIn>
      <path>http://www.microsoft.com/*</path>
      <rule>
        <path>http://www.microsoft.com/*</path>
        <type>0</type>
        <authenticationType>0</authenticationType>
        <contentClass />
        <suppressIndexing>false</suppressIndexing>
        <followComplexUrls>false</followComplexUrls>
        <crawlAsHttp>false</crawlAsHttp>
        <enabled>false</enabled>
        <pluggableSecurityTrimmerId>-1</pluggableSecurityTrimmerId>
      </rule>
    </UpdateCrawlRule>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <UpdateCrawlRuleResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <UpdateCrawlRuleResult>http://www.microsoft.com/*</UpdateCrawlRuleResult>
    </UpdateCrawlRuleResponse>
  </soap:Body>
</soap:Envelope>
```

4.2.4 SetCrawlRuleCredentials

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <SetCrawlRuleCredentials
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>175</versionIn>
      <path>http://www.microsoft.com/*</path>
      <authType>1</authType>
      <authString1>domainname\username</authString1>
      <authString2>password</authString2>
    </SetCrawlRuleCredentials>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <SetCrawlRuleCredentialsResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <SetCrawlRuleCredentialsResult>176</SetCrawlRuleCredentialsResult>
    </SetCrawlRuleCredentialsResponse>
  </soap:Body>
</soap:Envelope>
```

4.3 Crawl a Content Source

Following is an example of the steps typically needed to begin a crawl:

1. Retrieving the list of existing content sources.

2. Requesting that a crawl be started.

4.3.1 GetContentSources

Request message:

```xml
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetContentSources
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>180</versionIn>
      <catalog>0</catalog>
    </GetContentSources>
  </soap:Body>
</soap:Envelope>
```

Response message:

```xml
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetContentSourcesResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <GetContentSourcesResult>
        <contentSourcesInternal>
          <ContentSourceInternal>
            <id>4</id>
            <systemCreated>true</systemCreated>
            <type>1</type>
            <name>Local Office SharePoint Server sites</name>
            <wssCrawlStyle>0</wssCrawlStyle>
            <metadata />
            <followDirectories>false</followDirectories>
            <pageDepth>2147483647</pageDepth>
            <siteDepth>0</siteDepth>
            <startAddresses>
              <string>http://servername:500</string>
              <string>http://servername</string>
              <string>sps3://servername:500</string>
            </startAddresses>
            <throttleStart>0</throttleStart>
            <throttleDuration>0</throttleDuration>
            <nextIncCrawlStart>9999-12-31T23:59:59.9999999</nextIncCrawlStart>
            <nextFullCrawlStart>9999-12-31T23:59:59.9999999</nextFullCrawlStart>
            <dynamic>
              <crawlStatus>0</crawlStatus>
              <crawlStarted>2008-02-16T14:24:12</crawlStarted>
              <crawlCompleted>2008-02-16T14:24:32</crawlCompleted>
              <errorCount>0</errorCount>
              <crawlSuccesses>0</crawlSuccesses>
            </dynamic>
          </ContentSourceInternal>
          <ContentSourceInternal>
```

```
              <id>12</id>
              <systemCreated>false</systemCreated>
              <type>3</type>
              <name>Documents</name>
              <wssCrawlStyle>0</wssCrawlStyle>
              <metadata />
              <followDirectories>true</followDirectories>
              <pageDepth>2147483647</pageDepth>
              <siteDepth>0</siteDepth>
              <startAddresses>
                <string>http://www.microsoft.com</string>
              </startAddresses>
              <throttleStart>0</throttleStart>
              <throttleDuration>0</throttleDuration>

<incCrawlTrigger>MAAAANgHAgAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAQAAAAAAAAAAAAAA</incCrawlTr
igger>
              <nextIncCrawlStart>2008-02-17T00:00:00</nextIncCrawlStart>
              <nextFullCrawlStart>9999-12-31T23:59:59.9999999</nextFullCrawlStart>
              <incScheduleDescription>At 12:00 AM every day, starting
2/16/2008</incScheduleDescription>
              <dynamic>
                <crawlStatus>0</crawlStatus>
                <crawlStarted>1899-12-30T00:00:00</crawlStarted>
                <crawlCompleted>1899-12-30T00:00:00</crawlCompleted>
                <errorCount>0</errorCount>
                <crawlSuccesses>0</crawlSuccesses>
              </dynamic>
            </ContentSourceInternal>
          </contentSourcesInternal>
          <metadata />
        </GetContentSourcesResult>
      </GetContentSourcesResponse>
    </soap:Body>
</soap:Envelope>
```

4.3.2 StartCrawl

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <StartCrawl
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>180</versionIn>
      <contentSource>12</contentSource>
      <type>0</type>
    </StartCrawl>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <StartCrawlResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <StartCrawlResult>
        <crawlStatus>1</crawlStatus>
        <crawlStarted>2008-02-16T15:56:54</crawlStarted>
        <crawlCompleted>1899-12-30T00:00:00</crawlCompleted>
        <errorCount>0</errorCount>
        <crawlSuccesses>0</crawlSuccesses>
      </StartCrawlResult>
    </StartCrawlResponse>
  </soap:Body>
</soap:Envelope>
```

4.4   User Profile Import

Performing a user profile import typically involves the following steps:

1. Setting the user profile import domain and the user profile import account.

2. Requesting that the protocol server begin a user profile import.

4.4.1   SetImportAccount

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <SetImportAccount
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>206</versionIn>
      <domain>domainname</domain>
      <userID>domainname\username</userID>
      <password>password</password>
    </SetImportAccount>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <SetImportAccountResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <SetImportAccountResult>207</SetImportAccountResult>
```

```
        </SetImportAccountResponse>
    </soap:Body>
</soap:Envelope>
```

4.4.2 StartFullImport

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <StartFullImport
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>208</versionIn>
      <contentSourceName>PEOPLE_IMPORT</contentSourceName>
    </StartFullImport>
  </soap:Body>
</soap:Envelope>
```

Response message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <StartFullImportResponse
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService" />
  </soap:Body>
</soap:Envelope>
```

4.5 Failure Example

4.5.1 GetContentSources

Request message:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetContentSources
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService">
      <versionIn>1</versionIn>
      <catalog>0</catalog>
    </GetContentSources>
  </soap:Body>
</soap:Envelope>
```

Response message:

```xml
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <soap:Fault>
      <faultcode>soap:Server</faultcode>
      <faultstring>The search configuration has been updated since it was last
retrieved.</faultstring>

<faultactor>http://servername:56737/SharedServices1/Search/SearchAdmin.asmx</faultactor>
      <detail>
        <exception
xmlns="http://microsoft.com/webservices/OfficeServer/Search/SearchWebService">
```

敧囊掁獄牑□絖 崔㳮惻敭築 潊 廱晥侨牑鈘哉瑳 浧刮淩梻鮇鈔潯枋灯敧囊掁獄繿膠硅散瑰 潩殨縄崔㳮惻敧⊙檨 敜潟条□
摩﹀敨□く牑澔慲戞浧瑰眠狲洴掫□澔毿墊瑯□澗汰掁瑯潩敬陳潤普杤牵瑯潩楷栶愠牠淐敬整瘖敥ʾ景玸敧挠牵敧瑔

狴㤧整刪晥敧捧磁皽□澔汰掁瑯潩□敬陳仳敤瑣□湨 敧澗珄敧胜墊瑯□ †心敠獷条狂□腏瑯 獣擷晥湙柴築㳮廱晥□ʄ¬†瑯廱掁湨滒瑳敀晦掁□敧癗
散瑰 潩獣擷晥湙柴□輸 汥嘵鮶阻楳溿汾盜冯又⊙檨琭抾 幙散玸槭栴築㳮廱晥□ʄ¬†瑯廱掁湨滒瑳敀晦掁□敧癗
牠匼愒捲□㥮業楮瑳傗楴湯尰卓 吳陣鈔慮柲牠澔汰掁瑯潩⑰啘污摩瑯噃牠楳湯潨割愒⸠潨bar┝鱬狲嘖 牠楳湯□†瑯廱
掁湨滒瑳敀晦掁□敧癗牠匼愒捲□㥮業楮瑳傗楴湯匼愒捲稭梽 刮淩湩敧 牠呤⊙滒敤潃瑱冫怴専敧潴整滒敤滒敤潃瑱冫怴n怤
潭㦺羿墊ⅉ獯滒敬潩⸠胜敤ʫ的牸淩却抲牵塦槳湯整琭栴bar┝陳瀖嘇鳇1丬心瑥抾偗敧瑔槭栴⊙檨敀潭整潲瑥抾 偗敧瑔
槭栶堭楳溿汾盜冯又⊙檨敀潭整瑥抾捵鐲孿硲圉⊙心敀潭整瑥抾捵鐲孿硲⊙檨硅散瑰 潩黙瑩溿 摩﹀敨□㤻牑ℸ個楬慼整
敆獲潩禈枯敀槪掁湨滒瑳敀晦掁□敧癗牠匼愒捲h嘇牠楳湯ɥ狈1□□□緐汾晦敲歱㣺略 牴污 冨汢掁瑯歨昵齿湴沠学ʣ 彆散⊓
妓汽懿□砺初甍景冮晏楈散匼牠陳□敧牲 档秼泆遘狳牴瑯潩卍鏵鈓□蒙瑯敀稹灰楬價梽湯砺港摩嘇污摩瑯噃牠楳湯潨澙
割愒⸠潨bar¢心硅散玸潩黙瑩溿沠汢輸敀晦敧晢畺⸮ ヿ嬌ヿ恰 ᴢ心剮敜冷浭□匼瞍捲□摩﹀敨□┝牑心灊牵散⊙檨 慻揝個赫
掫鑿柲湯⊙檨匼梲±久揎溿初⊙檨匼梲±久揎涷瑯崠潭敿⊙�

```
        </exception>
      </detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

The string value of the **detail.exception** element is the UTF-16 string representation of the following serialized exception:

```
<SOAP-ENV:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encoding/" xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:clr="http://schemas.microsoft.com/soap/encoding/clr/1.0" SOAP-
ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
  <SOAP-ENV:Body>
    <a1:UpdatedConcurrencyException id="ref-1"
xmlns:a1="http://schemas.microsoft.com/clr/nsassem/Microsoft.Office.Server.Search.Administrat
ion/Microsoft.Office.Server.Search%2C%20Version%3D12.0.0.0%2C%20Culture%3Dneutral%2C%20Public
KeyToken%3D71e9bce111e9429c">
      <ClassName id="ref-
3">Microsoft.Office.Server.Search.Administration.UpdatedConcurrencyException</ClassName>
      <Message id="ref-4">The search configuration has been updated since it was last
retrieved.</Message>
      <Data xsi:null="1"/>
      <InnerException href="#ref-5"/>
      <HelpURL xsi:null="1"/>
      <StackTraceString id="ref-6">
        at Microsoft.Office.Server.Search.Administration.SearchApi.RunOnServer[T](CodeToRun`1
remoteCode, CodeToRun`1 localCode, Boolean useCurrentSecurityContext, Int32 versionIn)
        at Microsoft.Office.Server.Search.Administration.SearchApi.GetContentSources(Int32
versionIn, Int32 catalog)
        at
Microsoft.Office.Server.Search.Administration.SearchApplicationWebService.&#60;&#62;c__Displa
yClassaf.&#60;GetContentSources&#62;b__ae()
        at
Microsoft.Office.Server.Search.Administration.SearchWebService.RunWithSoapExceptionHandling[T
](CodeRequiresSoapExceptionHandling`1 webMethodCode, Boolean impersonateLocalAdmin)
      </StackTraceString>
```

```
    <RemoteStackTraceString xsi:null="1"/>
    <RemoteStackIndex>0</RemoteStackIndex>
    <ExceptionMethod id="ref-7">
        8
        RunOnServer
        Microsoft.Office.Server.Search, Version=12.0.0.0, Culture=neutral,
PublicKeyToken=71e9bce111e9429c
        Microsoft.Office.Server.Search.Administration.SearchApi
        T RunOnServer[T](CodeToRun`1, CodeToRun`1, Boolean, Int32)
    </ExceptionMethod>
    <HResult>-2146233088</HResult>
    <Source id="ref-8">Microsoft.Office.Server.Search</Source>
    </a1:UpdatedConcurrencyException>
    <a3:COMException id="ref-5"
xmlns:a3="http://schemas.microsoft.com/clr/ns/System.Runtime.InteropServices">
        <ClassName id="ref-9">System.Runtime.InteropServices.COMException</ClassName>
    <Message id="ref-10">An attempt was made to update application level configuration with
an obsolete view of the current state.  Refresh your application-level objects and redo the
update.  </Message>
    <Data xsi:null="1"/>
    <InnerException xsi:null="1"/>
    <HelpURL xsi:null="1"/>
    <StackTraceString id="ref-11">
        at
Microsoft.Office.Server.Search.Administration.MSSITLB.IGatherApplication2.ValidateVersionForR
ead(Int32 lLastVersion)
        at Microsoft.Office.Server.Search.Administration.SearchApi.RunOnServer[T](CodeToRun`1
remoteCode, CodeToRun`1 localCode, Boolean useCurrentSecurityContext, Int32 versionIn)
    </StackTraceString>
    <RemoteStackTraceString xsi:null="1"/>
    <RemoteStackIndex>0</RemoteStackIndex>
    <ExceptionMethod id="ref-12">
        8
        ValidateVersionForRead
        Microsoft.Office.Server.Search, Version=12.0.0.0, Culture=neutral,
PublicKeyToken=71e9bce111e9429c
        Microsoft.Office.Server.Search.Administration.MSSITLB.IGatherApplication2
        Void ValidateVersionForRead(Int32)
    </ExceptionMethod>
    <HResult>-2147217991</HResult>
    <Source id="ref-13">
</Source>
    </a3:COMException>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

Because operations specified by this protocol modify configuration of the index server, in addition to the security considerations applicable to the underlying protocols, implementers are advised to consider user authorization on the server for performing the requested operation.

5.2 Index of Security Parameters

Security Parameter	Section
Transport	section 2.1

6   Appendix A: Full WSDL

For ease of implementation the full WSDL is provided in the following code:

```xml
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions xmlns:s="http://www.w3.org/2001/XMLSchema"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
xmlns:tns="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tm="http://microsoft.com/wsdl/mime/textMatching/"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
targetNamespace="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebSer
vice">
    <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Microsoft(R) Office
SharePoint(R) Server 2007 Application Administration Web Service</wsdl:documentation>
    <wsdl:types>
        <s:schema elementFormDefault="qualified"
targetNamespace="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebSer
vice">
            <s:element name="GetVersion">
                <s:complexType/>
            </s:element>
            <s:element name="GetVersionResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="GetVersionResult"
type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="SetDefaultGatheringAccount">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="account"
type="s:string"/>
                        <s:element minOccurs="0" maxOccurs="1" name="password"
type="s:string"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="SetDefaultGatheringAccountResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1"
name="SetDefaultGatheringAccountResult" type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="GetContentState">
                <s:complexType>
                    <s:sequence>
```

```xml
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetContentStateResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="GetContentStateResult"
type="tns:ContentStateInternal"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:complexType name="ContentStateInternal">
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="retryLimit" type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="lotusNotesConfigured"
type="s:boolean"/>
                        <s:element minOccurs="0" maxOccurs="1" name="defaultGatheringAccount"
type="s:string"/>
                        <s:element minOccurs="0" maxOccurs="1" name="clientCertificateNames"
type="tns:ArrayOfString"/>
                        <s:element minOccurs="0" maxOccurs="1" name="activeDocuments"
type="tns:ArrayOfString"/>
                        <s:element minOccurs="0" maxOccurs="1" name="listKnownLotusNotesServers"
type="tns:ArrayOfString"/>
                    </s:sequence>
                </s:complexType>
                <s:complexType name="ArrayOfString">
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="unbounded" name="string"
nillable="true" type="s:string"/>
                    </s:sequence>
                </s:complexType>
                <s:element name="SetRetryLimit">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="retryLimit"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetRetryLimitResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="SetRetryLimitResult"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetContentSourcesMetadata">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
```

```
                            <s:element minOccurs="0" maxOccurs="1" name="metadata"
type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetContentSourcesMetadataResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="SetContentSourcesMetadataResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="IndexSize">
                    <s:complexType/>
                </s:element>
                <s:element name="IndexSizeResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="IndexSizeResult"
type="s:long"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="CatalogPauseCrawlRequest">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="reason" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="CatalogPauseCrawlRequestResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="CatalogResumeCrawlRequest">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="reason" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="CatalogResumeCrawlRequestResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="CatalogPauseStatus">
                    <s:complexType/>
                </s:element>
                <s:element name="CatalogPauseStatusResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="CatalogPauseStatusResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="IsCatalogPauseCompleted">
                    <s:complexType>
```

```xml
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="reason" type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="IsCatalogPauseCompletedResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1"
 name="IsCatalogPauseCompletedResult" type="s:boolean"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="StartRankingUpdate">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="type"
 type="tns:RankingUpdateType"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:simpleType name="RankingUpdateType">
                <s:restriction base="s:string">
                    <s:enumeration value="FullUpdate"/>
                </s:restriction>
            </s:simpleType>
            <s:element name="StartRankingUpdateResponse">
                <s:complexType/>
            </s:element>
            <s:element name="IsDeleteCrawlInProgress">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="IsDeleteCrawlInProgressResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1"
 name="IsDeleteCrawlInProgressResult" type="s:boolean"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="SearchDatabaseCleanup">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="enable"
 type="s:boolean"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="SearchDatabaseCleanupResponse">
```

```
                        <s:complexType/>
                </s:element>
                <s:element name="RefreshContentSource">
                        <s:complexType>
                                <s:sequence>
                                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                                        <s:element minOccurs="1" maxOccurs="1" name="id" type="s:int"/>
                                </s:sequence>
                        </s:complexType>
                </s:element>
                <s:element name="RefreshContentSourceResponse">
                        <s:complexType>
                                <s:sequence>
                                        <s:element minOccurs="0" maxOccurs="1"
 name="RefreshContentSourceResult" type="tns:ContentSourceDynamicPropsInternal"/>
                                </s:sequence>
                        </s:complexType>
                </s:element>
                <s:complexType name="ContentSourceDynamicPropsInternal">
                        <s:sequence>
                                <s:element minOccurs="1" maxOccurs="1" name="crawlStatus" type="s:int"/>
                                <s:element minOccurs="1" maxOccurs="1" name="crawlStarted"
 type="s:dateTime"/>
                                <s:element minOccurs="1" maxOccurs="1" name="crawlCompleted"
 type="s:dateTime"/>
                                <s:element minOccurs="1" maxOccurs="1" name="errorCount" type="s:int"/>
                                <s:element minOccurs="1" maxOccurs="1" name="crawlSuccesses"
 type="s:int"/>
                        </s:sequence>
                </s:complexType>
                <s:element name="RefreshAnchorContentSource">
                        <s:complexType>
                                <s:sequence>
                                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                                </s:sequence>
                        </s:complexType>
                </s:element>
                <s:element name="RefreshAnchorContentSourceResponse">
                        <s:complexType>
                                <s:sequence>
                                        <s:element minOccurs="0" maxOccurs="1"
 name="RefreshAnchorContentSourceResult" type="tns:ContentSourceDynamicPropsInternal"/>
                                </s:sequence>
                        </s:complexType>
                </s:element>
                <s:element name="EditContentSource">
                        <s:complexType>
                                <s:sequence>
                                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                                        <s:element minOccurs="1" maxOccurs="1" name="id" type="s:int"/>
                                        <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string"/>
                                        <s:element minOccurs="0" maxOccurs="1" name="metadata"
 type="s:string"/>
                                        <s:element minOccurs="1" maxOccurs="1" name="hostDepth"
 type="s:int"/>
```

```xml
                        <s:element minOccurs="1" maxOccurs="1" name="enumerationDepth"
type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="followDirectories"
type="s:boolean"/>
                        <s:element minOccurs="1" maxOccurs="1" name="wssCrawlStyle"
type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="throttleStart"
type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="throttleDuration"
type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="startAddresses"
type="tns:ArrayOfString"/>
                        <s:element minOccurs="0" maxOccurs="1" name="fullCrawlTrigger"
type="s:base64Binary"/>
                        <s:element minOccurs="0" maxOccurs="1" name="incCrawlTrigger"
type="s:base64Binary"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="EditContentSourceResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="EditContentSourceResult"
type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="GetPropagationInternal">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="GetPropagationInternalResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="1"
name="GetPropagationInternalResult" type="tns:PropagationInternal"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:complexType name="PropagationInternal">
                <s:sequence>
                    <s:element minOccurs="1" maxOccurs="1" name="type" type="s:int"/>
                    <s:element minOccurs="1" maxOccurs="1" name="propagationStatus"
type="s:int"/>
                </s:sequence>
            </s:complexType>
            <s:element name="RemoveQueryServer">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="serverName"
type="s:string"/>
                    </s:sequence>
```

```
                    </s:complexType>
                </s:element>
                <s:element name="RemoveQueryServerResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="StartCrawl">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="contentSource"
 type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="type" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="StartCrawlResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="StartCrawlResult"
 type="tns:ContentSourceDynamicPropsInternal"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="PauseCrawl">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="contentSource"
 type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="PauseCrawlResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="PauseCrawlResult"
 type="tns:ContentSourceDynamicPropsInternal"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ResumeCrawl">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="contentSource"
 type="s:int"/>
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                    </s:complexType>
                </s:element>
                <s:element name="ResumeCrawlResponse">
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                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="ResumeCrawlResult"
 type="tns:ContentSourceDynamicPropsInternal"/>
                        </s:sequence>
```

```
                    </s:complexType>
                </s:element>
                <s:element name="StopCrawl">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="contentSource"
 type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="StopCrawlResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="StopCrawlResult"
 type="tns:ContentSourceDynamicPropsInternal"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ResetApp">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ResetAppResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="ResetAppResult"
 type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="MountApp">
                    <s:complexType/>
                </s:element>
                <s:element name="MountAppResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="DismountApp">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="applicationName"
 type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="DismountAppResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="IsMounted">
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                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="applicationName"
 type="s:string"/>
```

```xml
                </s:sequence>
            </s:complexType>
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        <s:element name="IsMountedResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="1" maxOccurs="1" name="IsMountedResult"
 type="s:boolean"/>
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            </s:complexType>
        </s:element>
        <s:element name="RemoveApp">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1" name="applicationName"
 type="s:string"/>
                    <s:element minOccurs="0" maxOccurs="1" name="indexLocation"
 type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="RemoveAppResponse">
            <s:complexType/>
        </s:element>
        <s:element name="GetGathererApplications">
            <s:complexType/>
        </s:element>
        <s:element name="GetGathererApplicationsResponse">
            <s:complexType>
                <s:sequence>
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 name="GetGathererApplicationsResult" type="tns:ArrayOfString"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="AddApp">
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                <s:sequence>
                    <s:element minOccurs="1" maxOccurs="1" name="role" type="tns:Role"/>
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            </s:complexType>
        </s:element>
        <s:simpleType name="Role">
            <s:restriction base="s:string">
                <s:enumeration value="None"/>
                <s:enumeration value="Index"/>
                <s:enumeration value="Query"/>
                <s:enumeration value="IndexQuery"/>
            </s:restriction>
        </s:simpleType>
        <s:element name="AddAppResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="1" maxOccurs="1" name="AddAppResult"
 type="s:boolean"/>
                </s:sequence>
            </s:complexType>
        </s:element>
```

```xml
                <s:element name="RemoveAllGathererApplications">
                    <s:complexType/>
                </s:element>
                <s:element name="RemoveAllGathererApplicationsResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
 name="RemoveAllGathererApplicationsResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ValidateScheduleTrigger">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="trigger"
 type="s:base64Binary"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ValidateScheduleTriggerResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
 name="ValidateScheduleTriggerResult" type="tns:TriggerUpdate"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:complexType name="TriggerUpdate">
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="1" name="description"
 type="s:string"/>
                        <s:element minOccurs="1" maxOccurs="1" name="nextStart"
 type="s:dateTime"/>
                    </s:sequence>
                </s:complexType>
                <s:element name="BackupRegistry">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="backupNow"
 type="s:boolean"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="BackupRegistryResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="AddExtension">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="ext" type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="AddExtensionResponse">
```

```
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="AddExtensionResult"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="RemoveExtension">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="ext" type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="RemoveExtensionResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="RemoveExtensionResult"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ClearExtensionList">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ClearExtensionListResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="ClearExtensionListResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetExtensionList">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetExtensionListResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="GetExtensionListResult"
type="tns:ArrayOfString"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetIsExtensionIncludeList">
                    <s:complexType>
```

```xml
                          <s:sequence>
                              <s:element minOccurs="1" maxOccurs="1" name="versionIn"
  type="s:int"/>
                              <s:element minOccurs="1" maxOccurs="1" name="isInclude"
  type="s:boolean"/>
                          </s:sequence>
                      </s:complexType>
                  </s:element>
                  <s:element name="SetIsExtensionIncludeListResponse">
                      <s:complexType>
                          <s:sequence>
                              <s:element minOccurs="1" maxOccurs="1"
  name="SetIsExtensionIncludeListResult" type="s:int"/>
                          </s:sequence>
                      </s:complexType>
                  </s:element>
                  <s:element name="IsExtensionIncludeList">
                      <s:complexType>
                          <s:sequence>
                              <s:element minOccurs="1" maxOccurs="1" name="versionIn"
  type="s:int"/>
                          </s:sequence>
                      </s:complexType>
                  </s:element>
                  <s:element name="IsExtensionIncludeListResponse">
                      <s:complexType>
                          <s:sequence>
                              <s:element minOccurs="1" maxOccurs="1"
  name="IsExtensionIncludeListResult" type="s:boolean"/>
                          </s:sequence>
                      </s:complexType>
                  </s:element>
                  <s:element name="AddCrawlRule">
                      <s:complexType>
                          <s:sequence>
                              <s:element minOccurs="1" maxOccurs="1" name="versionIn"
  type="s:int"/>
                              <s:element minOccurs="1" maxOccurs="1" name="isIncludeRule"
  type="s:boolean"/>
                              <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                          </s:sequence>
                      </s:complexType>
                  </s:element>
                  <s:element name="AddCrawlRuleResponse">
                      <s:complexType>
                          <s:sequence>
                              <s:element minOccurs="0" maxOccurs="1" name="AddCrawlRuleResult"
  type="s:string"/>
                          </s:sequence>
                      </s:complexType>
                  </s:element>
                  <s:element name="RemoveCrawlRule">
                      <s:complexType>
                          <s:sequence>
                              <s:element minOccurs="1" maxOccurs="1" name="versionIn"
  type="s:int"/>
                              <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                          </s:sequence>
```

```
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            <s:element name="RemoveCrawlRuleResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="RemoveCrawlRuleResult"
 type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="GetCrawlRuleList">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
 type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="GetCrawlRuleListResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="1" name="GetCrawlRuleListResult"
 type="tns:ArrayOfCrawlRuleInternal"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:complexType name="ArrayOfCrawlRuleInternal">
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="unbounded" name="CrawlRuleInternal"
 nillable="true" type="tns:CrawlRuleInternal"/>
                </s:sequence>
            </s:complexType>
            <s:complexType name="CrawlRuleInternal">
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                    <s:element minOccurs="1" maxOccurs="1" name="type" type="s:int"/>
                    <s:element minOccurs="1" maxOccurs="1" name="authenticationType"
 type="s:int"/>
                    <s:element minOccurs="0" maxOccurs="1" name="accountName"
 type="s:string"/>
                    <s:element minOccurs="0" maxOccurs="1" name="contentClass"
 type="s:string"/>
                    <s:element minOccurs="1" maxOccurs="1" name="suppressIndexing"
 type="s:boolean"/>
                    <s:element minOccurs="1" maxOccurs="1" name="followComplexUrls"
 type="s:boolean"/>
                    <s:element minOccurs="1" maxOccurs="1" name="crawlAsHttp"
 type="s:boolean"/>
                    <s:element minOccurs="1" maxOccurs="1" name="enabled" type="s:boolean"/>
                    <s:element minOccurs="1" maxOccurs="1" name="pluggableSecurityTrimmerId"
 type="s:int"/>
                    <s:element minOccurs="0" maxOccurs="1" name="authUrl" type="s:string"/>
                    <s:element minOccurs="0" maxOccurs="1" name="authData" type="s:string"/>
                    <s:element minOccurs="0" maxOccurs="1" name="miscData"
 type="tns:ArrayOfString"/>
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            <s:element name="UpdateCrawlRule">
```

```xml
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type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="rule"
type="tns:CrawlRuleInternal"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="UpdateCrawlRuleResponse">
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                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="UpdateCrawlRuleResult"
type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ActivateCrawlRule">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ActivateCrawlRuleResponse">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="ActivateCrawlRuleResult"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="TestCrawlRule">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="url" type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="TestCrawlRuleResponse">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="TestCrawlRuleResult"
type="s:boolean"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="TestCrawlRules">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
```

```
                <s:element minOccurs="0" maxOccurs="1" name="url" type="s:string"/>
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    </s:element>
    <s:element name="TestCrawlRulesResponse">
        <s:complexType>
            <s:sequence>
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type="s:string"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="SetCrawlRulePriority">
        <s:complexType>
            <s:sequence>
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type="s:int"/>
                <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                <s:element minOccurs="1" maxOccurs="1" name="currentPriority"
type="s:int"/>
                <s:element minOccurs="1" maxOccurs="1" name="newPriority"
type="s:int"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="SetCrawlRulePriorityResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1"
name="SetCrawlRulePriorityResult" type="s:int"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="SetCrawlRuleCredentials">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                <s:element minOccurs="1" maxOccurs="1" name="authType" type="s:int"/>
                <s:element minOccurs="0" maxOccurs="1" name="authString1"
type="s:string"/>
                <s:element minOccurs="0" maxOccurs="1" name="authString2"
type="s:string"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="SetCrawlRuleCredentialsResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1"
name="SetCrawlRuleCredentialsResult" type="s:int"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="GetSiteRestrictionList">
        <s:complexType>
            <s:sequence>
```

```xml
                    <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="GetSiteRestrictionListResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1"
name="GetSiteRestrictionListResult" type="tns:ArrayOfSiteRestrictionInternal"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:complexType name="ArrayOfSiteRestrictionInternal">
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="unbounded"
name="SiteRestrictionInternal" nillable="true" type="tns:SiteRestrictionInternal"/>
            </s:sequence>
        </s:complexType>
        <s:complexType name="SiteRestrictionInternal">
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string"/>
                <s:element minOccurs="0" maxOccurs="1" name="paths"
type="tns:ArrayOfSitePathInternal"/>
            </s:sequence>
        </s:complexType>
        <s:complexType name="ArrayOfSitePathInternal">
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="unbounded" name="SitePathInternal"
nillable="true" type="tns:SitePathInternal"/>
            </s:sequence>
        </s:complexType>
        <s:complexType name="SitePathInternal">
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                <s:element minOccurs="0" maxOccurs="1" name="contentClass"
type="s:string"/>
            </s:sequence>
        </s:complexType>
        <s:element name="AddSiteRestriction">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                    <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="AddSiteRestrictionResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1"
name="AddSiteRestrictionResult" type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="RemoveSiteRestriction">
            <s:complexType>
```

```xml
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
   type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="RemoveSiteRestrictionResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
   name="RemoveSiteRestrictionResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="AddSitePath">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
   type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="restrictionName"
   type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="contentClass"
   type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="AddSitePathResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="AddSitePathResult"
   type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="RemoveSitePath">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
   type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="restrictionName"
   type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="RemoveSitePathResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="RemoveSitePathResult"
   type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ActivateProfileImport">
                    <s:complexType>
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```

```
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="enable"
type="s:boolean"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ActivateProfileImportResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="ActivateProfileImportResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetDefaultImportAccount">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="userID"
type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="password"
type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetDefaultImportAccountResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="SetDefaultImportAccountResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetImportAccount">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="domain"
type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="userID"
type="s:string"/>
                            <s:element minOccurs="0" maxOccurs="1" name="password"
type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="SetImportAccountResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="SetImportAccountResult"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetImportAccounts">
```

```
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetImportAccountsResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="GetImportAccountsResult"
type="tns:ArrayOfImportDomainAccount"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:complexType name="ArrayOfImportDomainAccount">
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="unbounded" name="ImportDomainAccount"
nillable="true" type="tns:ImportDomainAccount"/>
                    </s:sequence>
                </s:complexType>
                <s:complexType name="ImportDomainAccount">
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="1" name="domain" type="s:string"/>
                        <s:element minOccurs="0" maxOccurs="1" name="account" type="s:string"/>
                    </s:sequence>
                </s:complexType>
                <s:element name="CleanUnreferencedSiteRestrictions">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="domains"
type="tns:ArrayOfString"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="CleanUnreferencedSiteRestrictionsResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="CleanUnreferencedSiteRestrictionsResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetContentSource">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                            <s:element minOccurs="1" maxOccurs="1" name="catalog" type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="contentSourceName"
type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="GetContentSourceResponse">
                    <s:complexType>
```

```
                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="GetContentSourceResult"
    type="tns:ContentSourceInternal"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:complexType name="ContentSourceInternal">
                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="id" type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="systemCreated"
    type="s:boolean"/>
                        <s:element minOccurs="1" maxOccurs="1" name="type" type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string"/>
                        <s:element minOccurs="1" maxOccurs="1" name="wssCrawlStyle"
    type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="metadata" type="s:string"/>
                        <s:element minOccurs="1" maxOccurs="1" name="followDirectories"
    type="s:boolean"/>
                        <s:element minOccurs="1" maxOccurs="1" name="pageDepth" type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="siteDepth" type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="startAddresses"
    type="tns:ArrayOfString"/>
                        <s:element minOccurs="1" maxOccurs="1" name="throttleStart"
    type="s:int"/>
                        <s:element minOccurs="1" maxOccurs="1" name="throttleDuration"
    type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="fullCrawlTrigger"
    type="s:base64Binary"/>
                        <s:element minOccurs="0" maxOccurs="1" name="incCrawlTrigger"
    type="s:base64Binary"/>
                        <s:element minOccurs="1" maxOccurs="1" name="nextIncCrawlStart"
    type="s:dateTime"/>
                        <s:element minOccurs="1" maxOccurs="1" name="nextFullCrawlStart"
    type="s:dateTime"/>
                        <s:element minOccurs="0" maxOccurs="1" name="incScheduleDescription"
    type="s:string"/>
                        <s:element minOccurs="0" maxOccurs="1" name="fullScheduleDescription"
    type="s:string"/>
                        <s:element minOccurs="0" maxOccurs="1" name="dynamic"
    type="tns:ContentSourceDynamicPropsInternal"/>
                    </s:sequence>
                </s:complexType>
                <s:element name="StartFullImport">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1" name="versionIn"
    type="s:int"/>
                            <s:element minOccurs="0" maxOccurs="1" name="contentSourceName"
    type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="StartFullImportResponse">
                    <s:complexType/>
                </s:element>
                <s:element name="StartIncrementalImport">
                    <s:complexType>
                        <s:sequence>
```

```xml
                                    <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                                    <s:element minOccurs="0" maxOccurs="1" name="contentSourceName"
type="s:string"/>
                          </s:sequence>
                    </s:complexType>
              </s:element>
              <s:element name="StartIncrementalImportResponse">
                    <s:complexType/>
              </s:element>
              <s:element name="StopImport">
                    <s:complexType>
                          <s:sequence>
                                    <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                                    <s:element minOccurs="0" maxOccurs="1" name="contentSourceName"
type="s:string"/>
                          </s:sequence>
                    </s:complexType>
              </s:element>
              <s:element name="StopImportResponse">
                    <s:complexType/>
              </s:element>
              <s:element name="GetImportStatus">
                    <s:complexType>
                          <s:sequence>
                                    <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                                    <s:element minOccurs="0" maxOccurs="1" name="contentSourceName"
type="s:string"/>
                          </s:sequence>
                    </s:complexType>
              </s:element>
              <s:element name="GetImportStatusResponse">
                    <s:complexType>
                          <s:sequence>
                                    <s:element minOccurs="0" maxOccurs="1" name="GetImportStatusResult"
type="tns:StartAddressDynamicPropsInternal"/>
                          </s:sequence>
                    </s:complexType>
              </s:element>
              <s:complexType name="StartAddressDynamicPropsInternal">
                    <s:sequence>
                          <s:element minOccurs="1" maxOccurs="1" name="lastCrawlType"
type="s:int"/>
                          <s:element minOccurs="1" maxOccurs="1" name="crawlInProgressType"
type="s:int"/>
                          <s:element minOccurs="1" maxOccurs="1" name="lastCrawlSeedStatus"
type="s:int"/>
                          <s:element minOccurs="0" maxOccurs="1" name="lastCrawlErrorDescription"
type="s:string"/>
                    </s:sequence>
              </s:complexType>
              <s:element name="GetContentSources">
                    <s:complexType>
                          <s:sequence>
                                    <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
```

```xml
                <s:element minOccurs="1" maxOccurs="1" name="catalog" type="s:int"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="GetContentSourcesResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="GetContentSourcesResult"
type="tns:ContentSourcesInternal"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:complexType name="ContentSourcesInternal">
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="contentSourcesInternal"
type="tns:ArrayOfContentSourceInternal"/>
            <s:element minOccurs="0" maxOccurs="1" name="metadata" type="s:string"/>
        </s:sequence>
    </s:complexType>
    <s:complexType name="ArrayOfContentSourceInternal">
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="unbounded"
name="ContentSourceInternal" nillable="true" type="tns:ContentSourceInternal"/>
        </s:sequence>
    </s:complexType>
    <s:element name="AddContentSource">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                <s:element minOccurs="1" maxOccurs="1" name="catalog" type="s:int"/>
                <s:element minOccurs="1" maxOccurs="1" name="type" type="s:int"/>
                <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="AddContentSourceResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="AddContentSourceResult"
type="s:int"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="RemoveContentSource">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
                <s:element minOccurs="1" maxOccurs="1" name="catalog" type="s:int"/>
                <s:element minOccurs="1" maxOccurs="1" name="id" type="s:int"/>
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="RemoveContentSourceResponse">
        <s:complexType>
            <s:sequence>
```

```
                        <s:element minOccurs="1" maxOccurs="1"
name="RemoveContentSourceResult" type="s:int"/>
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            </s:element>
            <s:element name="GetCrawlMappings">
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                    <s:sequence>
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type="s:int"/>
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                </s:complexType>
            </s:element>
            <s:element name="GetCrawlMappingsResponse">
                <s:complexType>
                    <s:sequence>
                        <s:element minOccurs="0" maxOccurs="1" name="GetCrawlMappingsResult"
type="tns:ArrayOfCrawlMappingInternal"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:complexType name="ArrayOfCrawlMappingInternal">
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name="CrawlMappingInternal" nillable="true" type="tns:CrawlMappingInternal"/>
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                    <s:element minOccurs="0" maxOccurs="1" name="target" type="s:string"/>
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            <s:element name="AddCrawlMapping">
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                    <s:sequence>
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type="s:int"/>
                        <s:element minOccurs="0" maxOccurs="1" name="source"
type="s:string"/>
                        <s:element minOccurs="0" maxOccurs="1" name="target"
type="s:string"/>
                    </s:sequence>
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            </s:element>
            <s:element name="AddCrawlMappingResponse">
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                    <s:sequence>
                        <s:element minOccurs="1" maxOccurs="1" name="AddCrawlMappingResult"
type="s:int"/>
                    </s:sequence>
                </s:complexType>
            </s:element>
            <s:element name="RemoveCrawlMapping">
                <s:complexType>
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                        <s:element minOccurs="1" maxOccurs="1" name="versionIn"
type="s:int"/>
```

```
                            <s:element minOccurs="0" maxOccurs="1" name="source"
type="s:string"/>
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                </s:element>
                <s:element name="RemoveCrawlMappingResponse">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="RemoveCrawlMappingResult" type="s:int"/>
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                    </s:complexType>
                </s:element>
                <s:element name="ListKnownLotusNotesDatabases">
                    <s:complexType>
                        <s:sequence>
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type="s:string"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ListKnownLotusNotesDatabasesResponse">
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name="ListKnownLotusNotesDatabasesResult" type="tns:ArrayOfString"/>
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                    </s:complexType>
                </s:element>
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                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                            <s:element minOccurs="1" maxOccurs="1" name="minFreeDiskSpace"
type="s:long"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ValidateApplicationPathResponse">
                    <s:complexType>
                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
name="ValidateApplicationPathResult" type="s:long"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ValidatePath">
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                        <s:sequence>
                            <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                            <s:element minOccurs="1" maxOccurs="1" name="minFreeDiskSpace"
type="s:long"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
                <s:element name="ValidatePathResponse">
                    <s:complexType>
                        <s:sequence>
```

```
                    <s:element minOccurs="1" maxOccurs="1" name="ValidatePathResult"
type="s:long"/>
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            </s:complexType>
        </s:element>
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            <s:complexType/>
        </s:element>
        <s:element name="DefaultInstallationIndexLocationResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1"
name="DefaultInstallationIndexLocationResult" type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
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            <s:complexType/>
        </s:element>
        <s:element name="SystemDriveResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1" name="SystemDriveResult"
type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="IPAddress">
            <s:complexType/>
        </s:element>
        <s:element name="IPAddressResponse">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1" name="IPAddressResult"
type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="ConfigurePropagationShare">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                    <s:element minOccurs="0" maxOccurs="1" name="account"
type="s:string"/>
                </s:sequence>
            </s:complexType>
        </s:element>
        <s:element name="ConfigurePropagationShareResponse">
            <s:complexType/>
        </s:element>
        <s:element name="IsPropagationShareConfigured">
            <s:complexType>
                <s:sequence>
                    <s:element minOccurs="0" maxOccurs="1" name="path" type="s:string"/>
                    <s:element minOccurs="0" maxOccurs="1" name="account"
type="s:string"/>
                </s:sequence>
            </s:complexType>
```

```
                </s:element>
                <s:element name="IsPropagationShareConfiguredResponse">
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                        <s:sequence>
                            <s:element minOccurs="1" maxOccurs="1"
 name="IsPropagationShareConfiguredResult" type="s:int"/>
                        </s:sequence>
                    </s:complexType>
                </s:element>
        </s:schema>
    </wsdl:types>
    <wsdl:message name="GetVersionSoapIn">
        <wsdl:part name="parameters" element="tns:GetVersion"/>
    </wsdl:message>
    <wsdl:message name="GetVersionSoapOut">
        <wsdl:part name="parameters" element="tns:GetVersionResponse"/>
    </wsdl:message>
    <wsdl:message name="SetDefaultGatheringAccountSoapIn">
        <wsdl:part name="parameters" element="tns:SetDefaultGatheringAccount"/>
    </wsdl:message>
    <wsdl:message name="SetDefaultGatheringAccountSoapOut">
        <wsdl:part name="parameters" element="tns:SetDefaultGatheringAccountResponse"/>
    </wsdl:message>
    <wsdl:message name="GetContentStateSoapIn">
        <wsdl:part name="parameters" element="tns:GetContentState"/>
    </wsdl:message>
    <wsdl:message name="GetContentStateSoapOut">
        <wsdl:part name="parameters" element="tns:GetContentStateResponse"/>
    </wsdl:message>
    <wsdl:message name="SetRetryLimitSoapIn">
        <wsdl:part name="parameters" element="tns:SetRetryLimit"/>
    </wsdl:message>
    <wsdl:message name="SetRetryLimitSoapOut">
        <wsdl:part name="parameters" element="tns:SetRetryLimitResponse"/>
    </wsdl:message>
    <wsdl:message name="SetContentSourcesMetadataSoapIn">
        <wsdl:part name="parameters" element="tns:SetContentSourcesMetadata"/>
    </wsdl:message>
    <wsdl:message name="SetContentSourcesMetadataSoapOut">
        <wsdl:part name="parameters" element="tns:SetContentSourcesMetadataResponse"/>
    </wsdl:message>
    <wsdl:message name="IndexSizeSoapIn">
        <wsdl:part name="parameters" element="tns:IndexSize"/>
    </wsdl:message>
    <wsdl:message name="IndexSizeSoapOut">
        <wsdl:part name="parameters" element="tns:IndexSizeResponse"/>
    </wsdl:message>
    <wsdl:message name="CatalogPauseCrawlRequestSoapIn">
        <wsdl:part name="parameters" element="tns:CatalogPauseCrawlRequest"/>
    </wsdl:message>
    <wsdl:message name="CatalogPauseCrawlRequestSoapOut">
        <wsdl:part name="parameters" element="tns:CatalogPauseCrawlRequestResponse"/>
    </wsdl:message>
    <wsdl:message name="CatalogResumeCrawlRequestSoapIn">
        <wsdl:part name="parameters" element="tns:CatalogResumeCrawlRequest"/>
    </wsdl:message>
    <wsdl:message name="CatalogResumeCrawlRequestSoapOut">
```

```
        <wsdl:part name="parameters" element="tns:CatalogResumeCrawlRequestResponse"/>
    </wsdl:message>
    <wsdl:message name="CatalogPauseStatusSoapIn">
        <wsdl:part name="parameters" element="tns:CatalogPauseStatus"/>
    </wsdl:message>
    <wsdl:message name="CatalogPauseStatusSoapOut">
        <wsdl:part name="parameters" element="tns:CatalogPauseStatusResponse"/>
    </wsdl:message>
    <wsdl:message name="IsCatalogPauseCompletedSoapIn">
        <wsdl:part name="parameters" element="tns:IsCatalogPauseCompleted"/>
    </wsdl:message>
    <wsdl:message name="IsCatalogPauseCompletedSoapOut">
        <wsdl:part name="parameters" element="tns:IsCatalogPauseCompletedResponse"/>
    </wsdl:message>
    <wsdl:message name="StartRankingUpdateSoapIn">
        <wsdl:part name="parameters" element="tns:StartRankingUpdate"/>
    </wsdl:message>
    <wsdl:message name="StartRankingUpdateSoapOut">
        <wsdl:part name="parameters" element="tns:StartRankingUpdateResponse"/>
    </wsdl:message>
    <wsdl:message name="IsDeleteCrawlInProgressSoapIn">
        <wsdl:part name="parameters" element="tns:IsDeleteCrawlInProgress"/>
    </wsdl:message>
    <wsdl:message name="IsDeleteCrawlInProgressSoapOut">
        <wsdl:part name="parameters" element="tns:IsDeleteCrawlInProgressResponse"/>
    </wsdl:message>
    <wsdl:message name="SearchDatabaseCleanupSoapIn">
        <wsdl:part name="parameters" element="tns:SearchDatabaseCleanup"/>
    </wsdl:message>
    <wsdl:message name="SearchDatabaseCleanupSoapOut">
        <wsdl:part name="parameters" element="tns:SearchDatabaseCleanupResponse"/>
    </wsdl:message>
    <wsdl:message name="RefreshContentSourceSoapIn">
        <wsdl:part name="parameters" element="tns:RefreshContentSource"/>
    </wsdl:message>
    <wsdl:message name="RefreshContentSourceSoapOut">
        <wsdl:part name="parameters" element="tns:RefreshContentSourceResponse"/>
    </wsdl:message>
    <wsdl:message name="RefreshAnchorContentSourceSoapIn">
        <wsdl:part name="parameters" element="tns:RefreshAnchorContentSource"/>
    </wsdl:message>
    <wsdl:message name="RefreshAnchorContentSourceSoapOut">
        <wsdl:part name="parameters" element="tns:RefreshAnchorContentSourceResponse"/>
    </wsdl:message>
    <wsdl:message name="EditContentSourceSoapIn">
        <wsdl:part name="parameters" element="tns:EditContentSource"/>
    </wsdl:message>
    <wsdl:message name="EditContentSourceSoapOut">
        <wsdl:part name="parameters" element="tns:EditContentSourceResponse"/>
    </wsdl:message>
    <wsdl:message name="GetPropagationInternalSoapIn">
        <wsdl:part name="parameters" element="tns:GetPropagationInternal"/>
    </wsdl:message>
    <wsdl:message name="GetPropagationInternalSoapOut">
        <wsdl:part name="parameters" element="tns:GetPropagationInternalResponse"/>
    </wsdl:message>
    <wsdl:message name="RemoveQueryServerSoapIn">
```

```
        <wsdl:part name="parameters" element="tns:RemoveQueryServer"/>
    </wsdl:message>
    <wsdl:message name="RemoveQueryServerSoapOut">
        <wsdl:part name="parameters" element="tns:RemoveQueryServerResponse"/>
    </wsdl:message>
    <wsdl:message name="StartCrawlSoapIn">
        <wsdl:part name="parameters" element="tns:StartCrawl"/>
    </wsdl:message>
    <wsdl:message name="StartCrawlSoapOut">
        <wsdl:part name="parameters" element="tns:StartCrawlResponse"/>
    </wsdl:message>
    <wsdl:message name="PauseCrawlSoapIn">
        <wsdl:part name="parameters" element="tns:PauseCrawl"/>
    </wsdl:message>
    <wsdl:message name="PauseCrawlSoapOut">
        <wsdl:part name="parameters" element="tns:PauseCrawlResponse"/>
    </wsdl:message>
    <wsdl:message name="ResumeCrawlSoapIn">
        <wsdl:part name="parameters" element="tns:ResumeCrawl"/>
    </wsdl:message>
    <wsdl:message name="ResumeCrawlSoapOut">
        <wsdl:part name="parameters" element="tns:ResumeCrawlResponse"/>
    </wsdl:message>
    <wsdl:message name="StopCrawlSoapIn">
        <wsdl:part name="parameters" element="tns:StopCrawl"/>
    </wsdl:message>
    <wsdl:message name="StopCrawlSoapOut">
        <wsdl:part name="parameters" element="tns:StopCrawlResponse"/>
    </wsdl:message>
    <wsdl:message name="ResetAppSoapIn">
        <wsdl:part name="parameters" element="tns:ResetApp"/>
    </wsdl:message>
    <wsdl:message name="ResetAppSoapOut">
        <wsdl:part name="parameters" element="tns:ResetAppResponse"/>
    </wsdl:message>
    <wsdl:message name="MountAppSoapIn">
        <wsdl:part name="parameters" element="tns:MountApp"/>
    </wsdl:message>
    <wsdl:message name="MountAppSoapOut">
        <wsdl:part name="parameters" element="tns:MountAppResponse"/>
    </wsdl:message>
    <wsdl:message name="DismountAppSoapIn">
        <wsdl:part name="parameters" element="tns:DismountApp"/>
    </wsdl:message>
    <wsdl:message name="DismountAppSoapOut">
        <wsdl:part name="parameters" element="tns:DismountAppResponse"/>
    </wsdl:message>
    <wsdl:message name="IsMountedSoapIn">
        <wsdl:part name="parameters" element="tns:IsMounted"/>
    </wsdl:message>
    <wsdl:message name="IsMountedSoapOut">
        <wsdl:part name="parameters" element="tns:IsMountedResponse"/>
    </wsdl:message>
    <wsdl:message name="RemoveAppSoapIn">
        <wsdl:part name="parameters" element="tns:RemoveApp"/>
    </wsdl:message>
    <wsdl:message name="RemoveAppSoapOut">
```

```xml
            <wsdl:part name="parameters" element="tns:RemoveAppResponse"/>
        </wsdl:message>
        <wsdl:message name="GetGathererApplicationsSoapIn">
            <wsdl:part name="parameters" element="tns:GetGathererApplications"/>
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        </wsdl:message>
        <wsdl:message name="AddAppSoapIn">
            <wsdl:part name="parameters" element="tns:AddApp"/>
        </wsdl:message>
        <wsdl:message name="AddAppSoapOut">
            <wsdl:part name="parameters" element="tns:AddAppResponse"/>
        </wsdl:message>
        <wsdl:message name="RemoveAllGathererApplicationsSoapIn">
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        </wsdl:message>
        <wsdl:message name="ClearExtensionListSoapIn">
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        </wsdl:message>
        <wsdl:message name="ClearExtensionListSoapOut">
            <wsdl:part name="parameters" element="tns:ClearExtensionListResponse"/>
        </wsdl:message>
        <wsdl:message name="GetExtensionListSoapIn">
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        </wsdl:message>
        <wsdl:message name="GetExtensionListSoapOut">
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        </wsdl:message>
        <wsdl:message name="SetIsExtensionIncludeListSoapIn">
```

```
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    <wsdl:part name="parameters" element="tns:ActivateProfileImportResponse"/>
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 element="tns:CleanUnreferencedSiteRestrictionsResponse"/>
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    <wsdl:message name="StartFullImportSoapOut">
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    </wsdl:message>
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    <wsdl:message name="GetContentSourcesSoapOut">
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    <wsdl:message name="AddContentSourceSoapOut">
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    <wsdl:part name="parameters" element="tns:ListKnownLotusNotesDatabasesResponse"/>
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</wsdl:message>
<wsdl:message name="ValidateApplicationPathSoapOut">
    <wsdl:part name="parameters" element="tns:ValidateApplicationPathResponse"/>
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<wsdl:message name="ValidatePathSoapOut">
    <wsdl:part name="parameters" element="tns:ValidatePathResponse"/>
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</wsdl:message>
<wsdl:message name="DefaultInstallationIndexLocationSoapOut">
    <wsdl:part name="parameters" element="tns:DefaultInstallationIndexLocationResponse"/>
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    <wsdl:part name="parameters" element="tns:SystemDriveResponse"/>
</wsdl:message>
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    <wsdl:part name="parameters" element="tns:IPAddressResponse"/>
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</wsdl:message>
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    <wsdl:part name="parameters" element="tns:ConfigurePropagationShareResponse"/>
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<wsdl:message name="IsPropagationShareConfiguredSoapIn">
    <wsdl:part name="parameters" element="tns:IsPropagationShareConfigured"/>
</wsdl:message>
<wsdl:message name="IsPropagationShareConfiguredSoapOut">
    <wsdl:part name="parameters" element="tns:IsPropagationShareConfiguredResponse"/>
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        <wsdl:output message="tns:GetVersionSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetDefaultGatheringAccount">
        <wsdl:input message="tns:SetDefaultGatheringAccountSoapIn"/>
        <wsdl:output message="tns:SetDefaultGatheringAccountSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="GetContentState">
        <wsdl:input message="tns:GetContentStateSoapIn"/>
        <wsdl:output message="tns:GetContentStateSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetRetryLimit">
        <wsdl:input message="tns:SetRetryLimitSoapIn"/>
        <wsdl:output message="tns:SetRetryLimitSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="SetContentSourcesMetadata">
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        <wsdl:output message="tns:SetContentSourcesMetadataSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="IndexSize">
        <wsdl:input message="tns:IndexSizeSoapIn"/>
        <wsdl:output message="tns:IndexSizeSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="CatalogPauseCrawlRequest">
        <wsdl:input message="tns:CatalogPauseCrawlRequestSoapIn"/>
        <wsdl:output message="tns:CatalogPauseCrawlRequestSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="CatalogResumeCrawlRequest">
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        <wsdl:output message="tns:CatalogResumeCrawlRequestSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="CatalogPauseStatus">
        <wsdl:input message="tns:CatalogPauseStatusSoapIn"/>
        <wsdl:output message="tns:CatalogPauseStatusSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="IsCatalogPauseCompleted">
        <wsdl:input message="tns:IsCatalogPauseCompletedSoapIn"/>
        <wsdl:output message="tns:IsCatalogPauseCompletedSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="StartRankingUpdate">
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        <wsdl:output message="tns:StartRankingUpdateSoapOut"/>
    </wsdl:operation>
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```
<wsdl:operation name="IsDeleteCrawlInProgress">
    <wsdl:input message="tns:IsDeleteCrawlInProgressSoapIn"/>
    <wsdl:output message="tns:IsDeleteCrawlInProgressSoapOut"/>
</wsdl:operation>
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    <wsdl:input message="tns:SearchDatabaseCleanupSoapIn"/>
    <wsdl:output message="tns:SearchDatabaseCleanupSoapOut"/>
</wsdl:operation>
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    <wsdl:input message="tns:RefreshContentSourceSoapIn"/>
    <wsdl:output message="tns:RefreshContentSourceSoapOut"/>
</wsdl:operation>
<wsdl:operation name="RefreshAnchorContentSource">
    <wsdl:input message="tns:RefreshAnchorContentSourceSoapIn"/>
    <wsdl:output message="tns:RefreshAnchorContentSourceSoapOut"/>
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    <wsdl:output message="tns:EditContentSourceSoapOut"/>
</wsdl:operation>
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    <wsdl:output message="tns:GetPropagationInternalSoapOut"/>
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    <wsdl:output message="tns:RemoveQueryServerSoapOut"/>
</wsdl:operation>
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    <wsdl:output message="tns:StartCrawlSoapOut"/>
</wsdl:operation>
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    <wsdl:output message="tns:PauseCrawlSoapOut"/>
</wsdl:operation>
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    <wsdl:output message="tns:ResumeCrawlSoapOut"/>
</wsdl:operation>
<wsdl:operation name="StopCrawl">
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</wsdl:operation>
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    <wsdl:output message="tns:MountAppSoapOut"/>
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<wsdl:operation name="DismountApp">
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</wsdl:operation>
<wsdl:operation name="IsMounted">
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            <wsdl:input message="tns:IsMountedSoapIn"/>
            <wsdl:output message="tns:IsMountedSoapOut"/>
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            <wsdl:input message="tns:RemoveAppSoapIn"/>
            <wsdl:output message="tns:RemoveAppSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="GetGathererApplications">
            <wsdl:input message="tns:GetGathererApplicationsSoapIn"/>
            <wsdl:output message="tns:GetGathererApplicationsSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="AddApp">
            <wsdl:input message="tns:AddAppSoapIn"/>
            <wsdl:output message="tns:AddAppSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="RemoveAllGathererApplications">
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            <wsdl:output message="tns:RemoveAllGathererApplicationsSoapOut"/>
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            <wsdl:output message="tns:ValidateScheduleTriggerSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="BackupRegistry">
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        </wsdl:operation>
        <wsdl:operation name="AddExtension">
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        </wsdl:operation>
        <wsdl:operation name="RemoveExtension">
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        </wsdl:operation>
        <wsdl:operation name="ClearExtensionList">
            <wsdl:input message="tns:ClearExtensionListSoapIn"/>
            <wsdl:output message="tns:ClearExtensionListSoapOut"/>
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        <wsdl:operation name="GetExtensionList">
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        </wsdl:operation>
        <wsdl:operation name="SetIsExtensionIncludeList">
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        </wsdl:operation>
        <wsdl:operation name="SetCrawlRuleCredentials">
            <wsdl:input message="tns:SetCrawlRuleCredentialsSoapIn"/>
            <wsdl:output message="tns:SetCrawlRuleCredentialsSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="GetSiteRestrictionList">
            <wsdl:input message="tns:GetSiteRestrictionListSoapIn"/>
            <wsdl:output message="tns:GetSiteRestrictionListSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="AddSiteRestriction">
            <wsdl:input message="tns:AddSiteRestrictionSoapIn"/>
            <wsdl:output message="tns:AddSiteRestrictionSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="RemoveSiteRestriction">
            <wsdl:input message="tns:RemoveSiteRestrictionSoapIn"/>
            <wsdl:output message="tns:RemoveSiteRestrictionSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="AddSitePath">
            <wsdl:input message="tns:AddSitePathSoapIn"/>
            <wsdl:output message="tns:AddSitePathSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="RemoveSitePath">
            <wsdl:input message="tns:RemoveSitePathSoapIn"/>
            <wsdl:output message="tns:RemoveSitePathSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="ActivateProfileImport">
            <wsdl:input message="tns:ActivateProfileImportSoapIn"/>
            <wsdl:output message="tns:ActivateProfileImportSoapOut"/>
        </wsdl:operation>
        <wsdl:operation name="SetDefaultImportAccount">
            <wsdl:input message="tns:SetDefaultImportAccountSoapIn"/>
            <wsdl:output message="tns:SetDefaultImportAccountSoapOut"/>
```

```
            </wsdl:operation>
            <wsdl:operation name="SetImportAccount">
                <wsdl:input message="tns:SetImportAccountSoapIn"/>
                <wsdl:output message="tns:SetImportAccountSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="GetImportAccounts">
                <wsdl:input message="tns:GetImportAccountsSoapIn"/>
                <wsdl:output message="tns:GetImportAccountsSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="CleanUnreferencedSiteRestrictions">
                <wsdl:input message="tns:CleanUnreferencedSiteRestrictionsSoapIn"/>
                <wsdl:output message="tns:CleanUnreferencedSiteRestrictionsSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="GetContentSource">
                <wsdl:input message="tns:GetContentSourceSoapIn"/>
                <wsdl:output message="tns:GetContentSourceSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="StartFullImport">
                <wsdl:input message="tns:StartFullImportSoapIn"/>
                <wsdl:output message="tns:StartFullImportSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="StartIncrementalImport">
                <wsdl:input message="tns:StartIncrementalImportSoapIn"/>
                <wsdl:output message="tns:StartIncrementalImportSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="StopImport">
                <wsdl:input message="tns:StopImportSoapIn"/>
                <wsdl:output message="tns:StopImportSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="GetImportStatus">
                <wsdl:input message="tns:GetImportStatusSoapIn"/>
                <wsdl:output message="tns:GetImportStatusSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="GetContentSources">
                <wsdl:input message="tns:GetContentSourcesSoapIn"/>
                <wsdl:output message="tns:GetContentSourcesSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="AddContentSource">
                <wsdl:input message="tns:AddContentSourceSoapIn"/>
                <wsdl:output message="tns:AddContentSourceSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="RemoveContentSource">
                <wsdl:input message="tns:RemoveContentSourceSoapIn"/>
                <wsdl:output message="tns:RemoveContentSourceSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="GetCrawlMappings">
                <wsdl:input message="tns:GetCrawlMappingsSoapIn"/>
                <wsdl:output message="tns:GetCrawlMappingsSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="AddCrawlMapping">
                <wsdl:input message="tns:AddCrawlMappingSoapIn"/>
                <wsdl:output message="tns:AddCrawlMappingSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="RemoveCrawlMapping">
                <wsdl:input message="tns:RemoveCrawlMappingSoapIn"/>
                <wsdl:output message="tns:RemoveCrawlMappingSoapOut"/>
            </wsdl:operation>
```

```
            <wsdl:operation name="ListKnownLotusNotesDatabases">
                <wsdl:input message="tns:ListKnownLotusNotesDatabasesSoapIn"/>
                <wsdl:output message="tns:ListKnownLotusNotesDatabasesSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="ValidateApplicationPath">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Validates a
  file system path and a minimum amount of free disk space.</wsdl:documentation>
                <wsdl:input message="tns:ValidateApplicationPathSoapIn"/>
                <wsdl:output message="tns:ValidateApplicationPathSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="ValidatePath">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Validates a
  file system path and a minimum amount of free disk space.</wsdl:documentation>
                <wsdl:input message="tns:ValidatePathSoapIn"/>
                <wsdl:output message="tns:ValidatePathSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="DefaultInstallationIndexLocation">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Returns the
  default installation index location, that is, the path to the Data folder under the
  application installation root.</wsdl:documentation>
                <wsdl:input message="tns:DefaultInstallationIndexLocationSoapIn"/>
                <wsdl:output message="tns:DefaultInstallationIndexLocationSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="SystemDrive">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Returns the
  system drive letter.</wsdl:documentation>
                <wsdl:input message="tns:SystemDriveSoapIn"/>
                <wsdl:output message="tns:SystemDriveSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="IPAddress">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Returns the
  static IP address of this server if one exists. Otherwise, the dynamic IP
  address.</wsdl:documentation>
                <wsdl:input message="tns:IPAddressSoapIn"/>
                <wsdl:output message="tns:IPAddressSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="ConfigurePropagationShare">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Ensures that
  the propagation share with the appropriate ACL.</wsdl:documentation>
                <wsdl:input message="tns:ConfigurePropagationShareSoapIn"/>
                <wsdl:output message="tns:ConfigurePropagationShareSoapOut"/>
            </wsdl:operation>
            <wsdl:operation name="IsPropagationShareConfigured">
                <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">Checks whether
  the propagation share exists and whether it is configured with the appropriate
  ACL.</wsdl:documentation>
                <wsdl:input message="tns:IsPropagationShareConfiguredSoapIn"/>
                <wsdl:output message="tns:IsPropagationShareConfiguredSoapOut"/>
            </wsdl:operation>
        </wsdl:portType>
        <wsdl:binding name="SearchApplicationWebServiceSoap"
  type="tns:SearchApplicationWebServiceSoap">
            <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
            <wsdl:operation name="GetVersion">
                <soap:operation
  soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
  GetVersion" style="document"/>
                <wsdl:input>
```

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                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetDefaultGatheringAccount">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetDefaultGatheringAccount" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetContentState">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetContentState" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetRetryLimit">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetRetryLimit" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetContentSourcesMetadata">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetContentSourcesMetadata" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IndexSize">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IndexSize" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
```

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                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="CatalogPauseCrawlRequest">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
CatalogPauseCrawlRequest" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="CatalogResumeCrawlRequest">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
CatalogResumeCrawlRequest" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="CatalogPauseStatus">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
CatalogPauseStatus" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IsCatalogPauseCompleted">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsCatalogPauseCompleted" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartRankingUpdate">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartRankingUpdate" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
```

```
        <wsdl:operation name="IsDeleteCrawlInProgress">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsDeleteCrawlInProgress" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SearchDatabaseCleanup">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SearchDatabaseCleanup" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RefreshContentSource">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RefreshContentSource" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RefreshAnchorContentSource">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RefreshAnchorContentSource" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="EditContentSource">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
EditContentSource" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetPropagationInternal">
```

```
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetPropagationInternal" style="document"/>
               <wsdl:input>
                   <soap:body use="literal"/>
               </wsdl:input>
               <wsdl:output>
                   <soap:body use="literal"/>
               </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveQueryServer">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveQueryServer" style="document"/>
               <wsdl:input>
                   <soap:body use="literal"/>
               </wsdl:input>
               <wsdl:output>
                   <soap:body use="literal"/>
               </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartCrawl">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartCrawl" style="document"/>
               <wsdl:input>
                   <soap:body use="literal"/>
               </wsdl:input>
               <wsdl:output>
                   <soap:body use="literal"/>
               </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="PauseCrawl">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
PauseCrawl" style="document"/>
               <wsdl:input>
                   <soap:body use="literal"/>
               </wsdl:input>
               <wsdl:output>
                   <soap:body use="literal"/>
               </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ResumeCrawl">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ResumeCrawl" style="document"/>
               <wsdl:input>
                   <soap:body use="literal"/>
               </wsdl:input>
               <wsdl:output>
                   <soap:body use="literal"/>
               </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StopCrawl">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StopCrawl" style="document"/>
```

```
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="ResetApp">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ResetApp" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="MountApp">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
MountApp" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="DismountApp">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
DismountApp" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="IsMounted">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsMounted" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveApp">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveApp" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
```

```
                    <wsdl:output>
                        <soap:body use="literal"/>
                    </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="GetGathererApplications">
                    <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetGathererApplications" style="document"/>
                    <wsdl:input>
                        <soap:body use="literal"/>
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal"/>
                    </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="AddApp">
                    <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddApp" style="document"/>
                    <wsdl:input>
                        <soap:body use="literal"/>
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal"/>
                    </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveAllGathererApplications">
                    <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveAllGathererApplications" style="document"/>
                    <wsdl:input>
                        <soap:body use="literal"/>
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal"/>
                    </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="ValidateScheduleTrigger">
                    <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ValidateScheduleTrigger" style="document"/>
                    <wsdl:input>
                        <soap:body use="literal"/>
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal"/>
                    </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="BackupRegistry">
                    <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
BackupRegistry" style="document"/>
                    <wsdl:input>
                        <soap:body use="literal"/>
                    </wsdl:input>
                    <wsdl:output>
                        <soap:body use="literal"/>
                    </wsdl:output>
```

```
            </wsdl:operation>
            <wsdl:operation name="AddExtension">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddExtension" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveExtension">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveExtension" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="ClearExtensionList">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ClearExtensionList" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="GetExtensionList">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetExtensionList" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="SetIsExtensionIncludeList">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetIsExtensionIncludeList" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="IsExtensionIncludeList">
```

```
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsExtensionIncludeList" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddCrawlRule">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddCrawlRule" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveCrawlRule">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveCrawlRule" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetCrawlRuleList">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetCrawlRuleList" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="UpdateCrawlRule">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
UpdateCrawlRule" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ActivateCrawlRule">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ActivateCrawlRule" style="document"/>
```

```
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="TestCrawlRule">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
TestCrawlRule" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="TestCrawlRules">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
TestCrawlRules" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetCrawlRulePriority">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetCrawlRulePriority" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetCrawlRuleCredentials">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetCrawlRuleCredentials" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetSiteRestrictionList">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetSiteRestrictionList" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
```

```
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="AddSiteRestriction">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddSiteRestriction" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveSiteRestriction">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveSiteRestriction" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="AddSitePath">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddSitePath" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveSitePath">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveSitePath" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="ActivateProfileImport">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ActivateProfileImport" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
```

```
        </wsdl:operation>
        <wsdl:operation name="SetDefaultImportAccount">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetDefaultImportAccount" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetImportAccount">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetImportAccount" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetImportAccounts">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetImportAccounts" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="CleanUnreferencedSiteRestrictions">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
CleanUnreferencedSiteRestrictions" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetContentSource">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetContentSource" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartFullImport">
```

```
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartFullImport" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartIncrementalImport">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartIncrementalImport" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StopImport">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StopImport" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetImportStatus">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetImportStatus" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetContentSources">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetContentSources" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddContentSource">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddContentSource" style="document"/>
```

```
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveContentSource">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveContentSource" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="GetCrawlMappings">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetCrawlMappings" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="AddCrawlMapping">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddCrawlMapping" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="RemoveCrawlMapping">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveCrawlMapping" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="ListKnownLotusNotesDatabases">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ListKnownLotusNotesDatabases" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
```

```
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ValidateApplicationPath">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ValidateApplicationPath" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ValidatePath">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ValidatePath" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="DefaultInstallationIndexLocation">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
DefaultInstallationIndexLocation" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SystemDrive">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SystemDrive" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IPAddress">
            <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IPAddress" style="document"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
```

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            </wsdl:operation>
            <wsdl:operation name="ConfigurePropagationShare">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ConfigurePropagationShare" style="document"/>
                <wsdl:input>
                    <soap:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="IsPropagationShareConfigured">
                <soap:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsPropagationShareConfigured" 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="SearchApplicationWebServiceSoap12"
type="tns:SearchApplicationWebServiceSoap">
            <soap12:binding transport="http://schemas.xmlsoap.org/soap/http"/>
            <wsdl:operation name="GetVersion">
                <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetVersion" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="SetDefaultGatheringAccount">
                <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetDefaultGatheringAccount" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="GetContentState">
                <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetContentState" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
```

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                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="SetRetryLimit">
                <soap12:operation
    soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
    SetRetryLimit" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="SetContentSourcesMetadata">
                <soap12:operation
    soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
    SetContentSourcesMetadata" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="IndexSize">
                <soap12:operation
    soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
    IndexSize" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="CatalogPauseCrawlRequest">
                <soap12:operation
    soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
    CatalogPauseCrawlRequest" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="CatalogResumeCrawlRequest">
                <soap12:operation
    soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
    CatalogResumeCrawlRequest" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
            </wsdl:operation>
            <wsdl:operation name="CatalogPauseStatus">
```

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            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
CatalogPauseStatus" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IsCatalogPauseCompleted">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsCatalogPauseCompleted" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartRankingUpdate">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartRankingUpdate" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IsDeleteCrawlInProgress">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsDeleteCrawlInProgress" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SearchDatabaseCleanup">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SearchDatabaseCleanup" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RefreshContentSource">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RefreshContentSource" style="document"/>
```

```
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RefreshAnchorContentSource">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 RefreshAnchorContentSource" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="EditContentSource">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 EditContentSource" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetPropagationInternal">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 GetPropagationInternal" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveQueryServer">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 RemoveQueryServer" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartCrawl">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 StartCrawl" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
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                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="PauseCrawl">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
PauseCrawl" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ResumeCrawl">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ResumeCrawl" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StopCrawl">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StopCrawl" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ResetApp">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ResetApp" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="MountApp">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
MountApp" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
```

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        </wsdl:operation>
        <wsdl:operation name="DismountApp">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
DismountApp" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IsMounted">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsMounted" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveApp">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveApp" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetGathererApplications">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetGathererApplications" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddApp">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddApp" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveAllGathererApplications">
```

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            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveAllGathererApplications" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ValidateScheduleTrigger">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ValidateScheduleTrigger" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="BackupRegistry">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
BackupRegistry" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddExtension">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddExtension" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveExtension">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveExtension" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ClearExtensionList">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ClearExtensionList" style="document"/>
```

```
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetExtensionList">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 GetExtensionList" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetIsExtensionIncludeList">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 SetIsExtensionIncludeList" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IsExtensionIncludeList">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 IsExtensionIncludeList" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddCrawlRule">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 AddCrawlRule" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveCrawlRule">
            <soap12:operation
 soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
 RemoveCrawlRule" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
```

```
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetCrawlRuleList">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetCrawlRuleList" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="UpdateCrawlRule">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
UpdateCrawlRule" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ActivateCrawlRule">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ActivateCrawlRule" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="TestCrawlRule">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
TestCrawlRule" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="TestCrawlRules">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
TestCrawlRules" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
```

```
        </wsdl:operation>
        <wsdl:operation name="SetCrawlRulePriority">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetCrawlRulePriority" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetCrawlRuleCredentials">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetCrawlRuleCredentials" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetSiteRestrictionList">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetSiteRestrictionList" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddSiteRestriction">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddSiteRestriction" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveSiteRestriction">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveSiteRestriction" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddSitePath">
```

```
              <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddSitePath" style="document"/>
              <wsdl:input>
                  <soap12:body use="literal"/>
              </wsdl:input>
              <wsdl:output>
                  <soap12:body use="literal"/>
              </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveSitePath">
              <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveSitePath" style="document"/>
              <wsdl:input>
                  <soap12:body use="literal"/>
              </wsdl:input>
              <wsdl:output>
                  <soap12:body use="literal"/>
              </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ActivateProfileImport">
              <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ActivateProfileImport" style="document"/>
              <wsdl:input>
                  <soap12:body use="literal"/>
              </wsdl:input>
              <wsdl:output>
                  <soap12:body use="literal"/>
              </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetDefaultImportAccount">
              <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetDefaultImportAccount" style="document"/>
              <wsdl:input>
                  <soap12:body use="literal"/>
              </wsdl:input>
              <wsdl:output>
                  <soap12:body use="literal"/>
              </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SetImportAccount">
              <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SetImportAccount" style="document"/>
              <wsdl:input>
                  <soap12:body use="literal"/>
              </wsdl:input>
              <wsdl:output>
                  <soap12:body use="literal"/>
              </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetImportAccounts">
              <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetImportAccounts" style="document"/>
```

```
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="CleanUnreferencedSiteRestrictions">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
CleanUnreferencedSiteRestrictions" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetContentSource">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetContentSource" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartFullImport">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartFullImport" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StartIncrementalImport">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StartIncrementalImport" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
                <wsdl:output>
                    <soap12:body use="literal"/>
                </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="StopImport">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
StopImport" style="document"/>
                <wsdl:input>
                    <soap12:body use="literal"/>
                </wsdl:input>
```

```
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetImportStatus">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetImportStatus" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetContentSources">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetContentSources" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="AddContentSource">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddContentSource" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveContentSource">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveContentSource" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="GetCrawlMappings">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
GetCrawlMappings" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
```

```
        </wsdl:operation>
        <wsdl:operation name="AddCrawlMapping">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
AddCrawlMapping" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="RemoveCrawlMapping">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
RemoveCrawlMapping" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ListKnownLotusNotesDatabases">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ListKnownLotusNotesDatabases" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ValidateApplicationPath">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ValidateApplicationPath" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ValidatePath">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ValidatePath" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="DefaultInstallationIndexLocation">
```

```
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
DefaultInstallationIndexLocation" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="SystemDrive">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
SystemDrive" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IPAddress">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IPAddress" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="ConfigurePropagationShare">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
ConfigurePropagationShare" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
        <wsdl:operation name="IsPropagationShareConfigured">
            <soap12:operation
soapAction="http://microsoft.com/webservices/OfficeServer/Search/SearchApplicationWebService/
IsPropagationShareConfigured" style="document"/>
            <wsdl:input>
                <soap12:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap12:body use="literal"/>
            </wsdl:output>
        </wsdl:operation>
    </wsdl:binding>
</wsdl:definitions>
```

7   Appendix B: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

▪ Microsoft® Office SharePoint® Server 2007

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

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

<1> Section 3.1.4: This functionality was added as part of the Office SharePoint Server 2007 Infrastructure Update.

<2> Section 3.1.4: This functionality was added as part of the Office SharePoint Server 2007 Infrastructure Update.

8 Change Tracking

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

Release: Tuesday, April 10, 2012

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Release: Tuesday, April 10, 2012