

[MS-OXWSGNI]: Nonindexable Item Web Service Protocol

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft [Open Specification Promise](#) or the [Community Promise](#). If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting iplg@microsoft.com.
- **Trademarks.** The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights. For a list of Microsoft trademarks, visit www.microsoft.com/trademarks.
- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

Reservation of Rights. All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

Tools. The Open Specifications do not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them. Certain Open Specifications are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

Preliminary Documentation. This Open Specification provides documentation for past and current releases and/or for the pre-release (beta) version of this technology. This Open Specification is final documentation for past or current releases as specifically noted in the document, as applicable; it is preliminary documentation for the pre-release (beta) versions. Microsoft will release final documentation in connection with the commercial release of the updated or new version of this technology. As the documentation may change between this preliminary version and the final version of this technology, there are risks in relying on preliminary documentation. To the extent that you incur additional development obligations or any other costs as a result of relying on this preliminary documentation, you do so at your own risk.

Revision Summary

Date	Revision History	Revision Class	Comments
07/16/2012	0.1	New	Released new document.
10/08/2012	1.0	Major	Significantly changed the technical content.
02/11/2013	2.0	Major	Significantly changed the technical content.
07/26/2013	2.0	No change	No changes to the meaning, language, or formatting of the technical content.
11/18/2013	2.0	No change	No changes to the meaning, language, or formatting of the technical content.

Table of Contents

1 Introduction	5
1.1 Glossary	5
1.2 References	5
1.2.1 Normative References	5
1.2.2 Informative References	6
1.3 Overview	6
1.4 Relationship to Other Protocols	6
1.5 Prerequisites/Preconditions	7
1.6 Applicability Statement	7
1.7 Versioning and Capability Negotiation	7
1.8 Vendor-Extensible Fields	8
1.9 Standards Assignments	8
2 Messages	9
2.1 Transport	9
2.2 Common Message Syntax	9
2.2.1 Namespaces	9
2.2.2 Messages	9
2.2.3 Elements	9
2.2.4 Complex Types	10
2.2.4.1 NonEmptyArrayOfLegacyDNSType	10
2.2.5 Simple Types	10
2.2.6 Attributes	10
2.2.7 Groups	10
2.2.8 Attribute Groups	10
3 Protocol Details	11
3.1 ExchangeServicePortType Server Details	11
3.1.1 Abstract Data Model	11
3.1.2 Timers	11
3.1.3 Initialization	11
3.1.4 Message Processing Events and Sequencing Rules	11
3.1.4.1 GetNonIndexableItemDetails	11
3.1.4.1.1 Messages	12
3.1.4.1.1.1 GetNonIndexableItemDetailsSoapIn	12
3.1.4.1.1.2 GetNonIndexableItemDetailsSoapOut	13
3.1.4.1.2 Elements	14
3.1.4.1.2.1 GetNonIndexableItemDetails	14
3.1.4.1.2.2 GetNonIndexableItemDetailsResponse	14
3.1.4.1.3 Complex Types	14
3.1.4.1.3.1 GetNonIndexableItemDetailsType	15
3.1.4.1.3.2 GetNonIndexableItemDetailsResponseMessageType	16
3.1.4.1.3.3 ArrayOfNonIndexableItemDetailsType	16
3.1.4.1.3.4 NonIndexableItemDetailType	16
3.1.4.1.3.5 NonIndexableItemDetailResultType	17
3.1.4.1.4 Simple Types	18
3.1.4.1.4.1 ItemIndexErrorType	18
3.1.4.1.5 Attributes	18
3.1.4.1.6 Groups	19
3.1.4.1.7 Attribute Groups	19

3.1.4.2	GetNonIndexableItemStatistics	19
3.1.4.2.1	Messages	19
3.1.4.2.1.1	GetNonIndexableItemStatisticsSoapIn	20
3.1.4.2.1.2	GetNonIndexableItemStatisticsSoapOut	20
3.1.4.2.2	Elements	21
3.1.4.2.2.1	GetNonIndexableItemStatistics	21
3.1.4.2.2.2	GetNonIndexableItemStatisticsResponse	22
3.1.4.2.3	Complex Types	22
3.1.4.2.3.1	GetNonIndexableItemStatisticsType	22
3.1.4.2.3.2	GetNonIndexableItemStatisticsResponseMessageType	23
3.1.4.2.3.3	ArrayOfNonIndexableItemStatisticsType	23
3.1.4.2.3.4	NonIndexableItemStatisticType	23
3.1.4.2.4	Simple Types	24
3.1.4.2.5	Attributes	24
3.1.4.2.6	Groups	24
3.1.4.2.7	Attribute Groups	24
3.1.5	Timer Events	24
3.1.6	Other Local Events	24
4	Protocol Examples	25
4.1	Getting Details for Nonindexable Items	25
4.2	Getting Statistics for Nonindexable Items	26
5	Security	28
5.1	Security Considerations for Implementers	28
5.2	Index of Security Parameters	28
6	Appendix A: Full WSDL	29
7	Appendix B: Full XML Schema	31
7.1	http://schemas.microsoft.com/exchange/services/2006/messages Schema	31
7.2	http://schemas.microsoft.com/exchange/services/2006/types Schema	32
8	Appendix C: Product Behavior	34
9	Change Tracking	35
10	Index	36

1 Introduction

The Nonindexable Item Web Service Protocol enables a client to use a **web service** to retrieve **mailbox** items that cannot be indexed.

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 [\[MS-GLOS\]](#):

Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
SOAP
SOAP action
SOAP body
SOAP header
XML namespace

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

endpoint
mailbox
Uniform Resource Locator (URL)
web server
web service
Web Services Description Language (WSDL)
WSDL message
WSDL operation
WSDL port type
XML namespace prefix
XML schema

The following terms are specific to this document:

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

1.2 References

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

1.2.1 Normative References

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

[MS-OXWSCDATA] Microsoft Corporation, "[Common Web Service Data Types](#)".

[MS-OXWSCORE] Microsoft Corporation, "[Core Items Web Service Protocol](#)".

[MS-OXWSEDISC] Microsoft Corporation, "[Electronic Discovery \(eDiscovery\) Web Service Protocol](#)".

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

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

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

[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>

[WSIBASIC] Ballinger, K., Ehnebuske, D., Gudgin, M., et al., Eds., "Basic Profile Version 1.0", Final Material, April 2004, <http://www.ws-i.org/Profiles/BasicProfile-1.0-2004-04-16.html>

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

[XMLSCHEMA1] Thompson, H.S., Beech, D., Maloney, M., Eds., 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., and Malhotra, A., Eds., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

1.2.2 Informative References

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

[MS-OXDCLI] Microsoft Corporation, "[Autodiscover Publishing and Lookup Protocol](#)".

[MS-OXGLOS] Microsoft Corporation, "[Exchange Server Protocols Master Glossary](#)".

[MS-OXPROTO] Microsoft Corporation, "[Exchange Server Protocols System Overview](#)".

[MS-OXWSADISC] Microsoft Corporation, "[Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol](#)".

1.3 Overview

The Nonindexable Item Web Service Protocol enables the client to use web services to retrieve details and statistics for mailbox items that could not be indexed.

1.4 Relationship to Other Protocols

A client that implements this protocol can use the Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol, as described in [\[MS-OXWSADISC\]](#), or the Autodiscover Publishing and Lookup Protocol, as described in [\[MS-OXDCLI\]](#), to identify the target **endpoint (4)** to use for each operation.

This protocol uses **SOAP**, as described in [\[SOAP1.1\]](#), to specify the structure information that is exchanged between the client and the server. This protocol uses the **XML schema**, as described in [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#), to describe the message content that is sent to and from the server.

This protocol uses SOAP over **HTTP**, as described in [\[RFC2616\]](#), and SOAP over **HTTPS**, as described in [\[RFC2818\]](#), as shown in the following layering diagram.

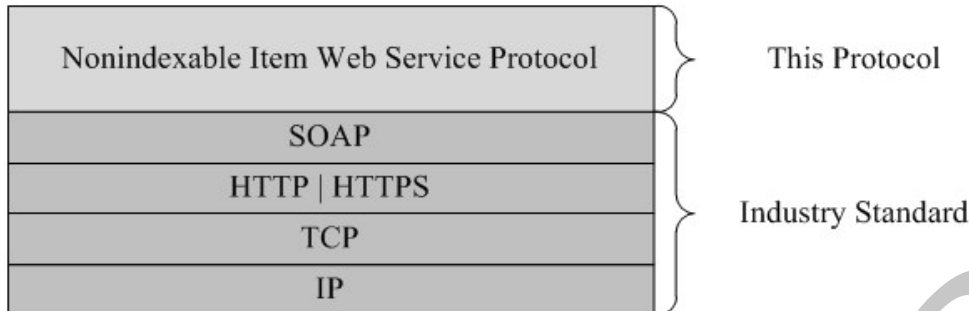


Figure 1: This protocol in relation to other protocols

This protocol uses the mailbox search and mailbox hold information provided by the Electronic Discovery (eDiscovery) Web Service Protocol, as described in [\[MS-OXWSEDISC\]](#).

For conceptual background information and overviews of the relationships and interactions between this and other protocols, see [\[MS-OXPROTO\]](#).

1.5 Prerequisites/Preconditions

The operations that this protocol defines cannot be accessed unless the correct endpoint (4) is identified in the HTTP web requests that target this protocol. This endpoint (4) **URL** is returned by either the Autodiscover Publishing Lookup SOAP-Based Web Service Protocol, as described in [\[MS-OXWSADISC\]](#), or the Autodiscover Publishing and Lookup Protocol, as described in [\[MS-OXDSCLI\]](#).

1.6 Applicability Statement

This protocol is applicable to environments that use web services to implement retrieval of mailbox items that could not be indexed. This protocol is applicable to all SOAP-based clients, as described in [\[SOAP1.1\]](#).

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses SOAP, as described in section [2.1](#).
- **Protocol Versions:** This protocol specifies only one **WSDL port type** version. The **RequestServerVersion** element, as described in [\[MS-OXWSCDATA\]](#) section 2.2.3.9, identifies the WSDL port type version of the request. The **ServerVersionInfo** element, as described in [\[MS-OXWSCDATA\]](#) section 2.2.3.10, identifies the version of the server responding to the request.
- **Security and Authentication Methods:** This protocol relies on the **web server** that is hosting it to perform authentication.

- **Localization:** This protocol uses date/time formats in various types, as described in section [3.1.4](#).
- **Capability Negotiation:** This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

Preliminary

2 Messages

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The **Web Services Description Language (WSDL)** in this specification provides a base description of the protocol. The schema in this specification provides a base description of the message syntax. The text that specifies the WSDL and schema might specify restrictions that reflect actual protocol behavior. For example, the schema definition might allow for an element to be empty, null, or not present but the behavior of the protocol as specified restricts the same elements to being non-empty, not null, or present.

2.1 Transport

This protocol uses SOAP 1.1, as specified in [\[SOAP1.1\]](#).

This protocol uses SOAP over HTTP, as specified in [\[RFC2616\]](#). The protocol SHOULD use secure communications by means of HTTPS, as defined in [\[RFC2818\]](#).

2.2 Common Message Syntax

This section contains common definitions that are used by this protocol. The syntax of the definitions uses XML schema, as 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
m	http://schemas.microsoft.com/exchange/services/2006/messages	
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
t	http://schemas.microsoft.com/exchange/services/2006/types	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
wsi	http://ws-i.org/schemas/conformanceClaim/	[WSIBASIC]
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

2.2.2 Messages

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

2.2.3 Elements

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

2.2.4 Complex Types

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

Complex type	Description
NonEmptyArrayOfLegacyDNsType	The NonEmptyArrayOfLegacyDNsType complex type specifies an array of legacy distinguished names.

2.2.4.1 NonEmptyArrayOfLegacyDNsType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/types>

The **NonEmptyArrayOfLegacyDNsType** complex type specifies an array of legacy distinguished names.

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

LegacyDN: An element of type **string**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.1, that represents a single legacy distinguished name.

2.2.5 Simple Types

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

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3 Protocol Details

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

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

3.1 ExchangeServicePortType Server Details

This protocol defines the ExchangeServicePortType port type with two operations, the **GetNonIndexableItemDetails** WSDL operation and the **GetNonIndexableItemStatistics** WSDL operation, that enable the retrieval of details and statistics for mailbox items that could not be indexed.

3.1.1 Abstract Data Model

None.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

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

Operation	Description
GetNonIndexableItemDetails	The GetNonIndexableItemDetails WSDL operation retrieves details for items in a mailbox that could not be indexed.
GetNonIndexableItemStatistics	The GetNonIndexableItemStatistics WSDL operation retrieves statistics for items that could not be indexed.

3.1.4.1 GetNonIndexableItemDetails

The **GetNonIndexableItemDetails** WSDL operation retrieves details for items in a mailbox that could not be indexed.

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

```

<wsdl:operation name="GetNonIndexableItemDetails"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input message="m:GetNonIndexableItemDetailsSoapIn"/>
  <wsdl:output message="m:GetNonIndexableItemDetailsSoapOut"/>
</wsdl:operation>

```

The following is the WSDL binding specification of the **GetNonIndexableItemDetails** WSDL operation.

```

<wsdl:operation name="GetNonIndexableItemDetails"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemD
etails" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  <wsdl:input>
    <soap:header message="m:GetNonIndexableItemDetailsSoapIn" part="RequestVersion"
use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
    <soap:header message="m:GetNonIndexableItemDetailsSoapIn" part="ManagementRole"
use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
    <soap:body use="literal" parts="request"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" parts="GetNonIndexableItemDetailsResult"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
    <soap:header message="m:GetNonIndexableItemDetailsSoapOut" part="ServerVersion"
use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  </wsdl:output>
</wsdl:operation>

```

The client sends a **GetNonIndexableItemDetailsSoapIn** request WSDL message, and the server responds with a **GetNonIndexableItemDetailsSoapOut** response.

3.1.4.1.1 Messages

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

Message	Description
GetNonIndexableItemDetailsSoapIn	Specifies the request to retrieve details for items that could not be indexed.
GetNonIndexableItemDetailsSoapOut	Specifies the response to the GetNonIndexableItemDetailsSoapIn request.

3.1.4.1.1.1 GetNonIndexableItemDetailsSoapIn

The **GetNonIndexableItemDetailsSoapIn** WSDL message specifies the request to retrieve nonindexable item details.

The following is the **GetNonIndexableItemDetailsSoapIn** WSDL message specification.

```

<wsdl:message name="GetNonIndexableItemDetailsSoapIn"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:part name="request" element="m:GetNonIndexableItemDetails"/>

```

```

    <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
    <wsdl:part name="ManagementRole" element="t:ManagementRole"/>
</wsdl:message>

```

The **GetNonIndexableItemDetailsSoapIn** WSDL message is the input message for the **SOAP action**

<http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemDetails>.

The parts of the **GetNonIndexableItemDetailsSoapIn** WSDL message are described in the following table.

Part name	Element/type	Description
request	GetNonIndexableItemDetails	Specifies the SOAP body of the request to retrieve details for items that could not be indexed.
RequestVersion	RequestServerVersion ([MS-OXWSCDATA] section 2.2.3.9)	Specifies a SOAP header that identifies the schema version for the GetNonIndexableItemDetails WSDL operation request.
ManagementRole	ManagementRole ([MS-OXWSCDATA] section 2.2.3.7)	Specifies a SOAP header that identifies a user or application role.

3.1.4.1.1.2 GetNonIndexableItemDetailsSoapOut

The **GetNonIndexableItemDetailsSoapOut** WSDL message specifies the response to the **GetNonIndexableItemDetailsSoapIn** request.

The following is the **GetNonIndexableItemDetailsSoapOut** WSDL message specification.

```

<wsdl:message name="GetNonIndexableItemDetailsSoapOut"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:part name="GetNonIndexableItemDetailsResult"
element="m:GetNonIndexableItemDetailsResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>

```

The **GetNonIndexableItemDetailsSoapOut** WSDL message is the output message for the SOAP action

<http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemDetails>.

The parts of the **GetNonIndexableItemDetailsSoapOut** WSDL message are described in the following table.

Part name	Element/type	Description
GetNonIndexableItemDetailsResult	GetNonIndexableItemDetailsResponse	Specifies the SOAP body of the response that contains the requested information.

Part name	Element/type	Description
ServerVersion	ServerVersionInfo ([MS-OXWSCDATA] section 2.2.3.10)	Specifies a SOAP header that identifies the server version for the response.

A successful **GetNonIndexableItemDetails** WSDL operation request returns a **GetNonIndexableItemDetailsResponse** element with the **ResponseClass** attribute set to "Success". The **ResponseCode** element of the **GetNonIndexableItemDetailsResponse** element is set to "NoError".

If the **GetNonIndexableItemDetails** WSDL operation request is not successful, it returns a **GetNonIndexableItemDetailsResponse** element with the **ResponseClass** attribute set to "Error". The **ResponseCode** element of the **GetNonIndexableItemDetailsResponse** element is set to one of the common errors defined in [\[MS-OXWSCDATA\]](#) section 2.2.5.23.

3.1.4.1.2 Elements

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

Element	Description
GetNonIndexableItemDetails	The input data for the GetNonIndexableItemDetails WSDL operation.
GetNonIndexableItemDetailsResponse	The result data for the GetNonIndexableItemDetails WSDL operation.

3.1.4.1.2.1 GetNonIndexableItemDetails

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

```
<xs:element name="GetNonIndexableItemDetails" type="m:GetNonIndexableItemDetailsType"
xmlns:xs="http://www.w3.org/2001/XMLSchema"/>
```

3.1.4.1.2.2 GetNonIndexableItemDetailsResponse

The **GetNonIndexableItemDetailsResponse** element specifies the result data for the **GetNonIndexableItemDetails** WSDL operation.

```
<xs:element name="GetNonIndexableItemDetailsResponse"
type="m:GetNonIndexableItemDetailsResponseMessageType"
xmlns:xs="http://www.w3.org/2001/XMLSchema"/>
```

3.1.4.1.3 Complex Types

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

Complex type	Description
ArrayOfNonIndexableItemDetailsType	Specifies an array of NonIndexableItemDetails elements.
GetNonIndexableItemDetailsResponseMessageType	Specifies the response message for a GetNonIndexableItemDetails WSDL operation.
GetNonIndexableItemDetailsType	Specifies a request to retrieve items in a mailbox that could not be indexed.
NonIndexableItemDetailResultType	Specifies the results of the GetNonIndexableItemDetails WSDL operation.
NonIndexableItemDetailType	Specifies a detail for an item that could not be indexed.

3.1.4.1.3.1 GetNonIndexableItemDetailsType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/messages>

The **GetNonIndexableItemDetailsType** complex type specifies a request to retrieve items in a mailbox that could not be indexed. This type extends the **BaseRequestType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.4.15.

```
<xs:complexType name="GetNonIndexableItemDetailsType"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexContent mixed="false">
    <xs:extension base="m:BaseRequestType">
      <xs:sequence>
        <xs:element minOccurs="1" name="Mailboxes" type="t:NonEmptyArrayOfLegacyDNsType"/>
        <xs:element minOccurs="0" name="PageSize" type="xs:int"/>
        <xs:element minOccurs="0" name="PageItemReference" type="xs:string"/>
        <xs:element minOccurs="0" name="PageDirection" type="t:SearchPageDirectionType"/>
        <xs:element minOccurs="0" name="SearchArchiveOnly" type="xs:boolean"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Mailboxes: An element of type **NonEmptyArrayOfLegacyDNsType**, as defined in section [2.2.4.1](#), that represents a list of mailboxes in the format of legacy distinguished names.

PageSize: An element of type **int**, as defined in [\[XMLSCHEMA2\]](#) section 3.3.17, that represents the size of the page.

PageItemReference: An element of type **string**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.1, that represents the item reference.

PageDirection: An element of type **SearchPageDirectionType**, as defined in [\[MS-OXWSEDISC\]](#) section 3.1.4.4.4.4, that represents the search direction, either previous or next.

SearchArchiveOnly: An element of type **boolean**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.2, that specifies whether only the archive is searched.

3.1.4.1.3.2 GetNonIndexableItemDetailsResponseMessageType

Namespace: http://schemas.microsoft.com/exchange/services/2006/messages

The **GetNonIndexableItemDetailsResponseMessageType** complex type specifies the response message for a **GetNonIndexableItemDetails** WSDL operation.

This type extends the **ResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.4.57.

```
<xs:complexType name="GetNonIndexableItemDetailsResponseMessageType"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexContent mixed="false">
    <xs:extension base="m:ResponseMessageType">
      <xs:sequence>
        <xs:element minOccurs="0" name="NonIndexableItemDetailsResult"
          type="t:NonIndexableItemDetailResultType"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

NonIndexableItemDetailsResult: An element of type **NonIndexableItemDetailResultType**, as defined in section [3.1.4.1.3.5](#), that specifies the results of the **GetNonIndexableItemDetails** WSDL operation.

3.1.4.1.3.3 ArrayOfNonIndexableItemDetailsType

Namespace: http://schemas.microsoft.com/exchange/services/2006/types

The **ArrayOfNonIndexableItemDetailsType** complex type specifies an array of **NonIndexableItemDetailType** complex types, as specified in section [3.1.4.1.3.4](#).

```
<xs:complexType name="ArrayOfNonIndexableItemDetailsType"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="NonIndexableItemDetail"
      type="t:NonIndexableItemDetailType"/>
  </xs:sequence>
</xs:complexType>
```

NonIndexableItemDetail: An element of type **NonIndexableItemDetailType** that represents a single detail for an item that could not be indexed.

3.1.4.1.3.4 NonIndexableItemDetailType

Namespace: http://schemas.microsoft.com/exchange/services/2006/types

The **NonIndexableItemDetailType** complex type specifies a detail for an item that could not be indexed.

```
<xs:complexType name="NonIndexableItemDetailType"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="ItemId" type="t:ItemIdType"/>
  </xs:sequence>
</xs:complexType>
```



```

<xs:element minOccurs="1" maxOccurs="1" name="ErrorCode" type="t:ItemIndexErrorType"/>
<xs:element minOccurs="1" maxOccurs="1" name="ErrorDescription" type="xs:string"/>
<xs:element minOccurs="1" maxOccurs="1" name="IsPartiallyIndexed" type="xs:boolean"/>
<xs:element minOccurs="1" maxOccurs="1" name="IsPermanentFailure" type="xs:boolean"/>
<xs:element minOccurs="1" maxOccurs="1" name="SortValue" type="xs:string"/>
<xs:element minOccurs="1" maxOccurs="1" name="AttemptCount" type="xs:int"/>
<xs:element minOccurs="0" maxOccurs="1" name="LastAttemptTime" type="xs:dateTime"/>
<xs:element minOccurs="0" maxOccurs="1" name="AdditionalInfo" type="xs:string"/>
</xs:sequence>
</xs:complexType>

```

ItemId: An element of type **ItemIdType**, as defined in [\[MS-OXWSCORE\]](#) section 2.2.4.17, that represents the identifier of the item that could not be indexed.

ErrorCode: An element of type **ItemIndexErrorType**, as defined in section [3.1.4.1.4.1](#). This element is for internal use only.

ErrorDescription: An element of type **string**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.1, that represents the description of the error returned.

IsPartiallyIndexed: An element of type **boolean**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.2, that indicates whether the item is partially indexed.

IsPermanentFailure: An element of type **boolean** that indicates whether a previous attempt to index the item was unsuccessful.

SortValue: An element of type **string** that contains a value used for sorting.

AttemptCount: An element of type **int**, as defined in [\[XMLSCHEMA2\]](#) section 3.3.17, that represents the number of attempts that have been made to index the item.

LastAttemptTime: An element of type **dateTime**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.7, that represents a time and date at which the last attempt to index the item was made.

AdditionalInfo: An element of type **string** that represents additional information.

3.1.4.1.3.5 NonIndexableItemDetailResultType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/types>

The **NonIndexableItemDetailResultType** complex type specifies the results of the **GetNonIndexableItemDetails** WSDL operation.

```

<xs:complexType name="NonIndexableItemDetailResultType"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Items" type="t:ArrayOfNonIndexableItemDetailsType"/>
    <xs:element minOccurs="0" name="FailedMailboxes"
      type="t:ArrayOfFailedSearchMailboxesType"/>
  </xs:sequence>
</xs:complexType>

```

Items: An element of type **ArrayOfNonIndexableItemDetailsType**, as defined in section [3.1.4.1.3.3](#), that contains an array of details for items that could not be indexed.

FailedMailboxes: An element of type **ArrayOfFailedSearchMailboxesType**, as defined in [\[MS-OXWSEDISC\]](#) section 2.2.4.1, that contains an array of mailboxes that failed the search.

3.1.4.1.4 Simple Types

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

Simple type	Description
ItemIndexErrorType	This type is for internal use only.

3.1.4.1.4.1 ItemIndexErrorType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/types>

The **ItemIndexErrorType** simple type is for internal use only.

```
<xs:simpleType name="ItemIndexErrorType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None"/>
    <xs:enumeration value="GenericError"/>
    <xs:enumeration value="Timeout"/>
    <xs:enumeration value="StaleEvent"/>
    <xs:enumeration value="MailboxOffline"/>
    <xs:enumeration value="AttachmentLimitReached"/>
    <xs:enumeration value="MarsWriterTruncation"/>
    <xs:enumeration value="DocumentParserFailure"/>
  </xs:restriction>
</xs:simpleType>
```

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

Value	Meaning
None	This value is for internal use only.
GenericError	This value is for internal use only.
Timeout	This value is for internal use only.
StaleEvent	This value is for internal use only.
MailboxOffline	This value is for internal use only.
AttachmentLimitReached	This value is for internal use only.
MarsWriterTruncation	This value is for internal use only.
DocumentParserFailure	This value is for internal use only.

3.1.4.1.5 Attributes

None.

3.1.4.1.6 Groups

None.

3.1.4.1.7 Attribute Groups

None.

3.1.4.2 GetNonIndexableItemStatistics

The **GetNonIndexableItemStatistics** WSDL operation retrieves statistics for items that could not be indexed.

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

```
<wsdl:operation name="GetNonIndexableItemStatistics"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input message="m:GetNonIndexableItemStatisticsSoapIn"/>
  <wsdl:output message="m:GetNonIndexableItemStatisticsSoapOut"/>
</wsdl:operation>
```

The following is the WSDL binding specification of the **GetNonIndexableItemStatistics** WSDL operation.

```
<wsdl:operation name="GetNonIndexableItemStatistics"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemS
tatistics" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  <wsdl:input>
    <soap:header message="m:GetNonIndexableItemStatisticsSoapIn" part="RequestVersion"
use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
    <soap:header message="m:GetNonIndexableItemStatisticsSoapIn" part="ManagementRole"
use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
    <soap:body use="literal" parts="request"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" parts="GetNonIndexableItemStatisticsResult"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
    <soap:header message="m:GetNonIndexableItemStatisticsSoapOut" part="ServerVersion"
use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  </wsdl:output>
</wsdl:operation>
```

The client sends a **GetNonIndexableItemStatisticsSoapIn** request WSDL message, and the server responds with a **GetNonIndexableItemStatisticsSoapOut** response.

3.1.4.2.1 Messages

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

Message	Description
GetNonIndexableItemStatisticsSoapIn	Specifies the request to retrieve statistics for items that could not be indexed.
GetNonIndexableItemStatisticsSoapOut	Specifies the response to the GetNonIndexableItemStatisticsSoapIn request.

3.1.4.2.1.1 GetNonIndexableItemStatisticsSoapIn

The **GetNonIndexableItemStatisticsSoapIn** WSDL message specifies the request to retrieve statistics for items that could not be indexed.

The following is the **GetNonIndexableItemStatisticsSoapIn** WSDL message specification.

```
<wsdl:message name="GetNonIndexableItemStatisticsSoapIn"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:part name="request" element="m:GetNonIndexableItemStatistics"/>
  <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  <wsdl:part name="ManagementRole" element="t:ManagementRole"/>
</wsdl:message>
```

The **GetNonIndexableItemStatisticsSoapIn** WSDL message is the input message for the SOAP action

<http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemStatistics>.

The parts of the **GetNonIndexableItemStatisticsSoapIn** WSDL message are described in the following table.

Part name	Element/type	Description
request	GetNonIndexableItemStatistics	Specifies the SOAP body of the request to retrieve statistics.
RequestVersion	RequestServerVersion ([MS-OXWSCDATA] section 2.2.3.9)	Specifies a SOAP header that identifies the schema version for the GetNonIndexableItemStatistics WSDL operation request.
ManagementRole	ManagementRole ([MS-OXWSCDATA] section 2.2.3.7)	Specifies a SOAP header that identifies a user or application role.

3.1.4.2.1.2 GetNonIndexableItemStatisticsSoapOut

The **GetNonIndexableItemStatisticsSoapOut** WSDL message specifies the response to the **GetNonIndexableItemStatisticsSoapIn** request.

The following is the **GetNonIndexableItemStatisticsSoapOut** WSDL message specification.

```
<wsdl:message name="GetNonIndexableItemStatisticsSoapOut"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:part name="GetNonIndexableItemStatisticsResult"
element="m:GetNonIndexableItemStatisticsResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
```

</wsdl:message>

The **GetNonIndexableItemStatisticsSoapOut** WSDL message is the output message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemStatistics>.

The parts of the **GetNonIndexableItemStatisticsSoapOut** WSDL message are described in the following table.

Part name	Element/type	Description
GetNonIndexableItemStatisticsResult	GetNonIndexableItemStatisticsResponse	Specifies the SOAP body of the response that contains the requested information.
ServerVersion	ServerVersionInfo ([MS-OXWSCDATA] section 2.2.3.10)	Specifies a SOAP header that identifies the server version for the response.

A successful **GetNonIndexableItemStatistics** WSDL operation request returns a **GetNonIndexableItemStatisticsResponse** element with the **ResponseClass** attribute set to "Success". The **ResponseCode** element of the **GetNonIndexableItemStatisticsResponse** element is set to "NoError".

If the **GetNonIndexableItemStatistics** WSDL operation request is not successful, it returns a **GetNonIndexableItemStatisticsResponse** element with the **ResponseClass** attribute set to "Error". The **ResponseCode** element of the **GetNonIndexableItemStatisticsResponse** element is set to one of the common errors defined in [\[MS-OXWSCDATA\]](#) section 2.2.5.23.

3.1.4.2.2 Elements

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

Element	Description
GetNonIndexableItemStatistics	The input data for the GetNonIndexableItemStatistics WSDL operation.
GetNonIndexableItemStatisticsResponse	The result data for the GetNonIndexableItemStatistics WSDL operation.

3.1.4.2.2.1 GetNonIndexableItemStatistics

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

```
<xs:element name="GetNonIndexableItemStatistics" type="m:GetNonIndexableItemStatisticsType"
xmlns:xs="http://www.w3.org/2001/XMLSchema"/>
```

3.1.4.2.2 GetNonIndexableItemStatisticsResponse

The **GetNonIndexableItemStatisticsResponse** element specifies the result data for the **GetNonIndexableItemStatistics** WSDL operation.

```
<xs:element name="GetNonIndexableItemStatisticsResponse"
type="m:GetNonIndexableItemStatisticsResponseMessageType"
xmlns:xs="http://www.w3.org/2001/XMLSchema"/>
```

3.1.4.2.3 Complex Types

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

Complex type	Description
ArrayOfNonIndexableItemStatisticsType	Specifies an array of statistics for items that could not be indexed.
GetNonIndexableItemStatisticsResponseMessageType	Specifies the response message for a GetNonIndexableItemStatistics WSDL operation.
GetNonIndexableItemStatisticsType	Specifies a request to retrieve statistics for items that could not be indexed.
NonIndexableItemStatisticType	Specifies a statistic for an item that could not be indexed.

3.1.4.2.3.1 GetNonIndexableItemStatisticsType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/messages>

The **GetNonIndexableItemStatisticsType** complex type specifies a request to retrieve statistics for items that could not be indexed. This type extends the **BaseRequestType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.4.15.

```
<xs:complexType name="GetNonIndexableItemStatisticsType"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexContent mixed="false">
    <xs:extension base="m:BaseRequestType">
      <xs:sequence>
        <xs:element minOccurs="1" name="Mailboxes" type="t:NonEmptyArrayOfLegacyDNsType"/>
        <xs:element minOccurs="0" name="SearchArchiveOnly" type="xs:boolean"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Mailboxes: An element of type **NonEmptyArrayOfLegacyDNsType**, as defined in section [2.2.4.1](#), that specifies the mailboxes that were not indexed although items were requested.

SearchArchiveOnly: An element of type **boolean**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.2, that specifies whether only the archive is searched.

3.1.4.2.3.2 GetNonIndexableItemStatisticsResponseMessageType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/messages>

The **GetNonIndexableItemStatisticsResponseMessageType** complex type specifies the response message for a **GetNonIndexableItemStatistics** WSDL operation. This type extends the **ResponseMessageType** complex type, as specified in [\[MS-OXWSCDATA\]](#) section 2.2.4.57.

```
<xs:complexType name="GetNonIndexableItemStatisticsResponseMessageType"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexContent mixed="false">
    <xs:extension base="m:ResponseMessageType">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="NonIndexableItemStatistics"
type="t:ArrayOfNonIndexableItemStatisticsType"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

NonIndexableItemStatistics: An element of type **ArrayOfNonIndexableItemStatisticsType**, as defined in section [3.1.4.2.3.1](#), that represents an array of statistics for items that could not be indexed.

3.1.4.2.3.3 ArrayOfNonIndexableItemStatisticsType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/types>

The **ArrayOfNonIndexableItemStatisticsType** complex type specifies an array of statistics for items that could not be indexed.

```
<xs:complexType name="ArrayOfNonIndexableItemStatisticsType"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="NonIndexableItemStatistic"
type="t:NonIndexableItemStatisticType"/>
  </xs:sequence>
</xs:complexType>
```

NonIndexableItemStatistic: An element of type **NonIndexableItemStatisticType**, as defined in section [3.1.4.2.3.4](#), that represents a single statistic for an item that could not be indexed.

3.1.4.2.3.4 NonIndexableItemStatisticType

Namespace: <http://schemas.microsoft.com/exchange/services/2006/types>

The **NonIndexableItemStatisticType** complex type specifies a statistic for an item that could not be indexed.

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

```
<xs:element minOccurs="1" maxOccurs="1" name="Mailbox" type="xs:string"/>
<xs:element minOccurs="1" maxOccurs="1" name="ItemCount" type="xs:long"/>
<xs:element minOccurs="0" maxOccurs="1" name="ErrorMessage" type="xs:string"/>
</xs:sequence>
</xs:complexType>
```

Mailbox: An element of type **string**, as defined in [\[XMLSCHEMA2\]](#) section 3.2.1, that represents the mailbox on which indexing failed.

ItemCount: An element of type **long**, as defined in [\[XMLSCHEMA2\]](#) section 3.3.16, that represents the number of items that could not be indexed.

ErrorMessage: An element of type **string** that contains the error message.

3.1.4.2.4 Simple Types

None.

3.1.4.2.5 Attributes

None.

3.1.4.2.6 Groups

None.

3.1.4.2.7 Attribute Groups

None.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 Getting Details for Nonindexable Items

This example of the **GetNonIndexableItemDetails** operation, as described in section [3.1.4.1](#), shows how the client retrieves from the server the details for items that could not be indexed.

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2013" />
  </soap:Header>
  <soap:Body >
    <m:GetNonIndexableItemDetails>
      <m:Mailboxes>
        <t:LegacyDN>/o=First Organization/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=35181a742f0e47e392c8201a60d13ecf-Steve</t:LegacyDN>
      </m:Mailboxes>
      <m:SearchArchiveOnly>>false</m:SearchArchiveOnly>
    </m:GetNonIndexableItemDetails>
  </soap:Body>
</soap:Envelope>
```

The server sends the following successful response to the client. The response shows that the document had a parsing error.

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <h:ServerVersionInfo MajorVersion="15"
      MinorVersion="0"
      MajorBuildNumber="526"
      MinorBuildNumber="0"
      Version="Exchange2013"
      xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
      xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
      xmlns:xsd="http://www.w3.org/2001/XMLSchema"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <GetNonIndexableItemDetailsResponse ResponseClass="Success"
      xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
      <ResponseCode>NoError</ResponseCode>
      <NonIndexableItemDetailsResult>
        <Items xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
          <NonIndexableItemDetail>
            <ItemId
              Id="AQMkAGVmNDAYODMwLTNkMzMALTRhMGQtYTR1OS1kODU3NjkwMAE2MGQARgAAA2L1bnf8ooZNtO4guk3auRYHALkzP
vMoJY1FjWrkRuQQcK0AAAMLAAAuTM+8ygljUWNauRG5BBwrQAAAY2fUAAAAA==" ChangeKey="CQAAAA==" />
            <ErrorCode>DocumentParserFailure</ErrorCode>
          </NonIndexableItemDetail>
        </Items>
      </NonIndexableItemDetailsResult>
    </GetNonIndexableItemDetailsResponse>
  </s:Body>
</s:Envelope>
```

```

        <ErrorDescription>The document parser encountered a processing
error.</ErrorDescription>
        <IsPartiallyIndexed>>false</IsPartiallyIndexed>
        <IsPermanentFailure>>true</IsPermanentFailure>
        <SortValue>502511175756</SortValue>
        <AttemptCount>0</AttemptCount>
        <LastAttemptTime>2012-11-15T01:56:11Z</LastAttemptTime>
        <AdditionalInfo> 301002 Error parsing document
'exchange://localhost/Attachment/d987b1f4-9aa7-42b3-aa8c-9515a35dfa1a/1f3047d4-c287-41e4-
910c-feb70c1a59f0/ef402830-3d33-4a0d-a4e9-d8576900060d/85b83861-0026-418f-8464-
be2036696333/502511175756.0/binaryfile.abc'. Document has an undetectable format and will not
be parsed.</AdditionalInfo>
    </NonIndexableItemDetail>
</Items>
</NonIndexableItemDetailsResult>
</GetNonIndexableItemDetailsResponse>
</s:Body>
</s:Envelope>

```

4.2 Getting Statistics for Nonindexable Items

This example of the **GetNonIndexableItemStatistics** operation, as described in section [3.1.4.2](#), shows how the client retrieves the statistics for an item that could not be indexed from the server.

```

<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
  xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages">
  <soap:Header>
    <t:RequestServerVersion Version="Exchange2013" />
  </soap:Header>
  <soap:Body >
    <m:GetNonIndexableItemStatistics>
      <m:Mailboxes>
        <t:LegacyDN/><o=First Organization/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=35181a742f0e47e392c8201a60d13ecf-Steve</t:LegacyDN>
      </m:Mailboxes>
      <m:SearchArchiveOnly>>false</m:SearchArchiveOnly>
    </m:GetNonIndexableItemStatistics>
  </soap:Body>
</soap:Envelope>

```

The server sends the following successful results of the request to the client. The response shows that two items in the mailbox could not be indexed.

```

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <h:ServerVersionInfo MajorVersion="15"
      MinorVersion="0"
      MajorBuildNumber="526"
      MinorBuildNumber="0"
      Version="Exchange2013"
      xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
      xmlns="http://schemas.microsoft.com/exchange/services/2006/types"
      xmlns:xsd="http://www.w3.org/2001/XMLSchema"

```

```
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
</s:Header>
<s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <GetNonIndexableItemStatisticsResponse ResponseClass="Success"
    xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
    <ResponseCode>NoError</ResponseCode>
    <NonIndexableItemStatistics>
      <NonIndexableItemStatistic
xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
        <Mailbox>/o=First Organization/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=35181a742f0e47e392c8201a60d13ecf-Steve</Mailbox>
        <ItemCount>2</ItemCount>
      </NonIndexableItemStatistic>
    </NonIndexableItemStatistics>
  </GetNonIndexableItemStatisticsResponse>
</s:Body>
</s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

Preliminary

6 Appendix A: Full WSDL

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

```
<?xml version="1.0"?>
<wsdl:definitions xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
version="Exchange2013" id="messages" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:include schemaLocation="MS-OXWSGNI-messages.xsd"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:portType name="ExchangeServicePortType">
    <wsdl:operation name="GetNonIndexableItemStatistics">
      <wsdl:input message="m:GetNonIndexableItemStatisticsSoapIn"/>
      <wsdl:output message="m:GetNonIndexableItemStatisticsSoapOut"/>
    </wsdl:operation>
    <wsdl:operation name="GetNonIndexableItemDetails">
      <wsdl:input message="m:GetNonIndexableItemDetailsSoapIn"/>
      <wsdl:output message="m:GetNonIndexableItemDetailsSoapOut"/>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="ExchangeServiceBinding" type="m:ExchangeServicePortType">
    <wsdl:documentation>
      <wsi:Claim conformsTo="http://ws-i.org/profiles/basic/1.0" xmlns:wsi="http://ws-
i.org/schemas/conformanceClaim"/>
    </wsdl:documentation>
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="GetNonIndexableItemStatistics">
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemS
tatistics"/>
      <wsdl:input>
        <soap:header message="m:GetNonIndexableItemStatisticsSoapIn" part="RequestVersion"
use="literal"/>
        <soap:header message="m:GetNonIndexableItemStatisticsSoapIn" part="ManagementRole"
use="literal"/>
        <soap:body use="literal" parts="request"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal" parts="GetNonIndexableItemStatisticsResult"/>
        <soap:header message="m:GetNonIndexableItemStatisticsSoapOut" part="ServerVersion"
use="literal"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="GetNonIndexableItemDetails">
      <soap:operation
soapAction="http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemD
etails"/>
      <wsdl:input>
        <soap:header message="m:GetNonIndexableItemDetailsSoapIn" part="RequestVersion"
use="literal"/>
        <soap:header message="m:GetNonIndexableItemDetailsSoapIn" part="ManagementRole"
use="literal"/>
        <soap:body use="literal" parts="request"/>
      </wsdl:input>
    </wsdl:operation>
  </wsdl:binding>

```

```
</wsdl:input>
<wsdl:output>
  <soap:body use="literal" parts="GetNonIndexableItemDetailsResult"/>
  <soap:header message="m:GetNonIndexableItemDetailsSoapOut" part="ServerVersion"
use="literal"/>
</wsdl:output>
</wsdl:operation>
</wsdl:binding>
<wsdl:message name="GetNonIndexableItemDetailsSoapIn">
  <wsdl:part name="request" element="m:GetNonIndexableItemDetails"/>
  <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  <wsdl:part name="ManagementRole" element="t:ManagementRole"/>
</wsdl:message>
<wsdl:message name="GetNonIndexableItemDetailsSoapOut">
  <wsdl:part name="GetNonIndexableItemDetailsResult"
element="m:GetNonIndexableItemDetailsResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
<wsdl:message name="GetNonIndexableItemStatisticsSoapIn">
  <wsdl:part name="request" element="m:GetNonIndexableItemStatistics"/>
  <wsdl:part name="RequestVersion" element="t:RequestServerVersion"/>
  <wsdl:part name="ManagementRole" element="t:ManagementRole"/>
</wsdl:message>
<wsdl:message name="GetNonIndexableItemStatisticsSoapOut">
  <wsdl:part name="GetNonIndexableItemStatisticsResult"
element="m:GetNonIndexableItemStatisticsResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
</wsdl:definitions>
```

7 Appendix B: Full XML Schema

Schema name	Prefix	Section
http://schemas.microsoft.com/exchange/services/2006/messages	m	7.1
http://schemas.microsoft.com/exchange/services/2006/types	t	7.2

For ease of implementation, the following sections provide the full XML schema for this protocol.

7.1 <http://schemas.microsoft.com/exchange/services/2006/messages> Schema

This section contains the MS-OXWSGNI-messages.xsd and information about additional files that this schema file requires to operate correctly.

MS-OXWSGNI-messages.xsd includes the files listed in the following table. To operate correctly, these files have to be present in the folder that contains the WSDL, types schema, and messages schema files for this protocol.

File name	Defining specification/section
MS-OXWSCDATA-messages.xsd	[MS-OXWSCDATA] section 7.1
MS-OXWSGNI-types.xsd	7.2

```
<?xml version="1.0"?>
<xs:schema xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
version="Exchange2013" id="messages" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import schemaLocation="MS-OXWSGNI-types.xsd"
namespace="http://schemas.microsoft.com/exchange/services/2006/types"/>
  <xs:include schemaLocation="MS-OXWSCDATA-messages.xsd"/>
  <xs:complexType name="GetNonIndexableItemStatisticsType">
    <xs:complexContent mixed="false">
      <xs:extension base="m:BaseRequestType">
        <xs:sequence>
          <xs:element minOccurs="1" name="Mailboxes" type="t:NonEmptyArrayOfLegacyDNSType"/>
          <xs:element minOccurs="0" name="SearchArchiveOnly" type="xs:boolean"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:element name="GetNonIndexableItemStatistics"
type="m:GetNonIndexableItemStatisticsType"/>
  <xs:complexType name="GetNonIndexableItemStatisticsResponseMessageType">
    <xs:complexContent mixed="false">
      <xs:extension base="m:ResponseMessageType">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="NonIndexableItemStatistics"
type="t:ArrayOfNonIndexableItemStatisticsType"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
```

```

<xs:element name="GetNonIndexableItemStatisticsResponse"
type="m:GetNonIndexableItemStatisticsResponseMessageType"/>
<xs:complexType name="GetNonIndexableItemDetailsType">
  <xs:complexContent mixed="false">
    <xs:extension base="m:BaseRequestType">
      <xs:sequence>
        <xs:element minOccurs="1" name="Mailboxes" type="t:NonEmptyArrayOfLegacyDNsType"/>
        <xs:element minOccurs="0" name="PageSize" type="xs:int"/>
        <xs:element minOccurs="0" name="PageItemReference" type="xs:string"/>
        <xs:element minOccurs="0" name="PageDirection" type="t:SearchPageDirectionType"/>
        <xs:element minOccurs="0" name="SearchArchiveOnly" type="xs:boolean"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="GetNonIndexableItemDetails" type="m:GetNonIndexableItemDetailsType"/>
<xs:complexType name="GetNonIndexableItemDetailsResponseMessageType">
  <xs:complexContent mixed="false">
    <xs:extension base="m:ResponseMessageType">
      <xs:sequence>
        <xs:element minOccurs="0" name="NonIndexableItemDetailsResult"
type="t:NonIndexableItemDetailResultType"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:element name="GetNonIndexableItemDetailsResponse"
type="m:GetNonIndexableItemDetailsResponseMessageType"/>
</xs:schema>

```

7.2 <http://schemas.microsoft.com/exchange/services/2006/types> Schema

This section contains the MS-OXWSGNI-types.xsd and information about additional files that this schema file requires to operate correctly.

MS-OXWSGNI-types.xsd includes the files listed in the following table. To operate correctly, these files have to be present in the folder that contains the WSDL, types schema, and messages schema for this protocol.

File name	Defining specification/section
MS-OXWSCORE-types.xsd	[MS-OXWSCORE] section 7.2
MS-OXWSEDISC-types.xsd	[MS-OXWSEDISC] section 7.2

```

<?xml version="1.0"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
version="Exchange2013" id="types" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://www.w3.org/XML/1998/namespace"/>
  <xs:include schemaLocation="MS-OXWSCORE-types.xsd"/>
  <xs:include schemaLocation="MS-OXWSEDISC-types.xsd"/>
  <xs:complexType name="ArrayOfNonIndexableItemDetailsType">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="NonIndexableItemDetail"
type="t:NonIndexableItemDetailType"/>
    </xs:sequence>
  </xs:complexType>

```



```

</xs:complexType>
<xs:complexType name="ArrayOfNonIndexableItemStatisticsType">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="NonIndexableItemStatistic"
type="t:NonIndexableItemStatisticType"/>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ItemIndexErrorType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None"/>
    <xs:enumeration value="GenericError"/>
    <xs:enumeration value="Timeout"/>
    <xs:enumeration value="StaleEvent"/>
    <xs:enumeration value="MailboxOffline"/>
    <xs:enumeration value="AttachmentLimitReached"/>
    <xs:enumeration value="MarsWriterTruncation"/>
    <xs:enumeration value="DocumentParserFailure"/>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="NonEmptyArrayOfLegacyDNsType">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="unbounded" name="LegacyDN" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="NonIndexableItemStatisticType">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="Mailbox" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="ItemCount" type="xs:long"/>
    <xs:element minOccurs="0" maxOccurs="1" name="ErrorMessage" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="NonIndexableItemDetailType">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="ItemId" type="t:ItemIdType"/>
    <xs:element minOccurs="1" maxOccurs="1" name="ErrorCode" type="t:ItemIndexErrorType"/>
    <xs:element minOccurs="1" maxOccurs="1" name="ErrorDescription" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsPartiallyIndexed" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="IsPermanentFailure" type="xs:boolean"/>
    <xs:element minOccurs="1" maxOccurs="1" name="SortValue" type="xs:string"/>
    <xs:element minOccurs="1" maxOccurs="1" name="AttemptCount" type="xs:int"/>
    <xs:element minOccurs="0" maxOccurs="1" name="LastAttemptTime" type="xs:dateTime"/>
    <xs:element minOccurs="0" maxOccurs="1" name="AdditionalInfo" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="NonIndexableItemDetailResultType">
  <xs:sequence>
    <xs:element minOccurs="0" name="Items" type="t:ArrayOfNonIndexableItemDetailsType"/>
    <xs:element minOccurs="0" name="FailedMailboxes"
type="t:ArrayOfFailedSearchMailboxesType"/>
  </xs:sequence>
</xs:complexType>
</xs:schema>

```

8 Appendix C: 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 Exchange Server 2013
- Microsoft Lync Server 2013

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

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

9 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

Preliminary

10 Index

A

Abstract data model
[server](#) 11
[Applicability](#) 7
[Attribute groups](#) 10
[Attributes](#) 10

C

[Capability negotiation](#) 7
[Change tracking](#) 35
Client
[overview](#) 11
[Complex types](#) 10
[NonEmptyArrayOfLegacyDNsType](#) 10

D

Data model - abstract
[server](#) 11

E

Events
[local - server](#) 24
[timer - server](#) 24
Examples
[getting details for nonindexable items](#) 25
[getting statistics for nonindexable items](#) 26
ExchangeServicePortType
[port type](#) 11

F

[Fields - vendor-extensible](#) 8
[Full WSDL](#) 29
[Full XML Schema](#) 31
[http://schemas.microsoft.com/exchange/services/2006/messages.Schema](#) 31
[http://schemas.microsoft.com/exchange/services/2006/types.Schema](#) 32

G

[Getting details for nonindexable items example](#) 25
[Getting statistics for nonindexable items example](#) 26
[Glossary](#) 5
[Groups](#) 10

I

[Implementer - security considerations](#) 28
[Index of security parameters](#) 28
[Informative references](#) 6
Initialization
[server](#) 11
[Introduction](#) 5

L

Local events
[server](#) 24

M

Message processing
[server](#) 11
Messages
[attribute groups](#) 10
[attributes](#) 10
[complex types](#) 10
[elements](#) 9
[enumerated](#) 9
[groups](#) 10
[namespaces](#) 9
[NonEmptyArrayOfLegacyDNsTypecomplex type](#) 10
[overview](#) 9
[simple types](#) 10
[syntax](#) 9
[transport](#) 9

N

[Namespaces](#) 9
[NonEmptyArrayOfLegacyDNsTypecomplex type](#) 10
[Normative references](#) 5

O

Operations
[GetNonIndexableItemDetails](#) 11
[GetNonIndexableItemStatistics](#) 19
[Overview \(synopsis\)](#) 6

P

[Parameters - security index](#) 28
Port types
[ExchangeServicePortType](#) 11
[Preconditions](#) 7
[Prerequisites](#) 7
[Product behavior](#) 34
Protocol Details
[overview](#) 11

R

[References](#) 5
[informative](#) 6
[normative](#) 5
[Relationship to other protocols](#) 6

S

Security

[implementer considerations](#) 28
[parameter index](#) 28
Sequencing rules
[server](#) 11
Server
[abstract data model](#) 11
[ExchangeServicePortType port type](#) 11
[GetNonIndexableItemDetails operation](#) 11
[GetNonIndexableItemStatistics operation](#) 19
[initialization](#) 11
[local events](#) 24
[message processing](#) 11
[overview](#) 11
[sequencing rules](#) 11
[timer events](#) 24
[timers](#) 11
[Simple types](#) 10
[Standards assignments](#) 8
Syntax
[messages - overview](#) 9

T

Timer events
[server](#) 24
Timers
[server](#) 11
[Tracking changes](#) 35
[Transport](#) 9
Types
[complex](#) 10
[simple](#) 10

V

[Vendor-extensible fields](#) 8
[Versioning](#) 7

W

[WSDL](#) 29

X

[XML Schema](#) 31
<http://schemas.microsoft.com/exchange/services/2006/messages Schema> 31
<http://schemas.microsoft.com/exchange/services/2006/types Schema> 32