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## Revision Summary

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[MS-OXWSGNI] - v20220215
Nonindexable Item Web Service Protocol
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Release: February 15, 2022
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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 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

1.1 Glossary

This document uses the following terms:

endpoint: A communication port that is exposed by an application server for a specific shared service and to which messages can be addressed.

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

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

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

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

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

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

SOAP header: A mechanism for implementing extensions to a SOAP message in a decentralized manner without prior agreement between the communicating parties. See [SOAP1.2-1/2007] section 5.2 for more information.

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

web server: A server computer that hosts websites and responds to requests from applications.

web service: A unit of application logic that provides data and services to other applications and can be called by using standard Internet transport protocols such as HTTP, Simple Mail Transfer Protocol (SMTP), or File Transfer Protocol (FTP). Web services can perform functions that range from simple requests to complicated business processes.

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

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

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

**WSDL port type:** A named set of logically-related, abstract Web Services Description Language (WSDL) operations and messages.

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

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

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

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

### 1.2 References

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

#### 1.2.1 Normative References

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

[MS-OXWSCTDATA] 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".


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-OXDSCLI], to identify the target endpoint 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.
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 is identified in the HTTP web requests that target this protocol. This endpoint 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.
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.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Namespace URI</th>
<th>Reference</th>
</tr>
</thead>
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<tr>
<td>soap</td>
<td><a href="http://schemas.xmlsoap.org/wsd/soap/">http://schemas.xmlsoap.org/wsd/soap/</a></td>
<td>[SOAP1.1]</td>
</tr>
<tr>
<td>t</td>
<td><a href="http://schemas.microsoft.com/exchange/services/2006/types">http://schemas.microsoft.com/exchange/services/2006/types</a></td>
<td></td>
</tr>
<tr>
<td>tns</td>
<td><a href="http://schemas.microsoft.com/exchange/services/2006/messages">http://schemas.microsoft.com/exchange/services/2006/messages</a></td>
<td></td>
</tr>
<tr>
<td>wsd1</td>
<td><a href="http://schemas.xmlsoap.org/wsd/">http://schemas.xmlsoap.org/wsd/</a></td>
<td>[WSDL]</td>
</tr>
<tr>
<td>wsi</td>
<td><a href="http://ws-i.org/schemas/conformanceClaim/">http://ws-i.org/schemas/conformanceClaim/</a></td>
<td>[WSIBASIC]</td>
</tr>
<tr>
<td>xs</td>
<td><a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a></td>
<td>[XMLSCHEMA1/2]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[XMLSCHEMA2/2]</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Complex type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NonEmptyArrayOfLegacyDNsType</td>
<td>The NonEmptyArrayOfLegacyDNsType complex type specifies an array of legacy distinguished names.</td>
</tr>
</tbody>
</table>

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.

```xml
<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.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemDetails</td>
<td>The GetNonIndexableItemDetails WSDL operation retrieves details for</td>
</tr>
<tr>
<td></td>
<td>items in a mailbox that could not be indexed.</td>
</tr>
<tr>
<td>GetNonIndexableItemStatistics</td>
<td>The GetNonIndexableItemStatistics WSDL operation retrieves statistics</td>
</tr>
<tr>
<td></td>
<td>for items that could not be indexed.</td>
</tr>
</tbody>
</table>

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

```xml
<wsdl:operation name="GetNonIndexableItemDetails"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
        <wsdl:input>
            <soap:header message="tns:GetNonIndexableItemDetailsSoapIn" part="RequestVersion" use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"/>
            <soap:header message="tns: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="tns:GetNonIndexableItemDetailsSoapOut" part="ServerVersion" use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"/>
        </wsdl:output>
    </soap:operation>
</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.

<table>
<thead>
<tr>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemDetailsSoapIn</td>
<td>Specifies the request to retrieve details for items that could not be indexed.</td>
</tr>
<tr>
<td>GetNonIndexableItemDetailsSoapOut</td>
<td>Specifies the response to the <code>GetNonIndexableItemDetailsSoapIn</code> request.</td>
</tr>
</tbody>
</table>

#### 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.

```xml
<wsdl:message name="GetNonIndexableItemDetailsSoapIn"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
    <wsdl:part name="request" element="tns: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.

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

### 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.

```xml
<wSDL:message name="GetNonIndexableItemDetailsSoapOut"
xmlns:wSDL="http://schemas.xmlsoap.org/wSDL/">
  <wSDL:part name="GetNonIndexableItemDetailsResult"
    element="tns: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.

<table>
<thead>
<tr>
<th>Part name</th>
<th>Element/type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemDetailsResult</td>
<td>GetNonIndexableItemDetailsResponse</td>
<td>Specifies the <strong>SOAP body</strong> of the response that contains the requested information.</td>
</tr>
<tr>
<td>ServerVersion</td>
<td>ServerVersionInfo ([MS-OXWSCDATA] section 2.2.3.10)</td>
<td>Specifies a <strong>SOAP header</strong> that identifies the server version for the response.</td>
</tr>
</tbody>
</table>
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 2.2.5.24.

### 3.1.4.1.2 Elements

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

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>GetNonIndexableItemDetails</code></td>
<td>The input data for the <code>GetNonIndexableItemDetails</code> WSDL operation.</td>
</tr>
<tr>
<td><code>GetNonIndexableItemDetailsResponse</code></td>
<td>The result data for the <code>GetNonIndexableItemDetails</code> WSDL operation.</td>
</tr>
</tbody>
</table>

#### 3.1.4.1.2.1 GetNonIndexableItemDetails

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

```xml
<xsd:element name="GetNonIndexableItemDetails" type="tns:GetNonIndexableItemDetailsType"
xmlns:xsd="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.

```xml
<xsd:element name="GetNonIndexableItemDetailsResponse"
    type="tns:GetNonIndexableItemDetailsResponseMessageType"
xmlns:xsd="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.

<table>
<thead>
<tr>
<th>Complex type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ArrayOfNonIndexableItemDetailsType</code></td>
<td>Specifies an array of <code>NonIndexableItemDetails</code> elements.</td>
</tr>
<tr>
<td><code>GetNonIndexableItemDetailsResponseMessageType</code></td>
<td>Specifies the response message for a <code>GetNonIndexableItemDetails</code> WSDL operation.</td>
</tr>
</tbody>
</table>
### Complex type

<table>
<thead>
<tr>
<th>Complex type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemDetailsType</td>
<td>Specifies a request to retrieve details for items in a mailbox that could not be indexed.</td>
</tr>
<tr>
<td>NonIndexableItemDetailResultType</td>
<td>Specifies the results of the GetNonIndexableItemDetails WSDL operation.</td>
</tr>
<tr>
<td>NonIndexableItemDetailType</td>
<td>Specifies a detail for an item that could not be indexed.</td>
</tr>
</tbody>
</table>

#### 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 details for items in a mailbox that could not be indexed. This type extends the BaseRequestType complex type, as specified in [MS-OXWSDATA] section 2.2.4.17.

```xml
<x:s:complexType name="GetNonIndexableItemDetailsType"
xmlns:x="http://www.w3.org/2001/XMLSchema">
  <x:s:complexContent mixed="false">
    <x:s:extension base="tns:BaseRequestType">
      <x:s:sequence>
        <x:s:element minOccurs="1" name="Mailboxes" type="t:NonEmptyArrayOfLegacyDNsType"/>
        <x:s:element minOccurs="0" name="PageSize" type="xs:int"/>
        <x:s:element minOccurs="0" name="PageItemReference" type="xs:string"/>
        <x:s:element minOccurs="0" name="PageDirection" type="t:SearchPageDirectionType"/>
        <x:s:element minOccurs="0" name="SearchArchiveOnly" type="xs:boolean"/>
      </x:s:sequence>
    </x:s:extension>
  </x:s:complexContent>
</x:s: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 number of items to be returned in a single page for a search result.

**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 2.2.4.67.
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.

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.

ItemId: An element of type ItemIdType, as defined in [MS-OXWSCORE] section 2.2.4.25, 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.

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

<table>
<thead>
<tr>
<th>Simple type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ItemIndexErrorType</td>
<td>This type is for internal use only.</td>
</tr>
</tbody>
</table>

### 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.

```xml
<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.

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>GenericError</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>Timeout</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>StaleEvent</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>MailboxOffline</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>AttachmentLimitReached</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>MarsWriterTruncation</td>
<td>This value is for internal use only.</td>
</tr>
<tr>
<td>DocumentParserFailure</td>
<td>This value is for internal use only.</td>
</tr>
</tbody>
</table>

### 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.

```xml
<wsdl:operation name="GetNonIndexableItemStatistics" xmlns:wsdl="http://schemas.xmlsoap.org/wsd1/">
  <wsdl:input message="tns:GetNonIndexableItemStatisticsSoapIn"/>
</wsdl:operation>
```
The following is the WSDL binding specification of the GetNonIndexableItemStatistics WSDL operation.

```xml
<wsdl:operation name="GetNonIndexableItemStatistics"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <soap:operation
    xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"/>
  <wsdl:input>
    <soap:header
      message="tns:GetNonIndexableItemStatisticsSoapIn" part="RequestVersion"
      use="literal" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"/>
    <soap:header
      message="tns: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="tns: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.

<table>
<thead>
<tr>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemStatisticsSoapIn</td>
<td>Specifies the request to retrieve statistics for items that could not be indexed.</td>
</tr>
<tr>
<td>GetNonIndexableItemStatisticsSoapOut</td>
<td>Specifies the response to the GetNonIndexableItemStatisticsSoapIn request.</td>
</tr>
</tbody>
</table>

#### 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.

```xml
<wsdl:message name="GetNonIndexableItemStatisticsSoapIn"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:part name="request" element="tns: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.

<table>
<thead>
<tr>
<th>Part name</th>
<th>Element/type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>request</td>
<td>GetNonIndexableItemStatistics</td>
<td>Specifies the <strong>SOAP body</strong> of the request to retrieve statistics.</td>
</tr>
<tr>
<td>RequestVersion</td>
<td>RequestServerVersion RequestServerVersion ([IMSOXWSCDATA] section 2.2.3.9)</td>
<td>Specifies a <strong>SOAP header</strong> that identifies the schema version for the GetNonIndexableItemStatistics WSDL operation request.</td>
</tr>
<tr>
<td>ManagementRole</td>
<td>ManagementRole ([IMSOXWSCDATA] section 2.2.3.7)</td>
<td>Specifies a SOAP header that identifies a user or application role.</td>
</tr>
</tbody>
</table>

### 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.

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

<table>
<thead>
<tr>
<th>Part name</th>
<th>Element/type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemStatisticsResult</td>
<td>GetNonIndexableItemStatisticsResponse</td>
<td>Specifies the <strong>SOAP body</strong> of the response that contains the requested information.</td>
</tr>
<tr>
<td>ServerVersion</td>
<td>ServerVersionInfo ([IMSOXWSCDATA] section 2.2.3.10)</td>
<td>Specifies a <strong>SOAP header</strong> that identifies the server version for the response.</td>
</tr>
</tbody>
</table>
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 2.2.5.24.

### 3.1.4.2.2 Elements

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

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetNonIndexableItemStatistics</td>
<td>The input data for the <strong>GetNonIndexableItemStatistics</strong> WSDL operation.</td>
</tr>
<tr>
<td>GetNonIndexableItemStatisticsResponse</td>
<td>The result data for the <strong>GetNonIndexableItemStatistics</strong> WSDL operation.</td>
</tr>
</tbody>
</table>

### 3.1.4.2.2.1 GetNonIndexableItemStatistics

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

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

### 3.1.4.2.2.2 GetNonIndexableItemStatisticsResponse

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

```xml
<xs:element name="GetNonIndexableItemStatisticsResponse"
    type="tns: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.

<table>
<thead>
<tr>
<th>Complex type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArrayOfNonIndexableItemStatisticsType</td>
<td>Specifies an array of statistics for items that could not be indexed.</td>
</tr>
<tr>
<td>GetNonIndexableItemStatisticsResponseMessageType</td>
<td>Specifies the response message for a <strong>GetNonIndexableItemStatistics</strong> WSDL operation.</td>
</tr>
<tr>
<td>GetNonIndexableItemStatisticsType</td>
<td>Specifies a request to retrieve statistics for items</td>
</tr>
</tbody>
</table>
NonIndexableItemStatisticType

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies a statistic for an item that could not be indexed.</td>
</tr>
</tbody>
</table>

### 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 2.2.4.17.

```xml
<xs:complexType name="GetNonIndexableItemStatisticsType"
    xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:complexContent mixed="false">
        <xs:extension base="tns: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 2.2.4.67.

```xml
<xs:complexType name="GetNonIndexableItemStatisticsResponseMessageType"
    xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:complexContent mixed="false">
        <xs:extension base="tns: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 3.1.4.2.3.3, 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.

```xml
<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.

```xml
<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
<?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>
<soap:ServerVersion 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
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<s:Header>
<s:ServerVersionInfo MajorVersion="15"
 MinorVersion="0"
 MajorBuildNumber="526"
 MinorBuildNumber="0"
 Version="Exchange2013"
 xmlns:h="http://schemas.microsoft.com/exchange/services/2006/types"
</s:Header>
<s:Body>
<s:GetNonIndexableItemDetailsResponse ResponseClass="Success"
 xmlns="http://schemas.microsoft.com/exchange/services/2006/messages">
<s:NonIndexableItemDetailsResult>
<s:Items xmlns="http://schemas.microsoft.com/exchange/services/2006/types">
<s:NonIndexableItemDetail>
<s:ItemId Id="AQMkAGVmNDAyODMwLTNkMzMALTRhMGQtYTRlOS1kODU3NjkwMAE2MGQARgAAA2L1bNf8ooZNtO4guk3auRYHALkzPvMo3Y1P]WkRhbQC0KDAAMGAAAAaWmT8ygljWkNuRG95BwrgQAIY2fUAAMA==" ChangeKey="CQAAAA=="/> 
<s:ErrorDescription>The document parser encountered a processing error.</s:ErrorDescription> 
<s:IsPartiallyIndexed>false</s:IsPartiallyIndexed> 
<s:IsPermanentFailure>true</s:IsPermanentFailure> 
<s:SortValue>502511175756</s:SortValue> 
<s:AttemptCount>0</s:AttemptCount> 
<s:LastAttemptTime>2012-11-15T01:56:11Z</s:LastAttemptTime>
```
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
<?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 (FYDIBOHP23SPDLT)/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
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <s:ServerVersionInfo MajorVersion="15"
      MinorVersion="0"
      MajorBuildNumber="526"
      MinorBuildNumber="0"
      Version="Exchange2013"
      xmlns:s="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 (FYDIBOHP23SPDLT)/cn=Recipients/cn=35181a742f0e47e392c8201a60d13ecf-Steve</Mailbox>
          <ItemCount>2</ItemCount>
        </NonIndexableItemStatistic>
      </NonIndexableItemStatistics>
    </GetNonIndexableItemStatisticsResponse>
  </s:Body>
</s:Envelope>
```
</NonIndexableItemStatistics>
</GetNonIndexableItemStatisticsResponse>
</s:Body>
</s:Envelope>
5 Security

5.1 Security Considerations for Implementers
None.

5.2 Index of Security Parameters
None.
6  Appendix A: Full WSDL

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

```xml
<?xml version="1.0" encoding="UTF-8"?>
 xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
 xmlns:n="http://schemas.microsoft.com/exchange/services/2006/types"
 xmlns:wsi="http://schemas.xmlsoap.org/wsdl/soap/"
 xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema elementFormDefault="qualified"
      targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
      version="Exchange2016" id="messages" xmlns:xs="http://www.w3.org/2001/XMLSchema">
      <xs:include schemaLocation="MS-OWSGNI-messages.xsd"/>
    </xs:schema>
  </wsdl:types>

  <wsdl:portType name="ExchangeServicePortType">
    <wsdl:operation name="GetNonIndexableItemStatistics">
      <wsdl:input message="tns:GetNonIndexableItemStatisticsSoapIn"/>
      <wsdl:output message="tns:GetNonIndexableItemStatisticsSoapOut"/>
    </wsdl:operation>

    <wsdl:operation name="GetNonIndexableItemDetails">
      <wsdl:input message="tns:GetNonIndexableItemDetailsSoapIn"/>
      <wsdl:output message="tns:GetNonIndexableItemDetailsSoapOut"/>
    </wsdl:operation>
  </wsdl:portType>

  <wsdl:binding name="ExchangeServiceBinding" type="tns:ExchangeServicePortType">
    <wsdl:documentation>
      <wsi:Claim conformsTo="http://ws-i.org/profiles/basic/1.0" xmlns:wsi="http://ws-i.org/schemas/conformanceClaim/"/>
    </wsdl:documentation>
  </wsdl:binding>

  <wsdl:operation name="GetNonIndexableItemStatistics">
    <wsdl:input>
      <soap:header message="tns:GetNonIndexableItemStatisticsSoapIn" part="RequestVersion" use="literal"/>
      <soap:header message="tns:GetNonIndexableItemStatisticsSoapIn" part="ManagementRole" use="literal"/>
      <soap:body use="literal" parts="request"/>
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" parts="GetNonIndexableItemStatisticsResult"/>
      <soap:header message="tns:GetNonIndexableItemStatisticsSoapOut" part="ServerVersion" use="literal"/>
    </wsdl:output>
  </wsdl:operation>

  <wsdl:operation name="GetNonIndexableItemDetails">
    <wsdl:input>
      <soap:header message="tns:GetNonIndexableItemDetailsSoapIn" part="RequestVersion" use="literal"/>
      <soap:header message="tns:GetNonIndexableItemDetailsSoapIn" part="ManagementRole" use="literal"/>
      <soap:body use="literal" parts="request"/>
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" parts="GetNonIndexableItemDetailsResult"/>
      <soap:header message="tns:GetNonIndexableItemDetailsSoapOut" part="ServerVersion" use="literal"/>
    </wsdl:output>
  </wsdl:operation>
</wsdl:definitions>
```
</wsdl:binding>
<wsdl:message name="GetNonIndexableItemDetailsSoapIn">
  <wsdl:part name="request" element="tns: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="tns:GetNonIndexableItemDetailsResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
<wsdl:message name="GetNonIndexableItemStatisticsSoapIn">
  <wsdl:part name="request" element="tns: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="tns:GetNonIndexableItemStatisticsResponse"/>
  <wsdl:part name="ServerVersion" element="t:ServerVersionInfo"/>
</wsdl:message>
</wsdl:definitions>
7 Appendix B: Full XML Schema

<table>
<thead>
<tr>
<th>Schema name</th>
<th>Prefix</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://schemas.microsoft.com/exchange/services/2006/types">http://schemas.microsoft.com/exchange/services/2006/types</a></td>
<td>t</td>
<td>7.2</td>
</tr>
<tr>
<td><a href="http://schemas.microsoft.com/exchange/services/2006/messages">http://schemas.microsoft.com/exchange/services/2006/messages</a></td>
<td>tns</td>
<td>7.1</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>File name</th>
<th>Defining specification/section</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS-OXWSCDATA-messages.xsd</td>
<td>[MS-OXWSCDATA] section 7.1</td>
</tr>
<tr>
<td>MS-OXWSGNI-types.xsd</td>
<td>7.2</td>
</tr>
</tbody>
</table>

```xml
<?xml version="1.0" encoding="UTF-8"?>
  <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="tns: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="tns:GetNonIndexableItemStatisticsType"/>
  <xs:complexType name="GetNonIndexableItemStatisticsResponseMessageType">
    <xs:complexContent mixed="false">
      <xs:extension base="tns: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="GetNonIndexableItemDetails" type="tns:GetNonIndexableItemDetailsType"/>
</xs:schema>
```
<xs:complexContent mixed="false">
  <xs:extension base="tns: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="tns:GetNonIndexableItemDetailsType"/>
<xs:complexType name="GetNonIndexableItemDetailsResponseMessageType">
  <xs:complexContent mixed="false">
    <xs:extension base="tns: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="tns: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.

<table>
<thead>
<tr>
<th>File name</th>
<th>Defining specification/section</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS-OXWSCORE-types.xsd</td>
<td>[MS-OXWSCORE] section 7.2</td>
</tr>
<tr>
<td>MS-OXWSEDISC-types.xsd</td>
<td>[MS-OXWSEDISC] section 7.2</td>
</tr>
</tbody>
</table>

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types"
  elementFormDefault="qualified"
  targetNamespace="http://schemas.microsoft.com/exchange/services/2006/types"
  version="Exchange2016" id="types" xmlns:x="http://www.w3.org/2001/XMLSchema">
  <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 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>
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 updates to those products.

- Microsoft Exchange Server 2013
- Microsoft Exchange Server 2016
- Microsoft Lync Server 2013
- Microsoft Skype for Business Server 2015
- Microsoft Skype for Business Server 2019
- Microsoft Exchange Server 2019

Exceptions, if any, are noted in this section. If an update version, service pack or Knowledge Base (KB) number appears with a product name, the behavior changed in that update. The new behavior also applies to subsequent updates 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.
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