

[MS-OXWSGNI]: Nonindexable Item Web Service Protocol Specification

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Revision Summary

Date	Revision History	Revision Class	Comments
07/16/2012	0.1	New	Released new document.

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	7
1.9 Standards Assignments	7
2 Messages	8
2.1 Transport	8
2.2 Common Message Syntax	8
2.2.1 Namespaces	8
2.2.2 Messages	8
2.2.3 Elements	8
2.2.4 Complex Types	9
2.2.4.1 NonEmptyArrayOfLegacyDNSType	9
2.2.5 Simple Types	9
2.2.6 Attributes	9
2.2.7 Groups	9
2.2.8 Attribute Groups	9
3 Protocol Details	10
3.1 ExchangeServicePortType Server Details	10
3.1.1 Abstract Data Model	10
3.1.2 Timers	10
3.1.3 Initialization	10
3.1.4 Message Processing Events and Sequencing Rules	10
3.1.4.1 GetNonIndexableItemDetails	10
3.1.4.1.1 Messages	11
3.1.4.1.1.1 GetNonIndexableItemDetailsSoapIn	11
3.1.4.1.1.2 GetNonIndexableItemDetailsSoapOut	12
3.1.4.1.2 Elements	12
3.1.4.1.2.1 GetNonIndexableItemDetails	13
3.1.4.1.2.2 GetNonIndexableItemDetailsResponse	13
3.1.4.1.3 Complex Types	13
3.1.4.1.3.1 GetNonIndexableItemDetailsType	13
3.1.4.1.3.2 GetNonIndexableItemDetailsResponseMessageType	14
3.1.4.1.3.3 ArrayOfNonIndexableItemDetailsType	14
3.1.4.1.3.4 NonIndexableItemDetailType	14
3.1.4.1.4 Simple Types	15
3.1.4.1.4.1 ItemIndexErrorType	15
3.1.4.1.5 Attributes	16
3.1.4.1.6 Groups	16
3.1.4.1.7 Attribute Groups	16
3.1.4.2 GetNonIndexableItemStatistics	16

3.1.4.2.1	Messages	17
3.1.4.2.1.1	GetNonIndexableItemStatisticsSoapIn	17
3.1.4.2.1.2	GetNonIndexableItemStatisticsSoapOut	18
3.1.4.2.2	Elements	18
3.1.4.2.2.1	GetNonIndexableItemStatistics	19
3.1.4.2.2.2	GetNonIndexableItemStatisticsResponse	19
3.1.4.2.3	Complex Types	19
3.1.4.2.3.1	GetNonIndexableItemStatisticsType	19
3.1.4.2.3.2	GetNonIndexableItemStatisticsResponseMessageType	20
3.1.4.2.3.3	ArrayOfNonIndexableItemStatisticsType	20
3.1.4.2.3.4	NonIndexableItemStatisticType	20
3.1.4.2.4	Simple Types	21
3.1.4.2.5	Attributes	21
3.1.4.2.6	Groups	21
3.1.4.2.7	Attribute Groups	21
3.1.5	Timer Events	21
3.1.6	Other Local Events	21
4	Protocol Examples	22
5	Security	23
5.1	Security Considerations for Implementers	23
5.2	Index of Security Parameters	23
6	Appendix A: Full WSDL	24
7	Appendix B: Full XML Schema	26
7.1	http://schemas.microsoft.com/exchange/services/2006/messages Schema	26
7.2	http://schemas.microsoft.com/exchange/services/2006/types Schema	27
8	Appendix C: Product Behavior	29
9	Change Tracking	30
10	Index	31

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)

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

endpoint
mailbox
Simple Object Access Protocol (SOAP)
SOAP action
SOAP body
SOAP header
Web Services Description Language (WSDL)
WSDL message
WSDL operation
WSDL port type
XML namespace
XML namespace prefix
XML schema

The following terms are specific to this document:

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

1.2 References

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

1.2.1 Normative References

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

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

[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>

[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>

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

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

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

1.2.2 Informative References

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

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

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

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

[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>

1.3 Overview

The Nonindexable Item Web Service Protocol enables the retrieval of details and statistics for nonindexable mailbox items, by using web Services.

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 the SOAP Protocol, as described in [\[SOAP1.1\]](#), to specify the structure information that is exchanged between the client and the server. This protocol uses the XML Protocol, 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.

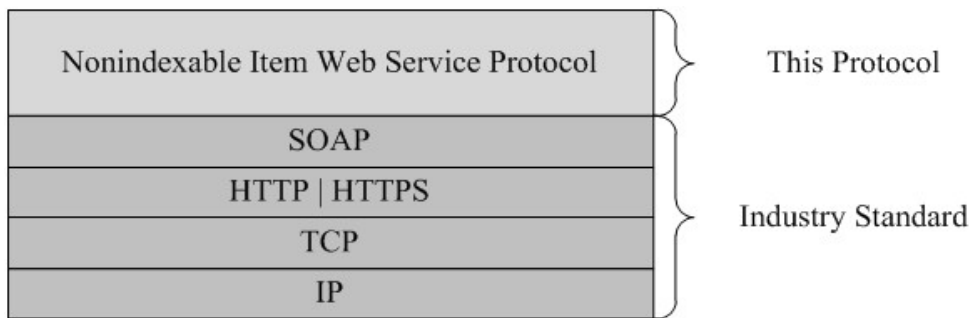


Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

The endpoint (4) URL that 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 [\[MS-OXDSCLI\]](#), is required to form the HTTP request to the web server that hosts this protocol. 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.

1.6 Applicability Statement

This protocol is applicable to environments that use web services to implement retrieval of nonindexable mailbox items. 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 1.1, as specified in section [2.1](#).
- **Protocol Versions:** This protocol specifies only one **WSDL port type** version. The **WSDL** version of the request is identified by using the **t:RequestServerVersion** element, as described in [\[MS-OXWSCDATA\]](#) section 2.2.5.9, and the version of the server responding to the request is identified by using the **t:ServerVersionInfo** element, as described in [\[MS-OXWSCDATA\]](#) section 2.2.5.10.
- **Security and Authentication Methods:** This protocol relies on the web server that is hosting it to perform authentication.
- **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 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

The SOAP version used for this protocol is SOAP 1.1, as specified in [\[SOAP1.1\]](#).

This protocol relies on the web server that hosts the application to perform authentication. 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 Web Services Description Language (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/	
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: 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

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 a single WSDL port type.

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 operation retrieves details for non-indexable items in a mailbox.
GetNonIndexableItemStatistics	The GetNonIndexableItemStatistics operation retrieves statistics for a GetNonIndexableItem operation.

3.1.4.1 GetNonIndexableItemDetails

The **GetNonIndexableItemDetails** operation retrieves details for non-indexable items in a mailbox.

```
<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** 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>

```

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 non-indexable item details.
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 **GetNonIndexableItemDetails** 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 **GetNonIndexableItemDetails** WSDL message is the input message for the **SOAP action** <http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemDetails>.

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

Part name	Element/type	Description
request	m:GetNonIndexableItemDetails (section 3.1.4.1.2.1)	Specifies the SOAP body of the request containing the information that is required to

Part name	Element/type	Description
		query for availability.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section 2.2.5.9)	Specifies a SOAP header that identifies the schema version for the GetNonIndexableItemDetails operation request. <1>
ManagementRole	t:ManagementRole ([MS-OXWSCDATA] section 2.2.5.7)	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 **GetNonIndexableItemDetails** 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 **GetNonIndexableItemDetails** WSDL message is the output message for the SOAP action <http://schemas.microsoft.com/exchange/services/2006/messages/GetNonIndexableItemDetails>.

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

Part name	Element/type	Description
GetNonIndexableItemDetailsResult	m:GetNonIndexableItemDetailsResponse (section 3.1.4.1.2.2)	Specifies the SOAP body of the response that contains the requested availability information.
ServerVersion	t:ServerVersionInfo ([MS-OXWSCDATA] section 2.2.5.10)	Specifies a SOAP header that identifies the server version for the response.

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

Element	Description
	operation.

3.1.4.1.2.1 GetNonIndexableItemDetails

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

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.

```
<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:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```
</xs:extension>
</xs:complexContent>
</xs:complexType>
```

Mailboxes: Represents a list of mailboxes in the format of legacy distinguished names.

PageSize: Represents the size of the page.

PageItemReference: Represents the item reference.

PageDirection: Represents the search direction, previous or next.

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** operation.

```
<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" maxOccurs="1" name="NonIndexableItemDetails"
type="t:ArrayOfNonIndexableItemDetailsType"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

NonIndexableItemDetails: Represents details about the item that could not be indexed.

3.1.4.1.3.3 ArrayOfNonIndexableItemDetailsType

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

The **ArrayOfNonIndexableItemDetailsType** complex type specifies an array of **NonIndexableItemDetails** elements.

```
<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: Represents a single nonindexable item detail.

3.1.4.1.3.4 NonIndexableItemDetailType

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

The **NonIndexableItemDetailType** complex type specifies a non-indexable item detail.

```

<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: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="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: Represents the identifier of the nonindexable item.

ErrorCode: Represents the error code returned.

ErrorDescription: Represents the description of the error returned.

IsPartiallyIndexed: Contains a Boolean value that indicates whether the item is partially indexed.

IsPermanentFailure: Contains a Boolean value that indicates whether a previous attempt to index the item was unsuccessful.

AttemptCount: Represents the number of attempts that have been made to index the item.

LastAttemptTime: Represents a time and date at which the last attempt to index the item was made.

AdditionalInfo: Represents additional information.

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	Specifies the type of an item index error.

3.1.4.1.4.1 ItemIndexErrorType

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

The **ItemIndexErrorType** simple type specifies the type of an item index error.

```

<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:restriction>
</xs:simpleType>

```

```

    <xs:enumeration value="DocumentParserFailure"/>
  </xs:restriction>
</xs:simpleType>

```

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

Value	Meaning
None	No error.
GenericError	Generic error.
Timeout	The operation timed out.
StaleEvent	This is a stale event.
MailboxOffline	The mailbox was offline.
AttachmentLimitReached	The attachment limit was reached.
MarsWriterTruncation	The Mars writer has truncated the data.
DocumentParserFailure	The operation was unable to parse the document.

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** operation retrieves statistics for a **GetNonIndexableItem** 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** 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>

```

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 nonindexable item statistics.
GetNonIndexableItemStatisticsSoapOut	Specifies the response to the GetNonIndexableItemStatisticsSoapIn request.

3.1.4.2.1.1 GetNonIndexableItemStatisticsSoapIn

The **GetNonIndexableItemStatisticsSoapIn** WSDL message specifies the request to retrieve non-indexable item statistics.

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

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

Part name	Element/type	Description
request	m:GetNonIndexableItemStatistics (section 3.1.4.2.2.1)	Specifies the SOAP body of the request containing the information that is required to query for availability.
RequestVersion	t:RequestServerVersion ([MS-OXWSCDATA] section)	Specifies a SOAP header that identifies the schema version for the

Part name	Element/type	Description
	2.2.5.9)	GetNonIndexableItemStatistics operation request. <2>
ManagementRole	t:ManagementRole ([MS-OXWSCDATA] section 2.2.5.7)	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 **GetNonIndexableItemStatistics** 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>
```

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

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

Part name	Element/type	Description
GetNonIndexableItemStatisticsResult	m:GetNonIndexableItemStatisticsResponse (section 3.1.4.2.2.2)	Specifies the SOAP body of the response that contains the requested availability information.
ServerVersion	t:ServerVersionInfo ([MS-OXWSCDATA] section 2.2.5.10)	Specifies a SOAP header that identifies the server version for the response.

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

Element	Description
	WSDL operation.

3.1.4.2.2.1 GetNonIndexableItemStatistics

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

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

3.1.4.2.2.2 GetNonIndexableItemStatisticsResponse

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
GetNonIndexableItemStatisticsType	Specifies a request to retrieve statistics for a GetNonIndexableItems operation.
GetNonIndexableItemStatisticsResponseMessageType	Specifies the response message for a GetNonIndexableItemStatistics operation.
ArrayOfNonIndexableItemStatisticsType	Specifies an array of 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 a **GetNonIndexableItems** operation.

```
<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:sequence>
    </xs:extension>
  </xs:complexContent>
```

```
</xs:complexType>
```

Mailboxes: Specifies the mailboxes that were not indexed although items were requested.

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** operation.

```
<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: 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: 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:sequence>
</xs:complexType>
```

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

Mailbox: Represents the mailbox on which indexing failed.

ItemCount: Represents the number of items that could not be indexed.

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

Preliminary

5 Security

5.1 Security Considerations for Implementers

This protocol relies on the Web server that hosts the application to perform authentication. The protocol SHOULD use secure communications by means of HTTPS, as defined in [\[RFC2818\]](#).

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 version="1.0"?>
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
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/>
  <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: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:output>
        <soap:body use="literal" parts="GetNonIndexableItemDetailsResult"/>
        <soap:header message="m:GetNonIndexableItemDetailsSoapOut" part="ServerVersion"
use="literal"/>
    </wsdl:output>
</wsdl:operation>
</wsdl:binding>
</wsdl:definitions>
```

7 Appendix B: Full XML Schema

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

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

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

This section contains the full XML schema for messages.

```
<?xml version="1.0"?>
<xs:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/exchange/services/2006/messages"
version="Exchange2012" id="messages" xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:m="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types">
  <xs:import namespace="http://schemas.microsoft.com/exchange/services/2006/types"/>
  <xs:include schemaLocation="MS-OXWSGNI-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: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: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" maxOccurs="1" name="NonIndexableItemDetails"
type="t:ArrayOfNonIndexableItemDetailsType"/>
      </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 full XML schema for types.

```

<?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="Exchange2012" 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: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:sequence>
  </xs:complexType>

```

```
    <xs:element minOccurs="1" maxOccurs="1" name="ItemCount" type="xs:long"/>
  </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="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: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 Preview
- Microsoft® Lync® Server 2013 Preview

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

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

[<1> Section 3.1.4.1.1.1:](#) Exchange 2007, Exchange 2010, and Exchange 2010 SP1 do not use the **RequestVersion** header. The **RequestVersion** header was introduced in Exchange 2010 SP2.

[<2> Section 3.1.4.2.1.1:](#) Exchange 2007, Exchange 2010, and Exchange 2010 SP1 do not use the **RequestVersion** header. The **RequestVersion** header was introduced in Exchange 2010 SP2.

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](#) 10
[Applicability](#) 7
[Attribute groups](#) 9
[Attributes](#) 9

C

[Capability negotiation](#) 7
[Change tracking](#) 30
[Complex types](#) 9
[NonEmptyArrayOfLegacyDNsType](#) 9

D

Data model - abstract
[server](#) 10

E

Events
[local - server](#) 21
[timer - server](#) 21

F

[Fields - vendor-extensible](#) 7
[Full WSDL](#) 24
[Full XML Schema](#) 26
<http://schemas.microsoft.com/exchange/services/2006/messages Schema> 26
<http://schemas.microsoft.com/exchange/services/2006/types Schema> 27

G

[Glossary](#) 5
[Groups](#) 9

I

[Implementer - security considerations](#) 23
[Index of security parameters](#) 23
[Informative references](#) 6
Initialization
[server](#) 10
[Introduction](#) 5

L

Local events
[server](#) 21

M

Message processing
[server](#) 10

Messages

[attribute groups](#) 9
[attributes](#) 9
[complex types](#) 9
[elements](#) 8
[enumerated](#) 8
[groups](#) 9
[namespaces](#) 8
[NonEmptyArrayOfLegacyDNsType complex type](#) 9
[simple types](#) 9
[syntax](#) 8
[transport](#) 8

N

[Namespaces](#) 8
[NonEmptyArrayOfLegacyDNsType complex type](#) 9
[Normative references](#) 5

O

Operations
[GetNonIndexableItemDetails](#) 10
[GetNonIndexableItemStatistics](#) 16
[Overview \(synopsis\)](#) 6

P

[Parameters - security index](#) 23
[Preconditions](#) 7
[Prerequisites](#) 7
[Product behavior](#) 29

R

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

S

Security
[implementer considerations](#) 23
[parameter index](#) 23
Sequencing rules
[server](#) 10
Server
[abstract data model](#) 10
[GetNonIndexableItemDetails operation](#) 10
[GetNonIndexableItemStatistics operation](#) 16
[initialization](#) 10
[local events](#) 21
[message processing](#) 10
[sequencing rules](#) 10
[timer events](#) 21
[timers](#) 10
[Simple types](#) 9
[Standards assignments](#) 7

Syntax
[messages - overview](#) 8

T

Timer events
[server](#) 21
Timers
[server](#) 10
[Tracking changes](#) 30
[Transport](#) 8
Types
[complex](#) 9
[simple](#) 9

V

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

W

[WSDL](#) 24

X

[XML Schema](#) 26
<http://schemas.microsoft.com/exchange/services/2006/messages> Schema 26
<http://schemas.microsoft.com/exchange/services/2006/types> Schema 27