

[MS-OXSHARE]: Sharing Message Object Protocol Specification

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04/25/2008	0.2		Revised and updated property names and other technical content.
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1 Introduction

The Sharing Message Object Protocol specifies the format of messages that enable a user to communicate status about the sharing of folders.

This document specifies the following:

- The message format used to inform users that they have been granted access to another user's folder and provide the information necessary to locate that folder.
- The message format used to request access to a user's folder.
- The message format used to respond to requests for access to a folder.

1.1 Glossary

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

**big-endian
handle**

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

**Address Book object
Message object
named property
property ID
recipient
remote operation (ROP)
restriction
special folder
Uniform Resource Locator (URL)**

The following terms are specific to this document:

sharing invitation: A type of Sharing Message object that informs a user that the user was granted access to another user's folder and provides the information necessary to locate that folder.

Sharing Message object: A Message object that is used to inform a recipient that they were granted access to another user's folder, request access to a recipient's folder, or respond to a request for access to a folder.

sharing provider: A software agent that is responsible for properly generating and processing a predefined Sharing Message object format.

sharing request: A type of Sharing Message object that is used to request access to a user's folder.

sharing response: A type of Sharing Message object that is used to respond to a sharing request.

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

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-OXCDATA] Microsoft Corporation, "[Data Structures](#)".

[MS-OXCFOLD] Microsoft Corporation, "[Folder Object Protocol Specification](#)".

[MS-OXCMSG] Microsoft Corporation, "[Message and Attachment Object Protocol Specification](#)".

[MS-OXCPERM] Microsoft Corporation, "[Exchange Access and Operation Permissions Protocol Specification](#)".

[MS-OXCPRPT] Microsoft Corporation, "[Property and Stream Object Protocol Specification](#)".

[MS-OXOABK] Microsoft Corporation, "[Address Book Object Protocol Specification](#)".

[MS-OXODLGT] Microsoft Corporation, "[Delegate Access Configuration Protocol Specification](#)".

[MS-OXOMSG] Microsoft Corporation, "[E-Mail Object Protocol Specification](#)".

[MS-OXOSFLD] Microsoft Corporation, "[Special Folders Protocol Specification](#)".

[MS-OXPROPS] Microsoft Corporation, "[Exchange Server Protocols Master Property List](#)".

[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>

1.2.2 Informative References

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

[MS-OXCROPS] Microsoft Corporation, "[Remote Operations \(ROP\) List and Encoding Protocol Specification](#)".

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

1.3 Overview

The Sharing Message Object Protocol allows for the representation of a communication related to sharing a folder. It extends the Message and Attachment Object Protocol in that it defines new properties and adds **restrictions** to the properties that are specified in [\[MS-OXCMSG\]](#).

The Sharing Message Object Protocol specifies the format and semantics of the **Sharing Message object**. The properties that are specific to a Sharing Message object facilitate communication about granting access to a folder, requesting access to a folder, or responding to a request for access to a folder

1.4 Relationship to Other Protocols

This specification extends the Message and Attachment Object Protocol specified in [\[MS-OXCMSG\]](#) and relies on an understanding of how to work with properties, folders, and **special folders** which are specified in [\[MS-OXCPRPT\]](#), [\[MS-OXCFOLD\]](#), and [\[MS-OXOSFLD\]](#). It also uses the E-mail Object Protocol specified in [\[MS-OXOMSG\]](#) for message submission and delivery.

1.5 Prerequisites/Preconditions

The Sharing Message Object Protocol has the same prerequisites and preconditions as specified in [\[MS-OXCMSG\]](#) and [\[MS-OXOMSG\]](#).

1.6 Applicability Statement

The Sharing Message Object Protocol can be used to notify another user that access has been granted to a folder. This protocol can also be used to request access to a folder and to respond to such requests.

The Sharing Message Object Protocol cannot be used to convey information about any type of object other than folders.

1.7 Versioning and Capability Negotiation

None.

1.8 Vendor-Extensible Fields

This protocol provides no vendor-extensibility beyond what is specified in [\[MS-OXCMSG\]](#).

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

The Sharing Message Object Protocol uses the protocols specified in [\[MS-OXCPRPT\]](#) and [\[MS-OXCMSG\]](#) as its primary transport mechanism.

2.2 Message Syntax

A Sharing Message object can be created and modified by clients and servers. Except where noted, this section defines constraints under which both clients and servers operate.

Clients operate on Sharing Message objects by using the E-mail Object Protocol specified in [\[MS-OXOMSG\]](#) and the Message and Attachment Object Protocol specified in [\[MS-OXCMSG\]](#). How a server operates on Sharing Message objects is implementation-dependent. The results of any such operation are exposed to clients in a manner that is consistent with the Sharing Object Protocol.

Unless otherwise specified, a Sharing Message object adheres to all property constraints specified in [\[MS-OXPROPS\]](#) and all property constraints specified in [\[MS-OXCMSG\]](#). A Sharing Message object can also contain other properties specified in [\[MS-OXPROPS\]](#), but these properties have no effect on the Sharing Message Object Protocol.

Where a string value is specified as a hexadecimal string representation of a binary value, the string value is a sequence of hexadecimal digits that reflect the byte sequence of the binary value. For example, the string "00000000DCA740C8" is the hexadecimal string representation of the following byte sequence:

```
0000 00 00 00 00 dc a7 40 c8
```

Where a string value is specified as a hexadecimal string representation of an integer value, the string value is a sequence of hexadecimal digits that reflect the integer value in **big-endian** format, without an "0x" prefix, and without leading "0" characters. For example, the hexadecimal string representation of the integer 0x0000010B would be "10B".

Sharing Message object properties can be of several different data types. The following data types used by Sharing Message object properties are specified in [\[MS-OXCDATA\]](#) section 2.11.1:

- PtypBinary
- PtypInteger32
- PtypString
- PtypTime

2.2.1 Common Message Object Properties

The following properties are general properties used by Sharing Message objects. The constraints on these properties are specified in [\[MS-OXPROPS\]](#).

2.2.1.1 PidTagNormalizedSubject Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidTagNormalizedSubject** property is specified in [\[MS-OXCMSG\]](#) section 2.2.1.10.

2.2.1.2 PidTagSubjectPrefix Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidTagSubjectPrefix** property is specified in [\[MS-OXCMSG\]](#) section 2.2.1.9.

2.2.2 Common Sharing Message Object Properties

The following properties are specific to Sharing Message objects.

2.2.2.1 PidLidSharingCapabilities Property

Type: **PtypInteger32** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingCapabilities** property ([\[MS-OXPROPS\]](#) section 2.231) MUST be one of the following values.

Value	Scenario
0x00040290	This Sharing Message object relates to a special folder.
0x000402B0	This Sharing Message object does not relate to a special folder.

2.2.2.2 PidNameXSharingCapabilities Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingCapabilities** property ([\[MS-OXPROPS\]](#) section 2.554) contains the hexadecimal string representation of the **PidLidSharingCapabilities** property (section [2.2.2.1](#)).

2.2.2.3 PidLidSharingConfigurationUrl Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingConfigurationUrl** property ([\[MS-OXPROPS\]](#) section 2.232) MUST be a zero-length string.

2.2.2.4 PidNameXSharingConfigUrl Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingConfigUrl** property ([\[MS-OXPROPS\]](#) section 2.255) MUST be set to the same value as **PidLidSharingConfigurationUrl** (section [2.2.2.3](#)).

2.2.2.5 PidLidSharingFlavor Property

Type: **PtypInteger32** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingFlavor** property ([\[MS-OXPROPS\]](#) section 2.239) MUST be one of the following values.

Value	Type of Sharing Message object
0x00020310	A sharing invitation for a special folder.

Value	Type of Sharing Message object
0x00000310	A sharing invitation for a folder that is not a special folder.
0x00020500	A sharing request .
0x00020710	Both a sharing invitation for a special folder and a sharing request for the recipient's equivalent special folder.
0x00025100	A sharing response denying a request.
0x00023310	A sharing response accepting a request (also a type of sharing invitation).

2.2.2.6 PidNameXSharingFlavor Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingFlavor** property ([\[MS-OXPROPS\]](#) section 2.557) MUST be set to the hexadecimal string representation of the value of **PidLidSharingFlavor** (section [2.2.2.5](#)).

2.2.2.7 PidLidSharingInitiatorEntryId Property

Type: **PtypBinary** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingInitiatorEntryId** property ([\[MS-OXPROPS\]](#) section 2.242) MUST be set to the value of the **PidTagEntryId** property ([\[MS-OXCPerm\]](#) section 2.2.1.4) for the **Address Book object** of the currently logged on user (see [\[MS-OXOABK\]](#)).

2.2.2.8 PidLidSharingInitiatorName Property

Type: **PtypString** ([\[MS-OXCData\]](#) section 2.11.1)

The **PidLidSharingInitiatorName** property ([\[MS-OXPROPS\]](#) section 2.243) MUST be set to the value of the **PidTagDisplayName** property ([\[MS-OXCFOLD\]](#) section 2.2.2.2.3) from the Address Book object identified by **PidLidSharingInitiatorEntryId** (section [2.2.2.7](#)) and SHOULD be ignored. [<1>](#)

2.2.2.9 PidLidSharingInitiatorSmtP Property

Type: **PtypString** ([\[MS-OXCData\]](#) section 2.11.1)

The **PidLidSharingInitiatorSmtP** property ([\[MS-OXPROPS\]](#) section 2.244) MUST be set to the value of the **PidTagSmtPAddress** property ([\[MS-OXOABK\]](#) section 2.2.3.21) from the Address Book object identified by **PidLidSharingInitiatorEntryId** (section [2.2.2.7](#)) and SHOULD be ignored. [<2>](#)

2.2.2.10 PidLidSharingLocalType Property

Type: **PtypString** ([\[MS-OXCData\]](#) section 2.11.1)

The **PidLidSharingLocalType** property ([\[MS-OXPROPS\]](#) section 2.253) MUST be set to the value of **PidTagContainerClass** ([\[MS-OXPROPS\]](#) section 2.701) of the folder being shared and MUST be one of the following values:

- "IPF.Appointment"

- "IPF.Contact"
- "IPF.Task"
- "IPF.StickyNote"
- "IPF.Journal"

2.2.2.11 PidNameXSharingLocalType Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingLocalType** property ([\[MS-OXPROPS\]](#) section 2.559) MUST be set to the same value as the **PidLidSharingLocalType** property (section [2.2.2.10](#)).

2.2.2.12 PidLidSharingProviderGuid Property

Type: **PtypBinary** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingProviderGuid** property ([\[MS-OXPROPS\]](#) section 2.260) MUST be set to %xAE.F0.06.00.00.00.00.00.C0.00.00.00.00.00.46.

2.2.2.13 PidNameXSharingProviderGuid Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingProviderGuid** property ([\[MS-OXPROPS\]](#) section 2.560) MUST be set to the hexadecimal string representation of the value of the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)). That is, "AEF0060000000000C000000000000046".

2.2.2.14 PidLidSharingProviderName Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingProviderName** property ([\[MS-OXPROPS\]](#) section 2.261) is a user-displayable name of the **sharing provider** identified by the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)). SHOULD be ignored. [<3>](#)

2.2.2.15 PidNameXSharingProviderName Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingProviderName** property ([\[MS-OXPROPS\]](#) section 2.561) MUST be set to the same value as **PidLidSharingProviderName** (section [2.2.2.14](#)) and SHOULD be ignored. [<4>](#)

2.2.2.16 PidLidSharingProviderUrl Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingProviderUrl** property ([\[MS-OXPROPS\]](#) section 2.262) is a **Uniform Resource Locator (URL)** related to the sharing provider identified by the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)). Generally used to provide more information about the sharing provider. SHOULD be ignored. [<5>](#)

2.2.2.17 PidNameXSharingProviderUrl Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingProviderUrl** property ([\[MS-OXPROPS\]](#) section 2.562) MUST be set to the same value as **PidLidSharingProviderGuid** ([\[MS-OXPROPS\]](#) section 2.261) and SHOULD be ignored. [<6>](#)

2.2.3 Sharing Request Properties

The following property constraints are specific to sharing requests to which the user has responded, which are Sharing Message objects with a **PidLidSharingFlavor** (section [2.2.2.5](#)) value of 0x00020500 or 0x00020710. For all other types of Sharing Message objects, these properties MUST NOT be set.

2.2.3.1 PidLidSharingResponseTime Property

Type: **PtypTime** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingResponseTime** property ([\[MS-OXPROPS\]](#) section 2.279) contains the time at which the recipient of the sharing request sent a sharing response.

2.2.3.2 PidLidSharingResponseType Property

Type: **PtypInteger32** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingResponseType** property ([\[MS-OXPROPS\]](#) section 2.280) contains the type of response with which the recipient of the sharing request responded. MUST be one of the following values.

Value	Meaning
0x00000001	Accepted
0x00000002	Denied

2.2.4 Sharing Invitation Properties

The following property constraints are specific to sharing invitations, which are Sharing Message objects with a **PidLidSharingFlavor** property (section [2.2.2.5](#)) value of 0x00020310, 0x00000310, 0x0020710, or 0x0023310. For all other types of Sharing Message objects, these properties SHOULD NOT be set and MUST be ignored. [<7>](#)

2.2.4.1 PidLidSharingRemoteName Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidLidSharingRemoteName** property ([\[MS-OXPROPS\]](#) section 2.271) MUST be set to the value of the **PidTagDisplayName** property ([\[MS-OXCFOLD\]](#) section 2.2.2.2.3) on the folder being shared.

2.2.4.2 PidNameXSharingRemoteName Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameXSharingRemoteName** property ([\[MS-OXPROPS\]](#) section 2.563) MUST be set to the same value as the **PidLidSharingRemoteName** property (section [2.2.4.1](#)).

2.2.4.3 PidLidSharingRemoteStoreUid Property

Type: **PtypString** ([\[MS-OXCADATA\]](#) section 2.11.1)

The **PidLidSharingRemoteStoreUid** property ([\[MS-OXPROPS\]](#) section 2.276) MUST be set to a hexadecimal string representation of the value of **PidTagStoreEntryId** ([\[MS-OXPROPS\]](#) section 2.1080) on the folder being shared.

2.2.4.4 PidNameXSharingRemoteStoreUid Property

Type: **PtypString** ([\[MS-OXCADATA\]](#) section 2.11.1)

The **PidNameXSharingRemoteStoreUid** property ([\[MS-OXPROPS\]](#) section 2.565) MUST be set to the same value as **PidLidSharingRemoteStoreUid** (section [2.2.4.3](#)).

2.2.4.5 PidLidSharingRemoteType Property

Type: **PtypString** ([\[MS-OXCADATA\]](#) section 2.11.1)

The **PidLidSharingRemoteType** property ([\[MS-OXPROPS\]](#) section 2.275) MUST be set to the same value as the **PidLidSharingLocalType** property (section [2.2.2.10](#)) and SHOULD be ignored. [<8>](#)

2.2.4.6 PidNameXSharingRemoteType Property

Type: **PtypString** ([\[MS-OXCADATA\]](#) section 2.11.1)

The **PidNameXSharingRemoteType** property ([\[MS-OXPROPS\]](#) section 2.566) MUST be set to the same value as **PidLidSharingRemoteType** (section [2.2.4.5](#)) and SHOULD be ignored. [<9>](#)

2.2.4.7 PidLidSharingRemoteUid Property

Type: **PtypString** ([\[MS-OXCADATA\]](#) section 2.11.1)

The **PidLidSharingRemoteUid** property ([\[MS-OXPROPS\]](#) section 2.276) MUST be set to the hexadecimal string representation of the value of **PidTagEntryId** ([\[MS-OXCPerm\]](#) section 2.2.1.4) on the folder being shared.

2.2.4.8 PidNameXSharingRemoteUid Property

Type: **PtypString** ([\[MS-OXCADATA\]](#) section 2.11.1)

The **PidNameXSharingRemoteUid** property ([\[MS-OXPROPS\]](#) section 2.567) MUST be set to the same value as **PidLidSharingRemoteUid** (section [2.2.4.7](#)).

2.2.5 Ignored Properties

The following properties SHOULD NOT be set and MUST be ignored: [<10>](#)

- **PidLidSharingAnonymity** ([\[MS-OXPROPS\]](#) section 2.228)
- **PidLidSharingBindingEntryId** ([\[MS-OXPROPS\]](#) section 2.229)
- **PidLidSharingBrowseUrl** ([\[MS-OXPROPS\]](#) section 2.230)

- **PidNameXSharingBrowseUrl** ([\[MS-OXPROPS\]](#) section 2.553)
- **PidLidSharingDataRangeEnd** ([\[MS-OXPROPS\]](#) section 2.233)
- **PidLidSharingDataRangeStart** ([\[MS-OXPROPS\]](#) section 2.234)
- **PidLidSharingDetail** ([\[MS-OXPROPS\]](#) section 2.235)
- **PidLidSharingExtensionXml** ([\[MS-OXPROPS\]](#) section 2.236)
- **PidNameXSharingExendedCaps** ([\[MS-OXPROPS\]](#) section 2.556)
- **PidLidSharingFilter** ([\[MS-OXPROPS\]](#) section 2.237)
- **PidLidSharingFlags** ([\[MS-OXPROPS\]](#) section 2.238)
- **PidLidSharingFolderEntryId** ([\[MS-OXPROPS\]](#) section 2.240)
- **PidLidSharingIndexEntryId** ([\[MS-OXPROPS\]](#) section 2.241)
- **PidLidSharingInstanceGuid** ([\[MS-OXPROPS\]](#) section 2.245)
- **PidNameXSharingInstanceGuid** ([\[MS-OXPROPS\]](#) section 2.558)
- **PidLidSharingLastAutoSyncTime** ([\[MS-OXPROPS\]](#) section 2.246)
- **PidLidSharingLastSyncTime** ([\[MS-OXPROPS\]](#) section 2.247)
- **PidLidSharingLocalComment** ([\[MS-OXPROPS\]](#) section 2.248)
- **PidLidSharingLocalLastModificationTime** ([\[MS-OXPROPS\]](#) section 2.249)
- **PidLidSharingLocalName** ([\[MS-OXPROPS\]](#) section 2.250)
- **PidLidSharingLocalPath** ([\[MS-OXPROPS\]](#) section 2.251)
- **PidLidSharingLocalStoreUid** ([\[MS-OXPROPS\]](#) section 2.252)
- **PidLidSharingLocalUid** ([\[MS-OXPROPS\]](#) section 2.254)
- **PidLidSharingOriginalMessageEntryId** ([\[MS-OXPROPS\]](#) section 2.255)
- **PidLidSharingParentBindingEntryId** ([\[MS-OXPROPS\]](#) section 2.256)
- **PidLidSharingParticipants** ([\[MS-OXPROPS\]](#) section 2.257)
- **PidLidSharingPermissions** ([\[MS-OXPROPS\]](#) section 2.258)
- **PidLidSharingProviderExtension** ([\[MS-OXPROPS\]](#) section 2.259)
- **PidLidSharingRangeEnd** ([\[MS-OXPROPS\]](#) section 2.263)
- **PidLidSharingRangeStart** ([\[MS-OXPROPS\]](#) section 2.264)
- **PidLidSharingReciprocation** ([\[MS-OXPROPS\]](#) section 2.265)
- **PidLidSharingRemoteByteSize** ([\[MS-OXPROPS\]](#) section 2.266)
- **PidLidSharingRemoteComment** ([\[MS-OXPROPS\]](#) section 2.267)

- **PidLidSharingRemoteCrc** ([\[MS-OXPROPS\]](#) section 2.268)
- **PidLidSharingRemoteLastModificationTime** ([\[MS-OXPROPS\]](#) section 2.269)
- **PidLidSharingRemoteMessageCount** ([\[MS-OXPROPS\]](#) section 2.269)
- **PidLidSharingRemotePass** ([\[MS-OXPROPS\]](#) section 2.272)
- **PidLidSharingRemotePath** ([\[MS-OXPROPS\]](#) section 2.273)
- **PidNameXSharingRemotePath** ([\[MS-OXPROPS\]](#) section 2.564)
- **PidLidSharingRemoteUser** ([\[MS-OXPROPS\]](#) section 2.277)
- **PidLidSharingRemoteVersion** ([\[MS-OXPROPS\]](#) section 2.278)
- **PidLidSharingRoamLog** ([\[MS-OXPROPS\]](#) section 2.281)
- **PidLidSharingStart** ([\[MS-OXPROPS\]](#) section 2.282)
- **PidLidSharingStatus** ([\[MS-OXPROPS\]](#) section 2.283)
- **PidLidSharingStop** ([\[MS-OXPROPS\]](#) section 2.284)
- **PidLidSharingSyncFlags** ([\[MS-OXPROPS\]](#) section 2.285)
- **PidLidSharingSyncInterval** ([\[MS-OXPROPS\]](#) section 2.286)
- **PidLidSharingTimeToLive** ([\[MS-OXPROPS\]](#) section 2.287)
- **PidLidSharingTimeToLiveAuto** ([\[MS-OXPROPS\]](#) section 2.288)
- **PidLidSharingWorkingHoursDays** ([\[MS-OXPROPS\]](#) section 2.289)
- **PidLidSharingWorkingHoursEnd** ([\[MS-OXPROPS\]](#) section 2.290)
- **PidLidSharingWorkingHoursStart** ([\[MS-OXPROPS\]](#) section 2.291)
- **PidLidSharingWorkingHoursTimeZone** ([\[MS-OXPROPS\]](#) section 2.292)

2.2.6 Additional Property Constraints

This document specifies additional constraints on the following properties beyond what is specified in [\[MS-OXCMSG\]](#).

2.2.6.1 PidNameContentClass Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidNameContentClass** property ([\[MS-OXPROPS\]](#) section 2.428) MUST be set to "Sharing".

2.2.6.2 PidTagMessageClass Property

Type: **PtypString** ([\[MS-OXCDATA\]](#) section 2.11.1)

The **PidTagMessageClass** property ([\[MS-OXCMSG\]](#) section 2.2.1.3) MUST be set to "IPM.Sharing" or a value that begins with "IPM.Sharing".

3 Protocol Details

There is no server role beyond those specified in [\[MS-OXCMSG\]](#) and [\[MS-OXOMSG\]](#).

3.1 Client Details

The client role is to create and operate on Sharing Message objects and otherwise operate in the client role, as specified in [\[MS-OXCMSG\]](#) and [\[MS-OXOMSG\]](#).<11>

3.1.1 Abstract Data Model

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

A Sharing Message object extends the **Message object** and has an abstract data model that does not differ from that specified in [\[MS-OXCMSG\]](#).

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Higher-Layer Triggered Events

3.1.4.1 Creating a Sharing Invitation

The following table lists the properties and the corresponding values that **MUST** be set, as specified in section [2.2](#), to create a sharing invitation.

Property	Valid Values
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	"IPM.Sharing" or a value that begins with "IPM.Sharing."
PidNameContentClass (section 2.2.6.1)	"Sharing"
PidLidSharingProviderGuid (section 2.2.2.12)	%xAE.F0.06.00.00.00.00.00.C0.00.00.00.00.00.46
PidNameXSharingProviderGuid (section 2.2.2.13)	"AEF0060000000000C000000000000046"
PidLidSharingProviderName (section 2.2.2.14)	A user-displayable name of the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderName (section 2.2.2.15)	The same value as PidLidSharingProviderName .
PidLidSharingProviderUrl (section 2.2.2.16)	A URL related to the sharing provider identified by PidLidSharingProviderGuid .

Property	Valid Values
2.2.2.16)	PidLidSharingProviderGuid.
PidNameXSharingProviderUrl (section 2.2.2.17)	The same value as PidLidSharingProviderUrl .
PidLidSharingConfigurationUrl (section 2.2.2.3)	A zero-length string.
PidNameXSharingConfigUrl (section 2.2.2.4)	The same value as PidLidSharingConfigurationUrl .
PidLidSharingFlavor (section 2.2.2.5)	If the folder being shared is a special folder: 0x00020310. If the folder being shared is not a special folder: 0x00000310.
PidNameXSharingFlavor (section 2.2.2.6)	If the folder being shared is a special folder: "20310". If the folder being shared is not a special folder: "310".
PidLidSharingCapabilities (section 2.2.2.1)	If the folder being shared is a special folder: 0x00040290. If the folder being shared is not a special folder: 0x000402B0.
PidNameXSharingCapabilities (section 2.2.2.2)	If the folder being shared is a special folder: "40290". If the folder being shared is not a special folder: "402B0".
PidLidSharingInitiatorEntryId (section 2.2.2.7)	The value of PidTagEntryId ([MS-OXCPERM] section 2.2.1.4) for the Address Book object of the currently logged in user.
PidLidSharingInitiatorName (section 2.2.2.8)	The value of PidTagDisplayName ([MS-OXCFOLD] section 2.2.2.2.2.3) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingInitiatorSntp (section 2.2.2.9)	The value of PidTagSntpAddress ([MS-OXOABK] section 2.2.3.21) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingRemoteName (section 2.2.4.1)	The value of PidTagDisplayName on the folder being shared.
PidNameXSharingRemoteName (section 2.2.4.2)	The same value as PidLidSharingRemoteName .
PidLidSharingRemoteUid (section 2.2.4.7)	A hexadecimal string representation of the value of PidTagEntryId on the folder being shared.
PidNameXSharingRemoteUid (section 2.2.4.8)	The value of PidLidSharingRemoteUid .
PidLidSharingRemoteStoreUid (section 2.2.4.3)	A hexadecimal string representation of the value of PidTagStoreEntryId () on the folder being shared.
PidNameXSharingRemoteStoreUid (section 2.2.4.4)	The value of PidLidSharingRemoteStoreUid .
PidLidSharingLocalType (section 2.2.2.10)	A value from table 1 according to the type of folder being shared.
PidNameXSharingLocalType (section 2.2.2.11)	The same value as PidLidSharingLocalType .

Property	Valid Values
PidLidSharingRemoteType (section 2.2.4.5)	The same value as PidLidSharingLocalType .
PidNameXSharingRemoteType (section 2.2.4.6)	The same value as PidLidSharingRemoteType .

Type of folder	Valid Value
Calendar	"IPF.Appointment"
Contacts	"IPF.Contact"
Tasks	"IPF.Task"
Notes	"IPF.StickyNote"
Journal	"IPF.Journal"

3.1.4.2 Creating a Sharing Request

The following table lists the properties and the corresponding values that MUST be set, as specified in section [2.2](#), to create a sharing request.

Property	Valid Values
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	"IPM.Sharing" or a value that begins with "IPM.Sharing."
PidNameContentClass (section 2.2.6.1)	"Sharing"
PidLidSharingProviderGuid (section 2.2.2.12)	%xAE.F0.06.00.00.00.00.C0.00.00.00.00.00.46
PidNameXSharingProviderGuid (section 2.2.2.13)	"AEF0060000000000C000000000000046"
PidLidSharingProviderName (section 2.2.2.14)	A user-displayable name of the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderName (section 2.2.2.15)	The same value as PidLidSharingProviderName .
PidLidSharingProviderUrl (section 2.2.2.16)	A URL related to the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderUrl (section 2.2.2.17)	The same value as PidLidSharingProviderUrl .
PidLidSharingConfigurationUrl (section 2.2.2.3)	A zero-length string.
PidNameXSharingConfigUrl (section 2.2.2.4)	The same value as PidLidSharingConfigurationUrl .

Property	Valid Values
PidLidSharingFlavor (section 2.2.2.5)	0x00020500
PidNameXSharingFlavor (section 2.2.2.6)	"20500"
PidLidSharingCapabilities (section 2.2.2.1)	0x00040290
PidNameXSharingCapabilities (section 2.2.2.2)	"40290"
PidLidSharingInitiatorEntryId (section 2.2.2.7)	The value of PidTagEntryId ([MS-OXCPERM] section 2.2.1.4) for the Address Book object of the currently logged on user.
PidLidSharingInitiatorName (section 2.2.2.8)	The value of PidTagDisplayName ([MS-OXCFOLD] section 2.2.2.2.3) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingInitiatorSmtp (section 2.2.2.9)	The value of PidTagSmtpAddress ([MS-OXOABK] section 2.2.3.21) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingLocalType (section 2.2.2.10)	A value from table 2 according to the special folder being requested.
PidNameXSharingLocalType (section 2.2.2.11)	The same value as PidLidSharingLocalType .

The following table lists the valid values for the **PidLidSharingLocalType** property.

Table 2: Valid Values for PidLidSharingLocalType on a Sharing Request

Special Folder (See [MS-OXOSFLD])	Valid value
Calendar	"IPF.Appointment"
Contacts	"IPF.Contact"
Tasks	"IPF.Task"
Notes	"IPF.StickyNote"
Journal	"IPF.Journal"

3.1.4.3 Creating a Sharing Response – Accept

The client can determine the special folder being requested by the sharing request according to the following table:

Value of PidLidSharingLocalType on the Sharing Request	Special Folder being Requested (See [MS-OXOSFLD])
"IPF.appointment"	Calendar
"IPF.contact"	Contacts

Value of PidLidSharingLocalType on the Sharing Request	Special Folder being Requested (See [MS-OXOSFLD])
"IPF.Task"	Tasks
"IPF.StickyNote"	Notes
"IPF.journal"	Journal

The following table lists the properties and the corresponding values that MUST be set, as specified in section 2.2, to create a sharing response that indicates that a sharing request has been accepted and provides the information necessary to locate the special folder being requested.

Property	Valid Values
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	"IPM.Sharing" or a value that begins with "IPM.Sharing."
PidNameContentClass (section 2.2.6.1)	"Sharing"
PidLidSharingProviderGuid (section 2.2.2.12)	%xAE.F0.06.00.00.00.00.00.C0.00.00.00.00.00.46
PidNameXSharingProviderGuid (section 2.2.2.13)	"AEF0060000000000C000000000000046"
PidLidSharingProviderName (section 2.2.2.14)	A user-displayable name of the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderName (section 2.2.2.15)	The same value as PidLidSharingProviderName .
PidLidSharingProviderUrl (section 2.2.2.16)	A URL related to the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderUrl (section 2.2.2.17)	The same value as PidLidSharingProviderUrl .
PidLidSharingConfigurationUrl (section 2.2.2.3)	A zero-length string.
PidNameXSharingConfigUrl (section 2.2.2.4)	The same value as PidLidSharingConfigurationUrl .
PidLidSharingFlavor (section 2.2.2.5)	0x00023310
PidNameXSharingFlavor (section 2.2.2.6)	"23310"
PidLidSharingCapabilities (section 2.2.2.1)	0x00040290
PidNameXSharingCapabilities (section 2.2.2.2)	"40290"
PidLidSharingInitiatorEntryId (section 2.2.2.7)	The value of PidTagEntryId ([MS-OXCPERM] section 2.2.1.4) for the Address Book object of the currently logged on user.
PidLidSharingInitiatorName (section	The value of PidTagDisplayName ([MS-OXCFLD] section

Property	Valid Values
2.2.2.8)	2.2.2.2.3) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingInitiatorSmtp (section 2.2.2.9)	The value of PidTagSmtpAddress ([MS-OXOABK] section 2.2.3.21) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingRemoteName (section 2.2.4.1)	The value of PidTagDisplayName on the special folder being requested.
PidNameXSharingRemoteName (section 2.2.4.2)	The same value as PidLidSharingRemoteName .
PidLidSharingRemoteUid (section 2.2.4.7)	The hexadecimal string representation of the value of PidTagEntryId on the special folder being requested.
PidNameXSharingRemoteUid (section 2.2.4.8)	The value of PidLidSharingRemoteUid .
PidLidSharingRemoteStoreUid (section 2.2.4.3)	The hexadecimal string representation of the value of PidTagStoreEntryId () on the special folder being requested.
PidNameXSharingRemoteStoreUid (section 2.2.4.4)	The value of PidLidSharingRemoteStoreUid .
PidLidSharingLocalType (section 2.2.2.10)	The value of PidLidSharingLocalType on the sharing request to which this message is responding.
PidNameXSharingLocalType (section 2.2.2.11)	The same value as PidLidSharingLocalType .
PidLidSharingRemoteType (section 2.2.4.5)	The same value as PidLidSharingLocalType .
PidNameXSharingRemoteType (section 2.2.4.6)	The same value as PidLidSharingRemoteType .

The following table lists the properties and the corresponding values that MUST be set, as specified in section [2.2](#), on the sharing request to which this sharing response is responding.

Property	Valid Values
PidLidSharingResponseType (section 2.2.3.2)	0x00000001
PidLidSharingResponseTime (section 2.2.3.1)	The time at which the sharing response was sent.

3.1.4.4 Creating a Sharing Response – Deny

The following table lists the properties and the corresponding values that MUST be set, as specified in section [2.2](#), to create a sharing response that indicates a sharing request has been denied.

Property	Valid Values
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	"IPM.Sharing" or a value that begins with "IPM.Sharing."

Property	Valid Values
PidNameContentClass (section 2.2.6.1)	"Sharing"
PidLidSharingProviderGuid (section 2.2.2.12)	%xAE.F0.06.00.00.00.00.00.C0.00.00.00.00.00.46
PidNameXSharingProviderGuid (section 2.2.2.13)	"AEF0060000000000C000000000000046"
PidLidSharingProviderName (section 2.2.2.14)	A user-displayable name of the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderName (section 2.2.2.15)	The same value as PidLidSharingProviderName .
PidLidSharingProviderUrl (section 2.2.2.16)	A URL related to the sharing provider identified by PidLidSharingProviderGuid .
PidNameXSharingProviderUrl (section 2.2.2.17)	The same value as PidLidSharingProviderUrl .
PidLidSharingConfigurationUrl (section 2.2.2.3)	A zero-length string.
PidNameXSharingConfigUrl (section 2.2.2.4)	The same value as PidLidSharingConfigurationUrl .
PidLidSharingFlavor (section 2.2.2.5)	0x00025100
PidNameXSharingFlavor (section 2.2.2.6)	"25100"
PidLidSharingCapabilities (section 2.2.2.1)	0x00040290
PidNameXSharingCapabilities (section 2.2.2.2)	"40290"
PidLidSharingInitiatorEntryId (section 2.2.2.7)	The value of PidTagEntryId ([MS-OXCPERM] section 2.2.1.4) for the Address Book object of the currently logged on user.
PidLidSharingInitiatorName (section 2.2.2.8)	The value of PidTagDisplayName ([MS-OXCFCID] section 2.2.2.2.3) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingInitiatorSmtpp (section 2.2.2.9)	The value of PidTagSmtppAddress ([MS-OXOABK] section 2.2.3.21) from the Address Book object identified by PidLidSharingInitiatorEntryId .
PidLidSharingLocalType (section 2.2.2.10)	The value of PidLidSharingLocalType on the sharing request to which this message is responding.
PidNameXSharingLocalType (section 2.2.2.11)	The same value as PidLidSharingLocalType .

The following table lists the properties and the corresponding values that MUST be set, as specified in section [2.2](#), on the sharing request to which this sharing response is responding.

Property	Valid Values
PidLidSharingResponseType (section 2.2.3.2)	0x00000002
PidLidSharingResponseTime (section 2.2.3.1)	The time at which the sharing response was sent.

3.1.5 Message Processing Events and Sequencing Rules

None.

3.1.6 Timer Events

None.

3.1.7 Other Local Events

None.

4 Protocol Examples

Kendall Keil wants to see Ryan Gregg's calendar special folder. Kendall sends a sharing request to Ryan and Ryan responds.

The following is a description of what a client might do to accomplish this scenario and the responses a server might return. See [\[MS-OXCPRPT\]](#) and [\[MS-OXCMSG\]](#) for details about **remote operations (ROPs)**.

Before manipulating Sharing Message objects, the client has to ask the server to perform a mapping from **named properties** to **property IDs**, using **RopGetPropertyIdsFromNames** ([\[MS-OXCROPS\]](#) section 2.2.8.1).

Property	Property set GUID	NameID
PidNameContentClass (section 2.2.6.1)	{00020386-0000-0000-c000-000000000046}	Content-class
PidLidSharingProviderGuid (section 2.2.2.12)	{00062040-0000-0000-C000-000000000046}	0x00008A01
PidNameXSharingProviderGuid (section 2.2.2.13)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Provider-GUID
PidLidSharingProviderName (section 2.2.2.14)	{00062040-0000-0000-C000-000000000046}	0x00008A02
PidNameXSharingProviderName (section 2.2.2.15)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Provider-Name
PidLidSharingProviderUrl (section 2.2.2.16)	{00062040-0000-0000-C000-000000000046}	0x00008A03
PidNameXSharingProviderUrl (section 2.2.2.17)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Provider-URL
PidLidSharingConfigurationUrl (section 2.2.2.3)	{00062040-0000-0000-C000-000000000046}	0x00008A24
PidNameXSharingConfigUrl (section 2.2.2.4)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Config-URL
PidLidSharingFlavor (section 2.2.2.5)	{00062040-0000-0000-C000-000000000046}	0x00008A18
PidNameXSharingFlavor (section 2.2.2.6)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Flavor
PidLidSharingCapabilities (section 2.2.2.1)	{00062040-0000-0000-C000-000000000046}	0x00008A17
PidNameXSharingCapabilities (section 2.2.2.2)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Capabilities
PidLidSharingLocalType (section 2.2.2.10)	{00062040-0000-0000-C000-000000000046}	0x00008A14
PidNameXSharingLocalType (section 2.2.2.11)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Local-Type

Property	Property set GUID	NameID
PidLidSharingInitiatorEntryId (section 2.2.2.7)	{00062040-0000-0000-C000-000000000046}	0x00008A09
PidLidSharingInitiatorName (section 2.2.2.8)	{00062040-0000-0000-C000-000000000046}	0x00008A07
PidLidSharingInitiatorSntp (section 2.2.2.9)	{00062040-0000-0000-C000-000000000046}	0x00008A08
PidLidSharingRemoteName (section 2.2.4.1)	{00062040-0000-0000-C000-000000000046}	0x00008A05
PidNameXSharingRemoteName (section 2.2.4.2)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Remote-Name
PidLidSharingRemoteType (section 2.2.4.5)	{00062040-0000-0000-C000-000000000046}	0x00008A1D
PidNameXSharingRemoteType (section 2.2.4.6)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Remote-Type
PidLidSharingRemoteUid (section 2.2.4.7)	{00062040-0000-0000-C000-000000000046}	0x00008A06
PidNameXSharingRemoteUid (section 2.2.4.8)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Remote-Uid
PidLidSharingRemoteStoreUid (section 2.2.4.3)	{00062040-0000-0000-C000-000000000046}	0x00008A48
PidNameXSharingRemoteStoreUid (section 2.2.4.4)	{00020386-0000-0000-C000-000000000046}	X-Sharing-Remote-Store-Uid
PidLidSharingResponseType (section 2.2.3.2)	{00062040-0000-0000-C000-000000000046}	0x00008A27
PidLidSharingResponseTime (section 2.2.3.1)	{00062040-0000-0000-C000-000000000046}	0x00008A28

The server might respond with the following identifiers, which will be used in the examples that follow. (The actual identifiers are at the discretion of the server.)

Property	Property ID
PidNameContentClass	0x806D
PidLidSharingProviderGuid	0x8243
PidNameXSharingProviderGuid	0x836F
PidLidSharingProviderName	0x8244
PidNameXSharingProviderName	0x8370
PidLidSharingProviderUrl	0x8245
PidNameXSharingProviderUrl	0x8371

Property	Property ID
PidLidSharingConfigurationUrl	0x83D0
PidNameXSharingConfigUrl	0x8377
PidLidSharingFlavor	0x823D
PidNameXSharingFlavor	0x836D
PidLidSharingCapabilities	0x823C
PidNameXSharingCapabilities	0x836C
PidLidSharingLocalType	0x824F
PidNameXSharingLocalType	0x8379
PidLidSharingInitiatorEntryId	0x8249
PidLidSharingInitiatorName	0x8029
PidLidSharingInitiatorSmtpt	0x8248
PidLidSharingRemoteName	0x8026
PidNameXSharingRemoteName	0x8373
PidLidSharingRemoteType	0x8247
PidNameXSharingRemoteType	0x8376
PidLidSharingRemoteUid	0x8246
PidNameXSharingRemoteUid	0x8374
PidLidSharingRemoteStoreUid	0x83E1
PidNameXSharingRemoteStoreUid	0x8375
PidLidSharingResponseType	0x83E4
PidLidSharingResponseTime	0x83E3

4.1 Sending a Sharing Request

Kendall's client creates a Message object, using **RopCreateMessage** ([MS-OXCROPS] section 2.2.6.2). The server returns a success code and a **handle** to a Message object.

The client then uses **RopSetProperties** ([MS-OXCROPS] section 2.2.8.6) to set the following properties and corresponding values on the Message object to create a sharing request, as follows:

Property	Property ID	Data Type	Value
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	0x001A	PtypString	"IPM.Sharing"
PidNameContentClass (section	0x806D	PtypString	"Sharing"

Property	Property ID	Data Type	Value
2.2.6.1)			
PidTagNormalizedSubject ([MS-OXCMSG] section 2.2.1.10)	0x0E1D	PtypString	"Sharing request: calendar"
PidTagSubjectPrefix ([MS-OXCMSG] section 2.2.1.9)	0x003D	PtypString	"" (a zero-length string)
PidLidSharingProviderGuid (section 2.2.2.12)	0x8243	PtypBinary	(See Figure 1)
PidNameXSharingProviderGuid (section 2.2.2.13)	0x836F	PtypString	"AEF0060000000000C00000000000046"
PidLidSharingProviderName (section 2.2.2.14)	0x8244	PtypString	"Microsoft Exchange"
PidNameXSharingProviderName (section 2.2.2.15)	0x8370	PtypString	"Microsoft Exchange"
PidLidSharingProviderUrl (section 2.2.2.16)	0x8245	PtypString	"HTTP://www.microsoft.com/exchange"
PidNameXSharingProviderUrl (section 2.2.2.17)	0x8371	PtypString	"HTTP://www.microsoft.com/exchange"
PidLidSharingConfigurationUrl (section 2.2.2.3)	0x83D0	PtypString	"" (a zero-length string)
PidNameXSharingConfigUrl (section 2.2.2.4)	0x8377	PtypString	"" (a zero-length string)
PidLidSharingFlavor (section 2.2.2.5)	0x823D	PtypInteger32	0x00020500
PidNameXSharingFlavor (section 2.2.2.6)	0x836D	PtypString	"20500"
PidLidSharingCapabilities (section 2.2.2.1)	0x823C	PtypInteger32	0x00040290
PidNameXSharingCapabilities (section 2.2.2.2)	0x836C	PtypString	"40290"
PidLidSharingLocalType (section 2.2.2.10)	0x824F	PtypString	"IPF.Appointment"
PidNameXSharingLocalType (section 2.2.2.11)	0x8379	PtypString	"IPF.Appointment"
PidLidSharingInitiatorEntryId (section 2.2.2.7)	0x8249	PtypBinary	(See Figure 2)
PidLidSharingInitiatorName (section 2.2.2.8)	0x8029	PtypString	user12
PidLidSharingInitiatorSntp (section 2.2.2.9)	0x8248	PtypString	user12@fabrikam.com

Figure 1 shows the value of the **PidLidSharingProviderGuid** property. The size of the value is 16 bytes.

```
0000: ae f0 06 00 00 00 00 00 c0 00 00 00 00 00 46 .....F
```

Figure 2 shows the value of the **PidLidSharingInitiatorEntryId** property. The size of the value is 125 bytes.

```
0000: 00 00 00 00 dc a7 40 c8 c0 42 10 1a b4 b9 08 00 .....@..B.....
0010: 2b 2f e1 82 01 00 00 00 00 00 00 00 2f 6f 3d 46 +/...../o=F
0020: 69 72 73 74 20 4f 72 67 61 6e 69 7a 61 74 69 6f irst Organizatio
0030: 6e 2f 6f 75 3d 45 78 63 68 61 6e 67 65 20 41 64 n/ou=Exchange Ad
0040: 6d 69 6e 69 73 74 72 61 74 69 76 65 20 47 72 6f ministrative Gro
0050: 75 70 20 28 46 59 44 49 42 4f 48 46 32 33 53 50 up (FYDIBOHF23SP
0060: 44 4c 54 29 2f 63 6e 3d 52 65 63 69 70 69 65 6e DLT)/cn=Recipien
0070: 74 73 2f 63 6e 3d 75 73 65 72 31 32 00          ts/cn=user12.
```

After addressing the message as specified in [\[MS-OXOMSG\]](#), the client uses **RopSubmitMessage** ([\[MS-OXCROPS\]](#) section 2.2.7.1) to send the message to Ryan and then uses **RopRelease** ([\[MS-OXCROPS\]](#) section 2.2.15.3) to release the Message object.

4.2 Denying a Sharing Request

Ryan wants to send a sharing response denying the sharing request described in section 4.1. The client uses **RopCreateMessage** ([\[MS-OXCROPS\]](#) section 2.2.6.2) to create a new Message object. The server returns a success code and a handle to a Message object.

The client then uses **RopSetProperties** ([\[MS-OXCROPS\]](#) section 2.2.8.6) to set the sharing properties for a sharing response that indicates that the request was denied, as follows:

Property	Property ID	Property Type	Value
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	0x001A	PtypString	"IPM.Sharing"
PidNameContentClass (section 2.2.6.1)	0x806d	PtypString	"Sharing"
PidTagNormalizedSubject ([MS-OXCMSG] section 2.2.1.10)	0x0E1D	PtypString	"Denied: sharing request: calendar"
PidTagSubjectPrefix ([MS-OXCMSG] section 2.2.1.9)	0x003D	PtypString	"" (a zero-length string)
PidLidSharingProviderGuid (section 2.2.2.12)	0x8243	PtypBinary	(See Figure 3)
PidNameXSharingProviderGuid (section 2.2.2.13)	0x836F	PtypString	"AEF0060000000000C0000000000046"
PidLidSharingProviderName (section 2.2.2.14)	0x8244	PtypString	"Microsoft Exchange"
PidNameXSharingProviderName (section 2.2.2.15)	0x8370	PtypString	"Microsoft Exchange"

Property	Property ID	Property Type	Value
PidLidSharingProviderUrl (section 2.2.2.16)	0x8245	PtypString	"HTTP://www.microsoft.com/exchange"
PidNameXSharingProviderUrl (section 2.2.2.17)	0x8371	PtypString	"HTTP://www.microsoft.com/exchange"
PidLidSharingConfigurationUrl (section 2.2.2.3)	0x83D0	PtypString	"" (a zero-length string)
PidNameXSharingConfigUrl (section 2.2.2.4)	0x8377	PtypString	"" (a zero-length string)
PidLidSharingFlavor (section 2.2.2.5)	0x823D	PtypInteger32	0x00025100
PidNameXSharingFlavor (section 2.2.2.6)	0x836D	PtypString	"25100"
PidLidSharingCapabilities (section 2.2.2.1)	0x823C	PtypInteger32	0x00040290
PidNameXSharingCapabilities (section 2.2.2.2)	0x836C	PtypString	"40290"
PidLidSharingLocalType (section 2.2.2.10)	0x824F	PtypString	"IPF.Appointment"
PidNameXSharingLocalType (section 2.2.2.11)	0x8379	PtypString	"IPF.Appointment"
PidLidSharingInitiatorEntryId (section 2.2.2.7)	0x8249	PtypBinary	(See Figure 4)
PidLidSharingInitiatorName (section 2.2.2.8)	0x8029	PtypString	user12
PidLidSharingInitiatorSmtpt (section 2.2.2.9)	0x8248	PtypString	user12@fabrikam.com

Figure 3 shows the value of the **PidLidSharingProviderGuid** property. The size of the value is 16 bytes.

```
0000: ae f0 06 00 00 00 00 00 c0 00 00 00 00 00 46 .....
```

Figure 4 shows the value of the **PidLidSharingInitiatorEntryId** property. The size of the value is 125 bytes.

```
0000: 00 00 00 00 dc a7 40 c8 c0 42 10 1a b4 b9 08 00 .....@..B.....
0010: 2b 2f e1 82 01 00 00 00 00 00 00 2f 6f 3d 46 +/...../o=F
0020: 69 72 73 74 20 4f 72 67 61 6e 69 7a 61 74 69 6f irst Organizatio
0030: 6e 2f 6f 75 3d 45 78 63 68 61 6e 67 65 20 41 64 n/ou=Exchange Ad
0040: 6d 69 6e 69 73 74 72 61 74 69 76 65 20 47 72 6f ministrative Gro
0050: 75 70 20 28 46 59 44 49 42 4f 48 46 32 33 53 50 up (FYDIBOHF23SP
0060: 44 4c 54 29 2f 63 6e 3d 52 65 63 69 70 69 65 6e DLT)/cn=Recipien
```

After addressing the message as specified in [\[MS-OXOMSG\]](#), the client uses **RopSubmitMessage** ([\[MS-OXCROPS\]](#) section 2.2.7.1) to send the message to Kendall and then uses **RopRelease** ([\[MS-OXCROPS\]](#) section 2.2.15.3) to release the Message object.

Then, the client uses **RopOpenMessage** ([\[MS-OXCROPS\]](#) section 2.2.6.1) to open the sharing request. The server returns a success code and a handle to the Message object.

The client uses **RopSetProperties** ([\[MS-OXCROPS\]](#) section 2.2.8.6) to set the sharing properties on the sharing request to indicate that the client has sent a sharing response denying the request and the time at which it was sent, as follows:

Property	Property ID	Property type	Data	Value
PidLidSharingResponseType (section 2.2.3.2)	0x83E4	PtypInteger32	02 00 00 00	0x00000002
PidLidSharingResponseTime (section 2.2.3.1)	0x83E3	PtypTime	00 9A C2 CF E3 7F C8 01	2008/03/06 23:43:00.000

The client uses **RopSaveChangesMessage** ([\[MS-OXCROPS\]](#) section 2.2.6.3) to save the changes and uses **RopRelease** ([\[MS-OXCROPS\]](#) section 2.2.15.3) to release the Message object.

4.3 Accepting a Sharing Request

Ryan wants to send a sharing response accepting the sharing request described in section [4.1](#). The client uses **RopCreateMessage** ([\[MS-OXCROPS\]](#) section 2.2.6.2) to create a new Message object. The server returns a success code and a handle to a Message object.

The client uses **RopSetProperties** ([\[MS-OXCROPS\]](#) section 2.2.8.6) to set the sharing properties for a sharing response that indicates that the request was accepted and provides the information required to locate the requested folder, as follows:

Property	Property ID	Property type	Value
PidTagMessageClass ([MS-OXCMSG] section 2.2.1.3)	0x001A	PtypString	"IPM.Sharing"
PidNameContentClass (section 2.2.6.1)	0x806d	PtypString	"Sharing"
PidTagNormalizedSubject ([MS-OXCMSG] section 2.2.1.10)	0x0E1D	PtypString	"Allowed: sharing request: calendar"
PidTagSubjectPrefix ([MS-OXCMSG] section 2.2.1.9)	0x003D	PtypString	"" (a zero-length string)
PidLidSharingProviderGuid (section 2.2.2.12)	0x8243	PtypBinary	(See Figure 5)
PidNameXSharingProviderGuid (section 2.2.2.13)	0x836F	PtypString	AEF0060000000000C0000000 00000046

Property	Property ID	Property type	Value
PidLidSharingProviderName (section 2.2.2.14)	0x8244	PtypString	"Microsoft Exchange"
PidNameXSharingProviderName (section 2.2.2.15)	0x8370	PtypString	"Microsoft Exchange"
PidLidSharingProviderUrl (section 2.2.2.16)	0x8245	PtypString	"HTTP://www.microsoft.com/exchange"
PidNameXSharingProviderUrl (section 2.2.2.17)	0x8371	PtypString	"HTTP://www.microsoft.com/exchange"
PidLidSharingConfigurationUrl (section 2.2.2.3)	0x83D0	PtypString	"" (a zero-length string)
PidNameXSharingConfigUrl (section 2.2.2.4)	0x8377	PtypString	"" (a zero-length string)
PidLidSharingFlavor (section 2.2.2.5)	0x823D	PtypInteger32	0x00023310
PidNameXSharingFlavor (section 2.2.2.6)	0x836D	PtypString	"23310"
PidLidSharingCapabilities (section 2.2.2.1)	0x823C	PtypInteger32	0x00040290
PidNameXSharingCapabilities (section 2.2.2.2)	0x836C	PtypString	"40290"
PidLidSharingLocalType (section 2.2.2.10)	0x824F	PtypString	"IPF.Appointment"
PidNameXSharingLocalType (section 2.2.2.11)	0x8379	PtypString	"IPF.Appointment"
PidLidSharingInitiatorEntryId (section 2.2.2.7)	0x8249	PtypBinary	(See Figure 6)
PidLidSharingInitiatorName (section 2.2.2.8)	0x8029	PtypString	user10
PidLidSharingInitiatorSmtP (section 2.2.2.9)	0x8248	PtypString	user10@fabrikam.com
PidLidSharingRemoteName (section 2.2.4.1)	0x8026	PtypString	"Calendar"
PidNameXSharingRemoteName (section 2.2.4.2)	0x8373	PtypString	"Calendar"
PidLidSharingRemoteType (section 2.2.4.5)	0x8247	PtypString	"IPF.Appointment"
PidNameXSharingRemoteType (section 2.2.4.6)	0x8376	PtypString	"IPF.Appointment"
PidLidSharingRemoteUid (section 2.2.4.3)	0x8246	PtypString	0000000B0FCA4F63C21A642

Property	Property ID	Property type	Value
2.2.4.7)			BD4B8F1BDBA04BC60100612A 7BAB49F64E4B9C52DBFB5A53 AA1C000000F04EEF0000
PidNameXSharingRemoteUid (section 2.2.4.8)	0x8374	PtypString	00000000B0FCA4F63C21A642B D4B8F1BDBA04BC60100612A7 BAB49F64E4B9C52DBFB5A53A A1C000000F04EEF0000
PidLidSharingRemoteStoreUid (section 2.2.4.3)	0x83E1	PtypString	0000000038A1BB1005E5101A A1BB08002B2A56C20000454D 534D44422E444C4C000000000 00000001B55FA20AA6611CD9 BC800AA002FC45A0C00000033 36353952392D413131002F6F3 D4669727374204F7267616E69 7A6174696F6E2F6F753D45786 368616E67652041646D696E69 73747261746976652047726F7 570202846594449424F484632 335350444C54292F636E3D526 563697069656E74732F636E3D 75736572313000
PidNameXSharingRemoteStoreUid (section 2.2.4.4)	0x8375	PtypString	0000000038A1BB1005E5101AA 1BB08002B2A56C20000454D5 34D44422E444C4C000000000 00000001B55FA20AA6611CD9B C800AA002FC45A0C000000333 6353952392D413131002F6F3D 4669727374204F7267616E697 A6174696F6E2F6F753D457863 68616E67652041646D696E697 3747261746976652047726F75 70202846594449424F4846323 35350444C54292F636E3D5265 63697069656E74732F636E3D7 5736572313000

Figure 5 shows the value of the **PidLidSharingProviderGuid** property. The size of the value is 16 bytes.

```
0000: ae f0 06 00 00 00 00 00 c0 00 00 00 00 00 46 .....
```

Figure 6 shows the value of the **PidLidSharingInitiatorEntryId** property. The size of the value is 125 bytes.

```
0000: 00 00 00 00 dc a7 40 c8 c0 42 10 1a b4 b9 08 00 .....@..B.....
0010: 2b 2f e1 82 01 00 00 00 00 00 00 2f 6f 3d 46 +/...../o=F
0020: 69 72 73 74 20 4f 72 67 61 6e 69 7a 61 74 69 6f irst Organizatio
0030: 6e 2f 6f 75 3d 45 78 63 68 61 6e 67 65 20 41 64 n/ou=Exchange Ad
0040: 6d 69 6e 69 73 74 72 61 74 69 76 65 20 47 72 6f ministrative Gro
0050: 75 70 20 28 46 59 44 49 42 4f 48 46 32 33 53 50 up (FYDIBOHF23SP
0060: 44 4c 54 29 2f 63 6e 3d 52 65 63 69 70 69 65 6e DLT)/cn=Recipien
```


After properly addressing the message as specified in [\[MS-OXOMSG\]](#), the client uses **RopSubmitMessage** ([\[MS-OXCROPS\]](#) section 2.2.7.1) to send the message to Kendall and then uses **RopRelease** ([\[MS-OXCROPS\]](#) section 2.2.15.3) to release the Message object.

The client then grants Kendall permission to the folder as specified in [\[MS-OXODLGT\]](#).

Then the client uses **RopOpenMessage** ([\[MS-OXCROPS\]](#) section 2.2.6.1) to open the sharing request. The server returns a success code and a handle to the Message object.

The client uses **RopSetProperties** ([\[MS-OXCROPS\]](#) section 2.2.8.6) to set the sharing properties on the sharing request to indicate that the client has sent a sharing response accepting the request and the time at which it was sent, as follows:

Property	Property ID	Property type	Data	Value
PidLidSharingResponseType (section 2.2.3.2)	0x83E4	PtypInteger32	01 00 00 00	0x00000001
PidLidSharingResponseTime (section 2.2.3.1)	0x83E3	PtypTime	00 9A C2 CF E3 7F C8 01	2008/03/06 23:43:00.000

The client uses **RopSaveChangesMessage** ([\[MS-OXCROPS\]](#) section 2.2.6.3) to save the changes and uses **RopRelease** ([\[MS-OXCROPS\]](#) section 2.2.15.3) to release the Message object.

5 Security

5.1 Security Considerations for Implementers

There are no special security considerations specific to the Sharing Message Object Protocol. General security considerations pertaining to the underlying transport apply, as specified in [\[MS-OXOMSG\]](#) and [\[MS-OXCMSG\]](#).

5.2 Index of Security Parameters

None.

6 Appendix A: 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 2007
- Microsoft® Exchange Server 2010
- Microsoft® Office Outlook® 2007
- Microsoft® Outlook® 2010

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 2.2.2.8](#): Office Outlook 2007 sets the value but, upon receipt, ignores the property and queries the address book for its value based on **PidLidSharingInitiatorEntryId** ([\[MS-OXPROPS\]](#) section 2.242).

<2> [Section 2.2.2.9](#): Office Outlook 2007 sets the value but, upon receipt, ignores the property and queries the address book for its value based on **PidLidSharingInitiatorEntryId** ([\[MS-OXPROPS\]](#) section 2.242).

<3> [Section 2.2.2.14](#): Office Outlook 2007 sets the value but, upon receipt, ignores the property and instead uses a custom value based on the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)).

<4> [Section 2.2.2.15](#): Office Outlook 2007 sets the value but, upon receipt, ignores the property and instead uses a custom value based on the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)).

<5> [Section 2.2.2.16](#): Office Outlook 2007 sets the value but, upon receipt, ignores the property and instead uses a custom value based on the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)).

<6> [Section 2.2.2.17](#): Office Outlook 2007 sets the value but, upon receipt, ignores the property and instead uses a custom value based on the **PidLidSharingProviderGuid** property (section [2.2.2.12](#)).

<7> [Section 2.2.4](#): Office Outlook 2007 sets these properties.

<8> [Section 2.2.4.5](#): Office Outlook 2007 sets this property to the same value as the **PidLidSharingLocalType** property (section [2.2.2.10](#)) but uses only the **PidLidSharingLocalType** property to determine behavior.

<9> [Section 2.2.4.6](#): Office Outlook 2007 sets this property to the same value as the **PidLidSharingLocalType** property (section [2.2.2.10](#)) but uses only the **PidLidSharingLocalType** property to determine behavior.

[<10> Section 2.2.5:](#) Office Outlook 2007 sets differing subsets of these properties in different scenarios but their values have no meaning in the context of this protocol.

[<11> Section 3.1:](#) Office Outlook 2007 only create and operate upon Sharing Message objects that are stored by Exchange 2007 and Exchange 2010.

7 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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