

# [MS-OXOJRNL]: Journal Object Protocol

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## Revision Summary

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# 1 Introduction

The Journal Object Protocol is used to track activity related to a meeting, task, **contact**, or application file. This protocol extends the Message and Attachment Object Protocol, which is described in [\[MS-OXCMMSG\]](#).

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 [\[RFC2119\]](#). Sections 1.5 and 1.9 are also normative but do not contain those terms. All other sections and examples in this specification are informative.

## 1.1 Glossary

The following terms are specific to this document:

**Attachment object:** A set of properties that represents a file, **Message object**, or structured storage that is attached to a Message object and is visible through the attachments table for a Message object.

**contact:** A person, company, or other entity that is stored in a directory and is associated with one or more unique identifiers and attributes (2), such as an Internet message address or login name.

**Coordinated Universal Time (UTC):** A high-precision atomic time standard that approximately tracks Universal Time (UT). It is the basis for legal, civil time all over the Earth. Time zones around the world are expressed as positive and negative offsets from UTC. In this role, it is also referred to as Zulu time (Z) and Greenwich Mean Time (GMT). In these specifications, all references to UTC refer to the time at UTC-0 (or GMT).

**EntryID:** A sequence of bytes that is used to identify and access an object.

**Folder object:** A messaging construct that is typically used to organize data into a hierarchy of objects containing Message objects and folder associated information (FAI) Message objects.

**handle:** Any token that can be used to identify and access an object such as a device, file, or a window.

**Journal object:** A **Message object** that represents an entry in a journal or log and adheres to the property descriptions that are described in [\[MS-OXOJRNL\]](#).

**Mail User Agent (MUA):** A client application that is used to compose and read email messages.

**Message object:** A set of properties that represents an email message, appointment, contact, or other type of personal-information-management object. In addition to its own properties, a Message object contains recipient properties that represent the addressees to which it is addressed, and an attachments table that represents any files and other Message objects that are attached to it.

**metafile:** A file that stores an image as graphical objects, such as lines, circles, and polygons, instead of pixels. A metafile preserves an image more accurately than pixels when an image is resized.

**named property:** A property that is identified by both a GUID and either a string name or a 32-bit identifier.

**property ID:** A 16-bit numeric identifier of a specific attribute (1). A property ID does not include any property type information.

**recipient:** An entity that can receive email messages.

**remote operation (ROP):** An operation that is invoked against a server. Each ROP represents an action, such as delete, send, or query. A ROP is contained in a ROP buffer for transmission over the wire.

**Rich Text Format (RTF):** Text with formatting as described in [\[MSFT-RTF\]](#).

**ROP request:** See ROP request buffer.

**ROP response:** See ROP response buffer.

**special folder:** One of a default set of **Folder objects** that can be used by an implementation to store and retrieve user data objects.

**storage:** An element of a compound file that is a unit of containment for one or more storages and streams, analogous to directories in a file system, as described in [\[MS-CFB\]](#).

**stream:** An element of a compound file, as described in [\[MS-CFB\]](#). A stream contains a sequence of bytes that can be read from or written to by an application, and they can exist only in storages.

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

## 1.2 References

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

### 1.2.1 Normative References

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

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

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

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

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

[MS-OXOMSG] Microsoft Corporation, "[Email Object Protocol](#)".

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

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

[MS-OXRTFCP] Microsoft Corporation, "[Rich Text Format \(RTF\) Compression Algorithm](#)".

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

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

### 1.3 Overview

The Journal Object Protocol allows a user to track activity on a meeting, task, or contact. Activity on a file such as a spreadsheet or word-processing document can also be tracked. This protocol defines a **Journal object** to represent a journal entry that contains a log of the activity. The properties of a Journal object specify the name of the activity, the duration, any contacts that are associated with the activity, and other details. The Journal object is stored in a **Folder object**.

The Journal Object Protocol extends the Message and Attachment Object Protocol, described in [\[MS-OXCMSG\]](#), in that it defines new properties on the **Message object** and adds constraints to the existing properties of the Message object.

### 1.4 Relationship to Other Protocols

The Journal Object Protocol has the same dependencies as the Message and Attachment Object Protocol, which it extends. For information about the Message and Attachment Object Protocol, see [\[MS-OXCMSG\]](#).

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

### 1.5 Prerequisites/Preconditions

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

### 1.6 Applicability Statement

A client can use this protocol to record the user's activities on various items.

### 1.7 Versioning and Capability Negotiation

None.

### 1.8 Vendor-Extensible Fields

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

### 1.9 Standards Assignments

None.



## 2 Messages

### 2.1 Transport

The Journal Object Protocol uses the same underlying transport as that used by the Message and Attachment Object Protocol, as specified in [\[MS-OXCMSG\]](#).

### 2.2 Message Syntax

A Journal 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 a Journal object by using the Message and Attachment Object Protocol, as specified in [\[MS-OXCMSG\]](#). How a server operates on a Journal object is implementation-dependent, but the results of any such operations MUST be exposed to clients in a manner that is consistent with the Journal Object Protocol.

Unless otherwise specified, a Journal object adheres to all property constraints specified in [\[MS-OXPROPS\]](#) and [\[MS-OXCMSG\]](#).

#### 2.2.1 Journal Object Properties

##### 2.2.1.1 PidLidLogType Property

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

The **PidLidLogType** property ([\[MS-OXPROPS\]](#) section 2.168) specifies the name of the activity that is being recorded.

##### 2.2.1.2 PidLidLogTypeDesc Property

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

The **PidLidLogTypeDesc** property ([\[MS-OXPROPS\]](#) section 2.169) describes the activity that is being recorded.

##### 2.2.1.3 PidLidLogStart Property

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

The **PidLidLogStart** property ([\[MS-OXPROPS\]](#) section 2.167) specifies the time, in **Coordinated Universal Time (UTC)**, at which the activity began. The value of this property MUST be equal to the value of the **PidLidCommonStart** property ([\[MS-OXCMSG\]](#) section 2.2.1.18).

##### 2.2.1.4 PidLidLogEnd Property

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

The **PidLidLogEnd** property ([\[MS-OXPROPS\]](#) section 2.165) specifies the time, in UTC, at which the activity ended. The value of this property MUST be equal to the value of the **PidLidCommonEnd** property ([\[MS-OXCMSG\]](#) section 2.2.1.19) and therefore greater than or equal to the **PidLidLogStart** property (section [2.2.1.3](#)).

### 2.2.1.5 PidLidLogDuration Property

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

The **PidLidLogDuration** property ([\[MS-OXPROPS\]](#) section 2.164) specifies the duration, in minutes, of the activity. The value of this property is the difference between the values of the **PidLidLogEnd** (section [2.2.1.4](#)) and **PidLidLogStart** (section [2.2.1.3](#)) properties.

### 2.2.1.6 PidLidLogFlags Property

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

The **PidLidLogFlags** property ([\[MS-OXPROPS\]](#) section 2.166) contains bits that specify whether the Journal object has a journal-associated attachment. This property MUST be set to one of the values in the following table.

Bit value	Meaning
0x00000000	This Journal object has no journal-associated attachment (section <a href="#">2.2.2.6</a> ).
0x40000000	This Journal object has a journal-associated attachment (section <a href="#">2.2.2.6</a> ).

### 2.2.1.7 PidLidLogDocumentPrinted Property

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

The **PidLidLogDocumentPrinted** property ([\[MS-OXPROPS\]](#) section 2.161) indicates whether the file, on which activity is being tracked, was printed during the tracking of the activity. [<1>](#) If printing occurred, this property is set to 0x01.

### 2.2.1.8 PidLidLogDocumentSaved Property

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

The **PidLidLogDocumentSaved** property ([\[MS-OXPROPS\]](#) section 2.163) indicates whether the file, on which activity is being tracked, was saved during the tracking of the activity. [<2>](#) If the document was saved, this property is set to 0x01.

### 2.2.1.9 PidLidLogDocumentRouted Property

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

The **PidLidLogDocumentRouted** property ([\[MS-OXPROPS\]](#) section 2.162) indicates whether the file, on which activity is being tracked, was sent to a **recipient** during the tracking of the activity. [<3>](#) If the document was sent, this property is set to 0x01.

### 2.2.1.10 PidLidLogDocumentPosted Property

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

The **PidLidLogDocumentPosted** property ([\[MS-OXPROPS\]](#) section 2.160) indicates whether the file, on which activity is being tracked, was sent by e-mail or posted to a server's folder during the tracking of the activity. [<4>](#) If the document was posted, this property is set to 0x01. If the document was sent by e-mail, it is set to 0x00.

## 2.2.2 Additional Property Constraints

This protocol places additional constraints on properties beyond what is specified in [\[MS-OXCMSG\]](#). These constraints are specified in section [2.2.2.1](#) through section [2.2.2.6](#).

### 2.2.2.1 PidTagMessageClass Property

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

The **PidTagMessageClass** property ([\[MS-OXCMSG\]](#) section 2.2.1.3) specifies the type of the Message object. The value of this property MUST be "IPM.Activity" or MUST begin with "IPM.Activity.", in addition to meeting the criteria specified in [\[MS-OXCMSG\]](#).

### 2.2.2.2 Best Body Properties

The main text of the Journal object MUST be stored in the **PidTagRtfCompressed** property ([\[MS-OXCMSG\]](#) section 2.2.1.56.4), as specified in [\[MS-OXRTECP\]](#).

### 2.2.2.3 PidTagIconIndex Property

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

The **PidTagIconIndex** property ([\[MS-OXOMSG\]](#) section 2.2.1.10) specifies which icon is to be used by a user interface when displaying the Journal object. The valid values for this property are specified in the following table.

Value	Meaning
0x00000601	Conversation
0x00000612	Document
0x00000602	E-mail message
0x00000609	Fax
0x0000060C	Letter
0x00000613	Meeting
0x00000614	Meeting cancellation
0x00000603	Meeting request
0x00000604	Meeting response
0x00000610	A database application file
0x0000060E	A spreadsheet application file
0x0000060F	A slide-show presentation application file
0x0000060D	A word processing application file
0x00000608	Note
0x0000060A	Phone call
0x00000615	Remote session
0x0000060B	Task

Value	Meaning
0x00000606	Task request
0x00000607	Task response
0x00000003	Other

#### 2.2.2.4 PidLidCompanies Property

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

The **PidLidCompanies** property ([\[MS-OXPROPS\]](#) section 2.64) contains a list of company names, each of which is associated with a contact that is specified in the **PidLidContacts** property ([\[MS-OXCMSG\]](#) section 2.2.1.57.2).

#### 2.2.2.5 Recipients

A Journal object MUST NOT have recipients.

#### 2.2.2.6 Journal-Associated Attachments

A journal-associated attachment links a Journal object with another object, such as a document. A Journal object MUST NOT have more than one journal-associated attachment.

The properties of a journal-associated attachment follow the requirements specified in [\[MS-OXCMSG\]](#) section 2.2.2 for **Attachment objects**, except that certain properties on the Attachment object MUST be set as specified in the following table.

Property	Value
<b>PidTagAttachmentLinkId</b> ( <a href="#">[MS-OXCMSG]</a> section 2.2.2.22)	0x00000004
<b>PidTagAttachMethod</b> ( <a href="#">[MS-OXCMSG]</a> section 2.2.2.9)	0x00000006
<b>PidTagRenderingPosition</b> ( <a href="#">[MS-OXCMSG]</a> section 2.2.2.16)	0xFFFFFFFF
<b>PidTagAttachmentFlags</b> ( <a href="#">[MS-OXCMSG]</a> section 2.2.2.23)	0x00000000
<b>PidTagAttachmentHidden</b> ( <a href="#">[MS-OXCMSG]</a> section 2.2.2.24)	0x00
<b>PidTagAccess</b> ( <a href="#">[MS-OXCPRPT]</a> section 2.2.1.1)	0x00000002

The content of the **PidTagAttachDataBinary** property ([\[MS-OXCMSG\]](#) section 2.2.2.7) is formatted as a structured **storage** that comprises eight **streams**, the names and contents of which are detailed in the following table.

Stream name	Contents
<b>IOlePres000</b>	A <b>metafile</b> that contains the icon to be used when rendering the attachment.
<b>\3MailStream*</b>	Binary contents: 04 00 00 00 00 00 00 00 00 00 00 00
<b>MailMsgAttFld</b>	The <b>EntryID</b> of the folder of the linked Message object.
<b>MailMsgAttMdb</b>	The EntryID of the store of the linked Message object.

Stream name	Contents
<b>MailMsgAttMsg</b>	The EntryID of the linked Message object; required only if the <b>MailMsgAttSrchKey</b> stream is empty.
<b>MailMsgAttSrchFld</b>	The object EntryID of the Sent Items <b>special folder</b> of the linked Message object. For details about special folders, see <a href="#">[MS-OXOSFLD]</a> .
<b>MailMsgAttSrchKey</b>	The value of the <b>PidTagSearchKey</b> property ([MS-OXCPRPT] section 2.2.1.9), as specified in [MS-OXCMSG], of the linked Message object; required only if the <b>MailMsgAttMsg</b> stream is empty.
<b>MailMsgAttSubject</b>	The value of the <b>PidTagSubject</b> property ([MS-OXCMSG] section 2.2.1.46) of the linked Message object.

\* The "\3" in "\3MailStream" represents the byte 0x03.

## 3 Protocol Details

### 3.1 Client Details

The client creates and manipulates a Journal object and in all other ways operates within the client role as specified in [\[MS-OXCMSG\]](#).

#### 3.1.1 Abstract Data Model

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

This protocol uses the abstract data model that is specified in [\[MS-OXCMSG\]](#) section 3.1.1 with the following adaptations:

- The Journal object is an extension of the Message object.
- A Journal object is created in the Journal special folder unless the end user or **Mail User Agent (MUA)** explicitly specifies another folder. For details about special folders, see [\[MS-OXOSFLD\]](#).

#### 3.1.2 Timers

None.

#### 3.1.3 Initialization

None.

#### 3.1.4 Higher-Layer Triggered Events

##### 3.1.4.1 Creating a Journal Object

When the user creates a journal entry, the client creates a Message object, as specified in [\[MS-OXCMSG\]](#) section 3.1.4.2, sets properties in accordance with the requirements in section 2, and saves the resulting Journal object, as specified in [\[MS-OXCMSG\]](#) section 3.1.4.3.

##### 3.1.4.2 Modifying a Journal Object

When the user modifies a journal entry, the client opens the Journal object as specified in [\[MS-OXCMSG\]](#) section 3.1.4.1, modifies any of the properties in accordance with the requirements in section 2, and saves the Journal object as specified in [\[MS-OXCMSG\]](#) section 3.1.4.3. For details about modifying the properties of a Message object, see [\[MS-OXCPRPT\]](#).

##### 3.1.4.3 Deleting a Journal Object

When a user deletes a journal entry, the client deletes the Journal object in the same way that it deletes any Message object, as specified in [\[MS-OXCFOLD\]](#) section 3.1.4.8.

#### 3.1.5 Message Processing Events and Sequencing Rules

None.

### **3.1.6 Timer Events**

None.

### **3.1.7 Other Local Events**

None.

## **3.2 Server Details**

The server processes a client's requests regarding a Journal object and in all other ways operates within the server role as specified in [\[MS-OXCMSG\]](#).

### **3.2.1 Abstract Data Model**

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

This protocol uses the abstract data model that is specified in [\[MS-OXCMSG\]](#) section 3.2.1 with the following adaptations:

- The Journal object is an extension of the Message object.
- A Journal object is created in the Journal special folder unless the end-user or MUA explicitly specifies another folder. For details about special folders, see [\[MS-OXOSFLD\]](#).

### **3.2.2 Timers**

None.

### **3.2.3 Initialization**

None.

### **3.2.4 Higher-Layer Triggered Events**

None.

### **3.2.5 Message Processing Events and Sequencing Rules**

The server responds to client requests as specified in [\[MS-OXCMSG\]](#) section 3.2.5.

### **3.2.6 Timer Events**

None.

### **3.2.7 Other Local Events**

None.

## 4 Protocol Examples

### 4.1 Journal Object for a Telephone Call Example

A user creates a journal entry to track a telephone call. The user records the start and end times, puts notes in the body, and links a contact and company. The following is a description of what a client might do to accomplish Joe's intentions and the responses a server might return. For information about **remote operations (ROPs)**, see [\[MS-OXCPRPT\]](#) and [\[MS-OXCMSG\]](#).

Before manipulating a Journal object, the client asks the server to map **named properties to property IDs**, by sending a **RopGetPropertyIDsFromNames ROP request** ([\[MS-OXCROPS\]](#) section 2.2.8.1).

Property	Property set GUID	LID
<b>PidLidCommonStart</b> ([MS-OXCMSG] section 2.2.1.18)	{00062008-0000-0000-C000-000000000046}	0x00008516
<b>PidLidCommonEnd</b> ([MS-OXCMSG] section 2.2.1.19)	{00062008-0000-0000-C000-000000000046}	0x00008517
<b>PidLidCompanies</b> (section <a href="#">2.2.2.4</a> )	{00062008-0000-0000-C000-000000000046}	0x00008539
<b>PidLidContacts</b> ([MS-OXCMSG] section 2.2.1.57.2)	{00062008-0000-0000-C000-000000000046}	0x0000853A
<b>PidLidContactLinkName</b> ([MS-OXCMSG] section 2.2.1.57.3)	{00062008-0000-0000-C000-000000000046}	0x00008586
<b>PidLidContactLinkEntry</b> ([MS-OXCMSG] section 2.2.1.57.1)	{00062008-0000-0000-C000-000000000046}	0x00008585
<b>PidLidContactLinkSearchKey</b> ([MS-OXCMSG] section 2.2.1.57.4)	{00062008-0000-0000-C000-000000000046}	0x00008584
<b>PidLidLogTypeDesc</b> (section <a href="#">2.2.1.2</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008712
<b>PidLidLogType</b> (section <a href="#">2.2.1.1</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008700
<b>PidLidLogStart</b> (section <a href="#">2.2.1.3</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008706
<b>PidLidLogEnd</b> (section <a href="#">2.2.1.4</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008708
<b>PidLidLogDuration</b> (section <a href="#">2.2.1.5</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008707
<b>PidLidLogFlags</b> (section <a href="#">2.2.1.6</a> )	{0006200A-0000-0000-C000-000000000046}	0x0000870C
<b>PidLidLogDocumentPrinted</b> (section <a href="#">2.2.1.7</a> )	{0006200A-0000-0000-C000-000000000046}	0x0000870E
<b>PidLidLogDocumentSaved</b> (section <a href="#">2.2.1.8</a> )	{0006200A-0000-0000-C000-000000000046}	0x0000870F
<b>PidLidLogDocumentRouted</b> (section <a href="#">2.2.1.9</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008710



Property	Property set GUID	LID
<b>PidLidLogDocumentPosted</b> (section <a href="#">2.2.1.10</a> )	{0006200A-0000-0000-C000-000000000046}	0x00008711

The server sends a **RopGetPropertyIDsFromNames ROP response** with the following property IDs, which will be used in the example that follows. (The actual property IDs are at the discretion of the server.)

Property	Property ID
<b>PidLidCommonStart</b>	0X81BD
<b>PidLidCommonEnd</b>	0X81BC
<b>PidLidCompanies</b>	0X800C
<b>PidLidContacts</b>	0X8019
<b>PidLidContactLinkName</b>	0X802B
<b>PidLidContactLinkEntry</b>	0X82F6
<b>PidLidContactLinkSearchKey</b>	0X82F7
<b>PidLidLogTypeDesc</b>	0X8230
<b>PidLidLogType</b>	0X801A
<b>PidLidLogStart</b>	0X8233
<b>PidLidLogEnd</b>	0X8234
<b>PidLidLogDuration</b>	0X8235
<b>PidLidLogFlags</b>	0X8236
<b>PidLidLogDocumentPrinted</b>	0X8238
<b>PidLidLogDocumentSaved</b>	0X8239
<b>PidLidLogDocumentRouted</b>	0X823A
<b>PidLidLogDocumentPosted</b>	0X823B

To create a Journal object, the client uses the **RopCreateMessage** ROP ([MS-OXCROPS] section 2.2.6.2). The server returns a **handle** to a Message object.

After the user has input his content for the Journal object, the client transmits the data to the server by using the **RopSetProperties** ROP ([MS-OXCROPS] section 2.2.8.6). For information about the property types in the following table, see [\[MS-OXCADATA\]](#) section 2.11.1.

Property	Property ID	Property type	Value
<b>PidLidCommonStart</b>	0x81bd	0x0040 ( <b>PtypTime</b> )	2008/02/20 23:02:00.000
<b>PidLidCommonEnd</b>	0x81bc	0x0040	2008/02/20 23:12:00.000

Property	Property ID	Property type	Value
<b>PidLidCompanies</b>	0x800c	0X101F ( <b>PtypMultipleString</b> ([MS-OXCADATA] section 2.11.1))	[1 entry] "Contoso Pharmaceuticals"
<b>PidLidContacts</b>	0x8019	0X101F	[1 entry] "Adam Barr"
<b>PidLidContactLinkName</b>	0x802b	0X001F ( <b>PtypString</b> )	"Adam Barr"
<b>PidLidContactLinkEntry</b>	0x82f6	0x0102 ( <b>PtypBinary</b> )	*(See note following table)
<b>PidLidContactLinkSearchKey</b>	0x82f7	0x0102	** (See note following table)
<b>PidLidLogTypeDesc</b>	0x8230	0X001F	"Phone call"
<b>PidLidLogType</b>	0x801a	0X001F	"Phone call"
<b>PidLidLogStart</b>	0x8233	0x0040	2008/02/20 23:02:00.000
<b>PidLidLogEnd</b>	0x8234	0x0040	2008/02/20 23:12:00.000
<b>PidLidLogDuration</b>	0x8235	0x0003 ( <b>PtypInteger32</b> )	0x0000000A
<b>PidLidLogFlags</b>	0x8236	0x0003	0x00000000
<b>PidLidLogDocumentPrinted</b>	0x8238	0X000B ( <b>PtypBoolean</b> )	0x00
<b>PidLidLogDocumentSaved</b>	0x8239	0X000B	0x00
<b>PidLidLogDocumentRouted</b>	0x823a	0X000B	0x00
<b>PidLidLogDocumentPosted</b>	0x823b	0X000B	0x00
<b>PidTagRtfCompressed</b> ([MS-OXCMSG] section 2.2.1.56.4)	0x1009	0x0102	*** (See note following table)
<b>PidTagIconIndex</b> ( <a href="#">[MS-OXOMSG]</a> section 2.2.1.10)	0x1080	0x0003	0x0000060A

\* The **PidLidContactLinkEntry** property contains a representation of the contact link, as described in [MS-OXCMSG] section 2.2.1.57.1.

\*\* The **PidLidContactLinkSearchKey** property contains a representation of the contact link, as described in [MS-OXCMSG] section 2.2.1.57.4.

\*\*\* The **PidTagRtfCompressed** property ([MS-OXCMSG] section 2.2.1.56.4) contains the compressed **Rich Text Format (RTF)** representation of the body, as described in [\[MS-OXRTFMCP\]](#).

When the user saves the changes, the client commits the properties on the server by using the **RopSaveChangesMessage** ROP ([MS-OXCROPS] section 2.2.6.3) and then releases the Journal object by using the **RopRelease** ROP ([MS-OXCROPS] section 2.2.15.3).

The values of some properties will change during the processing of the **RopSaveChangesMessage** ROP, but the properties specified in this document will not change.

## 5 Security

### 5.1 Security Considerations for Implementers

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

### 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 2003
- Microsoft Exchange Server 2007
- Microsoft Exchange Server 2010
- Microsoft Exchange Server 2013
- Microsoft Exchange Server 2016
- Microsoft Office Outlook 2003
- Microsoft Office Outlook 2007
- Microsoft Outlook 2010
- Microsoft Outlook 2013
- Microsoft Outlook 2016

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 2.2.1.7](#): Outlook 2013 and Outlook 2016 do not support the **PidLidLogDocumentPrinted** property (section [2.2.1.7](#)).

<2> [Section 2.2.1.8](#): Outlook 2013 and Outlook 2016 do not support the **PidLidLogDocumentSaved** property (section [2.2.1.8](#)).

<3> [Section 2.2.1.9](#): Outlook 2013 and Outlook 2016 do not support the **PidLidLogDocumentRouted** property (section [2.2.1.9](#)).

<4> [Section 2.2.1.10](#): Outlook 2013 and Outlook 2016 do not support the **PidLidLogDocumentPosted** property (section [2.2.1.10](#)).

## 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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