[MS-XWDCAL]:
Web Distributed Authoring and Versioning (WebDAV) Extensions for Calendar Support

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.

- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.

- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.

- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft Open Specification Promise or the Community Promise. If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting iplg@microsoft.com.

- **Trademarks.** The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights. For a list of Microsoft trademarks, visit www.microsoft.com/trademarks.

- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

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

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

Revision Summary

Date	Revision History	Revision Class	Comments
12/03/2008	1.0		Initial Release.
03/04/2009	1.01		Revised and edited technical content.
04/10/2009	2.0		Deprecated for Exchange 2010.
07/15/2009	3.0	Major	Changes made for template compliance.
11/04/2009	3.1.0	Minor	Updated the technical content.
02/10/2010	4.0.0	Major	Updated and revised the technical content.
05/05/2010	4.1.0	Minor	Updated the technical content.
08/04/2010	4.2	Minor	Clarified the meaning of the technical content.
11/03/2010	4.2	No change	No changes to the meaning, language, or formatting of the technical content.
03/18/2011	4.3	Minor	Clarified the meaning of the technical content.
08/05/2011	4.4	Minor	Clarified the meaning of the technical content.
10/07/2011	4.4	No change	No changes to the meaning, language, or formatting of the technical content.
01/20/2012	4.4	No change	No changes to the meaning, language, or formatting of the technical content.
04/27/2012	4.4	No change	No changes to the meaning, language, or formatting of the technical content.
07/16/2012	4.4	No change	No changes to the meaning, language, or formatting of the technical content.
10/08/2012	4.5	Minor	Clarified the meaning of the technical content.
02/11/2013	4.5	No change	No changes to the meaning, language, or formatting of the technical content.
07/26/2013	4.6	Minor	Clarified the meaning of the technical content.

Table of Contents

1 Introduction

This document specifies property extensions to [RFC2518], [MS-WDVME], [MS-WDVSE], and [MS-WDV] to allow for creation and manipulation of **Calendar objects** by using **WebDAV**. This document specifies properties that will allow clients to find the address for a user's default **Calendar folder**, get and set events on a **calendar**, find the address to a user's default **free/busy status**, and get access to the user's free/busy status.

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]:

access control list (ACL)
ASCII
class
Coordinated Universal Time (UTC)
discretionary access control list (DACL)
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
property set
resource
Unicode

The following terms are defined in [MS-OXGLOS]:

alias
calendar
Calendar folder
Calendar object
contact
delegate
Exception Embedded Message object
Folder object
free/busy status
header field
Hypertext Markup Language (HTML)
Inbox folder
instance
mailbox
meeting
Meeting object
meeting request
Meeting Request object
Meeting Response object
Meeting Update object
Meeting Workspace
meeting-related object
message store
optional attendee
organizer

orphan instance
Out of Office (OOF)
permission
plain text
public folder
recurrence pattern
recurring series
reminder
required attendee
restriction
Root folder
security descriptor
signal time
Simple Mail Transfer Protocol (SMTP)
structured document
Uniform Resource Identifier (URI)
Uniform Resource Locator (URL)
unsendable attendee
Web Distributed Authoring and Versioning Protocol (WebDAV)
WebDAV client
WebDAV server

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.

[ISO-8601] International Organization for Standardization, "Data Elements and Interchange Formats - Information Interchange - Representation of Dates and Times", ISO/IEC 8601:2004, December 2004, http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40874&ICS1=1&ICS2=140&ICS3=30

Note   There is a charge to download the specification.

[MS-MEETS] Microsoft Corporation, "Meetings Web Services Protocol".

[MS-OXCDATA] Microsoft Corporation, "Data Structures".

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

[MS-OXCFXICS] Microsoft Corporation, "Bulk Data Transfer Protocol".

[MS-OXCICAL] Microsoft Corporation, "iCalendar to Appointment Object Conversion Algorithm".

[MS-OXCMAIL] Microsoft Corporation, "RFC 2822 and MIME to Email Object Conversion Algorithm".

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

[MS-OXOCAL] Microsoft Corporation, "Appointment and Meeting Object Protocol".

[MS-OXOCNTC] Microsoft Corporation, "Contact Object Protocol".

[MS-OXOFLAG] Microsoft Corporation, "Informational Flagging Protocol".

[MS-OXORMDR] Microsoft Corporation, "Reminder Settings Protocol".

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

[MS-WDVME] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol: Microsoft Extensions".

[MS-WDVSE] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol: Server Extensions".

[RFC1522] Moore, K., "MIME (Multipurpose Internet Mail Extensions) Part Two: Message Header Extensions for Non-ASCII Text", RFC 1522, September 1993, http://www.rfc-editor.org/rfc/rfc1522.txt

[RFC20] Cerf, V., "ASCII Format for Network Interchange", RFC 20, October 1969, http://www.ietf.org/rfc/rfc20.txt

[RFC2068] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2068, January 1997, http://www.ietf.org/rfc/rfc2068.txt

[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

[RFC2445] Dawson, F., and Stenerson, D., "Internet Calendaring and Scheduling Core Object Specification (iCalendar)", RFC 2445, November 1998, http://www.rfc-editor.org/rfc/rfc2445.txt

[RFC2447] Dawson, F., Mansour, S., and Silverberg, S., "iCalendar Message-Based Interoperability Protocol (iMIP)", RFC 2447, November 1998, http://www.rfc-editor.org/rfc/rfc2447.txt

[RFC2518] Goland, Y., Whitehead, E., Faizi, A., et al., "HTTP Extensions for Distributed Authoring - WebDAV", RFC 2518, February 1999, http://www.ietf.org/rfc/rfc2518.txt

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

[RFC3744] Clemm, G., Reschke, J., Sedlar, E., and Whitehead, J., "Web Distributed Authoring and Versioning (WebDAV) Access Control Protocol", RFC 3744, May 2004, http://www.rfc-editor.org/rfc/rfc3744.txt

[RFC822] Crocker, D.H., "Standard for ARPA Internet Text Messages", STD 11, RFC 822, August 1982, http://www.ietf.org/rfc/rfc0822.txt

Release: July 26, 2013

1.2.2   Informative References

[MSDN-CESHU] Microsoft Corporation, "Constructing Exchange Store HTTP URLs", http://msdn.microsoft.com/en-us/library/aa493863(EXCHG.80).aspx

[MS-DTYP] Microsoft Corporation, "Windows Data Types".

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

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

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

[MS-WDV] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol: Client Extensions".

[MS-XWDVSEC] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol Security Descriptor Extensions".

[RFC2291] Slein, J., Vitali, F., Whitehead, E., et al., "Requirements for a Distributed Authoring and Versioning Protocol for the World Wide Web", RFC 2291, February 1998, http://www.ietf.org/rfc/rfc2291.txt

[RFC4791] Daboo, C., Desruisseaux, B., and Dusseault, L., "Calendaring Extensions to WebDAV (CalDAV)", RFC 4791, March 2007, http://www.rfc-editor.org/rfc/rfc4791.txt

1.3   Overview

This document specifies the properties used to exchange Calendar object data between a calendaring client and a calendaring server by using the Web Distributed Authoring and Versioning Protocol (WebDAV), as described in [RFC2518].

1.4   Relationship to Other Protocols

The Web Distributed Authoring and Versioning (WebDAV) Extensions for Calendar Support depend on the HTTP Extensions for Distributed Authoring -- WebDAV, as described in [RFC2518]. WebDAV, in turn, relies on **Hypertext Transfer Protocol (HTTP)** 1.1, as described in [RFC2068]. These extensions also rely on the **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as specified in [RFC2818], for data protection services.

The WebDAV Extensions for Calendaring Support are also dependent on the client, server, and Microsoft extensions to [RFC2518] as described in [MS-WDV], [MS-WDVSE], and [MS-WDVME].

This specification is similar in scope to [RFC4791]; however, the requirements for this specification were created before [RFC4791]. While similar in concept, the WebDAV Extensions for Calendaring Support are not fully compatible with the Calendaring Extensions to WebDAV described in [RFC4791].

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

1.5   Prerequisites/Preconditions

The WebDAV Extensions for Calendaring Support require the following:

- A **WebDAV server**, as described in [RFC2291].

- The **WebDAV client** has a **URL** that points to the WebDAV server.

- The WebDAV client obtains the URL through a mechanism that is outside of WebDAV and that is determined by the implementer.

- The WebDAV client and WebDAV server support WebDAV **access control lists (ACLs)**, as described in [MS-XWDVSEC] section 2.2.10 and [MS-DTYP].

- The WebDAV client and WebDAV server support ETags, as described in [RFC2068] section 14.20.

- The WebDAV client and WebDAV server support iCalendar, as described in [RFC2445], as a media type for the Calendar object resource format.

For more information about constructing WebDAV server URLs, see [MSDN-CESHU].

1.6   Applicability Statement

A client can use the WebDAV Extensions for Calendaring Support to exchange Calendar object data with a calendar server by using WebDAV.

1.7   Versioning and Capability Negotiation

- **Supported Transports:** This specification uses HTTP, as described in [RFC2068], and HTTPS, as described in [RFC2818], as its only transports.

- **Versioning:** This document introduces no new versioning mechanisms except those that already exist in WebDAV and HTTP as described in [RFC2818] and [RFC2068].

- **Capability Negotiation:** Clients can call the **PROPFIND** method on the **Root folder** for the urn:schemas:httpmail:calendar property. If the property exists, the server supports the WebDAV Extensions for Calendaring Support.

1.8   Vendor-Extensible Properties

None.

1.9   Standards Assignments

None.

2 Messages

2.1 Transport

Messages are transported using HTTP, as specified in [RFC2518] and [RFC2068], and HTTPS, as specified in [RFC2818].

2.2 Message Syntax

By using the **PROPFIND** and **PROPPATCH** methods, as specified in [RFC2518], properties are available for query and manipulation on Calendar objects. Namespaces such as DAV:, http://schemas.microsoft.com/repl/, and urn:schemas:httpmail: all provide access to general messaging properties used to transport Calendar object data and are utilized by other message types as well, whereas the urn:schemas:calendar and http://schemas.microsoft.com/exchange namespaces provide access to calendar-specific properties.

For each property in this section, the following information is provided:

- **DAV property name:** The WebDAV names for the property

- **Data type:** The data type of the property

- A description of the property and a link to the property page in [MS-OXPROPS]

2.2.1 DAV: Namespace Properties

The DAV: namespace defines properties for general WebDAV data access.

2.2.1.1 PidNameContentClass

DAV property names: **DAV:contentclass**, **Content-Class**, **urn:schemas:mailheader:content-class**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameContentClass** property ([MS-OXCMSG] section 2.2.1.48) gets or sets the content **class** for the Calendar object. For Calendar objects, the value of this property MUST be set to "urn:content-classes:appointment" for an appointment in the Calendar folder or set to "urn:content-classes:calendarmessage" for a new **meeting request**.

For more details about the **PidNameContentClass** property, see [MS-OXCMAIL] section 2.1.3.2.2.

2.2.1.2 PidNameDavId

DAV property name: **DAV:id**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameDavId** property ([MS-OXPROPS] section 2.411) gets the calculated unique ID for the calendar item.

2.2.1.3 PidNameDavIsCollection

DAV property name: **DAV:iscollection**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameDavIsCollection** property ([MS-OXPROPS] section 2.412) gets the calculated value that indicates whether the Calendar object is a collection, as specified in [RFC2518]. True if the Calendar object is a collection; otherwise, false.

2.2.1.4   PidNameDavIsStructuredDocument

DAV property name: **DAV:isstructureddocument**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameDavIsStructuredDocument** property ([MS-OXPROPS] section 2.413) gets the calculated value that indicates whether a Calendar object is a **structured document**. True if the Calendar object is a structured document; otherwise, false.

2.2.1.5   PidNameDavParentName

DAV property name: **DAV:parentname**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameDavParentName** property ([MS-OXPROPS] section 2.414) gets the calculated URL of the **Folder object** that contains the Calendar object.

2.2.1.6   PidNameDavUid

DAV property name: **DAV:uid**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameDavUid** property ([MS-OXPROPS] section 2.415) gets the calculated unique identifier for the item.

2.2.1.7   PidTagAttributeHidden

DAV property name: **DAV:ishidden**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagAttributeHidden** property ([MS-OXCFOLD] section 2.2.2.2.2.1) gets or sets a value that indicates whether an item is hidden, as specified in [MS-WDVME]. True if the item is hidden; otherwise, false.

For more details about the **PidTagAttributeHidden** property, see [MS-OXPROPS] section 2.602.

2.2.1.8   PidTagAttributeReadOnly

DAV property name: **DAV:isreadonly**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagAttributeReadOnly** property ([MS-OXPROPS] section 2.603) gets or sets a value that indicates whether an item can be modified or deleted. True if the item is read-only; otherwise, false.

2.2.1.9   PidTagComment

DAV property names: **DAV:comment**, **http://schemas.microsoft.com/exchange/summary-utf8**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagComment** property ([MS-OXCFOLD] section 2.2.2.2.2.2) gets or sets a comment for the Calendar object.

For more details about the **PidTagComment** property, see [MS-OXPROPS] section 2.628.

2.2.2   urn:schemas:calendar: Namespace Properties

The urn:schemas:calendar: namespace defines properties specifically for Calendar object support. Many of the properties in this namespace provide access to iCalendar properties specified in [MS-OXCICAL]. [MS-OXCICAL] specifies how these properties can be imported and exported from the calendar properties, as specified in [MS-OXOCAL].

2.2.2.1   PidLidAppointmentReplyTime

DAV property names: **urn:schemas:calendar:replytime**, **http://schemas.microsoft.com/mapi/apptreplytime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentReplyTime** property ([MS-OXOCAL] section 2.2.4.3) gets or sets the date and time when an attendee replied to a meeting request. The user can use this value to determine which response is the most recent when an attendee sends more than one response to a meeting request.

This property corresponds to **X-MICROSOFT-CDO-REPLYTIME**, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.37.

For more details about the **PidLidAppointmentReplyTime** property, see [MS-OXPROPS] section 2.24.

2.2.2.2   PidLidAppointmentSubType

DAV property names: **urn:schemas:calendar:alldayevent**, **http://schemas.microsoft.com/mapi/apptsubtype**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentSubType** property ([MS-OXOCAL] section 2.2.1.9) gets or sets a value that indicates whether the appointment or **meeting** is scheduled for an entire day. True if the appointment or meeting is an all-day event; otherwise, false. Setting this property does not affect the start time or the end time of the appointment or meeting.

For more details about the **PidLidAppointmentSubType** property, see [MS-OXPROPS] section 2.31.

2.2.2.3   PidLidFreeBusyLocation

DAV property name: **urn:schemas:calendar:fburl**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidFreeBusyLocation** property ([MS-OXOCNTC] section 2.2.1.10.10) gets or sets the URL of the free/busy **public folder**.

The format of the **fburl** property is as follows:

```
fburl = http domain location company group user legacydn [start] [end]
http    = "http://" / "https://"
domain  = atom ;Server name
atom    = 1*atext
atext   = ALPHA / DIGIT / "!" / "#" / "$" / "%"
        / "&" / "'" / "*" / "+" / "-" / "/" / "="
        / "?" / "^" / "_" / "`" / "{" / "|" / "}" / "~"
; Any character except controls, SP, and specials.
ALPHA   = %x41-5A / %x61-7A  ; A-Z / a-z
DIGIT   = %x30-39           ; 0-9
location = "/public/" atom "/non_ipm_subtree/SCHEDULE+ FREE BUSY/EX:"
;specify the location of the free busy folder as specified in [MS-OXOPFFB] ;section 3.1.4.1.2
company = "/o=" atom ;Specify the /o from the LegacyDN
group   = "/ou=" atom ;Specify the /ou from the LegacyDN
user    = "USER-/"
legacydn = atom
;Specify the rest of the LegacyDN after the OU portion
start   = "?start" year "-" month "-" day
end     = "&end=" year "-" month "-" day
year    = 4DIGIT
month   = 2DIGIT
day     = 2DIGIT
```

For example:

```
http://<domain>/public/MAPITLH/non_ipm_subtree/SCHEDULE+ FREE BUSY/EX:/o=<o from legacyDN of
User>/ou=<OU from legacyDN of User>/USER-/<rest of the User's legacyDN after the OU
part>?start1999-01-05&end=1999-01-08
```

Start and end dates MUST be expressed in the format specified in [ISO-8601]. The end date is inclusive, so if the start date and the end date are the same, the response will include one day. If the end date is before the start date, the server MUST return the 400 Bad Request error code, as specified in [RFC2068] section 10.4.1.

For more details about the **PidLidFreeBusyLocation** property, see [MS-OXPROPS] section 2.141.

2.2.2.4   PidLidLocation

DAV property name: **urn:schemas:calendar:location**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidLocation** property ([MS-OXOCAL] section 2.2.1.4) gets or sets the calculated location of an appointment or meeting.

This property corresponds to the **LOCATION** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.15.

For more details about the **PidLidLocation** property, see [MS-OXPROPS] section 2.159.

2.2.2.5   PidLidOwnerCriticalChange

DAV property names: **urn:schemas:calendar:dtstamp**,
http://schemas.microsoft.com/mapi/owner_critical_change

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidOwnerCriticalChange** property ([MS-OXOCAL] section 2.2.1.34) gets or sets the date and time at which a **Meeting Request object** was sent by the **organizer**. The value is specified in **Coordinated Universal Time (UTC)**.

This property corresponds to the **DTSTAMP** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.9.

For more details about the **PidLidOwnerCriticalChange** property, see [MS-OXPROPS] section 2.199.

2.2.2.6   PidLidResponseStatus

DAV property names: **urn:schemas:calendar:attendeestatus**,
http://schemas.microsoft.com/mapi/responsestatus

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidResponseStatus** property ([MS-OXOCAL] section 2.2.1.11) gets or sets the calculated response status of the attendee.

For more details about the **PidLidResponseStatus** property, see [MS-OXPROPS] section 2.231.

2.2.2.7   PidNameCalendarAttendeeRole

DAV property name: **urn:schemas:calendar:attendeerole**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarAttendeeRole** property ([MS-OXPROPS] section 2.374) gets or sets the role of the attendee. The following table lists valid values.

Description	Value
Required	0
Optional	1
Nonparticipant, but copied for reference	2
Chair	3

This property is not validated or enforced by the server. It is the responsibility of the client to keep this property synchronized.

2.2.2.8   PidNameCalendarBusystatus

DAV property name: **urn:schemas:calendar:busystatus**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarBusystatus** property ([MS-OXPROPS] section 2.375) gets or sets the calculated value that indicates whether the attendee is busy at the time of an appointment on their calendar. The following states are possible:

- **Out of Office (OOF)**

- Busy

- Tentative

- Free

This property corresponds to the **X-MICROSOFT-CDO-BUSYSTATUS** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.31.

2.2.2.9   PidNameCalendarContact

DAV property name: **urn:schemas:calendar:contact**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarContact** property ([MS-OXPROPS] section 2.376) gets or sets the name of a **contact** who is an attendee of a meeting.

This property corresponds to the **CONTACT** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.6.

2.2.2.10   PidNameCalendarContactUrl

DAV property name: **urn:schemas:calendar:contacturl**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarContactUrl** property ([MS-OXPROPS] section 2.377) gets or sets the URL where contact information is accessable in **HTML** format.

2.2.2.11   PidNameCalendarCreated

DAV property name: **urn:schemas:calendar:created**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarCreated** property ([MS-OXPROPS] section 2.378) gets or sets the calculated date and time that the organizer created the appointment or meeting.

This property corresponds to the **CREATED** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.7.

2.2.2.12   PidNameCalendarDescriptionUrl

DAV property name: **urn:schemas:calendar:descriptionurl**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarDescriptionUrl** property ([MS-OXPROPS] section 2.379) gets or sets the URL of a **resource** that contains a description of an appointment or meeting. This property is further specified in [RFC2445] section 4.2.1 as the **ALTREP DESCRIPTION** property, which is a **Uniform Resource Identifier (URI)**. URIs can contain only US-**ASCII** characters, as specified in [RFC20]. The server SHOULD assume that URIs in this property contain only US-ASCII characters, and therefore the server does not perform character-encoding conversion.

2.2.2.13   PidNameCalendarDuration

DAV property name: **urn:schemas:calendar:duration**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarDuration** property ([MS-OXPROPS] section 2.380) gets or sets the calculated duration, in seconds, of an appointment or meeting.

This property corresponds to the **DURATION** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.12.

2.2.2.14   PidNameCalendarExceptionDate

DAV property name: **urn:schemas:calendar:exdate**

Data type: **PtypMultipleTime** ([MS-OXCDATA] section 2.11.1)

The **PidNameCalendarExceptionDate** property ([MS-OXPROPS] section 2.381) gets or sets the calculated list of original start times of **instances** of the recurring appointment that have been deleted.

This property corresponds to the **EXDATE** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.13.

The **PidNameCalendarExceptionDate** property is combined with the following properties to specify the complete **recurrence pattern**:

- The **PidTagICalendarStartTime** property (section 2.2.2.41)

- The **PidNameICalendarRecurrenceRule** property (section 2.2.2.37)

- The **PidNameICalendarRecurrenceDate** property (section 2.2.2.36)

- The **PidNameCalendarExceptionRule** property (section 2.2.2.15)

2.2.2.15   PidNameCalendarExceptionRule

DAV property name: **urn:schemas:calendar:exrule**

Data type: **PtypMultipleString** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidNameCalendarExceptionRule** property ([MS-OXPROPS] section 2.382) gets or sets an exception rule for a recurring appointment. An exception rule is a repeating pattern of exceptions.

This property corresponds to the **EXRULE** property, as specified in [RFC2445] section 4.8.5.2.

The **PidNameCalendarExceptionRule** property is combined with the following properties to specify the complete recurrence pattern:

- The **PidTagICalendarStartTime** property (section 2.2.2.41)

- The **PidNameICalendarRecurrenceRule** property (section 2.2.2.37)

- The **PidNameICalendarRecurrenceDate** property (section 2.2.2.36)

- The **PidNameCalendarExceptionDate** property (section 2.2.2.14)

2.2.2.16 PidNameCalendarGeoLatitude

DAV property name: **urn:schemas:calendar:geolatitude**

Data type: **PtypFloating64** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarGeoLatitude** property ([MS-OXPROPS] section 2.383) gets or sets the geographical latitude of the location of an appointment. Positive values from 0 to 90 specify degrees of northern latitude. Negative values from 0 to -90 specify degrees of southern latitude.

This property corresponds to the **GEO** latitude property, as specified in [RFC2445] section 4.8.1.6.

2.2.2.17 PidNameCalendarGeoLongitude

DAV property name: **urn:schemas:calendar:geolongitude**

Data type: **PtypFloating64** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarGeoLongitude** property ([MS-OXPROPS] section 2.384) gets or sets the geographical longitude of the location of an appointment. Positive values from 0 to 180 specify degrees of eastern longitude. Negative values from 0 to -180 specify degrees of western longitude.

This property corresponds to the **GEO** longitude property, as specified in [RFC2445] section 4.8.1.6.

2.2.2.18 PidNameCalendarInstanceType

DAV property name: **urn:schemas:calendar:instancetype**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarInstanceType** property ([MS-OXPROPS] section 2.385) gets or sets the calculated type of the appointment. The following types are possible:

- Single appointment

- Master recurring appointment

- Instance of a recurring appointment

- Exception to a recurring appointment

This property cannot be directly imported and exported from a Calendar object property. This property is used to populate the **PidLidMeetingType** ([MS-OXOCAL] section 2.2.6.5) and **PidLidAppointmentRecur** ([MS-OXOCAL] section 2.2.1.44) properties.

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

Value	Description
0	A single appointment or meeting.
1	A **recurring series**. This is the master appointment for the series, which identifies all the appointments in the series.
2	A single instance of a recurring meeting or appointment.
3	An exception to a recurring series or appointment.

Clients SHOULD NOT change the value of this property.

The server SHOULD automatically set this property when changes to the appointment are committed. For example, assume a recurring appointment that has the **PidNameCalendarInstanceType property set** to master ("1"). If all of the recurrence patterns and exceptions that are associated with this appointment or meeting are deleted and the appointment or meeting is saved, the server updates the instance type to single instance ("2"). If the original value of the **PidNameCalendarInstanceType** property is single instance ("2") or exception ("3"), the value does not change.

2.2.2.19   PidNameCalendarIsOrganizer

DAV property name: **urn:schemas:calendar:isorganizer**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarIsOrganizer** property ([MS-OXPROPS] section 2.386) gets or sets a value that indicates whether an attendee is the organizer of an appointment or meeting. True if the attendee is the organizer of an appointment or meeting; otherwise, false.

2.2.2.20   PidNameCalendarLastModified

DAV property name: **urn:schemas:calendar:lastmodified**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarLastModified** property ([MS-OXPROPS] section 2.387) gets or sets the date and time when an appointment was last modified.

This property corresponds to the **LAST-MODIFIED** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.14.

This value SHOULD be stored in the appointment separate from **PidTagLastModificationTime** ([MS-OXPROPS] section 2.753).

2.2.2.21   PidNameCalendarLocationUrl

DAV property name: **urn:schemas:calendar:locationurl**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarLocationUrl** property ([MS-OXPROPS] section 2.388) gets or sets the URL where the location information is accessible in HTML format.

This property corresponds to the **X-MS-OLK-MWSURL** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.55.

2.2.2.22   PidNameCalendarMeetingStatus

DAV property name: **urn:schemas:calendar:meetingstatus**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarMeetingStatus** property ([MS-OXPROPS] section 2.389) gets or sets the calculated status of an appointment or meeting. The following states are possible.

- Tentative

- Confirmed

- Cancelled

This property corresponds to the **STATUS** property, as specified in [RFC2445] section 4.8.1.11.

The following table lists the valid values of the meeting status property.

Description	Value
Meeting cancelled	CANCELLED
Meeting confirmed	CONFIRMED
Meeting is tentative	TENTATIVE

2.2.2.23   PidNameCalendarMethod

DAV property name: **urn:schemas:calendar:method**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarMethod** property ([MS-OXPROPS] section 2.390) gets or sets the iCalendar method that is associated with an appointment object.

This property corresponds to the **METHOD** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.1.

2.2.2.24   PidNameCalendarProductId

DAV property name: **urn:schemas:calendar:prodid**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarProductId** property ([MS-OXPROPS] section 2.391) gets or sets the product that created the iCalendar-formatted stream. The iCalendar format is specified in [MS-OXCICAL].

This property corresponds to the **PRODID** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.2.

2.2.2.25   PidNameCalendarRecurrenceIdRange

DAV property name: **urn:schemas:calendar:recurrenceidrange**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarRecurrenceIdRange** property ([MS-OXPROPS] section 2.392) gets or sets a value that indicates which instances of a recurring appointment the **PidNameCalendarRecurrenceIdRange** property refers to. The **PtypString** value "ThisAndFuture" refers to the instance specified by the **PidLidExceptionReplaceTime** property ([MS-OXOCAL] section 2.2.10.2.5) and to all later instances of the recurring appointment. The **PtypString** value "ThisAndPrior" refers to the instance specified by the **PidLidExceptionReplaceTime** property and to all earlier instances of the recurring appointment. The default value is "None", which means that the **PidLidExceptionReplaceTime** property refers to a single instance.

This property corresponds to the **RANGE** property, as specified in [RFC2445] section 4.2.13.

2.2.2.26 PidNameCalendarReminderOffset

DAV property name: **urn:schemas:calendar:reminderoffset**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarReminderOffset** property ([MS-OXPROPS] section 2.393) gets or sets the number of seconds before an appointment starts that a **reminder** is to be displayed.

For appointments that are received as iCalendar messages, this value SHOULD be taken from the first VALARM calendar component of the appointment. The VALARM component is specified in [MS-OXCICAL] section 2.1.3.1.1.20.62.

This property corresponds to the **TRIGGER** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.62.1.

2.2.2.27 PidNameCalendarResources

DAV property name: **urn:schemas:calendar:resources**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarResources** property ([MS-OXPROPS] section 2.394) gets or sets a list of resources, such as rooms and video equipment, that are available for an appointment. This property is specified by mailto URIs and separated by commas.

This property corresponds to the **RESOURCES** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.21.

2.2.2.28 PidNameCalendarRsvp

DAV property name: **urn:schemas:calendar:rsvp**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarRsvp** property ([MS-OXPROPS] section 2.395) gets or sets a value that specifies whether the organizer of an appointment or meeting requested a response. True if the organizer of the appointment or meeting requested a response; otherwise, false.

2.2.2.29 PidNameCalendarSequence

DAV property name: **urn:schemas:calendar:sequence**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarSequence** property ([MS-OXPROPS] section 2.396) gets or sets a calculated value that specifies the sequence number of a version of an appointment.

This property corresponds to the **SEQUENCE** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.22.

The server SHOULD increment the sequence number when one or more of the following properties is changed:

- The **PidTagICalendarStartTime** property (section 2.2.2.41)

- The **PidTagICalendarEndTime** property (section 2.2.2.39)

- The **PidNameCalendarDuration** property ([MS-OXPROPS] section 2.380)

- The **PidNameICalendarRecurrenceDate** property ([MS-OXPROPS] section 2.441)

- The **PidNameICalendarRecurrenceRule** property ([MS-OXPROPS] section 2.442)

- The **PidNameCalendarExceptionDate** property ([MS-OXPROPS] section 2.381)

- The **PidNameCalendarExceptionRule** property ([MS-OXPROPS] section 2.382)

Clients SHOULD NOT change this value.

2.2.2.30   PidNameCalendarTimeZone

DAV property name: **urn:schemas:calendar:timezone**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarTimeZone** property ([MS-OXPROPS] section 2.397) gets or sets the calculated time zone of an appointment or meeting. This property enables you to define time zones that are not defined by the **PidNameCalendarTimeZoneId** property ([MS-OXPROPS] section 2.398). If the **PidNameCalendarTimeZone** property is specified, the **PidNameCalendarTimeZoneId** property SHOULD be ignored.

This property corresponds to the **VTIMEZONE** calendar component, as specified in [MS-OXCICAL] section 2.1.3.1.1.19.

An example of this property is provided in section 4.3.2.

2.2.2.31   PidNameCalendarTimeZoneId

DAV property name: **urn:schemas:calendar:timezoneid**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarTimeZoneId** property ([MS-OXPROPS] section 2.398) gets or sets the time zone identifier of an appointment or meeting.

This property SHOULD be ignored if the **PidNameCalendarTimeZone** property ([MS-OXPROPS] section 2.397) is specified.

The following table lists the valid values of the **PidNameCalendarTimeZoneId** property.

Property value name	Value	Description
UTC	0	Coordinated Universal Time (UTC)
GMT	1	Greenwich Mean Time (same as UTC)
Lisbon	2	Dublin, Edinburgh, Lisbon, London (UTC + 0:00)
Paris	3	Brussels, Copenhagen, Madrid, Paris, Vilnius (UTC + 1:00)
Berlin	4	Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna (UTC + 1:00)
EasternEurope	5	Eastern Europe (UTC + 2:00)
Prague	6	Belgrade, Pozsony, Budapest, Ljubljana, Prague (UTC + 1:00)
Athens	7	Athens, Instanbul, Minsk (UTC + 2:00)
Brasilia	8	Brasilia (UTC - 3:00)
AtlanticCanada	9	Atlantic time (UTC - 4:00)
Eastern	10	Eastern time (UTC - 5:00)
Central	11	Central time (UTC - 6:00)
Mountain	12	Mountain time (UTC - 7:00)
Pacific	13	Pacific time (UTC - 8:00)
Alaska	14	Alaska (UTC - 9:00)
Hawaii	15	Hawaii (UTC - 10:00)
MidwayIsland	16	Midway Island, Samoa (UTC - 11:00)
Wellington	17	Auckland, Wellington (UTC + 12:00)
Brisbane	18	Brisbane (UTC + 10:00)
Adelaide	19	Adelaide (UTC + 9:30)
Tokyo	20	Osaka, Sapporo, Tokyo (UTC + 9:00)
HongKong	21	Hong Kong SAR (UTC + 8:00)
Bangkok	22	Bangkok, Hanoi, Jakarta (UTC + 7:00)
Bombay	23	Mumbai, Kolkata, Chennai, New Delhi (UTC + 5:30)
AbuDhabi	24	Abu Dhabi, Muscat (UTC + 4:00)
Tehran	25	Tehran (UTC + 3:30)
Baghdad	26	Baghdad, Kuwait, Riyadh (UTC + 3:00)
Israel	27	Israel (UTC + 2:00)
Newfoundland	28	Newfoundland (UTC - 3:30)
Azores	29	Azores, Cape Verde Islands (UTC - 1:00)

Property value name	Value	Description
MidAtlantic	30	Mid Atlantic (UTC - 2:00)
Monrovia	31	Casablanca, Monrovia (UTC + 0:00)
BuenosAires	32	Buenos Aires, Georgetown (UTC - 3:00)
Caracas	33	Caracas, La Paz (UTC - 4:00)
Indiana	34	Indiana (UTC - 5:00)
Bogota	35	Bogota, Lima, Quito (UTC - 5:00)
Saskatchewan	36	Saskatchewan (UTC - 6:00)
MexicoCity	37	Mexico City, Tegucigalpa (UTC - 6:00)
Arizona	38	Arizona (UTC - 7:00)
Eniwetok	39	Eniwetok, Kwajalein (UTC - 12:00)
Fiji	40	Fiji Islands, Kamchatka, Marshall Islands (UTC + 12:00)
Magadan	41	Magadan, Solomon Islands, New Caledonia (UTC + 11:00)
Hobart	42	Hobart (UTC + 10:00)
Guam	43	Guam, Port Moresby (UTC + 10:00)
Darwin	44	Darwin (UTC + 9:30)
Beijing	45	Beijing, Chongqing, Urumqi (UTC + 8:00)
Almaty	46	Akmola, Almaty, Dhaka (UTC + 6:00)
Islamabad	47	Islamabad, Karachi, Tashkent (UTC + 5:00)
Kabul	48	Kabul (UTC + 4:30)
Cairo	49	Cairo (UTC + 2:00)
Harare	50	Harare, Pretoria (UTC + 2:00)
Moscow	51	Moscow, St. Petersburg, Volgograd (UTC + 3:00)
InvalidTimeZone	52	Non-valid time zone

2.2.2.32   PidNameCalendarTransparent

DAV property name: **urn:schemas:calendar:transparent**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarTransparent** property ([MS-OXPROPS] section 2.399) gets or sets a value that specifies whether an appointment or meeting is visible to busy time searches. Valid values are "opaque" (visible) and "transparent" (invisible).

This property corresponds to the **TRANSP** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.25.

2.2.2.33   PidNameCalendarUid

DAV property name: **urn:schemas:calendar:uid**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarUid** property ([MS-OXPROPS] section 2.400) gets or sets the calculated unique identifier of the appointment or meeting.

This property corresponds to the **UID** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.26.

2.2.2.34   PidNameCalendarVersion

DAV property name: **urn:schemas:calendar:version**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameCalendarVersion** property ([MS-OXPROPS] section 2.401) gets or sets the calculated version of the iCalendar specification that is required to correctly interpret an iCalendar object.

This property corresponds to the **VERSION** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.3.

2.2.2.35   PidNameFrom

DAV property name: **urn:schemas:calendar:organizer**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameFrom** property ([MS-OXPROPS] section 2.435) gets or sets the **Simple Mail Transfer Protocol (SMTP)** e-mail **alias** of the organizer of an appointment or meeting. The organizer is the attendee with the **PidNameCalendarIsOrganizer** property ([MS-OXPROPS] section 2.386) set to "TRUE".

This property corresponds to the **ORGANIZER** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.16.

2.2.2.36   PidNameICalendarRecurrenceDate

DAV property name: **urn:schemas:calendar:rdate**

Data type: **PtypMultipleTime** ([MS-OXCDATA] section 2.11.1)

The **PidNameICalendarRecurrenceDate** property ([MS-OXPROPS] section 2.441) gets or sets an array of instances of a recurring appointment. The instances are stored as the dates and times of the appointment.

This property corresponds to the **RDATE** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.18.<1>

The **PidNameICalendarRecurrenceDate** property is combined with the following properties to specify the complete recurrence pattern:

- The **PidTagICalendarStartTime** property (section 2.2.2.41)

- The **PidNameICalendarRecurrenceRule** property (section 2.2.2.37)

- The **PidNameCalendarExceptionDate** property (section [2.2.2.14](#))

- The **PidNameCalendarExceptionRule** property (section [2.2.2.15](#))

2.2.2.37 PidNameICalendarRecurrenceRule

DAV property name: **urn:schemas:calendar:rrule**

Data type: **PtypMultipleString** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidNameICalendarRecurrenceRule** property ([MS-OXPROPS] section 2.442) gets or sets the rule for the pattern that defines a recurring appointment. The **PidTagICalendarStartTime** property (section [2.2.2.41](#)) specifies the first instance of the appointment. The rule is based on the date and time of the first instance.

This property corresponds to the **RRULE** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.19.

The **PidNameICalendarRecurrenceRule** property is combined with the following properties to specify the complete recurrence pattern:

- The **PidTagICalendarStartTime** property (section [2.2.2.41](#))

- The **PidNameICalendarRecurrenceDate** property (section [2.2.2.36](#))

- The **PidNameCalendarExceptionDate** property (section [2.2.2.14](#))

- The **PidNameCalendarExceptionRule** property (section [2.2.2.15](#))

2.2.2.38 PidTagCdoRecurrenceid

DAV property name: **urn:schemas:calendar:recurrenceid**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagCdoRecurrenceid** property ([MS-OXPROPS] section 2.621) gets or sets the recurrence identifier that identifies a specific instance of a recurring appointment. This property SHOULD be used with the **PidNameCalendarSequence** property ([MS-OXPROPS] section 2.396) to uniquely identify the instance. The value of the recurrence identifier is the starting date and time of the specific instance.

The **PidNameCalendarRecurrenceIdRange** property ([MS-OXPROPS] section 2.392) can modify the meaning of the **PidTagCdoRecurrenceid** property to refer to multiple instances of a recurring appointment.

This property corresponds to the **RECURRENCE-ID** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.20.

2.2.2.39 PidTagICalendarEndTime

DAV property name: **urn:schemas:calendar:dtend**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagICalendarEndTime** property ([MS-OXPROPS] section 2.723) gets or sets the date and time when the appointment or meeting ends.

Release: July 26, 2013

This property corresponds to the **DTEND** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.8.

2.2.2.40   PidTagICalendarReminderNextTime

DAV property name: **urn:schemas:calendar:remindernexttime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagICalendarReminderNextTime** property ([MS-OXPROPS] section 2.724) gets or sets the calculated date and time for the activation of the next reminder.

2.2.2.41   PidTagICalendarStartTime

DAV property name: **urn:schemas:calendar:dtstart**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagICalendarStartTime** property ([MS-OXPROPS] section 2.725) gets or sets the calculated date and time when the appointment or meeting starts.

This property corresponds to the **DTSTART** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.10.

The **PidTagICalendarStartTime** property is combined with the following properties to specify the complete recurrence pattern:

- The **PidNameICalendarRecurrenceDate** property (section 2.2.2.36)

- The **PidNameICalendarRecurrenceRule** property (section 2.2.2.37)

- The **PidNameCalendarExceptionDate** property (section 2.2.2.14)

- The **PidNameCalendarExceptionRule** property (section 2.2.2.15)

2.2.2.42   PidTagLastModificationTime

DAV property names: **urn:schemas:calendar:lastmodifiedtime**, **DAV:getlastmodified**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagLastModificationTime** property ([MS-OXCMSG] section 2.2.2.2) gets or sets the date and time when the appointment was last saved.

This property can have a different value in the appointment of the organizer and in the copy of each attendee. The server SHOULD update this value when any method saves an appointment.

For more details about the **PidTagLastModificationTime** property, see [MS-OXPROPS] section 2.753.

2.2.2.43   PidTagResponseRequested

DAV property names: **urn:schemas:calendar:responserequested**, **http://schemas.microsoft.com/mapi/response_requested**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagResponseRequested** property ([MS-OXPROPS] section 2.919) gets or sets a value that indicates whether the originator of the meeting requested a response. True if a response is requested; otherwise, false.

This property corresponds to the **RSVP** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.2.5.

For outgoing meeting requests, if the value for the **PidTagResponseRequested** property is "TRUE", the iCalendar RSVP property of all attendees SHOULD be set to "TRUE", or if the value for the **PidTagResponseRequested** property is "FALSE", the RSVP property of all attendees SHOULD be set to "FALSE". For incoming meeting requests, if the iCalendar RSVP property of any attendee is "TRUE", then the **PidTagResponseRequested** property SHOULD be set to "TRUE", or if RSVP for all attendees is "FALSE", then the **PidTagResponseRequested** property SHOULD be set to "FALSE".

2.2.3   urn:schemas:httpmail: Namespace Properties

The urn:schemas:httpmail: namespace defines properties for general WebDAV data access. Some properties in this namespace provide access to the properties specified in [MS-OXCMAIL] and [MS-OXCMSG].

2.2.3.1   PidNameHttpmailCalendar

DAV property name: **urn:schemas:httpmail:calendar**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameHttpmailCalendar** property ([MS-OXPROPS] section 2.438) gets the calculated URL for the Calendar folder for a particular user. This property MUST be set by the server on a user's root mailbox folder to identify the URL to their Calendar folder.

2.2.3.2   PidNameHttpmailHtmlDescription

DAV property name: **urn:schemas:httpmail:htmldescription**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameHttpmailHtmlDescription** property ([MS-OXPROPS] section 2.439) gets or sets the HTML content of the message.

2.2.3.3   PidNameHttpmailSendMessage

DAV property name: **urn:schemas:httpmail:sendmsg**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameHttpmailSendMessage** property ([MS-OXPROPS] section 2.440) gets the calculated mail submission URI to which outgoing mail is submitted.

2.2.3.4   PidTagBody

DAV property name: **urn:schemas:httpmail:textdescription**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagBody** property ([MS-OXCMSG] section 2.2.1.56.1) gets or sets the **plain text** content of the message.

For more details about the **PidTagBody** property, see [MS-OXPROPS] section 2.609.

2.2.3.5 PidTagHasAttachments

DAV property name: **urn:schemas:httpmail:hasattachment**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagHasAttachments** property ([MS-OXCMSG] section 2.2.1.2) gets a value that indicates whether or not the message has attachments. True if the message has attachments; otherwise, false.

For more details about the **PidTagHasAttachments** property, see [MS-OXPROPS] section 2.706.

2.2.3.6 PidTagNormalizedSubject

DAV property name: **urn:schemas:httpmail:normalizedsubject**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagNormalizedSubject** property ([MS-OXCMSG] section 2.2.1.10) gets the calculated normalized subject of the Calendar object. The normalized subject contains the subject with any prefixes, such as "Re:" and "Fwd:", removed.

For more details about the **PidTagNormalizedSubject** property, see [MS-OXPROPS] section 2.801.

2.2.3.7 PidTagPriority

DAV property name: **urn:schemas:httpmail:priority**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagPriority** property ([MS-OXCMSG] section 2.2.1.12) gets or sets the priority at which the message is to be sent by the messaging system.

For more details about the **PidTagPriority** property, see [MS-OXPROPS] section 2.860.

2.2.3.8 PidTagRead

DAV property name: **urn:schemas:httpmail:read**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagRead** property ([MS-OXPROPS] section 2.867) gets or sets a value that indicates whether the Calendar object has been read. True if the Calendar object has been read; otherwise, false.

2.2.3.9 PidTagSubject

DAV property name: **urn:schemas:httpmail:subject**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagSubject** property ([MS-OXPROPS] section 2.933) gets or sets the subject of the message. This property corresponds to the **Subject header field** of [RFC822]. This property differs from the **PidNameInternetSubject** property ([MS-OXPROPS] section 2.443) only in that all characters encoded as specified in [RFC1522] are decoded and returned as **Unicode** characters.

2.2.4   urn:schemas:mailheader: Namespace Properties

The urn:schemas:mailheader: namespace defines one property that is used by Calendar objects.

2.2.4.1   PidNameInternetSubject

DAV property name: **urn:schemas:mailheader:subject**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameInternetSubject** property ([MS-OXPROPS] section 2.443) gets or sets the subject of the message. This property differs from the **PidTagSubject** property ([MS-OXPROPS] section 2.1021) only in that all characters encoded as specified in [RFC1522] are not decoded.

2.2.5   urn:schemas-microsoft-com:exch-data: Namespace Properties

The urn:schemas-microsoft-com:exch-data: namespace defines three properties that are used by Calendar objects.

2.2.5.1   PidNameExchDatabaseSchema

DAV property name: **urn:schemas-microsoft-com:exch-data:baseschema**

Data type: **PtypMultipleString** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidNameExchDatabaseSchema** property ([MS-OXPROPS] section 2.425) gets or sets an array of URLs identifying other Folder objects within the same **message store** that contain schema definition items.

The **PidNameExchDatabaseSchema** property SHOULD be used in conjunction with the **PidNameExchDataSchemaCollectionReference** property ([MS-OXPROPS] section 2.427) to define a Folder object's schema scope. Set this property on any Folder object containing schema definition items to identify subsequent Folder objects to search for schema items. Clients and servers SHOULD always check the current Folder object before proceeding to the Folder objects identified by the **PidNameExchDatabaseSchema** property.

The order in which the URLs are listed in this property is significant. When searching for schema definition items, applications perform a breadth-first search for definition items within the Folder object's schema scope starting in the Folder objects identified by the **schema-collection-ref** property. Folder objects subsequently identified by the **PidNameExchDatabaseSchema** property of this schema collection Folder object are then searched in the order that they appear in the property. During the search, the first encountered definition item is always used, and other subsequent definition items are ignored. Each **PidNameExchDatabaseSchema** Folder object can then in turn define its own set of **PidNameExchDatabaseSchema** Folder objects. These Folder objects are searched in the order that they appear in the property.

2.2.5.2   PidNameExchDataExpectedContentClass

DAV property name: **urn:schemas-microsoft-com:exch-data:expected-content-class**

Data type: **PtypMultipleString** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidNameExchDataExpectedContentClass** property ([MS-OXPROPS] section 2.426) gets or sets an array of names indicating the expected content classes of items within a Folder object.

The **PidNameExchDataExpectedContentClass** property is an array (list) of content class names that are designated as expected for items in the Folder object. This property does not itself define these content classes and does not define in what Folder object or Folder objects the associated content class and property definition items are kept. Applications SHOULD search for these definitions within the Folder object's schema scope. Additionally, the **PidNameExchDataExpectedContentClass** property SHOULD NOT impose a **restriction** on what the value of an item's content class can be; it simply designates the list of names as expected for items within the Folder object.

The **PidNameExchDataExpectedContentClass**, **PidNameExchDataSchemaCollectionReference** ([MS-OXPROPS] section 2.427), and **PidNameExchDatabaseSchema** ([MS-OXPROPS] section 2.425) properties SHOULD be used together to define a Folder object's schema. Folder objects can contain separate content class and property definitions specific to a particular application.

2.2.5.3 PidNameExchDataSchemaCollectionReference

DAV property name: **urn:schemas-microsoft-com:exch-data:schema-collection-ref**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchDataSchemaCollectionReference** property ([MS-OXPROPS] section 2.427) gets or sets an array of names indicating the expected content classes of items within a Folder object.

Use this property to define the first Folder object within its schema scope. The value SHOULD be the URL of the first Folder object in which to search for schema content class and property definition items. If no value is set, the Folder object's schema scope SHOULD default to the non_ipm_subtree/Schema Folder object in that public message store or mailbox message store.

2.2.6 urn:schemas-microsoft-com:office:office Namespace Properties

The urn:schemas-microsoft-com:office:office namespace defines one property that is used by Calendar objects.

2.2.6.1 PidNameKeywords

DAV property names: **urn:schemas-microsoft-com:office:office#Keywords**, **http://schemas.microsoft.com/exchange/keywords-utf8**

Data type: **PtypMultipleString** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidNameKeywords** property ([MS-OXPROPS] section 2.444) gets or sets a list of keywords for the Calendar object. This property is further specified in [MS-OXCMSG] section 2.2.1.17.

2.2.7 http://schemas.microsoft.com/mapi/ Namespace Properties

The http://schemas.microsoft.com/mapi/ namespace defines some properties specifically for Calendar object support. Many of the Calendar object properties in this namespace provide access to calendar and reminder properties specified in [MS-OXOCAL] and [MS-OXORMDR].

2.2.7.1 PidLidAllAttendeesString

DAV property name: **http://schemas.microsoft.com/mapi/allattendeesstring**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAllAttendeesString** property ([MS-OXOCAL] section 2.2.1.16) gets or sets a list of all the attendees except for the organizer, including resources and **unsendable attendees**.

For more details about the **PidLidAllAttendeesString** property, see [MS-OXPROPS] section 2.5.

2.2.7.2 PidLidAppointmentDuration

DAV property name: **http://schemas.microsoft.com/mapi/apptduration**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentDuration** property ([MS-OXOCAL] section 2.2.1.7) gets or sets the length of the event, in minutes.

For more details about the **PidLidAppointmentDuration** property, see [MS-OXPROPS] section 2.11.

2.2.7.3 PidLidAppointmentEndDate

DAV property name: **http://schemas.microsoft.com/mapi/apptenddate**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentEndDate** property ([MS-OXPROPS] section 2.12) gets or sets the calculated appointment end date.

2.2.7.4 PidLidAppointmentEndTime

DAV property name: **http://schemas.microsoft.com/mapi/apptendtime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentEndTime** property ([MS-OXPROPS] section 2.13) gets or sets the calculated appointment end time.

2.2.7.5 PidLidAppointmentEndWhole

DAV property name: **http://schemas.microsoft.com/mapi/apptendwhole**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentEndWhole** property ([MS-OXOCAL] section 2.2.1.6) gets or sets the calculated end date and time for the event in **UTC** and MUST be greater than the value of the **PidLidAppointmentStartWhole** property ([MS-OXOCAL] section 2.2.1.5).

For more details about the **PidLidAppointmentEndWhole** property, see [MS-OXPROPS] section 2.14.

2.2.7.6 PidLidAppointmentRecur

DAV property name: **http://schemas.microsoft.com/mapi/apptrecur**

Data type: **PtypBinary** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) gets or sets the dates and times when a recurring series occurs by using one of the recurrence patterns and ranges specified in [MS-OXOCAL] section 2.2.1.44.

For more details about the **PidLidAppointmentRecur** property, see [MS-OXPROPS] section 2.22.

2.2.7.7   PidLidAppointmentReplyName

DAV property name: **http://schemas.microsoft.com/mapi/apptreplyname**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentReplyName** property ([MS-OXOCAL] section 2.2.4.5) gets or sets the name of the user who last replied to the Meeting Request object or **Meeting Update object**.

For more details about the **PidLidAppointmentReplyName** property, see [MS-OXPROPS] section 2.23.

2.2.7.8   PidLidAppointmentReplyTime

DAV property names: **http://schemas.microsoft.com/mapi/apptreplytime**, **urn:schemas:calendar:replytime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentReplyTime** property ([MS-OXOCAL] section 2.2.4.3) gets or sets the date and time at which the attendee responded to a received Meeting Request object or Meeting Update object.

For more details about the **PidLidAppointmentReplyTime** property, see [MS-OXPROPS] section 2.24.

2.2.7.9   PidLidAppointmentSequence

DAV property name: **http://schemas.microsoft.com/mapi/apptsequence**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentSequence** property ([MS-OXOCAL] section 2.2.1.1) gets or sets the sequence number of a **Meeting object**.

For more details about the **PidLidAppointmentSequence** property, see [MS-OXPROPS] section 2.25.

2.2.7.10   PidLidAppointmentStartDate

DAV property name: **http://schemas.microsoft.com/mapi/apptstartdate**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentStartDate** property ([MS-OXPROPS] section 2.27) gets or sets the calculated date the appointment starts.

For backward compatibility with older clients, this property SHOULD be set, and when set, it MUST be equal to the value of the **PidLidAppointmentStartWhole** property ([MS-OXOCAL] section 2.2.1.5).

2.2.7.11   PidLidAppointmentStartTime

DAV property name: **http://schemas.microsoft.com/mapi/apptstarttime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentStartTime** property ([MS-OXPROPS] section 2.28) gets or sets the time the appointment starts.

2.2.7.12   PidLidAppointmentStartWhole

DAV property name: **http://schemas.microsoft.com/mapi/apptstartwhole**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentStartWhole** property ([MS-OXOCAL] section 2.2.1.5) gets or sets the calculated start date and time of the event; MUST be in UTC and MUST be less than the value of the **PidLidAppointmentEndWhole** property ([MS-OXOCAL] section 2.2.1.6).

For more details about the **PidLidAppointmentStartWhole** property, see [MS-OXPROPS] section 2.29.

2.2.7.13   PidLidAppointmentStateFlags

DAV property name: **http://schemas.microsoft.com/mapi/apptstateflags**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentStateFlags** property ([MS-OXOCAL] section 2.2.1.10) gets or sets the calculated bit field that describes the state of the object. The flag values are specified in [MS-OXOCAL] section 2.2.1.10.

For more details about the **PidLidAppointmentStateFlags** property, see [MS-OXPROPS] section 2.30.

2.2.7.14   PidLidAppointmentSubType

DAV property names: **http://schemas.microsoft.com/mapi/apptsubtype**, **urn:schemas:calendar:alldayevent**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentSubType** property ([MS-OXOCAL] section 2.2.1.9) gets or sets a value that indicates whether the event is an all-day event. True if the event is an all-day event; otherwise, false.

For more details about the **PidLidAppointmentSubType** property, see [MS-OXPROPS] section 2.31.

2.2.7.15   PidLidAppointmentUpdateTime

DAV property name: **http://schemas.microsoft.com/mapi/apptupdatetime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAppointmentUpdateTime** property ([MS-OXPROPS] section 2.36) gets or sets the time at which the appointment was last updated.

2.2.7.16   PidLidAttendeeCriticalChange

DAV property name: **http://schemas.microsoft.com/mapi/attendee_critical_change**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidAttendeeCriticalChange** property ([MS-OXOCAL] section 2.2.5.2) gets or sets the calculated date and time at which the **meeting-related object** was sent.

For more details about the **PidLidAttendeeCriticalChange** property, see [MS-OXPROPS] section 2.37.

2.2.7.17   PidLidBusyStatus

DAV property name: **http://schemas.microsoft.com/mapi/busystatus**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidBusyStatus** property ([MS-OXOCAL] section 2.2.1.2) gets or sets the calculated availability of a user for the event described by the object. Valid values are specified in [MS-OXOCAL] section 2.2.1.2.

For more details about the **PidLidBusyStatus** property, see [MS-OXPROPS] section 2.47.

2.2.7.18   PidLidCalendarType

DAV property name: **http://schemas.microsoft.com/mapi/calendar_type**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

When the Meeting Request object represents a recurring series or an exception, the **PidLidCalendarType** property ([MS-OXOCAL] section 2.2.6.11) gets or sets the value of the **CalendarType** field, as specified in [MS-OXOCAL] section 2.2.1.44.1, from the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44). If the value of the **CalendarType** field of the **PidLidAppointmentRecur** recurrence pattern is zero (0x0000), then the **PidLidCalendarType** property is computed as Gregorian (1).

For more details about **PidLidCalendarType**, see [MS-OXPROPS] section 2.48.

2.2.7.19   PidLidDayInterval

DAV property name: **http://schemas.microsoft.com/mapi/day_interval**

Data type: **PtypInteger16** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidDayInterval** property ([MS-OXPROPS] section 2.90) gets or sets the calculated day interval for the recurrence pattern.<2>

2.2.7.20   PidLidDayOfMonth

DAV property name: **http://schemas.microsoft.com/mapi/dayofmonth**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidDayOfMonth** property ([MS-OXPROPS] section 2.91) gets or sets the day of the month for the appointment or meeting.

2.2.7.21 PidLidDelegateMail

DAV property name: **http://schemas.microsoft.com/mapi/delegate_mail**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidDelegateMail** property ([MS-OXPROPS] section 2.92) gets or sets a value that indicates whether a **delegate** responded to the meeting request. True if the delegate responded to the request; otherwise, false.

2.2.7.22 PidLidEndRecurrenceDate

DAV property name: **http://schemas.microsoft.com/mapi/end_recur_date**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidEndRecurrenceDate** property ([MS-OXPROPS] section 2.115) gets or sets the calculated end date of the recurrence range.

2.2.7.23 PidLidEndRecurrenceTime

DAV property name: **http://schemas.microsoft.com/mapi/end_recur_time**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidEndRecurrenceTime** property ([MS-OXPROPS] section 2.116) gets or sets the end time of the recurrence range.

2.2.7.24 PidLidFInvited

DAV property name: **http://schemas.microsoft.com/mapi/finvited**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidFInvited** property ([MS-OXOCAL] section 2.2.4.4) gets or sets a calculated value that indicates whether invitations have been sent for the meeting that this Meeting object represents. True if invitations have been sent; otherwise, false.

For more details about the **PidLidFInvited** property, see [MS-OXPROPS] section 2.135.

2.2.7.25 PidLidFlagRequest

DAV property names: **http://schemas.microsoft.com/mapi/request**, **urn:schemas:httpmail:messageflag**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidFlagRequest** property ([MS-OXOFLAG] section 2.2.1.9) gets or sets the user-specified text associated with the flag.

For more details about the **PidLidFlagRequest** property, see [MS-OXPROPS] section 2.136.

2.2.7.26   PidLidFOthersAppointment

DAV property name: **http://schemas.microsoft.com/mapi/fothersappt**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidFOthersAppointment** property ([MS-OXPROPS] section 2.140) gets or sets a value on the in-memory object that indicates whether the Calendar folder from which the meeting was opened is another user's calendar. True if the Calendar folder from which the meeting was opened is another user's calendar; otherwise, false.

2.2.7.27   PidLidICalendarDayOfWeekMask

DAV property name: **http://schemas.microsoft.com/mapi/dayofweekmask**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidICalendarDayOfWeekMask** property ([MS-OXPROPS] section 2.147) identifies the day of the week for the appointment or meeting.

2.2.7.28   PidLidIntendedBusyStatus

DAV property name: **http://schemas.microsoft.com/mapi/intendedbusystatus**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidIntendedBusyStatus** property ([MS-OXOCAL] section 2.2.6.4) gets or sets the calculated value of the **PidLidBusyStatus** property ([MS-OXOCAL] section 2.2.8.5) on the Meeting object in the organizer's calendar at the time the Meeting Request object or Meeting Update object was sent. The allowable values of this property are the same as those for the **PidLidBusyStatus** property.

For more details about the **PidLidIntendedBusyStatus** property, see [MS-OXPROPS] section 2.151.

2.2.7.29   PidLidIsException

DAV property name: **http://schemas.microsoft.com/mapi/is_exception**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidIsException** property ([MS-OXOCAL] section 2.2.1.35) gets or sets a calculated value that indicates wither the object represents an exception (including an **orphan instance**). True if the object represents an exception. False if the object represents a recurring series or a single instance. The absence of this property for any object indicates a value of "FALSE" except for the **Exception Embedded Message object**, which assumes a value of "TRUE".

For more details about the **PidLidIsException** property, see [MS-OXPROPS] section 2.155.

2.2.7.30   PidLidIsRecurring

DAV property name: **http://schemas.microsoft.com/mapi/is_recurring**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidIsRecurring** property ([MS-OXOCAL] section 2.2.1.13) gets or sets a value that indicates whether the object is associated with a recurring series. True if the object represents either a recurring series or an exception (including an orphan instance); otherwise, false.

For more details about the **PidLidIsRecurring** property, see [MS-OXPROPS] section 2.156.

2.2.7.31 PidLidIsSilent

DAV property name: **http://schemas.microsoft.com/mapi/is_silent**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidIsSilent** property ([MS-OXOCAL] section 2.2.7.7) gets or sets a value that indicates whether the user included text in the body of the **Meeting Response object**. True if the user did not include any text in the body of the Meeting Response object; otherwise, false.

For more details about the **PidLidIsSilent** property, see [MS-OXPROPS] section 2.157.

2.2.7.32 PidLidMeetingWorkspaceUrl

DAV property name: **http://schemas.microsoft.com/mapi/meetingworkspaceurl**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidMeetingWorkspaceUrl** property ([MS-OXOCAL] section 2.2.1.48) gets or sets the URL of the **Meeting Workspace**, as specified in [MS-MEETS], that is associated with a Calendar object.

For more details about the **PidLidMeetingWorkspaceUrl** property, see [MS-OXPROPS] section 2.171.

2.2.7.33 PidLidMonthInterval

DAV property name: **http://schemas.microsoft.com/mapi/month_interval**

Data type: **PtypInteger16** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidMonthInterval** property ([MS-OXPROPS] section 2.172) gets or sets a calculated value that indicates the monthly interval of the appointment or meeting.<3>

2.2.7.34 PidLidMonthOfYear

DAV property name: **http://schemas.microsoft.com/mapi/monthofyear**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidMonthOfYear** property ([MS-OXPROPS] section 2.173) gets or sets the month of the year that the appointment or meeting occurs.

2.2.7.35 PidLidMonthOfYearMask

DAV property name: **http://schemas.microsoft.com/mapi/moy_mask**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidMonthOfYearMask** property ([MS-OXPROPS] section 2.174) gets or sets the calculated month of the year that the appointment or meeting occurs.

2.2.7.36   PidLidNoEndDateFlag

DAV property name: **http://schemas.microsoft.com/mapi/fnoenddate**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidNoEndDateFlag** property ([MS-OXPROPS] section 2.176) gets or sets a value that indicates whether the recurrence pattern has an end date. True if there is no end date; otherwise, false. This property is not validated or enforced by the server. It is the responsibility of the client to keep this property synchronized and give it meaning.

2.2.7.37   PidLidNonSendableBcc

DAV property name: **http://schemas.microsoft.com/mapi/nonsendablebcc**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidNonSendableBcc** property ([MS-OXOCAL] section 2.2.1.21) gets or sets a list of all the unsendable attendees who are also resources.

For more details about the **PidLidNonSendableBcc** property, see [MS-OXPROPS] section 2.177.

2.2.7.38   PidLidNonSendableCc

DAV property name: **http://schemas.microsoft.com/mapi/nonsendablecc**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidNonSendableCc** property ([MS-OXOCAL] section 2.2.1.20) gets or sets a list of all the unsendable attendees who are also **optional attendees**.

For more details about the **PidLidNonSendableCc** property, see [MS-OXPROPS] section 2.178.

2.2.7.39   PidLidNonSendableTo

DAV property name: **http://schemas.microsoft.com/mapi/nonsendableto**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidNonSendableTo** property ([MS-OXOCAL] section 2.2.1.19) gets or sets a list of all the unsendable attendees who are also **required attendees**.

For more details about the **PidLidNonSendableTo** property, see [MS-OXPROPS] section 2.179.

2.2.7.40   PidLidNonSendBccTrackStatus

DAV property name: **http://schemas.microsoft.com/mapi/nonsendbcctrackstatus**

Data type: **PtypMultipleInteger32** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidLidNonSendBccTrackStatus** property ([MS-OXOCAL] section 2.2.1.24) gets or sets a value from the response table, as specified in [MS-OXOCAL] section 2.2.1.11, for each attendee listed in the **PidLidNonSendableBcc** property ([MS-OXOCAL] section 2.2.1.21).

For more details about the **PidLidNonSendBccTrackStatus** property, see [MS-OXPROPS] section 2.180.

2.2.7.41   PidLidNonSendCcTrackStatus

DAV property name: **http://schemas.microsoft.com/mapi/nonsendcctrackstatus**

Data type: **PtypMultipleInteger32** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidLidNonSendCcTrackStatus** property ([MS-OXOCAL] section 2.2.1.23) gets or sets the value from the response table for each attendee listed in the **PidLidNonSendableCc** property ([MS-OXOCAL] section 2.2.1.20).

For additional information about the **PidLidNonSendCcTrackStatus** property, see [MS-OXPROPS] section 2.181.

2.2.7.42   PidLidNonSendToTrackStatus

DAV property name: **http://schemas.microsoft.com/mapi/nonsendtotrackstatus**

Data type: **PtypMultipleInteger32** ([MS-OXCDATA] section 2.11.1.6.1)

The **PidLidNonSendToTrackStatus** property ([MS-OXOCAL] section 2.2.1.22) gets or sets the value from the response table, as specified in [MS-OXOCAL] section 2.2.1.11, for each attendee listed in the **PidLidNonSendableTo** property ([MS-OXOCAL] section 2.2.1.19).

For more details about the **PidLidNonSendToTrackStatus** property, see [MS-OXPROPS] section 2.182.

2.2.7.43   PidLidOccurrences

DAV property name: **http://schemas.microsoft.com/mapi/occurrences**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidOccurrences** property ([MS-OXPROPS] section 2.188) gets or sets the number of occurrences in the recurring appointment or meeting.

2.2.7.44   PidLidOldRecurrenceType

DAV property name: **http://schemas.microsoft.com/mapi/recur_type**

Data type: **PtypInteger16** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidOldRecurrenceType** property ([MS-OXPROPS] section 2.190) gets or sets the recurrence pattern for the appointment or meeting.

The following table lists the valid values.

Description	Value
The appointment occurs only once.	Not set
The appointment recurs daily.	64
The appointment recurs weekly.	48
The appointment recurs monthly.	12
The appointment recurs every nth month.	56

Description	Value
The appointment recurs yearly.	7
The appointment recurs every nth year.	51

2.2.7.45   PidLidOptionalAttendees

DAV property name: **http://schemas.microsoft.com/mapi/optional_attendees**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidOptionalAttendees** property is further specified in [MS-OXPROPS] section 2.194.<4>

2.2.7.46   PidLidOwnerCriticalChange

DAV property names: **http://schemas.microsoft.com/mapi/owner_critical_change**, **urn:schemas:calendar:dtstamp**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidOwnerCriticalChange** property ([MS-OXOCAL] section 2.2.1.34) gets or sets the date and time at which a Meeting Request object was sent by the organizer. The value is specified in UTC.

This property corresponds to the **DTSTAMP** property, as specified in [MS-OXCICAL] section 2.1.3.1.1.20.9

For more details about the **PidLidOwnerCriticalChange** property, see [MS-OXPROPS] section 2.199.

2.2.7.47   PidLidOwnerName

DAV property name: **http://schemas.microsoft.com/mapi/ownername**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidOwnerName** property ([MS-OXPROPS] section 2.200) gets or sets the name of the owner of the **mailbox**.

2.2.7.48   PidLidRecurrenceDuration

DAV property name: **http://schemas.microsoft.com/mapi/recurduration**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidRecurrenceDuration** property ([MS-OXPROPS] section 2.213) gets or sets the length, in minutes, of the appointment or meeting.

2.2.7.49   PidLidRecurrencePattern

DAV property name: **http://schemas.microsoft.com/mapi/recurpattern**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidRecurrencePattern** property ([MS-OXOCAL] section 2.2.1.46) gets or sets a description of the recurrence pattern of the Calendar object.

For more details about the **PidLidRecurrencePattern** property, see [MS-OXPROPS] section 2.214.

2.2.7.50   PidLidRecurrenceType

DAV property name: **http://schemas.microsoft.com/mapi/recurtype**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidRecurrenceType** property ([MS-OXOCAL] section 2.2.1.45) gets or sets the calculated recurrence type of the recurring series by using one of the values listed in [MS-OXOCAL] section 2.2.1.45.

For more details about the **PidLidRecurrenceType** property, see [MS-OXPROPS] section 2.215.

2.2.7.51   PidLidRecurring

DAV property name: **http://schemas.microsoft.com/mapi/recurring**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidRecurring** property ([MS-OXOCAL] section 2.2.1.12) gets or sets the calculated value that indicates whether the object represents a recurring series.

For more details about the **PidLidRecurring** property, see [MS-OXPROPS] section 2.216.

2.2.7.52   PidLidReminderDelta

DAV property name: **http://schemas.microsoft.com/mapi/reminderdelta**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderDelta** property ([MS-OXPROPS] section 2.218) gets or sets the calculated interval, in minutes, between the time at which the reminder first becomes overdue and the start time of the Calendar object.

For more details about the **PidLidReminderDelta** property, see [MS-OXORMDR] section 2.2.1.3.

2.2.7.53   PidLidReminderFileParameter

DAV property name: **http://schemas.microsoft.com/mapi/reminderfileparam**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderFileParameter** property ([MS-OXORMDR] section 2.2.1.7) gets or sets the file name of the sound that a client SHOULD play when the reminder for that object becomes overdue.

For more details about the **PidLidReminderFileParameter** property, see [MS-OXPROPS] section 2.219.

2.2.7.54   PidLidReminderOverride

DAV property name: **http://schemas.microsoft.com/mapi/reminderoverride**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderOverride** property ([MS-OXORMDR] section 2.2.1.5) gets or sets a value that indicates whether the client SHOULD adhere to the values of **PidLidReminderPlaySound** ([MS-OXORMDR] section 2.2.1.6) and **PidLidReminderFileParameter** ([MS-OXORMDR] section 2.2.1.7) as specified in sections 2.2.7.55 and 2.2.7.53 respectively. True if the values SHOULD be adhered to; otherwise, false.

For more details about the **PidLidReminderOverride** property, see [MS-OXPROPS] section 2.220.

2.2.7.55   PidLidReminderPlaySound

DAV property name: **http://schemas.microsoft.com/mapi/reminderplaysound**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderPlaySound** property ([MS-OXORMDR] section 2.2.1.6) gets or sets a value that indicates whether the client SHOULD play a sound when the reminder becomes overdue. True if the client SHOULD play a sound; otherwise, false.

For more details about the **PidLidReminderPlaySound** property, see [MS-OXPROPS] section 2.221.

2.2.7.56   PidLidReminderSet

DAV property name: **http://schemas.microsoft.com/mapi/reminderset**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderSet** property ([MS-OXORMDR] section 2.2.1.1) gets or sets a calculated value that indicates whether a reminder is set on the object. True if a reminder is set on the object; otherwise, false.

For more details about the **PidLidReminderSet** property, see [MS-OXPROPS] section 2.222.

2.2.7.57   PidLidReminderSignalTime

DAV property name: **http://schemas.microsoft.com/mapi/remindernexttime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderSignalTime** property ([MS-OXORMDR] section 2.2.1.2) gets or sets the calculated time when a reminder transitions from pending to overdue.

For more details about the **PidLidReminderSignalTime** property, see [MS-OXPROPS] section 2.223.

2.2.7.58   PidLidReminderTime

DAV property name: **http://schemas.microsoft.com/mapi/remindertime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

For non-Calendar objects, the **PidLidReminderTime** property ([MS-OXORMDR] section 2.2.1.4) gets or sets the initial **signal time**. For Calendar objects, gets or sets the time after which the user would be late; that is, the start time of the appointment.

For more details about the **PidLidReminderTime** property, see [MS-OXPROPS] section 2.224.

2.2.7.59   PidLidReminderTimeDate

DAV property name: **http://schemas.microsoft.com/mapi/remindertimedate**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderTimeDate** property ([MS-OXPROPS] section 2.225) gets or sets the time and date of the reminder for the appointment or meeting.

2.2.7.60   PidLidReminderTimeTime

DAV property name: **http://schemas.microsoft.com/mapi/remindertimetime**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderTimeTime** property ([MS-OXPROPS] section 2.226) gets or sets a value that indicates the time of the reminder for the appointment or meeting.

2.2.7.61   PidLidReminderType

DAV property name: **http://schemas.microsoft.com/mapi/remindertype**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidReminderType** property ([MS-OXPROPS] section 2.227) SHOULD NOT be set and MUST be ignored.

2.2.7.62   PidLidRemoteStatus

DAV property name: **http://schemas.microsoft.com/mapi/remotestatus**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidRemoteStatus** property ([MS-OXPROPS] section 2.228) gets or sets a value that indicates the remote status of the calendar item.

The following table lists the valid values for this property.

Description	Value
No status	0
Unmarked	1
Marked for download	2
Marked for copy	3
Marked for delete	4

2.2.7.63   PidLidRequiredAttendees

DAV property name: **http://schemas.microsoft.com/mapi/required_attendees**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidRequiredAttendees** property ([MS-OXPROPS] section 2.229) gets or sets the required attendees for the appointment or meeting.<5>

2.2.7.64   PidLidResourceAttendees

DAV property name: **http://schemas.microsoft.com/mapi/resource_attendees**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidResourceAttendees** property ([MS-OXPROPS] section 2.230) gets or sets the resource attendees for the appointment or meeting.<6>

2.2.7.65   PidLidResponseStatus

DAV property names: **http://schemas.microsoft.com/mapi/responsestatus**, **urn:schemas:calendar:attendeestatus**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidResponseStatus** property ([MS-OXOCAL] section 2.2.1.11) gets or sets the calculated response status of the attendee.

For more details about **PidLidResponseStatus**, see [MS-OXPROPS] section 2.231.

2.2.7.66   PidLidStartRecurrenceDate

DAV property name: **http://schemas.microsoft.com/mapi/start_recur_date**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidStartRecurrenceDate** property ([MS-OXPROPS] section 2.303) gets or sets the calculated the start date of the recurrence pattern.<7>

2.2.7.67   PidLidStartRecurrenceTime

DAV property name: **http://schemas.microsoft.com/mapi/start_recur_time**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidStartRecurrenceTime** property ([MS-OXPROPS] section 2.304) gets or sets the calculated start time of the recurrence pattern.<8>

2.2.7.68   PidLidTimeZone

DAV property name: **http://schemas.microsoft.com/mapi/time_zone**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidTimeZone** property ([MS-OXOCAL] section 2.2.5.6) gets or sets information about the time zone of a recurring meeting.

For more details about the **PidLidTimeZone** property, see [MS-OXPROPS] section 2.340.

2.2.7.69   PidLidTimeZoneDescription

DAV property name: **http://schemas.microsoft.com/mapi/timezonedesc**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidTimeZoneDescription** property ([MS-OXOCAL] section 2.2.1.40) gets or sets the calculated human-readable description of the time zone that is represented by the data in the **PidLidTimeZoneStruct** property, as specified in section 2.2.7.70.

For more details about the **PidLidTimeZoneDescription** property, see [MS-OXPROPS] section 2.341.

2.2.7.70   PidLidTimeZoneStruct

DAV property name: **http://schemas.microsoft.com/mapi/timezonestruct**

Data type: **PtypBinary** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidTimeZoneStruct** property ([MS-OXOCAL] section 2.2.1.39) gets or sets the calculated information to convert the values in time fields between local time and UTC.

For more details about the **PidLidTimeZoneStruct** property, see [MS-OXPROPS] section 2.342.

2.2.7.71   PidLidWeekInterval

DAV property name: **http://schemas.microsoft.com/mapi/week_interval**

Data type: **PtypInteger16** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidWeekInterval** property ([MS-OXPROPS] section 2.352) gets or sets the calculated number of weeks that occur between each meeting.<9>

2.2.7.72   PidLidWhere

DAV property name: **http://schemas.microsoft.com/mapi/where**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidWhere** property ([MS-OXOCAL] section 2.2.5.3) gets or sets a calculated value that SHOULD be the same as the value of the **PidLidLocation** property ([MS-OXOCAL] section 2.2.1.4) from the associated Meeting object.

For more details about the **PidLidWhere** property, see [MS-OXPROPS] section 2.353.

2.2.7.73   PidLidYearInterval

DAV property name: **http://schemas.microsoft.com/mapi/year_interval**

Data type: **PtypInteger16** ([MS-OXCDATA] section 2.11.1.6)

The **PidLidYearInterval** property ([MS-OXPROPS] section 2.362) gets or sets the calculated yearly interval of the appointment or meeting.<10>

2.2.7.74   PidTagEndDate

DAV property name: **http://schemas.microsoft.com/mapi/end_date**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagEndDate** property ([MS-OXOCAL] section 2.2.1.31) gets or sets a calculated value that SHOULD be set and, when set, MUST be equal to the value of the **PidLidAppointmentEndWhole** property ([MS-OXOCAL] section 2.2.1.6), as specified in section 2.2.7.5.

For more details about the **PidTagEndDate** property, see [MS-OXPROPS] section 2.673.

2.2.7.75 PidTagOwnerAppointmentId

DAV property name: **http://schemas.microsoft.com/mapi/owner_appt_id**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagOwnerAppointmentId** property ([MS-OXOCAL] section 2.2.1.29) gets or sets a calculated quasi-unique value among all Calendar objects in a user's mailbox.

For more details about the **PidTagOwnerAppointmentId** property, see [MS-OXPROPS] section 2.845.

2.2.7.76 PidTagResponseRequested

DAV property names: **http://schemas.microsoft.com/mapi/response_requested**, **urn:schemas:calendar:responserequested**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagResponseRequested** property ([MS-OXPROPS] section 2.919) gets or sets a value that indicates whether the organizer of the meeting requested a response. True if a response is requested; otherwise, false.

This property corresponds to the **RSVP** property ([MS-OXCICAL] section 2.1.3.1.1.20.2.5). For outgoing meeting requests, if the value of the **PidTagResponseRequested** property is "TRUE", the iCalendar **RSVP** property of all attendees SHOULD be set to "TRUE", or if the value of the **PidTagResponseRequested** property is "FALSE", the **RSVP** property of all attendees SHOULD be set to "FALSE". For incoming meeting requests, if the value of the iCalendar **RSVP** property of any attendee is "TRUE", then **PidTagResponseRequested** SHOULD be set to "TRUE", or if the value of the **RSVP** property for all attendees is "FALSE", then the **PidTagResponseRequested** property SHOULD be set to "FALSE". The **PidTagResponseRequested** property SHOULD be set to "FALSE" if the meeting does not have an organizer. The organizer is an attendee with the **PidNameCalendarIsOrganizer** property ([MS-OXPROPS] section 2.386) set to "TRUE".

For more details about the **PidTagResponseRequested** property, see [MS-OXOCAL] section 2.2.1.36.

2.2.7.77 PidTagStartDate

DAV property name: **http://schemas.microsoft.com/mapi/start_date**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagStartDate** property ([MS-OXPROPS] section 2.1013) gets or sets a calculated value that SHOULD be set, and when set, it MUST be equal to the value of the **PidLidAppointmentStartWhole** property ([MS-OXOCAL] section 2.2.1.5), as specified in section 2.2.7.12.

2.2.8   http://schemas.microsoft.com/exchange Namespace Properties

The http://schemas.microsoft.com/exchange/ namespace defines some properties specifically for Calendar object support. Some of the Calendar object properties in this namespace provide access to calendar properties specified in [MS-OXOCAL].

2.2.8.1   PidNameExchangeIntendedBusyStatus

DAV property name: **http://schemas.microsoft.com/exchange/intendedbusystatus**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchangeIntendedBusyStatus** property ([MS-OXPROPS] section 2.418) gets or sets the busy status of the user during an appointment or meeting.

2.2.8.2   PidNameExchangeModifyExceptionStructure

DAV property name: **http://schemas.microsoft.com/exchange/modifyexceptionstruct**

Data type: **PtypBinary** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchangeModifyExceptionStructure** property ([MS-OXPROPS] section 2.420) gets or sets a calculated structure that modifies an exception to the recurrence.

2.2.8.3   PidNameExchangeNoModifyExceptions

DAV property name: **http://schemas.microsoft.com/exchange/nomodifyexceptions**

Data type: **PtypBoolean** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchangeNoModifyExceptions** property ([MS-OXPROPS] section 2.421) gets a calculated value that indicates whether there are exceptions for the recurring appointment. True if no exceptions exist; otherwise, false.

2.2.8.4   PidNameExchangePatternEnd

DAV property name**: http://schemas.microsoft.com/exchange/patternend**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchangePatternEnd** property ([MS-OXPROPS] section 2.422) gets or sets the maximum time when an instance of a recurring appointment ends. If there are no exceptions, this is the end time of the last instance.

2.2.8.5   PidNameExchangePatternStart

DAV property name: **http://schemas.microsoft.com/exchange/patternstart**

Data type: **PtypTime** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchangePatternStart** property ([MS-OXPROPS] section 2.423) gets or sets the calculated absolute minimum time when an instance of a recurring appointment starts. If there are no exceptions, this is the start time of the first instance.

2.2.8.6   PidNameExchangeReminderInterval

DAV property name: **http://schemas.microsoft.com/exchange/reminderinterval**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidNameExchangeReminderInterval** property ([MS-OXPROPS] section 2.424) gets or sets the time, in seconds, between reminders.

2.2.8.7   PidTagContainerClass

DAV property name: **http://schemas.microsoft.com/exchange/outlookfolderclass**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagContainerClass** property ([MS-OXOCAL] section 2.2.11.1) gets or sets the container class for the Calendar folder.

For more details about the **PidTagContainerClass** property, see [MS-OXPROPS] section 2.633.

2.2.8.8   PidTagExchangeNTSecurityDescriptor

DAV property name: **http://schemas.microsoft.com/exchange/ntsecuritydescriptor**

Data type: **PtypBinary** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagExchangeNTSecurityDescriptor** property ([MS-OXPROPS] section 2.678) gets or sets the calculated **security descriptor** for the item. The security descriptor SHOULD contain the item's primary owner and group and a **discretionary access control list (DACL)** granting and denying various rights to particular users and groups. Clients MUST NOT manipulate the security descriptor directly.

2.2.8.9   PidTagFlatUrlName

DAV property name: **http://schemas.microsoft.com/exchange/permanenturl**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagFlatUrlName** property ([MS-OXPROPS] section 2.689) gets the unique identifier for an item across the message store. This value SHOULD NOT change as long as the item remains in the same Folder object. The **PidTagFlatUrlName** property contains the ID of the parent Folder object of the item, which changes when the item is moved to a different Folder object or deleted. Changing a property on an item SHOULD NOT change the **PidTagFlatUrlName** property and neither will adding more items to the Folder object with the same display name or message subject.

2.2.8.10   PidTagMessageClass

DAV property name: **http://schemas.microsoft.com/exchange/outlookmessageclass**

Data type: **PtypString** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagMessageClass** property ([MS-OXCMSG] section 2.2.1.3) gets or sets the type of Calendar object.

The **PidTagMessageClass** property is further specified in [MS-OXOCAL] section 2.2.2.1.

For more details about the **PidTagMessageClass** property, see [MS-OXPROPS] section 2.776.

2.2.8.11   PidTagMid

DAV property name: **http://schemas.microsoft.com/exchange/mid**

Data type: **PtypInteger64** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagMid** property ([MS-OXCFXICS] section 2.2.1.2.1) gets the message ID (MID), as specified in [MS-OXCDATA] section 2.2.1.2.

For more details about the **PidTagMid** property, see [MS-OXPROPS] section 2.790.

2.2.8.12   PidTagSensitivity

DAV property name: **http://schemas.microsoft.com/exchange/sensitivity**

Data type: **PtypInteger32** ([MS-OXCDATA] section 2.11.1.6)

The **PidTagSensitivity** property ([MS-OXPROPS] section 2.999) gets or sets message and appointment sensitivity. The following table lists valid values.

Description	Value
Normal	0
Personal	1
Private	2
Confidential	3

For more details about the **PidTagSensitivity** property, see [MS-OXCMSG] section 2.2.1.13.

3 Protocol Details

3.1 Client and Server Details

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 their external behavior is consistent with that described in this document.

Calendar: A WebDAV collection containing WebDAV resources that represent individual calendar events. A calendar collection can be conceptualized as a Folder object containing multiple calendar events. Both the collection and the resource have properties on them. A user can have multiple Calendar folders.

Recurrence: A recurring event is normally modeled as a single resource with properties that define the recurrence pattern. Exceptions to the recurrence pattern are also modeled as resources.

The recurrence pattern engine is modeled on the iCalendar Message-Based Interoperability Protocol, as specified in [RFC2447], and uses the **PidNameICalendarRecurrenceDate** ([MS-OXPROPS] section 2.441), **PidTagICalendarStartTime** (section 2.2.2.41), **PidNameICalendarRecurrenceRule** ([MS-OXPROPS] section 2.442), **PidNameCalendarExceptionDate** ([MS-OXPROPS] section 2.381), and **PidNameCalendarExceptionRule** ([MS-OXPROPS] section 2.382) properties from the urn:schemas:calendar: namespace to define a recurrence pattern.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Higher-Layer Triggered Events

3.1.4.1 Discovery

The client uses the **urn:schemas:httpmail:calendar** property to retrieve the URL of the user's main Calendar folder from the server.

3.1.4.2 Creating Calendar Objects

To create a Calendar object, the client uses the **POST** or **PUT** method, as specified in [RFC2518], to add a Calendar object to their Calendar folder.

When inviting other attendees, the client can check the other user's free/busy status to determine a meeting start and end time. The client then uses the **POST** or **PUT** method to add the Calendar object to the user's Folder object.

3.1.4.3 Changing Calendar Objects

To change a Calendar object, the client first retrieves the item using the **GET** method, as specified in [RFC2068] section 9.3, to retrieve the item stream, or the **PROPFIND** method, as specified in [RFC2518] section 8.1, or the **SEARCH** method, as specified in [MS-WDVSE], to retrieve a list of specific properties.

The client then submits the changed properties of the appointment using the **PUT** method, as specified in [RFC2518] section 8.7, to set the entire item stream, or the **PROPPATCH** method, as specified in [RFC2518] section 8.2, to set a list of specific properties.

3.1.4.4 Sending Meeting Requests

Clients use the **POST** or **PUT** method method, as specified in [RFC2518], to create new meeting requests. The value of the **DAV:contentclass** property, as specified in section 2.2.1.1, MUST be set to "urn:content-classes:calendarmessage" for the meeting request to appear in both the recipient's **Inbox folder** and Calendar folder. If the **DAV:contentclass** property is set to "urn:content-classes:appointment", then the meeting request only appears in the recipient's Inbox folder and not the recipient's Calendar folder as an appointment.

3.1.4.5 Calendar Delegation

ACLs, as specified in [RFC3744], are used to set calendar access **permissions** so that a user can allow another individual to read or write Calendar objects to their calendar.

3.1.4.6 Recurring Appointments

To determine whether an item is an appointment, clients and servers check the **DAV:contentclass** property, as specified in section 2.2.1.1. To determine whether an appointment is a recurring master or a recurrence exception, clients and servers check the **urn:schemas:calendar:instancetype** property, as specified in section 2.2.2.18. To determine what recurring master an exception is related to, search for all items that have the same **urn:schemas:calendar:uid** property value as the instance but have a **urn:schemas:calendar:instancetype** property value of "1".

The server agent SHOULD expand all recurring appointments. This means that every instance of a recurring item is a separate object in a Calendar folder; thus WebDAV can access each item individually. Properties on the item indicate whether it is a master event, an instance event, or a standalone event.

Note that this does not mean that the client SHOULD access each item individually in all cases. For example, to change the location of a recurring meeting for all recurrences, only the recurring master appointment needs to be changed. Clients can also add recurrences or exceptions that modify the recurrence master.

The server SHOULD perform recurrence expansion automatically when any request includes the recurrence begin date and end date in the **SEARCH** method query, as specified in [MS-WDVSE].

If clients do not want the server to expand recurrences, the client can use the **urn:schemas: calendar:instancetype** property to restrict queries. To retrieve only recurring master appointments, the client queries the Calendar folder for instancetype = "1".

To retrieve recurrence exception information, the client has to download the entire stream of the appointment master to see the details of the exception.

3.1.5   Message Processing Events and Sequencing Rules

The following section specifies extensions to the existing WebDAV methods specified in [RFC2518], [RFC2068], and [MS-WDVSE]. These methods SHOULD be processed as specified in [RFC2518], except for any exceptions specified in this section.

3.1.5.1   GET Method

Clients use the **GET** method, as specified in [RFC2518] section 8.4, to retrieve events from a Calendar folder.

3.1.5.1.1   Accept Header

The default format supported by the message store SHOULD be the iCalendar standard specified in [RFC2445].

3.1.5.2   POST Method

Clients use the **POST** method, as specified in [RFC2068] section 9.5, to add new Calendar objects or update existing Calendar objects in the Calendar folder.

3.1.5.3   PROPFIND Method

Clients use the **PROPFIND** method, as specified in [RFC2518] section 8.1, to retrieve one or more properties from the calendar collection or a resource item.

3.1.5.4   PROPPATCH Method

Clients use the **PROPPATCH** method, as specified in [RFC2518] section 8.2, to set one or more properties on the calendar collection or a resource item.

3.1.5.5   PUT Method

Clients use the **PUT** method, as specified in [RFC2518] section 8.7, to create new Calendar objects or update existing Calendar objects in the Calendar folder. To add new Calendar objects, another user, or a new resource, the **PUT** request is sent to the address for that user or resource's calendar. The **PidTagExchangeNTSecurityDescriptor** property ([MS-OXPROPS] section 2.678) is used to restrict access to Calendar folders for resources.

As specified in [RFC2518] section 8.7.2, the **PUT** method cannot be used to create new collections, only resources.

3.1.5.6   SEARCH Method

Clients use the **SEARCH** method, as specified in [MS-WDVSE], to list the contents of a Calendar folder. The content of the Folder object is returned as URLs.

3.1.6   Timer Events

None.

3.1.7   Other Local Events

None.

4   Protocol Examples

4.1   Creating a New Calendar Object

In the following example, the client connects to the server using WebDAV and uses the
PROPPATCH method, as described in [RFC2518] section 8.2, to create a new Calendar object.

```
PROPPATCH /exchange/administrator/calendar/meeting.eml HTTP/1.1
Content-type: text/xml
Translate: f

<?xml version="1.0"?>
<a:propertyupdate
      xmlns:a="DAV:"
      xmlns:c="urn:schemas:calendar:"
      xmlns:dt="urn:uuid:c2f41010-65b3-11d1-a29f-00aa00c14882/"
      xmlns:e="urn:schemas:httpmail:"
      xmlns:f="http://schemas.microsoft.com/exchange/"
      xmlns:j="urn:schemas:mailheader:" >
   <a:set>
      <a:prop>
         <e:textdescription>The body text</e:textdescription>
         <a:contentclass>urn:content-classes:appointment</a:contentclass>
         <f:outlookmessageclass>IPM.Appointment</f:outlookmessageclass>
         <c:busystatus>BUSY</c:busystatus>
         <c:dtstart dt:dt="dateTime.tz">2009-08-24T15:00:00.000Z</c:dtstart>
         <c:location>here</c:location>
         <j:subject>Simple meeting</j:subject>
         <c:duration dt:dt="int">1800</c:duration>
         <c:dtend dt:dt="dateTime.tz">2009-08-24T15:30:00.000Z</c:dtend>
      </>
   </>
</>
```

4.2   Discovering the Calendar Folder

4.2.1   Request

In the following example, the client connects to a calendar server using WebDAV and uses the
PROPFIND method, as described in [RFC2518] section 8.1, to retrieve the URL of the **sendmsg**
and Calendar folder.

```
PROPFIND /exchange/local HTTP/1.1
Content-Type: text/xml
Depth: 0

<?xml version="1.0" encoding="utf-8"?>
<a:propfind xmlns:a="DAV:">
    <a:prop xmlns:m="urn:schemas:httpmail:">
        <m:sendmsg />
        <m:calendar />
    </a:prop>
</a:propfind>
```

4.2.2 Response

In the response message, the value of the **d:calendar** property contains the URL for the Calendar folder.

```
HTTP/1.1 207 Multi-Status
Cache-Control: no-cache
Transfer-Encoding: chunked
Content-Type: text/xml
Accept-Ranges: rows
Server: Microsoft-IIS/7.0
MS-WebStorage: 08.01.10240
X-Powered-By: ASP.NET
Date: Fri, 19 Sep 2008 21:42:37 GMT
<?xml version="1.0"?>
<a:multistatus xmlns:b="urn:uuid:c2f41010-65b3-11d1-a29f-00aa00c14882/"
xmlns:d="urn:schemas:httpmail:" xmlns:c="xml:" xmlns:a="DAV:">
    <a:response>
        <a:href>https://SERVER01/exchange/local/</a:href>
        <a:propstat>
            <a:status>HTTP/1.1 200 OK</a:status>
            <a:prop>
                <d:sendmsg>https://SERVER01/exchange/local/%23%23DavMailSubmission
URI%23%23/</d:sendmsg>
                <d:calendar>https://SERVER01/exchange/local/Calendar</d:calendar>
            </a:prop>
        </a:propstat>
    </a:response>
</a:multistatus>
```

4.3   Retrieving the Contents of the Calendar Folder

4.3.1   Request

In the following example, the client uses the **SEARCH** method, as described in [MS-WDVSE], to retrieve the contents of the Calendar folder in the default iCalendar format, as described in [RFC2445].

```
SEARCH /exchange/local/Calendar HTTP/1.1
Content-Type: text/xml

<?xml version="1.0"?>
<g:searchrequest xmlns:g="DAV:">
    <g:sql>Select * FROM Scope('SHALLOW TRAVERSAL OF "/exchange/local/Calendar"')</g:sql>
</g:searchrequest>
```

4.3.2   Response

The response is returned as a set of properties providing the start and end times of three appointments:

▪   A recurring appointment on Mondays

- An appointment on Saturday

- An appointment on Friday

```
HTTP/1.1 207 Multi-Status
Cache-Control: no-cache
Transfer-Encoding: chunked
Content-Type: text/xml
Accept-Ranges: rows
Server: Microsoft-IIS/7.0
MS-WebStorage: 08.01.10240
X-Powered-By: ASP.NET
Date: Fri, 19 Sep 2008 21:47:30 GMT


<?xml version="1.0"?>
<a:multistatus xmlns:b="urn:uuid:c2f41010-65b3-11d1-a29f-00aa00c14882/"
xmlns:e="urn:schemas:httpmail:" xmlns:j="urn:schemas:mailheader:" xmlns:c="xml:"
xmlns:f="http://schemas.microsoft.com/exchange/" xmlns:i="urn:schemas-microsoft-
com:office:office" xmlns:k="http://schemas.microsoft.com/repl/"
xmlns:d="urn:schemas:calendar:" xmlns:g="urn:schemas:contacts:" xmlns:h="urn:schemas-
microsoft-com:exch-data:" xmlns:a="DAV:">
<!--Calendar configuration information has been removed from -->
<!--this example.-->
<!--The following is the information for the recurring -->
<!--Monday appointment-->
    <a:response>
        <a:href>https://SERVER01/exchange/local/Calendar/Recurring%20Monday%20Appt.EML
</a:href>
        <a:propstat>
            <a:status>HTTP/1.1 200 OK</a:status>
            <a:prop>
                <d:alldayevent b:dt="boolean">0</d:alldayevent>
                <e:textdescription>
                </e:textdescription>
                <a:contentclass>urn:content-classes:appointment</a:contentclass>
                <d:responserequested b:dt="boolean">1</d:responserequested>
                <a:supportedlock>
                    <lockentry xmlns="DAV:">
                        <locktype>
                            <transaction>
                                <groupoperation />
                            </transaction>
                        </locktype>
                        <lockscope>
                            <local />
                        </lockscope>
                    </lockentry>
                </a:supportedlock>
                <d:busystatus>BUSY</d:busystatus>
                <f:permanenturl>https://SERVER01/exchange/local/-FlatUrlSpace-
/1c5a707ee8157a47bfce2b746a3dba25-12c2720/878040245f8fd545a99a34a3d65eae4b-
12c0403</f:permanenturl>
                <a:getcontenttype>message/rfc822</a:getcontenttype>
                <a:id>AQEAAAABLCcgBAAAAAEsBAMAAAAA</a:id>
                <f:mid b:dt="i8">217347064827215876</f:mid>
                <d:uid>040000008200E00074C5B7101A82E0080000000090556E824E1AC9010000000
000000000100000001267AC06562E3A4EBA4627A617D09DE3</d:uid>
                <a:isfolder b:dt="boolean">0</a:isfolder>
                <a:resourcetype />
                <d:method>REQUEST</d:method>
```

```
                <a:getetag>"1c5a707ee8157a47bfce2b746a3dba250000012c30ab"</a:getetag>
                <d:timezone>BEGIN:VTIMEZONE TZID:GMT -0800 (Standard) / GMT -0700
(Daylight) BEGIN:STANDARD DTSTART:19671105T020000
RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=11 TZOFFSETFROM:-0700 TZOFFSETTO:-0800
END:STANDARD BEGIN:DAYLIGHT DTSTART:19670312T020000
RRULE:FREQ=YEARLY;BYDAY=2SU;BYMONTH=3 TZOFFSETFROM:-0800 TZOFFSETTO:-0700 END:DAYLIGHT
END:VTIMEZONE</d:timezone>
                <lockdiscovery xmlns="DAV:">
                </lockdiscovery>
                <f:outlookmessageclass>IPM.Appointment</f:outlookmessageclass>
                <a:creationdate b:dt="dateTime.tz">2008-09-
19T18:54:34.903Z</a:creationdate>
                <d:rrule b:dt="mv.string">
                    <c:v>FREQ=WEEKLY;INTERVAL=1;BYDAY=MO;WKST=SU</c:v>
                </d:rrule>
                <f:ntsecuritydescriptor
b:dt="bin.base64">CAAEAAAAAAABAC+MMAAAAEwAAAAAAAAAFAAAAAIAHAABAAAAAARAUAL8PHwABAQAAAAAA
BQcAAAAABBQAAAAAABRUAAAD0l0oajmNmy/EPr4pXBAAAAQUAAAAAAAUVAAAA9JdKGo5jZsvxD6+KAQIAAA==</
f:ntsecuritydescriptor>
                <d:lastmodified b:dt="dateTime.tz">2008-09-
19T18:54:34.903Z</d:lastmodified>
                <d:dtstart b:dt="dateTime.tz">2008-09-22T17:00:00.000Z</d:dtstart>
                <d:location>
                </d:location>
                <j:subject>Recurring Monday Appt</j:subject>
                <d:duration b:dt="int">3600</d:duration>
                <e:htmldescription>&lt;!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML
3.2//EN"&gt; &lt;HTML&gt; &lt;HEAD&gt; &lt;META NAME="Generator" CONTENT="MS Exchange
Server version 08.01.0240.003"&gt; &lt;TITLE&gt;Recurring Monday Appt&lt;/TITLE&gt;
&lt;/HEAD&gt; &lt;BODY&gt; &lt;!-- Converted from text/rtf format --&gt; &lt;P
DIR=LTR&gt;&lt;SPAN LANG="en-us"&gt;&lt;/SPAN&gt;&lt;/P&gt; &lt;/BODY&gt;
&lt;/HTML&gt;</e:htmldescription>
                <a:ishidden b:dt="boolean">0</a:ishidden>
                <a:parentname>https://SERVER01/exchange/local/Calendar/</a:parentname>
                <d:meetingstatus>TENTATIVE</d:meetingstatus>
                <e:subject>Recurring Monday Appt</e:subject>
                <a:getcontentlength b:dt="int">6735</a:getcontentlength>
                <e:normalizedsubject>Recurring Monday Appt</e:normalizedsubject>
                <a:isstructureddocument b:dt="boolean">0</a:isstructureddocument>
                <k:repl-uid>rid:878040245f8fd545a99a34a3d65eae4b0000012c0403</k:repl-
uid>
                <d:reminderoffset b:dt="int">900</d:reminderoffset>
                <a:displayname>Recurring Monday Appt.EML</a:displayname>
                <a:href>https://SERVER01/exchange/local/Calendar/Recurring%20Monday%20
Appt.EML</a:href>
                <a:isreadonly b:dt="boolean">0</a:isreadonly>
                <d:instancetype b:dt="int">1</d:instancetype>
                <a:uid>AQQAAAABLAQDAAAAAAAAAAAAAAA</a:uid>
                <a:getlastmodified b:dt="dateTime.tz">2008-09-
19T18:54:34.903Z</a:getlastmodified>
                <d:created b:dt="dateTime.tz">2008-09-19T18:54:34.903Z</d:created>
                <f:sensitivity b:dt="int">0</f:sensitivity>
                <d:dtend b:dt="dateTime.tz">2008-09-22T18:00:00.000Z</d:dtend>
                <e:hasattachment b:dt="boolean">0</e:hasattachment>
                <a:iscollection b:dt="boolean">0</a:iscollection>
                <e:read b:dt="boolean">1</e:read>
                <k:resourcetag>rt:878040245f8fd545a99a34a3d65eae4b0000012c04031c5a707e
e8157a47bfce2b746a3dba250000012c30ab</k:resourcetag>
                <e:priority b:dt="int">0</e:priority>
                <d:sequence b:dt="int">0</d:sequence>
            </a:prop>
```

```
                </a:propstat>    </a:response>
<!--The following is the information for the Saturday -->
<!--appointment-->
    <a:response>
        <a:href>https://SERVER01/exchange/local/Calendar/Sat%20Appt.EML</a:href>
        <a:propstat>
            <a:status>HTTP/1.1 200 OK</a:status>
            <a:prop>
                <d:alldayevent b:dt="boolean">0</d:alldayevent>
                <e:textdescription>
                </e:textdescription>
                <a:contentclass>urn:content-classes:appointment</a:contentclass>
                <d:responserequested b:dt="boolean">1</d:responserequested>
                <a:supportedlock>
                    <lockentry xmlns="DAV:">
                        <locktype>
                            <transaction>
                                <groupoperation />
                            </transaction>
                        </locktype>
                        <lockscope>
                            <local />
                        </lockscope>
                    </lockentry>
                </a:supportedlock>
                <d:busystatus>BUSY</d:busystatus>
                <f:permanenturl>https://SERVER01/exchange/local/-FlatUrlSpace-
/1c5a707ee8157a47bfce2b746a3dba25-12c2720/878040245f8fd545a99a34a3d65eae4b-
12c0402</f:permanenturl>
                <a:getcontenttype>message/rfc822</a:getcontenttype>
                <a:id>AQEAAAABLCcgBAAAAAEsBAIAAAAA</a:id>
                <f:mid b:dt="i8">145289470789287940</f:mid>
                <d:uid>040000008200E00074C5B7101A82E00800000000F0F4EF794E1AC9010000000
00000000010000000AF06C474E22DE94DAC2E6AF0E8AC2EA0</d:uid>
                <a:isfolder b:dt="boolean">0</a:isfolder>
                <a:resourcetype />
                <d:method>REQUEST</d:method>
                <a:getetag>"1c5a707ee8157a47bfce2b746a3dba250000012c30a9"</a:getetag>
                <lockdiscovery xmlns="DAV:">
                </lockdiscovery>
                <f:outlookmessageclass>IPM.Appointment</f:outlookmessageclass>
                <a:creationdate b:dt="dateTime.tz">2008-09-
19T18:54:29.169Z</a:creationdate>
                <f:ntsecuritydescriptor
b:dt="bin.base64">CAAEAAAAAAABAC+MMAAAAEwAAAAAAAAAFAAAAAIAHAABAAAAARAUAL8PHwABAQAAAAAA
BQcAAAABBQAAAAABRUAAAD0l0oajmNmy/EPr4pXBAAAAQUAAAAAAAUVAAAA9JdKGo5jZsvxD6+KAQIAAA==</
f:ntsecuritydescriptor>
                <d:lastmodified b:dt="dateTime.tz">2008-09-
19T18:54:29.169Z</d:lastmodified>
                <d:dtstart b:dt="dateTime.tz">2008-09-20T17:00:00.000Z</d:dtstart>
                <d:location>
                </d:location>
                <j:subject>Sat Appt</j:subject>
                <d:duration b:dt="int">3600</d:duration>
                <e:htmldescription>&lt;!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML
3.2//EN"&gt; &lt;HTML&gt; &lt;HEAD&gt; &lt;META NAME="Generator" CONTENT="MS Exchange
Server version 08.01.0240.003"&gt; &lt;TITLE&gt;Sat Appt&lt;/TITLE&gt; &lt;/HEAD&gt;
&lt;BODY&gt; &lt;!-- Converted from text/rtf format --&gt; &lt;P DIR=LTR&gt;&lt;SPAN
LANG="en-us"&gt;&lt;/SPAN&gt;&lt;/P&gt; &lt;/BODY&gt;
&lt;/HTML&gt;</e:htmldescription>
```

```
                    <a:ishidden b:dt="boolean">0</a:ishidden>
                    <a:parentname>https://SERVER01/exchange/local/Calendar/</a:parentname>
                    <d:meetingstatus>TENTATIVE</d:meetingstatus>
                    <e:subject>Sat Appt</e:subject>
                    <a:getcontentlength b:dt="int">6348</a:getcontentlength>
                    <e:normalizedsubject>Sat Appt</e:normalizedsubject>
                    <a:isstructureddocument b:dt="boolean">0</a:isstructureddocument>
                    <k:repl-uid>rid:878040245f8fd545a99a34a3d65eae4b0000012c0402</k:repl-
uid>
                    <d:reminderoffset b:dt="int">900</d:reminderoffset>
                    <a:displayname>Sat Appt.EML</a:displayname>
                    <a:href>https://SERVER01/exchange/local/Calendar/Sat%20Appt.EML</a:hre
f>
                    <a:isreadonly b:dt="boolean">0</a:isreadonly>
                    <d:instancetype b:dt="int">0</d:instancetype>
                    <a:uid>AQQAAAABLAQCAAAAAAAAAAAAAAAAA</a:uid>
                    <a:getlastmodified b:dt="dateTime.tz">2008-09-
19T18:54:29.169Z</a:getlastmodified>
                    <d:created b:dt="dateTime.tz">2008-09-19T18:54:29.169Z</d:created>
                    <f:sensitivity b:dt="int">0</f:sensitivity>
                    <d:dtend b:dt="dateTime.tz">2008-09-20T18:00:00.000Z</d:dtend>
                    <e:hasattachment b:dt="boolean">0</e:hasattachment>
                    <a:iscollection b:dt="boolean">0</a:iscollection>
                    <e:read b:dt="boolean">1</e:read>
                    <k:resourcetag>rt:878040245f8fd545a99a34a3d65eae4b0000012c04021c5a707e
e8157a47bfce2b746a3dba250000012c30a9</k:resourcetag>
                    <e:priority b:dt="int">0</e:priority>
                    <d:sequence b:dt="int">0</d:sequence>
                </a:prop>
            </a:propstat>
        </a:response>
    <!--The following is the information for the Friday -->
    <!--appointment-->
        <a:response>
            <a:href>https://SERVER01/exchange/local/Calendar/Friday%20Appt.EML</a:href>
            <a:propstat>
                <a:status>HTTP/1.1 200 OK</a:status>
                <a:prop>
                    <d:alldayevent b:dt="boolean">0</d:alldayevent>
                    <e:textdescription>
                    </e:textdescription>
                    <a:contentclass>urn:content-classes:appointment</a:contentclass>
                    <d:responserequested b:dt="boolean">1</d:responserequested>
                    <a:supportedlock>
                        <lockentry xmlns="DAV:">
                            <locktype>
                                <transaction>
                                    <groupoperation />
                                </transaction>
                            </locktype>
                            <lockscope>
                                <local />
                            </lockscope>
                        </lockentry>
                    </a:supportedlock>
                    <d:busystatus>BUSY</d:busystatus>
                    <f:permanenturl>https://SERVER01/exchange/local/-FlatUrlSpace-
/1c5a707ee8157a47bfce2b746a3dba25-12c2720/878040245f8fd545a99a34a3d65eae4b-
12c0401</f:permanenturl>
```

```xml
                <a:getcontenttype>message/rfc822</a:getcontenttype>
                <a:id>AQEAAAABLCcgBAAAAAEsBAEAAAAA</a:id>
                <f:mid b:dt="i8">73231876751360004</f:mid>
                <d:uid>040000008200E00074C5B7101A82E00800000000C0533E754E1AC9010000000
00000000010000000B7AB7A2E2A04F94F8B71655A3762DEEC</d:uid>
                <a:isfolder b:dt="boolean">0</a:isfolder>
                <a:resourcetype />
                <d:method>REQUEST</d:method>
                <a:getetag>"1c5a707ee8157a47bfce2b746a3dba250000012c30a5"</a:getetag>
                <lockdiscovery xmlns="DAV:">
                </lockdiscovery>
                <f:outlookmessageclass>IPM.Appointment</f:outlookmessageclass>
                <a:creationdate b:dt="dateTime.tz">2008-09-
19T18:54:15.997Z</a:creationdate>
                <f:ntsecuritydescriptor
b:dt="bin.base64">CAAEAAAAAAABAC+MMAAAAEwAAAAAAAAAFAAAAAIAHAABAAAAARAUAL8PHwABAQAAAAAA
BQcAAAABBQAAAAABRUAAAD0l0oajmNmy/EPr4pXBAAAAQUAAAAAAAUVAAAA9JdKGo5jZsvxD6+KAQIAAA==</
f:ntsecuritydescriptor>
                <d:lastmodified b:dt="dateTime.tz">2008-09-
19T18:54:15.997Z</d:lastmodified>
                <d:dtstart b:dt="dateTime.tz">2008-09-19T22:00:00.000Z</d:dtstart>
                <d:location>
                </d:location>
                <j:subject>Friday Appt</j:subject>
                <d:duration b:dt="int">3600</d:duration>
                <e:htmldescription>&lt;!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML
3.2//EN"&gt; &lt;HTML&gt; &lt;HEAD&gt; &lt;META NAME="Generator" CONTENT="MS Exchange
Server version 08.01.0240.003"&gt; &lt;TITLE&gt;Friday Appt&lt;/TITLE&gt;
&lt;/HEAD&gt; &lt;BODY&gt; &lt;!-- Converted from text/rtf format --&gt; &lt;P
DIR=LTR&gt;&lt;SPAN LANG="en-us"&gt;&lt;/SPAN&gt;&lt;/P&gt; &lt;/BODY&gt;
&lt;/HTML&gt;</e:htmldescription>
                <a:ishidden b:dt="boolean">0</a:ishidden>
                <a:parentname>https://SERVER01/exchange/local/Calendar/</a:parentname>
                <d:meetingstatus>TENTATIVE</d:meetingstatus>
                <e:subject>Friday Appt</e:subject>
                <a:getcontentlength b:dt="int">6351</a:getcontentlength>
                <e:normalizedsubject>Friday Appt</e:normalizedsubject>
                <a:isstructureddocument b:dt="boolean">0</a:isstructureddocument>
                <k:repl-uid>rid:878040245f8fd545a99a34a3d65eae4b0000012c0401</k:repl-
uid>
                <d:reminderoffset b:dt="int">900</d:reminderoffset>
                <a:displayname>Friday Appt.EML</a:displayname>
                <a:href>https://SERVER01/exchange/local/Calendar/Friday%20Appt.EML</a:
href>
                <a:isreadonly b:dt="boolean">0</a:isreadonly>
                <d:instancetype b:dt="int">0</d:instancetype>
                <a:uid>AQQAAAABLAQBAAAAAAAAAAAAAAAA</a:uid>
                <a:getlastmodified b:dt="dateTime.tz">2008-09-
19T18:54:15.997Z</a:getlastmodified>
                <d:created b:dt="dateTime.tz">2008-09-19T18:54:15.997Z</d:created>
                <f:sensitivity b:dt="int">0</f:sensitivity>
                <d:dtend b:dt="dateTime.tz">2008-09-19T23:00:00.000Z</d:dtend>
                <e:hasattachment b:dt="boolean">0</e:hasattachment>
                <a:iscollection b:dt="boolean">0</a:iscollection>
                <e:read b:dt="boolean">1</e:read>
                <k:resourcetag>rt:878040245f8fd545a99a34a3d65eae4b0000012c04011c5a707e
e8157a47bfce2b746a3dba250000012c30a5</k:resourcetag>
                <e:priority b:dt="int">0</e:priority>
                <d:sequence b:dt="int">0</d:sequence>
            </a:prop>
```

```
            </a:propstat>
        </a:response>
    </a:multistatus>
```

4.4   Retrieving the Contents of an Appointment

4.4.1   Request

In the following example, the client uses the **GET** method, as described in [RFC2518] section 8.4, to
retrieve the contents of a single appointment returned in the **SEARCH** method response,
/exchange/local/Calendar/Recurring%20Monday%20Appt.EML.

```
GET /exchange/local/Calendar/Recurring%20Monday%20Appt.EML HTTP/1.1
Translate: f
```

4.4.2   Response

The response is returned as a set of properties providing the properties set on the Calendar object.

```
HTTP/1.1 200 OK
Content-Length: 2930
Content-Type: message/rfc822
Last-Modified: Fri, 19 Sep 2008 18:54:34 GMT
Accept-Ranges: bytes
ETag: "1c5a707ee8157a47bfce2b746a3dba250000012c30ab"
Server: Microsoft-IIS/7.0
ResourceTag:
<rt:878040245f8fd545a99a34a3d65eae4b0000012c04031c5a707ee8157a47bfce2b746a3dba250000012c30ab>
MS-WebStorage: 08.01.10240
X-Powered-By: ASP.NET
Date: Fri, 19 Sep 2008 22:08:49 GMT


Received: by SERVER01.contoso.com
id <01C91A89.2ECD2D90@SERVER01.contoso.com>; Fri, 19 Sep 2008 11:54:45 -0700
Content-class: urn:content-classes:appointment
Subject: Recurring Monday Appt
Date: Fri, 19 Sep 2008 11:54:45 -0700
Message-ID: <878040245F8FD545A99A34A3D65EAE4B012C0403@SERVER01.contoso.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="----_=_NextPart_001_01C91A89.2ECD2D90"
X-MS-Has-Attach:
X-MS-TNEF-Correlator:
Thread-Topic: Recurring Monday Appt
Thread-Index: AckaiS7NHD0URXe6QTuC5WF9VAcG+g==
X-MimeOLE: Produced By Microsoft Exchange V8.1
From: "Brian Smith" <brian@contoso.com>

This is a multi-part message in MIME format.

------_=_NextPart_001_01C91A89.2ECD2D90
Content-Type: text/html;
charset="iso-8859-1"
```

```
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//EN">
<HTML>
<HEAD>
<META HTTP-EQUIV=3D"Content-Type" CONTENT=3D"text/html; =
charset=3Diso-8859-1">
<META NAME=3D"Generator" CONTENT=3D"MS Exchange Server version =
08.01.0240.003">
<TITLE>Recurring Monday Appt</TITLE>
</HEAD>
<BODY>
<!-- Converted from text/rtf format -->

<P DIR=3DLTR><SPAN LANG=3D"en-us"></SPAN></P>

</BODY>
</HTML>
------_=_NextPart_001_01C91A89.2ECD2D90
Content-class: urn:content-classes:appointment
Content-Type: text/calendar;
method=REQUEST;
charset="utf-8"
Content-Transfer-Encoding: 8bit

BEGIN:VCALENDAR
METHOD:REQUEST
PRODID:Microsoft CDO for Microsoft Exchange
VERSION:2.0
BEGIN:VTIMEZONE
TZID:GMT -0800 (Standard) / GMT -0700 (Daylight)
BEGIN:STANDARD
DTSTART:16010101T020000
TZOFFSETFROM:-0700
TZOFFSETTO:-0800
RRULE:FREQ=YEARLY;WKST=MO;INTERVAL=1;BYMONTH=11;BYDAY=1SU
END:STANDARD
BEGIN:DAYLIGHT
DTSTART:16010101T020000
TZOFFSETFROM:-0800
TZOFFSETTO:-0700
RRULE:FREQ=YEARLY;WKST=MO;INTERVAL=1;BYMONTH=3;BYDAY=2SU
END:DAYLIGHT
END:VTIMEZONE
BEGIN:VEVENT
DTSTAMP:20080919T220849Z
DTSTART;TZID="GMT -0800 (Standard) / GMT -0700 (Daylight)":20080922T100000
SUMMARY:Recurring Monday Appt
UID:040000008200E00074C5B7101A82E0080000000090556E824E1AC901000000000000000
 0100000001267AC06562E3A4EBA4627A617D09DE3
ORGANIZER;CN="Brian Smith":MAILTO:brian@contoso.com
LOCATION:
DTEND;TZID="GMT -0800 (Standard) / GMT -0700 (Daylight)":20080922T110000
RRULE:FREQ=WEEKLY;INTERVAL=1;BYDAY=MO;WKST=SU
DESCRIPTION:\N
SEQUENCE:0
PRIORITY:5
CLASS:
CREATED:20080919T185434Z
```

```
LAST-MODIFIED:20080919T185434Z
STATUS:TENTATIVE
TRANSP:OPAQUE
X-MICROSOFT-CDO-BUSYSTATUS:BUSY
X-MICROSOFT-CDO-INSTTYPE:1
X-MICROSOFT-CDO-INTENDEDSTATUS:BUSY
X-MICROSOFT-CDO-ALLDAYEVENT:FALSE
X-MICROSOFT-CDO-IMPORTANCE:1
X-MICROSOFT-CDO-OWNERAPPTID:-1
X-MICROSOFT-CDO-APPT-SEQUENCE:0
X-MICROSOFT-CDO-ATTENDEE-CRITICAL-CHANGE:20080919T185434Z
BEGIN:VALARM
ACTION:DISPLAY
DESCRIPTION:REMINDER
TRIGGER;RELATED=START:-PT00H15M00S
END:VALARM
END:VEVENT
END:VCALENDAR

------_=_NextPart_001_01C91A89.2ECD2D90--
```

4.5   Changing an Appointment Property Value

4.5.1   Request

In the following example, the client uses the **PROPPATCH** method, as described in [RFC2518] section 8.2, to change the properties on a Calendar object returned by the **GET** method in section 4.5.2.

```
PROPPATCH /exchange/local/Calendar/Recurring%20Monday%20Appt.EML HTTP/1.1
Content-type: text/xml

<?xml version="1.0"?>
<a:propertyupdate xmlns:a="DAV:" xmlns:c="urn:schemas:calendar:"
xmlns:ct="urn:schemas:contacts:" xmlns:r="http://schemas.microsoft.com/repl/"
xmlns:ex="http://schemas.microsoft.com/exchange/" xmlns:o="urn:schemas-microsoft-
com:office:office" xmlns:m="urn:schemas:httpmail:" xmlns:h="urn:schemas:mailheader:"
xmlns:dt="urn:uuid:c2f41010-65b3-11d1-a29f-00aa00c14882/">
    <a:set>
        <a:prop>
            <c:busystatus>FREE</c:busystatus>
        </a:prop>
    </a:set>
</a:propertyupdate>
```

4.5.2   Response

The response contains the status of the update and confirmation of the property updated.

```
HTTP/1.1 207 Multi-Status
Cache-Control: no-cache
Content-Length: 300
Content-Type: text/xml
```

```
Server: Microsoft-IIS/7.0
MS-Exchange-Permanent-URL: https://SERVER01/exchange/local/-FlatUrlSpace-
/1c5a707ee8157a47bfce2b746a3dba25-12c2720/878040245f8fd545a99a34a3d65eae4b-12c0403
Repl-UID: <rid:878040245f8fd545a99a34a3d65eae4b0000012c0403>
ResourceTag:
<rt:878040245f8fd545a99a34a3d65eae4b0000012c04031c5a707ee8157a47bfce2b746a3dba250000012c39c4>
MS-WebStorage: 08.01.10240
X-Powered-By: ASP.NET
Date: Fri, 19 Sep 2008 22:11:12 GMT

<?xml version="1.0"?>
<a:multistatus xmlns:b="urn:schemas:calendar:" xmlns:a="DAV:">
    <a:response>
        <a:href>https://SERVER01/exchange/local/Calendar/Recurring%20Monday%20Appt.EML</a:hre
f>
        <a:propstat>
            <a:status>HTTP/1.1 200 OK</a:status>
            <a:prop>
                <b:busystatus />
            </a:prop>
        </a:propstat>
    </a:response>
</a:multistatus>
```

5   Security

5.1   Security Considerations for Implementers

None.

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

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 2.2.2.36: Exchange 2003 and Exchange 2007 do not support the **RDATE** property.

<2> Section 2.2.7.19: The **PidLidDayInterval** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<3> Section 2.2.7.33: The **PidLidMonthInterval** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<4> Section 2.2.7.45: The **PidLidOptionalAttendees** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<5> Section 2.2.7.63: The **PidLidRequiredAttendees** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<6> Section 2.2.7.64: The **PidLidResourceAttendees** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<7> Section 2.2.7.66: The **PidLidStartRecurrenceDate** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<8> Section 2.2.7.67: The **PidLidStartRecurrenceTime** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<9> Section 2.2.7.71: The **PidLidWeekInterval** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

<10> Section 2.2.7.73: The **PidLidYearInterval** property is not used by Exchange 2003 or Exchange 2007. It is included for backward compatibility only.

7 Change Tracking

This section identifies changes that were made to the [MS-XWDCAL] protocol document between the February 2013 and July 2013 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.

- An extensive rewrite, addition, or deletion of major portions of content.

- The removal of a document from the documentation set.

- Changes made for template compliance.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the language and formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

Major and minor changes can be described further using the following change types:

- New content added.

- Content updated.

- Content removed.

- New product behavior note added.

- Product behavior note updated.

- Product behavior note removed.

- New protocol syntax added.

- Protocol syntax updated.

- Protocol syntax removed.

- New content added due to protocol revision.

- Content updated due to protocol revision.

- Content removed due to protocol revision.

- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.

- Protocol syntax removed due to protocol revision.

- New content added for template compliance.

- Content updated for template compliance.

- Content removed for template compliance.

- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated.**

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.

- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

The changes made to this document are listed in the following table. For more information, please contact protocol@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
1.1 Glossary	Removed "store" from the list of terms that are defined in [MS-OXGLOS].	N	Content updated.
1.1 Glossary	Added "message store" and "structured document" to the list of terms that are defined in [MS-OXGLOS].	N	Content updated.
1.4 Relationship to Other Protocols	Removed reference to [MS-XWDEXT].	N	Content updated.
2.2.1.4 PidNameDavIsStructuredDocument	Removed reference to [MS-XWDSTRUCTDOC].	N	Content updated.
2.2.1.4 PidNameDavIsStructuredDocument	Added a link to the glossary for the term "structured document".	N	Content updated.
2.2.3.8 PidTagRead	Removed reference to [MS-XWDMAIL] and added a reference to [MS-OXPROPS].	N	Content updated.
2.2.8.9 PidTagFlatUrlName	Removed reference to [MS-XWDEXT].	N	Content updated.
	Removed section 2.2.1.10 "PidTagSubFolder".	N	Content removed.
	Removed section 2.2.1.11 "PidTagUrlName".	N	Content removed.

Release: July 26, 2013

8 Index

Release: July 26, 2013

Release: July 26, 2013