

## [MS-XWDCAL]:

# Web Distributed Authoring and Versioning (WebDAV) Extensions for Calendar Support

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# 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 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

## 1.1 Glossary

This document uses the following terms:

**access control list (ACL):** A list of access control entries (ACEs) that collectively describe the security rules for authorizing access to some resource; for example, an object or set of objects.

**alias:** An alternate name that can be used to reference an object or element.

**ASCII:** The American Standard Code for Information Interchange (ASCII) is an 8-bit character-encoding scheme based on the English alphabet. ASCII codes represent text in computers, communications equipment, and other devices that work with text. ASCII refers to a single 8-bit ASCII character or an array of 8-bit ASCII characters with the high bit of each character set to zero.

**calendar:** A date range that shows availability, **meetings**, and appointments for one or more users or **resources**. See also **Calendar object**.

**Calendar folder:** A **Folder object** that contains **Calendar objects**.

**Calendar object:** A Message object that represents an event, which can be a one-time event or a recurring event. The Calendar object includes properties that specify event details such as description, organizer, date and time, and status.

**class:** User-defined binary data that is associated with a key.

**contact:** A presence entity (presentity) whose presence information can be tracked.

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

**delegate:** A user or resource that has permissions to act on behalf of another user or resource.

**discretionary access control list (DACL):** An **access control list (ACL)** that is controlled by the owner of an object and that specifies the access particular users or groups can have to the object.

**Exception Embedded Message object:** An Embedded Message object that contains the changes for an Exception object.

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

**free/busy status:** A property of an appointment that indicates how an appointment on the **calendar** of an attendee or resource affects their availability.



**header field:** A component of a Session Initiation Protocol (SIP) message header, as described in [\[RFC3261\]](#).

**Hypertext Markup Language (HTML):** An application of the Standard Generalized Markup Language (SGML) that uses tags to mark elements in a document, as described in [\[HTML\]](#).

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

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

**Inbox folder:** A special folder that is the default location for Message objects received by a user or resource.

**instance:** A unique publication of data for a category. It enables a publisher to publish data for the same category multiple times. An example is a publisher who uses two different endpoints to publish data. These endpoints can publish the same category. However, each endpoint requires a different instance number to be considered a distinct publication by the server. An instance number is provided by the publishing client.

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

**meeting:** An event with attendees.

**Meeting object:** A **Calendar object** that has both an organizer and attendees.

**meeting request:** An instance of a **Meeting Request object**.

**Meeting Request object:** A Message object that represents an invitation from the meeting organizer to an attendee.

**Meeting Response object:** A Message object that represents an attendee's response to a meeting organizer's invitation. The response indicates whether the attendee accepted, tentatively accepted, or declined the meeting request. The response can include a proposed new date or time for the meeting.

**Meeting Update object:** A Message object that represents a meeting organizer's changes to a previously scheduled meeting. The update is categorized as either a full update or an informational update.

**Meeting Workspace:** A website that is created by using the Meetings Web Services protocol, as described in [\[MS-MEETS\]](#). It can host documents, discussions, and other information about a meeting.

**meeting-related object:** A Message object that represents a relay of information between a meeting organizer and an attendee. It can be any of the following: **Meeting Request object**, **Meeting Update object**, Meeting Cancellation object, or **Meeting Response object**.

**message store:** A unit of containment for a single hierarchy of Folder objects, such as a mailbox or public folders.

**optional attendee:** An attendee of an event whom the organizer lists as an optional participant.

**organizer:** The owner or creator of a **meeting** or appointment.

**orphan instance:** An instance of an event that is in a **recurring series** and is in a Calendar folder without the recurring series. For all practical purposes, this is a single instance.

**Out of Office (OOO):** One of the possible values for the **free/busy status** on an appointment. It indicates that the user will not be in the office during the appointment.

**permission:** A rule that is associated with an object and that regulates which users can gain access to the object and in what manner. See also rights.

**plain text:** Text that does not have markup. See also plain text message body.

**property set:** A set of attributes, identified by a GUID. Granting access to a property set grants access to all the attributes in the set.

**public folder:** A **Folder object** that is stored in a location that is publicly available.

**recurrence pattern:** Information for a repeating event, such as the start and end time, the number of occurrences, and how occurrences are spaced, such as daily, weekly, or monthly.

**recurring series:** An event that repeats at specific intervals of time according to a recurrence pattern.

**reminder:** A generally user-visible notification that a specified time has been reached. A reminder is most commonly related to the beginning of a meeting or the due time of a task but it can be applied to any object type.

**required attendee:** An attendee of an event whom the organizer lists as a mandatory participant.

**resource:** Any component that a computer can access that can read, write, and process data. This includes internal components (such as a disk drive), a service, or an application running on and managed by the cluster on a network that is used to access a file.

**restriction:** A set of conditions that an item meets to be included in the search results that are returned by a query server in response to a search query.

**root folder:** The folder at the top of a hierarchy of folders in a list.

**security descriptor:** A data structure containing the security information associated with a securable object. A **security descriptor** identifies an object's owner by its security identifier (SID). If access control is configured for the object, its **security descriptor** contains a **discretionary access control list (DACL)** with SIDs for the security principals who are allowed or denied access. Applications use this structure to set and query an object's security status. The **security descriptor** is used to guard access to an object as well as to control which type of auditing takes place when the object is accessed. The **security descriptor** format is specified in [\[MS-DTYP\]](#) section 2.4.6; a string representation of **security descriptors**, called SDDL, is specified in [\[MS-DTYP\]](#) section 2.5.1.

**signal time:** The time at which a **reminder** has been specified to notify the user or an agent acting on behalf of the user. For example, the signal time for a meeting that starts at 11:00 A.M. can be 10:45 A.M., thus allowing the user 15 minutes to prepare for or travel to the meeting upon receiving the notification.

**Simple Mail Transfer Protocol (SMTP):** A member of the TCP/IP suite of protocols that is used to transport Internet messages, as described in [\[RFC5321\]](#).

**structured document:** A document that is internally composed of multiple streams that specify data for individual pieces of the document, such as style information, images, or embedded objects. The streams allow pieces of the document to be addressed and manipulated individually.

**Unicode:** A character encoding standard developed by the Unicode Consortium that represents almost all of the written languages of the world. The **Unicode** standard [\[UNICODE5.0.0/2007\]](#) provides three forms (UTF-8, UTF-16, and UTF-32) and seven schemes (UTF-8, UTF-16, UTF-16 BE, UTF-16 LE, UTF-32, UTF-32 LE, and UTF-32 BE).

**Uniform Resource Identifier (URI):** A string that identifies a resource. The URI is an addressing mechanism defined in Internet Engineering Task Force (IETF) Uniform Resource Identifier (URI): Generic Syntax [\[RFC3986\]](#).

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

**unsendable attendee:** An attendee to whom a **meeting request** or meeting update is not sent.

**Web Distributed Authoring and Versioning Protocol (WebDAV):** The Web Distributed Authoring and Versioning Protocol, as described in [\[RFC2518\]](#) or [\[RFC4918\]](#).

**WebDAV client:** A computer that uses **WebDAV**, as described in [\[RFC2518\]](#) or [\[RFC4918\]](#), to retrieve data from a **WebDAV server**.

**WebDAV server:** A computer that supports **WebDAV**, as described in [\[RFC2518\]](#) or [\[RFC4918\]](#), and responds to requests from **WebDAV clients**.

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

## 1.2 References

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

### 1.2.1 Normative References

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

[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-EXPROPS] 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>

[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>

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

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <https://www.rfc-editor.org/rfc/rfc2119.html>

[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.rfc-editor.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>

## 1.2.2 Informative References

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

[MS-EXPROTO] 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](#)".

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

[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.rfc-editor.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 2.417) 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 2.418) 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 2.419) 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 2.420) 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 2.421) 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 2.2.2.2.1) 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 2.611.

#### 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 2.612) 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) gets or sets a comment for the **Calendar object**.

For more details about the **PidTagComment** property, see [\[MS-OXPROPS\]](#) section 2.637.

## 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 2.380) 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 2.381) 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 2.382) 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 2.383) gets or sets the **URL** where contact information is accessible 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 2.384) 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 2.385) 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 2.386) 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 2.387) 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)

The **PidNameCalendarExceptionRule** property ([\[MS-OXPROPS\]](#) section 2.388) 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 2.389) 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 2.390) 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 2.391) 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 <b>meeting</b> .
1	A <b>recurring series</b> . 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 2.392) 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 2.393) 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 2.764).

### 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 2.394) 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 2.395) 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 2.396) 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 2.397) gets or sets the product that created the iCalendar-formatted stream. The iCalendar format is specified in [\[MS-OXCICAL\]](#).

This property corresponds to the **PROID** 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 2.398) 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 ([\[MS-OXCICAL\]](#) 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 2.399) 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 2.400) 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 2.401) 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 2.402) 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 2.386)
- The **PidNameICalendarRecurrenceDate** property ([\[MS-OXPROPS\]](#) section 2.447)
- The **PidNameICalendarRecurrenceRule** property ([\[MS-OXPROPS\]](#) section 2.448)
- The **PidNameCalendarExceptionDate** property ([\[MS-OXPROPS\]](#) section 2.387)
- The **PidNameCalendarExceptionRule** property ([\[MS-OXPROPS\]](#) section 2.388)

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 2.403) 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 2.404). 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 2.404) gets or sets the time zone identifier of an appointment or **meeting**.

This property SHOULD be ignored if the **PidNameCalendarTimeZone** property ([\[MS-OXPROPS\]](#) section 2.403) 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, Istanbul, 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)

Property value name	Value	Description
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)
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)

Property value name	Value	Description
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 2.405) 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 2.406) 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 2.407) 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 2.441) 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 2.392) 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 2.447) 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)

The **PidNameICalendarRecurrenceRule** property ([\[MS-OXPROPS\]](#) section 2.448) 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 2.630) 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 2.402) 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 2.398) 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 2.734) gets or sets the date and time when the appointment or **meeting** ends.

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 2.735) 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 2.736) 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 ([\[MS-OXCMMSG\]](#) 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 2.764.

### 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 2.930) 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 [\[MS-OXCMMSG\]](#).

### 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 2.444) 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 2.445) 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 2.446) 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 2.618.

### 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 2.716.

### 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 2.812.

### 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 2.871.

### 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 2.878) 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 2.1033) 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 2.449) 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 2.449) gets or sets the subject of the message. This property differs from the **PidTagSubject** property ([\[MS-OXPROPS\]](#) section 2.1033) 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)

The **PidNameExchDatabaseSchema** property ([\[MS-OXPROPS\]](#) section 2.431) 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 2.433) 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)

The **PidNameExchDataExpectedContentClass** property ([\[MS-OXPROPS\]](#) section 2.432) 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 2.433), and **PidNameExchDatabaseSchema** ([\[MS-OXPROPS\]](#) section 2.431) 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 2.433) 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)

The **PidNameKeywords** property ([\[MS-OXPROPS\]](#) section 2.451) 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](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](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](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](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 whether 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](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](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
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/remindertimetype>**

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 start date of the **recurrence pattern**.[<7>](#) The value of this property is interpreted as follows:

- Bits 0-4 represent the day
- Bits 5-8 represent the month
- Bits 9-31 represent the year

### 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>](#) The value of this property is interpreted as follows:

- Bits 0-5 represent the seconds
- Bits 6-11 represent the minutes
- Bits 12-16 represent the hours

### 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 2.682.

#### 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 2.856.

### 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 2.930) 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 2.392) 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 2.1025) 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 2.424) 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 2.426) 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 2.427) 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 2.428) 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 2.429) 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 2.430) 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 2.642.

### 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 2.687) 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 2.698) 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 2.787.

### 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 2.801.

### 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 2.1010) 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 2.447), **PidTagICalendarStartTime** (section [2.2.2.41](#)), **PidNameICalendarRecurrenceRule** ([\[MS-OXPROPS\]](#) section 2.448), **PidNameCalendarExceptionDate** ([\[MS-OXPROPS\]](#) section 2.387), and **PidNameCalendarExceptionRule** ([\[MS-OXPROPS\]](#) section 2.388) 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, 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 2.687) 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:bustatus>BUSY</c:bustatus>
      <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>
    </a:prop>
  </a:set>
</a:propertyupdate>
```

### 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>AQEAAAABLCCgBAAAAAEsBAMAAAA</a:id>
        <f:mid b:dt="i8">217347064827215876</f:mid>

        <d:uid>040000008200E00074C5B7101A82E008000000090556E824E1AC90100000000000000100000001267AC
06562E3A4EBA4627A617D09DE3</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">CAAEAAAAAAAAABAC+MMAAAAEwAAAAAAAAAFAAAAIAHAABAAAAAARAUAL8PhWABAQAAAAABQcAAAA
BBQAAAAABRUAAAD0l0oajmNmy/EPr4pXBAAAQUAAAAAAAAUVA9JdKG05jZsvxD6+KAQIAAA= </f:ntsecurityde
scriptor>
        <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">
&lt;HTML&gt; &lt;HEAD&gt; &lt;META NAME="Generator" CONTENT="MS Exchange Server version
08.01.0240.003"> &lt;TITLE&gt;Recurring Monday Appt&lt;/TITLE&gt; &lt;/HEAD&gt;
&lt;BODY&gt; &lt;!-- Converted from text/rtf format --> &lt;P DIR=LTR&gt;&lt;SPAN
LANG="en-us">&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%20Appt.EML</a:href>
<a:isreadonly b:dt="boolean">0</a:isreadonly>
<d:instancetype b:dt="int">1</d:instancetype>
<a:uid>AQQAAAABLAQDAAAAAAAAAAAAAAAAAA</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:878040245f8fd545a99a34a3d65eae4b0000012c04031c5a707ee8157a47bfce2b746a3dba2
50000012c30ab</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>AQEAAAABLCcgBAAAAEsBAIAAAAA</a:id>

```

```

</f:mid b:dt="i8">145289470789287940</f:mid>

<d:uid>040000008200E00074C5B7101A82E0080000000F0F4EF794E1AC90100000000000000010000000AF06C4
74E22DE94DAC2E6AF0E8AC2EA0</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">CAAEAAAAAAAAABAC+MMAAAAEwAAAAAAAAFAAAAAIAHAABAAAAAARAUAL8PHwABAQAAAAABQcAAAA
BBQAAAAABRUAAAD01oajmNmy/EPr4pXBAAAQUAAAAAAAAUVA9JdKG05jZsvxD6+KAQIAAA==</f:ntsecurityde
scriptor>
    <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">
    &lt;HTML&gt; &lt;HEAD&gt; &lt;META NAME="Generator" CONTENT="MS Exchange Server version
08.01.0240.003"> &lt;TITLE&gt;Sat Appt&lt;/TITLE&gt; &lt;/HEAD&gt; &lt;BODY&gt; &lt;!--
Converted from text/rtf format --> &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:href>
    <a:isreadonly b:dt="boolean">0</a:isreadonly>
    <d:instancetype b:dt="int">0</d:instancetype>
    <a:uid>AQQAABLAQCAAAAAAAAAAAAAAAAAA</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:878040245f8fd545a99a34a3d65eae4b0000012c04021c5a707ee8157a47bfce2b746a3dba2
50000012c30a9</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>
<a:getcontenttype>message/rfc822</a:getcontenttype>
<a:id>AQEAAAABLCCgBAAAAAEsBAEAAAAA</a:id>
<f:mid b:dt="i8">73231876751360004</f:mid>

<d:uid>040000008200E00074C5B7101A82E00800000000C0533E754E1AC90100000000000000010000000B7AB7A
2E2A04F94F8B71655A3762DEEC</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">CAAEAAAAAABAC+MMAAAAEwAAAAAAAFAAAAAIAHAABAAAAARAUAL8PHWABAQAAAAABQCAAAA
BBQAAAAABRUAAAD010oajmNmy/EPr4pXBAAAAQUAAAAAAUVAAAA9JdKG05jZsvxD6+KAQIAAA==</f:ntsecurityde
scriptor>
  <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">
&lt;HTML&gt; &lt;HEAD&gt; &lt;META NAME="Generator" CONTENT="MS Exchange Server version
08.01.0240.003"> &lt;TITLE&gt;Friday Appt&lt;/TITLE&gt; &lt;/HEAD&gt; &lt;BODY&gt; &lt;!--
Converted from text/rtf format --> &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>AQQAAAABLAQBAAAAAAAAAAAAAAAAA</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>
  <a:hasattachment b:dt="boolean">0</a:hasattachment>
  <a:iscollection b:dt="boolean">0</a:iscollection>
  <e:read b:dt="boolean">1</e:read>

```

```

<k:resourcetag>rt:878040245f8fd545a99a34a3d65eae4b0000012c04011c5a707ee8157a47bfce2b746a3dba2
50000012c30a5</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:040000008200E00074C5B7101A82E0080000000090556E824E1AC9010000000000000000
01000000001267AC06562E3A4EBA4627A617D09DE3
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:href>
    <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 updates to those products.

- Microsoft Exchange Server 2003
- Microsoft Exchange Server 2007

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

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

<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

No table of changes is available. The document is either new or has had no changes since its last release.

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