**[MS-OXCICAL]:**

**iCalendar to Appointment Object Conversion Algorithm**

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**Revision Summary**

| Date | Revision History | Revision Class | Comments |
| --- | --- | --- | --- |
| 4/4/2008 | 0.1 | New | Initial Availability. |
| 4/25/2008 | 0.2 | Minor | Revised and updated property names and other technical content. |
| 6/27/2008 | 1.0 | Major | Initial Release. |
| 8/6/2008 | 1.01 | Minor | Revised and edited technical content. |
| 9/3/2008 | 1.02 | Minor | Revised and edited technical content. |
| 10/1/2008 | 1.03 | Minor | Revised and edited technical content. |
| 12/3/2008 | 1.04 | Minor | Updated IP notice. |
| 3/4/2009 | 1.05 | Minor | Revised and edited technical content. |
| 4/10/2009 | 2.0 | Major | Updated technical content and applicable product releases. |
| 7/15/2009 | 3.0 | Major | Revised and edited for technical content. |
| 11/4/2009 | 4.0.0 | Major | Updated and revised the technical content. |
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| 8/4/2010 | 4.2 | Minor | Clarified the meaning of the technical content. |
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# Introduction

The iCalendar file format, as described in [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504), describes an extensible text structure that is capable of serializing a wide variety of calendar data, including [**meeting requests**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0), task items, [**free/busy status**](#gt_dd9c906a-450c-42ba-a3eb-468d568ee1b4), and exported calendars.

The iCalendar to Appointment Object Conversion Algorithm describes how applications can import appointments in the iCalendar file format to a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18), as described in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1), and export Calendar objects to appointments in the iCalendar file format.

Sections 1.6 and 2 of this specification are normative. All other sections and examples in this specification are informative.

## Glossary

This document uses the following terms:

**address book**: A collection of [**Address Book objects**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633), each of which are contained in any number of address lists.

**Address Book object**: An entity in an [**address book**](#gt_d16f7b78-c5a6-48f4-9e0f-3b205b5598b5) that contains a set of attributes, each attribute with a set of associated values.

**Attachment object**: A set of properties that represents a file, [**Message object**](#gt_b6c15d0c-d992-421d-ba96-99d3b63894cf), or structured storage that is attached to a Message object and is visible through the [**attachments table**](#gt_84534866-2990-4b91-80bc-c90655ee3f9c) for a Message object.

**attachments table**: A Table object whose rows represent the [**Attachment objects**](#gt_6ab4cacc-0e1a-4843-b9e5-4f1fee5a695a) that are attached to a [**Message object**](#gt_b6c15d0c-d992-421d-ba96-99d3b63894cf).

**Augmented Backus-Naur Form (ABNF)**: A modified version of Backus-Naur Form (BNF), commonly used by Internet specifications. ABNF notation balances compactness and simplicity with reasonable representational power. ABNF differs from standard BNF in its definitions and uses of naming rules, repetition, alternatives, order-independence, and value ranges. For more information, see [[RFC5234]](https://go.microsoft.com/fwlink/?LinkId=123096).

**base64 encoding**: A binary-to-text encoding scheme whereby an arbitrary sequence of bytes is converted to a sequence of printable ASCII characters, as described in [[RFC4648]](https://go.microsoft.com/fwlink/?LinkId=90487).

**binary large object (BLOB)**: A discrete packet of data that is stored in a database and is treated as a sequence of uninterpreted bytes.

**calendar**: A date range that shows availability, [**meetings**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94), and appointments for one or more users or resources. See also [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18).

**Calendar object**: A [**Message object**](#gt_b6c15d0c-d992-421d-ba96-99d3b63894cf) 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.

**code page**: An ordered set of characters of a specific script in which a numerical index (code-point value) is associated with each character. Code pages are a means of providing support for character sets and keyboard layouts used in different countries. Devices such as the display and keyboard can be configured to use a specific code page and to switch from one code page (such as the United States) to another (such as Portugal) at the user's request.

**common name (CN)**: A string attribute of a certificate that is one component of a distinguished name (DN). In Microsoft Enterprise uses, a CN must be unique within the forest where it is defined and any forests that share trust with the defining forest. The website or email address of the certificate owner is often used as a common name. Client applications often refer to a certification authority (CA) by the CN of its signing certificate.

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

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

**counter proposal**: A request that an attendee sends to an [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) when requesting a change to the date or time of a meeting.

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

**floating**: A time that is interpreted in an observer's location and does not necessarily translate into the same [**Coordinated Universal Time (UTC)**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time in different locations, as described in [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504). For example, a reminder for an appointment that starts at 1/1/2008 at 2:00 P.M. floating time would signal two hours earlier in Athens than in London.

**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**](#gt_7204b2ed-dcef-4434-be15-6451f92d03fb) of an attendee or resource affects their availability.

**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]](https://go.microsoft.com/fwlink/?LinkId=89880).

**meeting**: An event with attendees.

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

**Meeting Workspace**: A website that is created by using the Meetings Web Services protocol, as described in [[MS-MEETS]](%5bMS-MEETS%5d.pdf#Section_18cd333c37a94c32ab22b6d741ba55d9). It can host documents, discussions, and other information about a meeting.

**Message object**: A set of properties that represents an email message, appointment, contact, or other type of personal-information-management object. In addition to its own properties, a Message object contains recipient properties that represent the addressees to which it is addressed, and an [**attachments table**](#gt_84534866-2990-4b91-80bc-c90655ee3f9c) that represents any files and other Message objects that are attached to it.

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

**MIME message**: A message that is as described in [[RFC2045]](https://go.microsoft.com/fwlink/?LinkId=90307), [[RFC2046]](https://go.microsoft.com/fwlink/?LinkId=90308), and [[RFC2047]](https://go.microsoft.com/fwlink/?LinkId=90309).

**MIME part**: A message part that is as described in [RFC2045], [RFC2046], and [RFC2047].

**Multipurpose Internet Mail Extensions (MIME)**: A set of extensions that redefines and expands support for various types of content in email messages, as described in [RFC2045], [RFC2046], and [RFC2047].

**one-off EntryID**: A special address object EntryID that encapsulates electronic address information, as described in [[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8).

**organizer**: The owner or creator of a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) or appointment.

**primary calendar**: The [**calendar**](#gt_7204b2ed-dcef-4434-be15-6451f92d03fb) that contains free/busy information for a specific user or resource. It enables a user or resource to schedule their appointments and other types of events, and the [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) within it are used to process and respond to meeting requests.

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

**recipient table**: The part of a [**Message object**](#gt_b6c15d0c-d992-421d-ba96-99d3b63894cf) that represents users to whom a message is addressed. Each row of the table is a set of properties that represents one recipient.

**recurrence part**: A name/value pair in a property of type Recurrence Rule, as described in [RFC2445].

**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 Calendar object**: A [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that describes an event that repeats 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.

**Rich Text Format (RTF)**: Text with formatting as described in [[MSFT-RTF]](https://go.microsoft.com/fwlink/?LinkId=120924).

**signal time**: The time at which a [**reminder**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a) 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]](https://go.microsoft.com/fwlink/?LinkId=144740).

**Unicode**: A character encoding standard developed by the Unicode Consortium that represents almost all of the written languages of the world. The [**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) standard [[UNICODE5.0.0/2007]](https://go.microsoft.com/fwlink/?LinkId=154659) 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]](https://go.microsoft.com/fwlink/?LinkId=90453).

**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]](https://go.microsoft.com/fwlink/?LinkId=90287).

**Web Distributed Authoring and Versioning Protocol (WebDAV)**: The Web Distributed Authoring and Versioning Protocol, as described in [[RFC2518]](https://go.microsoft.com/fwlink/?LinkId=90363) or [[RFC4918]](https://go.microsoft.com/fwlink/?LinkId=151240).

**week independent**: A BYDAY [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) that does not specify any week numbers.

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as defined in [[RFC2119]](https://go.microsoft.com/fwlink/?LinkId=90317). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 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](https://go.microsoft.com/fwlink/?linkid=850906).

### Normative References

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

[MS-DTYP] Microsoft Corporation, "[Windows Data Types](%5bMS-DTYP%5d.pdf#Section_cca2742956894a16b2b49325d93e4ba2)".

[MS-LCID] Microsoft Corporation, "[Windows Language Code Identifier (LCID) Reference](%5bMS-LCID%5d.pdf#Section_70feba9f294e491eb6eb56532684c37f)".

[MS-OXCDATA] Microsoft Corporation, "[Data Structures](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8)".

[MS-OXCMAIL] Microsoft Corporation, "[RFC 2822 and MIME to Email Object Conversion Algorithm](%5bMS-OXCMAIL%5d.pdf#Section_b60d48db183f4bf5a908f584e62cb2d4)".

[MS-OXOABK] Microsoft Corporation, "[Address Book Object Protocol](%5bMS-OXOABK%5d.pdf#Section_f4cf9b4c923245069e712270de217614)".

[MS-OXOCAL] Microsoft Corporation, "[Appointment and Meeting Object Protocol](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1)".

[MS-OXPROPS] Microsoft Corporation, "[Exchange Server Protocols Master Property List](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148)".

[MS-OXRTFCP] Microsoft Corporation, "[Rich Text Format (RTF) Compression Algorithm](%5bMS-OXRTFCP%5d.pdf#Section_65dfe2df1b6943fc8ebd21819a7463fb)".

[MS-OXRTFEX] Microsoft Corporation, "[Rich Text Format (RTF) Extensions Algorithm](%5bMS-OXRTFEX%5d.pdf#Section_411d0d5849f7496cb8c35859b045f6cf)".

[RFC1766] Alvestrand, H., "Tags for the Identification of Languages", RFC 1766, March 1995, [https://www.rfc-editor.org/info/rfc1766](https://go.microsoft.com/fwlink/?LinkId=120475)

[RFC2045] Freed, N., and Borenstein, N., "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996, [https://www.rfc-editor.org/info/rfc2045](https://go.microsoft.com/fwlink/?LinkId=90307)

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, [https://www.rfc-editor.org/info/rfc2119](https://go.microsoft.com/fwlink/?LinkId=90317)

[RFC2368] Hoffman, P., Masinter, L., and Zawinski, J., "The mailto URL scheme", RFC 2368, July 1998, [http://www.rfc-editor.org/rfc/rfc2368.txt](https://go.microsoft.com/fwlink/?LinkId=113487)

[RFC2392] Levinson, E., "Content-ID and Message-ID Uniform Resource Locators", RFC 2392, August 1998, [http://www.rfc-editor.org/rfc/rfc2392.txt](https://go.microsoft.com/fwlink/?LinkId=193298)

[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](https://go.microsoft.com/fwlink/?LinkId=112504)

[RFC2446] Silverberg, S., Mansour, S., Dawson, F., and Hopson, R., "iCalendar Transport-Independent Interoperability Protocol (iTIP) Scheduling Events, BusyTime, To-Dos, and Journal Entries", RFC 2446, November 1998, [http://www.ietf.org/rfc/rfc2446.txt](https://go.microsoft.com/fwlink/?LinkId=90354)

[RFC3986] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, January 2005, [https://www.rfc-editor.org/info/rfc3986](https://go.microsoft.com/fwlink/?LinkId=90453)

[RFC5234] Crocker, D., Ed., and Overell, P., "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008, [https://www.rfc-editor.org/info/rfc5234](https://go.microsoft.com/fwlink/?LinkId=123096)

[UNICODE5.1] The Unicode Consortium, "The Unicode Standard, Version 5.1.0, defined by: The Unicode Standard, Version 5.0 (Boston, MA, Addison-Wesley, 2007. ISBN 0-321-48091-0), as amended by Unicode 5.1.0", [http://www.unicode.org/versions/Unicode5.1.0/](https://go.microsoft.com/fwlink/?LinkId=152822)

### Informative References

[MS-OXCMSG] Microsoft Corporation, "[Message and Attachment Object Protocol](%5bMS-OXCMSG%5d.pdf#Section_7fd7ec40deec4c0694931bc06b349682)".

[MS-OXOMSG] Microsoft Corporation, "[Email Object Protocol](%5bMS-OXOMSG%5d.pdf#Section_daa9120ff3254afba73828f91049ab3c)".

[MS-OXPROTO] Microsoft Corporation, "[Exchange Server Protocols System Overview](%5bMS-OXPROTO%5d.pdf#Section_734ab967e43e425babe1974af56c0283)".

[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](https://go.microsoft.com/fwlink/?LinkId=193299)

## Overview

This algorithm enables the iCalendar file format to be used by a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) application, as described in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1), to communicate with other calendaring systems over transports that do not support Calendar objects. More specifically, the algorithm enables iCalendar data to be imported into a Calendar object and Calendar objects to be exported as iCalendar data.

## Relationship to Protocols and Other Algorithms

This algorithm enables a mapping between the iCalendar file format (as described in [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504)) and a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) (as described in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1)), which can be updated and sent using the protocols described in [[MS-OXCMSG]](%5bMS-OXCMSG%5d.pdf#Section_7fd7ec40deec4c0694931bc06b349682) and [[MS-OXOMSG]](%5bMS-OXOMSG%5d.pdf#Section_daa9120ff3254afba73828f91049ab3c).

When used as a [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0), the iCalendar file format can be embedded as a [**MIME**](#gt_af6ba277-34c1-493d-8103-71d2af36ce30) part in an e-mail as described in [[RFC2447]](https://go.microsoft.com/fwlink/?LinkId=193299) and [[MS-OXCMAIL]](%5bMS-OXCMAIL%5d.pdf#Section_b60d48db183f4bf5a908f584e62cb2d4).

For conceptual background information and overviews of the relationships and interactions between this and other protocols, see [[MS-OXPROTO]](%5bMS-OXPROTO%5d.pdf#Section_734ab967e43e425babe1974af56c0283).

## Applicability Statement

This algorithm is applicable for scenarios where [**calendar**](#gt_7204b2ed-dcef-4434-be15-6451f92d03fb) data needs to be transported between a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) source and a non-Calendar object or indeterminate destination. This algorithm is best avoided if 100 percent fidelity is required when transporting calendar data between a Calendar object source and a Calendar object destination.

## Standards Assignments

None.

# Algorithm Details

## Common Algorithm Details

The structure of the iCalendar text stream is specified in [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.1.

### Abstract Data Model

None.

### Initialization

None.

### Processing Rules

Section [2.1.3.1](#Section_bfe3eaaa0c4146179aef70ce608a90c3) specifies over 100 components, properties, and parameters that can be converted between the iCalendar and Calendar object. The following table provides recommendations regarding the actual relevance of each component, property, and parameter to the scenarios defined by five values of the METHOD property: 'PUBLISH' (PUB), 'REQUEST' (REQ), 'REPLY' (REP), 'COUNTER' (COU), and 'CANCEL' (CAN) (as specified in [[RFC2446]](https://go.microsoft.com/fwlink/?LinkId=90354)).

For clarity, 'No's are represented by a blank space. The '•' symbol is used to indicate hierarchy placement.

| Component/Property/Parameter | Section | PUB | REQ | REP | COU | CAN |
| --- | --- | --- | --- | --- | --- | --- |
| **VCALENDAR** | [2.1.3.1.1](#Section_e7a90cf6fd814dfd8deebcbde9c4fe05) | Yes | Yes | Yes | Yes | Yes |
| • **METHOD** | [2.1.3.1.1.1](#Section_7befe35d0652447fa780d5fd5b879d38) | Yes | Yes | Yes | Yes | Yes |
| • **PRODID** | [2.1.3.1.1.2](#Section_9fafdc54b0e44692a8f94919878036a1) | Yes | Yes | Yes | Yes | Yes |
| • **VERSION** | [2.1.3.1.1.3](#Section_bd4fa40b73cc43d9aaba4732177ea13c) | Yes | Yes | Yes | Yes | Yes |
| • **X-CALEND** | [2.1.3.1.1.4](#Section_e8432ac90c544a008597119fb10038d1) | Yes |  |  |  |  |
| • • **TZID** | [2.1.3.1.1.4.1](#Section_3b90d6765c0b4c3badaeab855e1a44a2) | Yes |  |  |  |  |
| • **X-CALSTART** | [2.1.3.1.1.5](#Section_6868088dd3d041fa806c4d536cd4211c) | Yes |  |  |  |  |
| • • **TZID** | [2.1.3.1.1.5.1](#Section_d2fe13248f884378bbc2688fc92c05e5) | Yes |  |  |  |  |
| • **X-CLIPEND** | [2.1.3.1.1.6](#Section_ad2b396315804af3851865e81fed486d) | Yes |  |  |  |  |
| • • **TZID** | [2.1.3.1.1.6.1](#Section_a29bc546078044cfad7ca77a975c9cc2) | Yes |  |  |  |  |
| • **X-CLIPSTART** | [2.1.3.1.1.7](#Section_a9a97a6f62124d1d8c0bc034607e5d9b) | Yes |  |  |  |  |
| • • **TZID** | [2.1.3.1.1.7.1](#Section_eb070f927035476db9b6de5fc09bbe75) | Yes |  |  |  |  |
| • **X-MICROSOFT-CALSCALE** | [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac) | Yes | Yes | Yes | Yes | Yes |
| • **X-MS-OLK-FORCEINSPECTOROPEN** | [2.1.3.1.1.9](#Section_d2a0a07902a646439e780ac35998e1fb) | Yes |  |  |  |  |
| • **X-MS-WKHRDAYS** | [2.1.3.1.1.10](#Section_6dcab54704074a5393633e36db766dc1) | Yes |  |  |  |  |
| • **X-MS-WKHREND** | [2.1.3.1.1.11](#Section_fd33fb9e24844f8f80d718fc7d0bd5c0) | Yes |  |  |  |  |
| • • **TZID** | [2.1.3.1.1.11.1](#Section_ff8674ad6eb6471ebb33bdde28fbeb9b) | Yes |  |  |  |  |
| • **X-MS-WKHRSTART** | [2.1.3.1.1.12](#Section_01142c526d734ea9b23d1c8cf295a232) | Yes |  |  |  |  |
| • • **TZID** | [2.1.3.1.1.12.1](#Section_c323562b70814f3b9d909d6662385ba0) | Yes |  |  |  |  |
| • **X-OWNER** | [2.1.3.1.1.13](#Section_8ec5359ef1234520849fda8799189066) | Yes |  |  |  |  |
| • • **CN** | [2.1.3.1.1.13.1](#Section_d8229e04e77943e898c9349d724b60aa) | Yes |  |  |  |  |
| • **X-PRIMARY-CALENDAR** | [2.1.3.1.1.14](#Section_be3601fd440045feac05399a94369981) | Yes |  |  |  |  |
| • **X-PUBLISHED-TTL** | [2.1.3.1.1.15](#Section_1fc7b244ecd14d28ac0c2bb4df855a1f) | Yes |  |  |  |  |
| • **X-WR-CALDESC** | [2.1.3.1.1.16](#Section_9194db936de241b3bebefc76a11e31e9) | Yes |  |  |  |  |
| • **X-WR-CALNAME** | [2.1.3.1.1.17](#Section_1da58449b97e46bdb018a1ce576f3e6d) | Yes |  |  |  |  |
| • **X-WR-RELCALID** | [2.1.3.1.1.18](#Section_3ef9f6060d634e56a86d73617afa7383) | Yes |  |  |  |  |
| • **VTIMEZONE** | [2.1.3.1.1.19](#Section_65e61fa3de85403082451054e27208f7) | Yes | Yes | Yes | Yes | Yes |
| • • **TZID** | [2.1.3.1.1.19.1](#Section_c219ef6359c7439e94d3a1d4d721fec2) | Yes | Yes | Yes | Yes | Yes |
| • • **STANDARD** | [2.1.3.1.1.19.2](#Section_256198395b3a402e865af4fa511db4b2) | Yes | Yes | Yes | Yes | Yes |
| • • • **DTSTART** | [2.1.3.1.1.19.2.1](#Section_832b62de0dba446ab66eefa0b5f80fac) | Yes | Yes | Yes | Yes | Yes |
| • • • **RRULE** | [2.1.3.1.1.19.2.2](#Section_9b81b75323fc4635a4f016445897d22b) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZNAME** | [2.1.3.1.1.19.2.3](#Section_8add350488af412a93c29efd4c2cd9c1) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZOFFSETFROM** | [2.1.3.1.1.19.2.4](#Section_dfe9ff24d3fd497a82f5a89b5d0e8e64) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZOFFSETTO** | [2.1.3.1.1.19.2.5](#Section_f07a2c606d774208bb370799e471a4c8) | Yes | Yes | Yes | Yes | Yes |
| • • **DAYLIGHT** | [2.1.3.1.1.19.3](#Section_76589aac94474d44a23631487f51cb0d) | Yes | Yes | Yes | Yes | Yes |
| • • • **DTSTART** | [2.1.3.1.1.19.3.1](#Section_284631939530437da7321442bff14e4a) | Yes | Yes | Yes | Yes | Yes |
| • • • **RRULE** | [2.1.3.1.1.19.3.2](#Section_8a27afc07ded46239d714fa5d0ac9ab7) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZNAME** | [2.1.3.1.1.19.3.3](#Section_ed11ed65c66041f881870fb88dd973b7) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZOFFSETFROM** | [2.1.3.1.1.19.3.4](#Section_66b8dc3734b54aa7955626f3e70b5dda) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZOFFSETTO** | [2.1.3.1.1.19.3.5](#Section_6ef63450377b4353b1917a22a796885b) | Yes | Yes | Yes | Yes | Yes |
| • **VEVENT** | [2.1.3.1.1.20](#Section_321edfe2748742629b319b4f8984012a) | Yes | Yes | Yes | Yes | Yes |
| • • **ATTACH** | [2.1.3.1.1.20.1](#Section_87f0ef4dc1af41c19b0747083627cc43) | Yes |  |  |  |  |
| • • • **ENCODING** | [2.1.3.1.1.20.1.1](#Section_139f860549ec493fb91458796f331cf3) | Yes |  |  |  |  |
| • • • **FMTTYPE** | [2.1.3.1.1.20.1.2](#Section_8e62c8353abc419cb311b9670da49633) | Yes |  |  |  |  |
| • • • **VALUE** | [2.1.3.1.1.20.1.3](#Section_533177d0cd7942d3bc5b8d2b6bb9b0cb) | Yes |  |  |  |  |
| • • • **X-FILENAME** | [2.1.3.1.1.20.1.4](#Section_27e3c742502045d59ff9de1c2ac564fb) | Yes |  |  |  |  |
| • • **ATTENDEE** | [2.1.3.1.1.20.2](#Section_fe87b9d5c0054b92b54bfe6f1504c3a0) | Yes | Yes | Yes | Yes | Yes |
| • • • **CN** | [2.1.3.1.1.20.2.1](#Section_574b50ac86ac475db68a214f5d35eec1) | Yes | Yes | Yes | Yes | Yes |
| • • • **CUTYPE** | [2.1.3.1.1.20.2.2](#Section_67ff347bf29147bea15792e5d882502c) | Yes | Yes | Yes | Yes | Yes |
| • • • **PARTSTAT** | [2.1.3.1.1.20.2.3](#Section_3e139c25767e49a298ed1e0c4776de90) |  |  | Yes | Yes |  |
| • • • **ROLE** | [2.1.3.1.1.20.2.4](#Section_b75dacb75f754a25bf29a6b1423a6676) | Yes | Yes | Yes | Yes | Yes |
| • • • **RSVP** | [2.1.3.1.1.20.2.5](#Section_71cfba9d1eb6449cb75587b264d80fc0) | Yes | Yes |  |  | Yes |
| • • • **X-MS-OLK-RESPTIME** | [2.1.3.1.1.20.2.6](#Section_7d88dd7b1a844ef48051f74ed89f7a27) | Yes |  |  |  |  |
| • • **CATEGORIES** | [2.1.3.1.1.20.3](#Section_1c64465c7d884b0f988f6e40a289c57f) | Yes | Yes | Yes | Yes | Yes |
| • • **CLASS** | [2.1.3.1.1.20.4](#Section_c3c3ec349c174542831319416e6c6830) | Yes | Yes | Yes | Yes | Yes |
| • • **COMMENT** | [2.1.3.1.1.20.5](#Section_f2fcce4d515c4f839a1de12dd68d590f) |  |  | Yes | Yes |  |
| • • **CONTACT** | [2.1.3.1.1.20.6](#Section_caf29cc2e18a4371b2a36f53208e1b8e) | Yes | Yes | Yes | Yes | Yes |
| • • **CREATED** | [2.1.3.1.1.20.7](#Section_8fb2282f4fee4026afb279de15914f54) |  |  |  |  |  |
| • • **DTEND** | [2.1.3.1.1.20.8](#Section_7ca3f3d6d38a4432bf1dacaa9da4df88) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZID** | [2.1.3.1.1.20.8.1](#Section_aa74709de70649dc84782780973450ff) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.8.2](#Section_6cd9f68a93af41d3aa7ac56e378d4d8b) | Yes | Yes | Yes | Yes | Yes |
| • • **DTSTAMP** | [2.1.3.1.1.20.9](#Section_4b93e7b6142e4f0cac081505a6fa0199) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZID** | [2.1.3.1.1.20.9.1](#Section_2328f58a35ca47539daeafe384d9dacc) |  |  |  |  |  |
| • • **DTSTART** | [2.1.3.1.1.20.10](#Section_43d2f45b031140059a9d519bdcc747fc) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZID** | [2.1.3.1.1.20.10.1](#Section_18b18fd292424394a459bdd29c2f0e10) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.10.2](#Section_21bab17304d74d5e9c21870178354ae7) | Yes | Yes | Yes | Yes | Yes |
| • • **DESCRIPTION** | [2.1.3.1.1.20.11](#Section_1b69f2ac8f1249b9b91cb7b44b89b451) | Yes | Yes | Yes | Yes | Yes |
| • • • **LANGUAGE** | [2.1.3.1.1.20.11.1](#Section_dfb94ecd5b1a47f58e90081d4d320c86) | Yes | Yes | Yes | Yes | Yes |
| • • **DURATION** | [2.1.3.1.1.20.12](#Section_bc0e14e1d997485d997ba7813d0f76c3) |  |  |  |  |  |
| • • **EXDATE** | [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZID** | [2.1.3.1.1.20.13.1](#Section_8a59becb43434b66a6800e2335976710) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.13.2](#Section_f6b9e7d48485427aaf31ddb19ab9df7f) | Yes | Yes | Yes | Yes | Yes |
| • • **LAST-MODIFIED** | [2.1.3.1.1.20.14](#Section_89b6c37e5e384167b4bab343a8a83f73) |  |  |  |  |  |
| • • **LOCATION** | [2.1.3.1.1.20.15](#Section_9b79606a2a56415ebbfb45001039c4f9) | Yes | Yes | Yes | Yes | Yes |
| • • • **ALTREP** | [2.1.3.1.1.20.15.1](#Section_f7688a9ecdba4c3889fec13843a002d0) | Yes | Yes | Yes | Yes | Yes |
| • • • **LANGUAGE** | [2.1.3.1.1.20.15.2](#Section_4ffcddbd0c0a49c0904f4aaa119f75cf) | Yes | Yes | Yes | Yes | Yes |
| • • **ORGANIZER** | [2.1.3.1.1.20.16](#Section_088b8ca4199c4a93bd5f590dc9126319) | Yes | Yes | Yes | Yes | Yes |
| • • • **CN** | [2.1.3.1.1.20.16.1](#Section_7a1e72195db147d3bf41f64b7e6ca982) | Yes | Yes | Yes | Yes | Yes |
| • • **PRIORITY** | [2.1.3.1.1.20.17](#Section_685aa63de563446a9dda8123dcad6603) | Yes | Yes | Yes | Yes | Yes |
| • • **RDATE** | [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZID** | [2.1.3.1.1.20.18.1](#Section_8b5da5d506f84d75bc87a11be209dfa0) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.18.2](#Section_f5e29a93f972478ba9ba2b624d8c239f) | Yes | Yes | Yes | Yes | Yes |
| • • **RRULE** | [2.1.3.1.1.20.19](#Section_296930afd881447cbd74e5cbe95798c9) | Yes | Yes | Yes | Yes | Yes |
| • • **RECURRENCE-ID** | [2.1.3.1.1.20.20](#Section_6911f0f9a26b44bdbe7e0fe38059fae0) | Yes | Yes | Yes | Yes | Yes |
| • • • **TZID** | [2.1.3.1.1.20.20.1](#Section_709b0cbaa8f241a6b18ed297a8ad0439) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.20.2](#Section_dbcfe4d05e2d463ebb1b7a997e67f2e4) | Yes | Yes | Yes | Yes | Yes |
| • • **RESOURCES** | [2.1.3.1.1.20.21](#Section_b2a30a4382c7497ba7026ff8b5a00767) | Yes | Yes | Yes | Yes | Yes |
| • • **SEQUENCE** | [2.1.3.1.1.20.22](#Section_c9d1e1c74356462fbce0fbf6ce57d214) | Yes | Yes | Yes | Yes | Yes |
| • • **STATUS** | [2.1.3.1.1.20.23](#Section_14b1b344d70440f2b30d83291bde0977) |  |  |  |  |  |
| • • **SUMMARY** | [2.1.3.1.1.20.24](#Section_f9f57d5c98fc4e6b96f1652d0a5f1105) | Yes | Yes | Yes | Yes | Yes |
| • • • **LANGUAGE** | [2.1.3.1.1.20.24.1](#Section_2f5f4b0893d743599d0909431c0b5b60) | Yes | Yes | Yes | Yes | Yes |
| • • **TRANSP** | [2.1.3.1.1.20.25](#Section_54d3000ca6b343c0b4b0543578f86fa0) | Yes | Yes | Yes | Yes | Yes |
| • • **UID** | [2.1.3.1.1.20.26](#Section_ac8c1e68de584230a2e279aae754a055) | Yes | Yes | Yes | Yes | Yes |
| • • **X-ALT-DESC** | [2.1.3.1.1.20.27](#Section_d7f285da9c7a4597803bb74193c898a8) | Yes |  |  |  |  |
| • • • **FMTTYPE** | [2.1.3.1.1.20.27.1](#Section_eca0e8a7e84f43c1b0269fbda5d8e015) | Yes |  |  |  |  |
| • • **X-MICROSOFT-CDO-ALLDAYEVENT** | [2.1.3.1.1.20.28](#Section_0f262da6c5fd459e9f18145eba86b5d2) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-CDO-APPT-SEQUENCE** | [2.1.3.1.1.20.29](#Section_71f425bec850458ebc99037247d51d5b) |  |  |  |  |  |
| • • **X-MICROSOFT-CDO-ATTENDEE-CRITICAL-CHANGE** | [2.1.3.1.1.20.30](#Section_0db93f9ef5c44475a56b761babcea939) |  | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-CDO-BUSYSTATUS** | [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-CDO-IMPORTANCE** | [2.1.3.1.1.20.32](#Section_38b4e7a98dec488aa90185cfe71171d8) |  |  |  |  |  |
| • • **X-MICROSOFT-CDO-INSTTYPE** | [2.1.3.1.1.20.33](#Section_739a9faa6f05437dbfe2b0b025a23042) |  |  |  |  |  |
| • • **X-MICROSOFT-CDO-INTENDEDSTATUS** | [2.1.3.1.1.20.34](#Section_df1c798899084ee695b0fcd180b02b44) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-CDO-OWNERAPPTID** | [2.1.3.1.1.20.35](#Section_7b1219be5d5046a69b96c1e86745a243) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-CDO-OWNER-CRITICAL-CHANGE** | [2.1.3.1.1.20.36](#Section_e1861ca865e5439ca84c5c6407b1d67a) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-CDO-REPLYTIME** | [2.1.3.1.1.20.37](#Section_574496e55e5a4f5990280a8f49ab999c) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-DISALLOW-COUNTER** | [2.1.3.1.1.20.38](#Section_8fcaed94cfc7488183cd36317969711d) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-EXDATE** | [2.1.3.1.1.20.39](#Section_4518dacf35f044d887a839bc57dad5c7) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.39.1](#Section_cf8c28ac648b4ac0b671c11f5920bfc4) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MICROSOFT-ISDRAFT** | [2.1.3.1.1.20.40](#Section_63b96c071b06417d8965f8300f78f5ed) | Yes |  |  |  |  |
| • • **X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT** | [2.1.3.1.1.20.41](#Section_d775d2f2d45446f3955c8ebb20721ada) |  |  |  |  |  |
| • • **X-MICROSOFT-MSNCALENDAR-BUSYSTATUS** | [2.1.3.1.1.20.42](#Section_b9b97ee604274dd3b25faea42453e414) |  |  |  |  |  |
| • • **X-MICROSOFT-MSNCALENDAR-IMPORTANCE** | [2.1.3.1.1.20.43](#Section_6aea4ffe019343f0b2cd8dfa11e9f772) |  |  |  |  |  |
| • • **X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS** | [2.1.3.1.1.20.44](#Section_f6c01b0b3cec45ef8c6385a557d1d47f) |  |  |  |  |  |
| • • **X-MICROSOFT-RRULE** | [2.1.3.1.1.20.45](#Section_deff79aab5db4bf088f0cd4675c1782c) | Yes | Yes | Yes | Yes | Yes |
| • • • **VALUE** | [2.1.3.1.1.20.45.1](#Section_cb99e8da75ce46fcb248d60f8d93b101) | Yes | Yes | Yes | Yes | Yes |
| • • • **X-MICROSOFT-ISLEAPMONTH** | [2.1.3.1.1.20.45.2](#Section_73bc9a68f1b849a58384bf781b32bd11) | Yes | Yes | Yes | Yes | Yes |
| • • **X-MS-OLK-ALLOWEXTERNCHECK** | [2.1.3.1.1.20.46](#Section_9508adc40b214aa697a38aeda10e7ed9) |  |  |  |  |  |
| • • **X-MS-OLK-APPTLASTSEQUENCE** | [2.1.3.1.1.20.47](#Section_2727a301b6584a9dbd199fe0316fd50a) |  |  |  |  |  |
| • • **X-MS-OLK-APPTSEQTIME** | [2.1.3.1.1.20.48](#Section_9af33d6c865a467b9c3a751bcfb6ace0) |  |  |  |  |  |
| • • • **TZID** | [2.1.3.1.1.20.48.1](#Section_0d7c0494f17347c6afaa02ffde168895) |  |  |  |  |  |
| • • **X-MS-OLK-AUTOFILLLOCATION** | [2.1.3.1.1.20.49](#Section_73693601ce75486c9dd2f5549d15feea) |  |  |  |  |  |
| • • **X-MS-OLK-AUTOSTARTCHECK** | [2.1.3.1.1.20.50](#Section_025e0aa64e804c97922eeaa33378bbbb) |  |  |  |  |  |
| • • **X-MS-OLK-COLLABORATEDOC** | [2.1.3.1.1.20.51](#Section_304e6d45d63d4bf6adbd9af8a761ea10) |  |  |  |  |  |
| • • **X-MS-OLK-CONFCHECK** | [2.1.3.1.1.20.52](#Section_f68b72a93b4d4dff804354629b6a55fc) |  |  |  |  |  |
| • • **X-MS-OLK-CONFTYPE** | [2.1.3.1.1.20.53](#Section_0ac3828965784a6fb8beefd74edd3d71) |  |  |  |  |  |
| • • **X-MS-OLK-DIRECTORY** | [2.1.3.1.1.20.54](#Section_36bbf96e004743a0a250a1abc2c8de16) |  |  |  |  |  |
| • • **X-MS-OLK-MWSURL** | [2.1.3.1.1.20.55](#Section_89ac6ed4cf5842a6a6188ed26ec0b073) |  |  |  |  |  |
| • • **X-MS-OLK-NETSHOWURL** | [2.1.3.1.1.20.56](#Section_7324be4f604d40ff9ae4529010fc8dcb) |  |  |  |  |  |
| • • **X-MS-OLK-ONLINEPASSWORD** | [2.1.3.1.1.20.57](#Section_ba6dd1b0537f4d159f7c2b7c3598fcf0) |  |  |  |  |  |
| • • **X-MS-OLK-ORGALIAS** | [2.1.3.1.1.20.58](#Section_8c575b3383314681bf77f3c562cab3d3) |  |  |  |  |  |
| • •**X-MS-OLK-ORIGINALEND** | [2.1.3.1.1.20.59](#Section_92ee1b7dd1f64032bdf4a61075d6d0ef) |  |  |  | Yes |  |
| • •**X-MS-OLK-ORIGINALSTART** | [2.1.3.1.1.20.60](#Section_cc81a70f8d0f4da3bb831401199b8fdc) |  |  |  | Yes |  |
| • • **X-MS-OLK-SENDER** | [2.1.3.1.1.20.61](#Section_c069cac13ebe4f69b9042ad47f46650f) | Yes |  |  |  |  |
| • • • **CN** | [2.1.3.1.1.20.61.1](#Section_b392a2f20c7f4965a42b9c1602631d61) | Yes |  |  |  |  |
| • • **VALARM** | [2.1.3.1.1.20.62](#Section_9710b22cba2e4581be59e143a952708a) | Yes | Yes |  |  | Yes |
| • • • **TRIGGER** | [2.1.3.1.1.20.62.1](#Section_cc4b5bbe71d344b8a38c48fbdffd97ed) | Yes | Yes |  |  | Yes |
| • • • **ACTION** | [2.1.3.1.1.20.62.2](#Section_7fd3531e05f44cf591000638aa9794de) | Yes | Yes |  |  | Yes |
| • • • **DESCRIPTION** | [2.1.3.1.1.20.62.3](#Section_9ab4a407b38140069f9e4d1676ad4f7b) | Yes | Yes |  |  | Yes |

#### Hierarchy of Components, Properties, and Parameters

This section enumerates all iCalendar components, properties, and parameters that can be mapped to [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18). The hierarchy presented in the header specifies all parent-child relationships between these components, properties, and parameters. Any components, properties, and parameters not specified in this document SHOULD be ignored.

Unless otherwise specified, if the Calendar object property being exported is not set, then the corresponding property SHOULD NOT be exported. Similarly, unless otherwise specified, if the property being imported is not present, then the corresponding Calendar object property SHOULD be left unset.

##### Component: VCALENDAR

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.4

Number of Instances Allowed: 1+

Brief Description: The root component of a valid iCalendar file.

**Importing to and Exporting from Calendar objects**

A valid iCalendar file SHOULD[<1>](#Appendix_A_1" \o "Product behavior note 1) have exactly one VCALENDAR component as its root.

###### Property: METHOD

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.7.2

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Distinguishes normal appointments from [**meeting requests**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0), responses, and cancellations.

**Importing to Calendar objects**

The METHOD property SHOULD[<2>](#Appendix_A_2" \o "Product behavior note 2) be imported as the **PidTagMessageClass** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.788) and **PidLidAppointmentCounterProposal** ([MS-OXPROPS] section 2.10) of all imported [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18), as specified in the table later in this section. In the case where the METHOD property is set to 'REPLY', the **PidTagMessageClass** has several possible values depending on the PARTSTAT parameter (as specified in section [2.1.3.1.1.20.2.3](#Section_3e139c25767e49a298ed1e0c4776de90)) of the ATTENDEE property (as specified in section [2.1.3.1.1.20.2](#Section_fe87b9d5c0054b92b54bfe6f1504c3a0)) of the VEVENT component (as specified in section [2.1.3.1.1.20](#Section_321edfe2748742629b319b4f8984012a)). If the METHOD property is set to 'REPLY' or 'COUNTER', the iCalendar MUST have exactly one ATTENDEE property and exactly one such PARTSTAT parameter.

In the case where the METHOD property is set to 'REQUEST', 'REPLY', or 'CANCEL', the VCALENDAR component MUST define exactly one appointment.[<3>](#Appendix_A_3" \o "Product behavior note 3)

| METHOD | PARTSTAT | PidLidAppointmentCounterProposal | PidTagMessageClass |
| --- | --- | --- | --- |
| (default) |  | FALSE or unset | IPM.Appointment |
| PUBLISH |  | FALSE or unset | IPM.Appointment |
| REQUEST |  | FALSE or unset | IPM.Schedule.Meeting.Request |
| REPLY | ACCEPTED | FALSE or unset | IPM.Schedule.Meeting.Resp.Pos |
| REPLY | TENTATIVE | FALSE or unset | IPM.Schedule.Meeting.Resp.Tent |
| REPLY | DECLINED | FALSE or unset | IPM.Schedule.Meeting.Resp.Neg |
| COUNTER | TENTATIVE | TRUE | IPM.Schedule.Meeting.Resp.Tent |
| CANCEL |  | FALSE or unset | IPM.Schedule.Meeting.Canceled |

**Exporting from Calendar objects**

For exports of calendars, the METHOD property MUST be left unset or set to 'PUBLISH'. For exports of individual Calendar objects, the **PidTagMessageClass** and **PidLidAppointmentCounterProposal** of the Calendar object SHOULD[<4>](#Appendix_A_4" \o "Product behavior note 4) be exported as the METHOD property as specified in the table earlier in this section.

###### Property: PRODID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.7.3

Number of Instances Allowed: 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Identifies the application that generated the iCalendar file.

**Importing to Calendar objects**

When parsing an iCalendar file, if the value of the PRODID property begins with the substring '-//Microsoft Corporation//Outlook<SP>' and ends with the substring '<SP>MIMEDIR//EN', where 'MIMEDIR' represents the Mimedir.dll file. '<SP>' represents the space character ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+0020), the portion of the string between the two substrings SHOULD be evaluated to determine if it matches the following [**ABNF**](#gt_24ddbbb4-b79e-4419-96ec-0fdd229c9ebf) rule:

1. version\_number = 1\*2DIGIT '.' \*DIGIT

The DIGIT elements to the left of the period ('.') are evaluated as an integer. If the integer is between 1 and 11 (inclusive), then some behavior changes SHOULD be made as described in section [2.1.3.2.4](#Section_5112ec59ed9d49a5a04f47076af97713).

**Exporting from Calendar objects**

The value assigned to PRODID MUST be unique for different implementations or different versions of an iCalendar converter.

###### Property: VERSION

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.7.4

Number of Instances Allowed: 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Identifies the version of an iCalendar file.

**Importing to and Exporting from Calendar objects**

The value of this property MUST be set to '2.0'.

###### Property: X-CALEND

RFC Reference: N/A

Number of Instances Allowed: 0, 1, 2

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Identifies the end time of the last instance of an appointment in the iCalendar file.

**Importing to Calendar objects**

This property SHOULD be ignored.

**Exporting from Calendar objects**

This property SHOULD[<5>](#Appendix_A_5" \o "Product behavior note 5) be computed as the end time of the last instance of an appointment in the iCalendar file. If the iCalendar contains appointments with [**floating**](#gt_fe9b0a4f-452f-4ed4-98fb-f423027f6f24) and non-floating end times in such a way that the calendar's end time is dependent on the [**recipient's**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b) time zone, the X-CALEND property SHOULD[<6>](#Appendix_A_6" \o "Product behavior note 6) be declared twice: once with a floating calendar end time, and once with a non-floating calendar end time.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE (as specified in section [2.1.3.1.1.19](#Section_65e61fa3de85403082451054e27208f7)), specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

###### Property: X-CALSTART

RFC Reference: N/A

Number of Instances Allowed: 0, 1, 2

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Identifies the start time of the first instance of an appointment in the iCalendar file.

**Importing to Calendar objects**

This property SHOULD be ignored.

**Exporting from Calendar objects**

This property SHOULD[<7>](#Appendix_A_7" \o "Product behavior note 7) be computed as the start time of the first instance of an appointment in the iCalendar file. If the iCalendar contains appointments with [**floating**](#gt_fe9b0a4f-452f-4ed4-98fb-f423027f6f24) and non-floating start times in such a way that the calendar's start time is dependent on the [**recipient's**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b) time zone, the X-CALSTART property SHOULD[<8>](#Appendix_A_8" \o "Product behavior note 8) be declared twice: once with a floating calendar start time, and once with a non-floating calendar start time.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

###### Property: X-CLIPEND

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Indicates the end of the date range that the user selected for export during the creation of the iCalendar file.

**Importing to Calendar objects**

This property SHOULD[<9>](#Appendix_A_9" \o "Product behavior note 9) be ignored.

**Exporting from Calendar objects**

This property SHOULD[<10>](#Appendix_A_10" \o "Product behavior note 10) be the end of the date range that the user selected for export. If this iCalendar does not represent a calendar export, this property MUST be omitted.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

###### Property: X-CLIPSTART

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Indicates the start of the date range that the user selected for export during the creation of the iCalendar file.

**Importing to Calendar objects**

This property SHOULD[<11>](#Appendix_A_11" \o "Product behavior note 11) be ignored.

**Exporting from Calendar objects**

This property SHOULD[<12>](#Appendix_A_12" \o "Product behavior note 12) be the start of the date range that the user selected for export. If this iCalendar does not represent a calendar export, this property MUST be omitted.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

###### Property: X-MICROSOFT-CALSCALE

RFC Reference: N/A

Number of Instances Allowed: 0,1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Identifies the calendar type of a non-Gregorian recurring appointment.

**Importing to Calendar objects**

If this property is specified, then it SHOULD[<13>](#Appendix_A_13" \o "Product behavior note 13) be imported for every VEVENT that declares an X-MICROSOFT-RRULE.

This property SHOULD[<14>](#Appendix_A_14" \o "Product behavior note 14) set the **CalendarType** field of the **RecurrencePattern** field of the **AppointmentRecurrencePattern** structure ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44). See also sections [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f), [2.1.3.2.2.2](#Section_305b728b8fb248d287097dab1686b9cc), [2.1.3.2.2.3](#Section_7d3e36469f9b4665aca77f9260b74424), [2.1.3.2.2.4](#Section_47624472cffc4d8db1c8ca55e1b404b6), [2.1.3.2.2.5](#Section_7c0b03d645d64607a78f99c00e6815c2), and [2.1.3.2.2.6](#Section_0f3eb29da3b346e498db5658f14d5ca8).

| X-MICROSOFT-CALSCALE Value | CalendarType |
| --- | --- |
| Not present or empty string (default) | 0x0000 |
| Gregorian | 0x0001 |
| Gregorian\_us | 0x0002 |
| Japan | 0x0003 |
| Taiwan | 0x0004 |
| Korea | 0x0005 |
| Hijri | Either 0x0000 or 0x0006, as specified in the table for Hijri calendars that follows (the PatternType field SHOULD[<15>](#Appendix_A_15" \o "Product behavior note 15) also be overwritten as specified in the table for Hijri calendars that follows). |
| Thai | 0x0007 |
| Hebrew | 0x0008 |
| GregorianMeFrench | 0x0009 |
| GregorianArabic | 0x000A |
| GregorianXlitEnglish | 0x000B |
| GregorianXlitFrench | 0x000C |
| JapanLunar | 0x000E |
| ChineseLunar | 0x000F |
| Saka | 0x0010 |
| LunarEtoChn | 0x0011 |
| LunarEtoKor | 0x0012 |
| LunarRokuyou | 0x0013 |
| KoreaLunar | 0x0014 |
| Umalqura | 0x0017 |

For appointments with an X-MICROSOFT-CALSCALE value of "Hijri", the value for **PatternType** (as specified in [MS-OXOCAL] section 2.2.1.44.1) and **CalendarType** depend upon the imported value of **PatternType**. **PatternType** SHOULD be determined as specified in section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4). The resulting value SHOULD then be overwritten as specified in the following table.

| Imported PatternType Value | Hijri PatternType Value | Hijri CalendarType Value |
| --- | --- | --- |
| 0x0000 | 0x0000 | 0x0006 |
| 0x0001 | 0x0001 | 0x0006 |
| 0x0002 | 0x000A | 0x0000 |
| 0x0003 | 0x000B | 0x0000 |

**Exporting from Calendar objects**

Since this property is a child of the VCALENDAR, a VCALENDAR MUST NOT contain any two VEVENTs that would result in different values of X-MICROSOFT-CALSCALE.

If the **CalendarType** field of the **RecurrencePattern** field of the **AppointmentRecurrencePattern** structure is nonzero, then this property SHOULD[<16>](#Appendix_A_16" \o "Product behavior note 16) be exported as specified in the following table.

| CalendarType Value | X-MICROSOFT-CALSCALE Value |
| --- | --- |
| 0x0001 | Gregorian |
| 0x0002 | Gregorian\_us |
| 0x0003 | Japan |
| 0x0004 | Taiwan |
| 0x0005 | Korea |
| 0x0006 | Hijri |
| 0x0007 | Thai |
| 0x0008 | Hebrew |
| 0x0009 | GregorianMeFrench |
| 0x000A | GregorianArabic |
| 0x000B | GregorianXlitEnglish |
| 0x000C | GregorianXlitFrench |
| 0x000E | JapanLunar |
| 0x000F | ChineseLunar |
| 0x0010 | Saka |
| 0x0011 | LunarEtoChn |
| 0x0012 | LunarEtoKor |
| 0x0013 | LunarRokuyou |
| 0x0014 | KoreaLunar |
| 0x0017 | Umalqura |

Additionally, for certain values of the **PatternType** field of the **RecurrencePattern** field of the **AppointmentRecurrencePattern** structure, this property SHOULD[<17>](#Appendix_A_17" \o "Product behavior note 17) be exported as specified in the following table.

| Special PatternType Value | X-MICROSOFT-CALSCALE Value |
| --- | --- |
| 0x000A | Hijri |
| 0x000B | Hijri |

###### Property: X-MS-OLK-FORCEINSPECTOROPEN

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether or not the iCalendar file only contains one appointment.

**Importing to Calendar objects**

If this property is set to TRUE, the iCalendar stream SHOULD[<18>](#Appendix_A_18" \o "Product behavior note 18) be imported as a single [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18), regardless of the number of VEVENT components present in the iCalendar. Note that it is possible for an iCalendar file containing multiple VEVENT components to represent a single appointment through the use of the RECURRENCE-ID property specified in section [2.1.3.1.1.20.20](#Section_6911f0f9a26b44bdbe7e0fe38059fae0).

**Exporting from Calendar objects**

This property SHOULD[<19>](#Appendix_A_19" \o "Product behavior note 19) be set to 'TRUE' if the iCalendar file represents a single appointment rather than a calendar export.

###### Property: X-MS-WKHRDAYS

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the days of the week in the calendar owner's workweek.

**Importing to Calendar objects**

This property SHOULD[<20>](#Appendix_A_20" \o "Product behavior note 20) be ignored.

**Exporting from Calendar objects**

If this iCalendar does not represent the [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55) of the owner, this property SHOULD be omitted. Otherwise, this property SHOULD[<21>](#Appendix_A_21" \o "Product behavior note 21) be a comma-delimited list containing any number of the character codes for days of the week specified in section [2.1.3.2.1.6](#Section_b8069b8f7a1c4eb8b529102fd49cdb3d).

Each element MUST NOT appear more than once, but the order of the elements does not matter. The syntax of this format is the same as the syntax of a [**week independent**](#gt_4b4d3b38-996f-4888-bb53-892abbd68de4) BYDAY [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) specified in 2.1.3.2.1.6.

###### Property: X-MS-WKHREND

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Local Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.12)

Brief Description: Specifies the end time of the calendar owner's workday.

**Importing to Calendar objects**

This property SHOULD[<22>](#Appendix_A_22" \o "Product behavior note 22) be ignored.

**Exporting from Calendar objects**

If this iCalendar does not represent the [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55) of the owner, this property SHOULD be omitted. Otherwise, this property SHOULD[<23>](#Appendix_A_23" \o "Product behavior note 23) be the end time of the calendar owner's workday, specified as a local time with the TZID parameter (section [2.1.3.1.1.11.1](#Section_ff8674ad6eb6471ebb33bdde28fbeb9b)).

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

###### Property: X-MS-WKHRSTART

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Local Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.12)

Brief Description: Specifies the starting time of the calendar owner's workday.

**Importing to Calendar objects**

This property SHOULD[<24>](#Appendix_A_24" \o "Product behavior note 24) be ignored.

**Exporting from Calendar objects**

If this iCalendar does not represent the [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55) of the owner, this property SHOULD be omitted. Otherwise, this property SHOULD[<25>](#Appendix_A_25" \o "Product behavior note 25) be the start time of the calendar owner's workday, specified as a local time with the TZID parameter (section [2.1.3.1.1.12.1](#Section_c323562b70814f3b9d909d6662385ba0)).

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

###### Property: X-OWNER

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: calendar User Address ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.3)

Brief Description: Specifies the calendar owner of a [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55).

**Importing to Calendar objects**

This property SHOULD[<26>](#Appendix_A_26" \o "Product behavior note 26) be ignored.

**Exporting from Calendar objects**

If this iCalendar does not represent the primary calendar of the owner, this property SHOULD be omitted. Otherwise, this property SHOULD[<27>](#Appendix_A_27" \o "Product behavior note 27) be the e-mail address of the owner.

Parameter: CN

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.2

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the display name of the owner of a [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55).

**Importing to Calendar objects**

This parameter SHOULD[<28>](#Appendix_A_28" \o "Product behavior note 28) be ignored.

**Exporting from Calendar objects**

If this iCalendar does not represent the primary calendar of the owner, this parameter SHOULD be omitted. Otherwise, this parameter SHOULD[<29>](#Appendix_A_29" \o "Product behavior note 29) be the display name of the owner.

###### Property: X-PRIMARY-CALENDAR

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether or not the iCalendar file represents a [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55).

**Importing to Calendar objects**

This property SHOULD[<30>](#Appendix_A_30" \o "Product behavior note 30) be ignored.

**Exporting from Calendar objects**

If this iCalendar does not represent the primary calendar of the owner, this property SHOULD be omitted. Otherwise, this property SHOULD[<31>](#Appendix_A_31" \o "Product behavior note 31) be set to 'TRUE'.

###### Property: X-PUBLISHED-TTL

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Duration ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.6)

Brief Description: Specifies a suggested iCalendar file download frequency for clients and servers with sync capabilities.

**Importing to Calendar objects**

This property SHOULD[<32>](#Appendix_A_32" \o "Product behavior note 32) be ignored.

**Exporting from Calendar objects**

If this iCalendar is being automatically published to a remote location at regular intervals, this property SHOULD[<33>](#Appendix_A_33" \o "Product behavior note 33) be set to that interval with a minimum granularity of minutes.

###### Property: X-WR-CALDESC

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the description of the calendar.

**Importing to Calendar objects**

This property SHOULD[<34>](#Appendix_A_34" \o "Product behavior note 34) be ignored.

**Exporting from Calendar objects**

If this iCalendar represents an export of a calendar, and if the owner has provided a description of the calendar, this property SHOULD[<35>](#Appendix_A_35" \o "Product behavior note 35) be set to the owner's specified text, which SHOULD[<36>](#Appendix_A_36" \o "Product behavior note 36) be truncated to a length of 255 WCHARs if the length exceeds 255 WCHARs. The truncation SHOULD NOT[<37>](#Appendix_A_37" \o "Product behavior note 37) split surrogate pairs (as specified in [[UNICODE5.1]](https://go.microsoft.com/fwlink/?LinkId=152822) section 2.5).

###### Property: X-WR-CALNAME

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the name of the calendar.

**Importing to Calendar objects**

This property SHOULD[<38>](#Appendix_A_38" \o "Product behavior note 38) be imported directly into the **PidTagDisplayName** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.677) of the [**Folder object**](#gt_0682daa7-c1b8-419b-8a32-6048833d0b72) representing the newly-created destination of the imported appointments. Implementations MAY truncate the value to 255 characters and MAY remove carriage return ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+000D) and line feed (Unicode character U+000A) characters.

**Exporting from Calendar objects**

This property MUST be omitted if the iCalendar represents a single appointment or [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

If this iCalendar represents a calendar export, this property SHOULD[<39>](#Appendix_A_39" \o "Product behavior note 39) be set to the value of **PidTagDisplayName** on the Folder object representing the calendar being exported.

If the calendar is the owner's [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55), this property SHOULD[<40>](#Appendix_A_40" \o "Product behavior note 40) instead be set to a more descriptive locale-dependent string containing the owner's name (e.g. 'Elizabeth Andersen calendar').

###### Property: X-WR-RELCALID

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies a globally unique identifier for the calendar.

**Importing to Calendar objects**

This property SHOULD[<41>](#Appendix_A_41" \o "Product behavior note 41) be used and persisted by the iCalendar renderer to decide whether the import overwrites an existing calendar or creates a new calendar.

**Exporting from Calendar objects**

This property MUST be omitted if the iCalendar represents a single appointment or [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

If this iCalendar represents a calendar export, this property SHOULD[<42>](#Appendix_A_42" \o "Product behavior note 42) be set to a value that will be globally unique for different calendars, but consistent across multiple exports of the same calendar.

###### Component: VTIMEZONE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.6.5

Number of Instances Allowed: 0+[<43>](#Appendix_A_43" \o "Product behavior note 43)

Brief Description: Specifies any time zones referenced by TZID parameters.

**Importing to Calendar objects**

Since TZIDs can be referenced by many properties in the root component, VTIMEZONEs MUST be used to resolve all local times in the iCalendar file, even if the TZID reference occurs before the VTIMEZONE definition. This section discusses how to import a VTIMEZONE into a **PidLidTimeZoneStruct** structure ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.39).

| Field of the PidLidTimeZoneStruct structure | Value |
| --- | --- |
| **lBias** | See section [2.1.3.1.1.19.2.5](#Section_f07a2c606d774208bb370799e471a4c8) |
| **lStandardBias** | Set to 0x00000000 |
| **lDaylightBias** | See section [2.1.3.1.1.19.3.5](#Section_6ef63450377b4353b1917a22a796885b) |
| **stStandardDate** | See sections [2.1.3.1.1.19.2.1](#Section_832b62de0dba446ab66eefa0b5f80fac) and [2.1.3.1.1.19.2.2](#Section_9b81b75323fc4635a4f016445897d22b) |
| **stDaylightDate** | See sections [2.1.3.1.1.19.3.1](#Section_284631939530437da7321442bff14e4a) and [2.1.3.1.1.19.3.2](#Section_8a27afc07ded46239d714fa5d0ac9ab7) |
| **wStandardYear** | Set to the **wYear** field of **stStandardDate** |
| **wDaylightYear** | Set to the **wYear** field of **stDaylightDate** |

If this VTIMEZONE is imported as **PidLidAppointmentTimeZoneDefinitionRecur** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.33), **PidLidAppointmentTimeZoneDefinitionStartDisplay** ([MS-OXPROPS] section 2.34), and/or **PidLidAppointmentTimeZoneDefinitionEndDisplay** ([MS-OXPROPS] section 2.32),[<44>](#Appendix_A_44" \o "Product behavior note 44) then the following table specifies the contents of the resulting [**BLOB**](#gt_ad861812-8cb0-497a-80bb-13c95aa4e425) (the structure of this BLOB is specified in [MS-OXOCAL]). See section [2.1.3.1.1.20.8.1](#Section_aa74709de70649dc84782780973450ff) and section [2.1.3.1.1.20.10.1](#Section_18b18fd292424394a459bdd29c2f0e10) for more information.

| Field of the BLOB | Value |
| --- | --- |
| **Major Version** | Constant specified by [MS-OXOCAL] |
| **Minor Version** | Constant specified by [MS-OXOCAL] |
| **cbHeader** | Set to (0x0006 + 0x0002 \* **cchKeyName**) |
| **Reserved** | Constant specified by [MS-OXOCAL] |
| **cchKeyName** | Set to the number of characters in **KeyName** |
| **KeyName** | See section [2.1.3.1.1.19.1](#Section_c219ef6359c7439e94d3a1d4d721fec2) |
| **cRules** | Set to the number of **TZRule** structures (as specified in [MS-OXOCAL] section 2.2.1.41.1) in the **TZRules** field. This value is equal to the number of time zone rules generated by parsing the STANDARD (section [2.1.3.1.1.19.2](#Section_256198395b3a402e865af4fa511db4b2)) and DAYLIGHT (section [2.1.3.1.1.19.3](#Section_76589aac94474d44a23631487f51cb0d)) subcomponents. |
| **TZRules** | An array of **TZRule** structures as specified in the following table. |

The following table specifies the contents of each **TZRule** structure in the **TZRules** field.

| TZRule structure field | Value |
| --- | --- |
| **Major Version** | Constant specified by [MS-OXOCAL] |
| **Minor Version** | Constant specified by [MS-OXOCAL] |
| **Reserved** | Constant specified by [MS-OXOCAL] |
| **TZRule flags** | Set to 0x0002 for **PidLidAppointmentTimeZoneDefinitionStartDisplay** and **PidLidAppointmentTimeZoneDefinitionEndDisplay**.  Set to 0x0003 for **PidLidAppointmentTimeZoneDefinitionRecur**. |
| **wYear** | For the first **TZRule** structure in the array, this field SHOULD be set to 0x0641 but MAY[<45>](#Appendix_A_45" \o "Product behavior note 45) be set to 0x0001. For subsequent **TZRule** structures, this field MUST be set to the year that corresponds to the time zone rule. |
| **X** | Constant specified by [MS-OXOCAL] |
| **lBias** | Import the same as the **lBias** field of a **PidLidTimeZoneStruct** structure |
| **lStandardBias** | Import the same as the **lStandardBias** field of a **PidLidTimeZoneStruct** structure |
| **lDaylightBias** | Import the same as the **lDaylightBias** field of a **PidLidTimeZoneStruct** structure |
| **stStandardDate** | Import the same as the **stStandardDate** field of a **PidLidTimeZoneStruct** structure |
| **stDaylightDate** | Import the same as the **stDaylightDate** field of a **PidLidTimeZoneStruct** structure |

**Exporting from Calendar objects**

A VTIMEZONE component MUST be declared for each unique value of any TZID parameters in the iCalendar. Note that the comparison used to match TZID parameters to VTIMEZONE components SHOULD[<46>](#Appendix_A_46" \o "Product behavior note 46) be case-insensitive.

If exporting a VTIMEZONE from a **PidLidAppointmentTimeZoneDefinitionRecur**, **PidLidAppointmentTimeZoneDefinitionStartDisplay**, or **PidLidAppointmentTimeZoneDefinitionEndDisplay**, the **lBias**, **lStandardBias**, **lDaylightBias**, **stStandardDate**, and **stDaylightDate** subfields of the **TZRule** entry with the TZRULE\_FLAG\_EFFECTIVE\_TZREG (0x0002) bit set in the **TZRule flags** field MUST be exported as a **PidLidTimeZoneStruct** structure as specified in the following subsections.[<47>](#Appendix_A_47" \o "Product behavior note 47)

Property: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.1

Number of Instances Allowed: 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The name of the time zone. This string will be compared (case-insensitive)[<48>](#Appendix_A_48" \o "Product behavior note 48) to TZID parameters in the rest of the iCalendar to identify the time zone being referenced by the parameter's parent property.

**Importing to Calendar objects**

This property SHOULD be imported as specified in section [2.1.3.1.1.20.8.1](#Section_aa74709de70649dc84782780973450ff) and section [2.1.3.1.1.20.10.1](#Section_18b18fd292424394a459bdd29c2f0e10).

**Exporting from Calendar objects**

If the system's local time zone is being exported as a VTIMEZONE, then this name MUST be derived from the system API that supplied the time zone.

If the **PidLidTimeZoneStruct** property is being exported as a VTIMEZONE, this name SHOULD be derived from **PidLidTimeZoneDescription** ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.40), but MAY be set to any unique string.

If the **PidLidAppointmentTimeZoneDefinitionRecur**, **PidLidAppointmentTimeZoneDefinitionStartDisplay**, or **PidLidAppointmentTimeZoneDefinitionEndDisplay** property is being exported as a VTIMEZONE, then the value of TZID MUST[<49>](#Appendix_A_49" \o "Product behavior note 49) be derived from the **KeyName** field of the **PidLidAppointmentTimeZoneDefinitionRecur** structure ([MS-OXOCAL] section 2.2.1.41) contained in the property.

In all cases, TZIDs for different time zones MUST be unique, and each unique TZID MUST NOT be defined more than once.

Component: STANDARD

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.6.5

Number of Instances Allowed: 1+

Brief Description: A specification of the Standard portion of the time zone.

**Importing to Calendar objects**

If more than one STANDARD component is defined in the VTIMEZONE, only the STANDARD component with the largest DTSTART (as specified in section [2.1.3.1.1.19.2.1](#Section_832b62de0dba446ab66eefa0b5f80fac)) SHOULD[<50>](#Appendix_A_50" \o "Product behavior note 50) be parsed. Alternatively, implementers MAY[<51>](#Appendix_A_51" \o "Product behavior note 51) parse the first STANDARD component found within the VTIMEZONE, MAY[<52>](#Appendix_A_52" \o "Product behavior note 52) parse all STANDARD components found within the VTIMEZONE that have unique years in their DTSTART subcomponents, or MAY[<53>](#Appendix_A_53" \o "Product behavior note 53) fail to parse the iCalendar stream if more than one STANDARD component is defined in the VTIMEZONE.

**Exporting from Calendar objects**

Exactly one STANDARD component SHOULD be exported for each VTIMEZONE.

Property: DTSTART

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.2.4

Number of Instances Allowed: 1

Format: Date-Time ([RFC2445] section 4.3.5)

Brief Description: The effective start date of this onset of Standard time.

**Importing to Calendar objects**

If this VTIMEZONE component has no DAYLIGHT sub-component, all the bytes in the **stStandardDate** field of the **PidLidTimeZoneStruct** structure MUST be set to 0x00.

If the VTIMEZONE being imported contains one or more DAYLIGHT sub-components and the STANDARD component contains an RRULE property (as specified in section [2.1.3.1.1.19.2.2](#Section_9b81b75323fc4635a4f016445897d22b)), the fields of the **stStandardDate** field of the **PidLidTimeZoneStruct** structure are set according to the following table.

| Field of PidLidTimeZoneStruct.stStandardDate | Value |
| --- | --- |
| **wYear** | Set as specified in section 2.1.3.1.1.19.2.2. |
| **wMonth** | Set as specified in section 2.1.3.1.1.19.2.2. |
| **wDayOfWeek** | Set as specified in section 2.1.3.1.1.19.2.2. |
| **wDay** | Set as specified in section 2.1.3.1.1.19.2.2. |
| **wHour** | The hour portion of DTSTART |
| **wMinute** | The minute portion of DTSTART |
| **wSecond** | The second portion of DTSTART |
| **wMilliseconds** | Set to 0x0000 |

If an RRULE property is not specified for this component, the **stStandardDate** field of the **PidLidTimeZoneStruct** structure SHOULD[<54>](#Appendix_A_54" \o "Product behavior note 54) be imported as specified in the following table. Alternatively, implementers MAY[<55>](#Appendix_A_55" \o "Product behavior note 55) convert the value of the RDATE property to a **SYSTEMTIME** structure (as specified in [[MS-DTYP]](%5bMS-DTYP%5d.pdf#Section_cca2742956894a16b2b49325d93e4ba2)) and import the resulting value to the **stStandardDate** field, or MAY[<56>](#Appendix_A_56" \o "Product behavior note 56) convert the value of the DTSTART property to a **SYSTEMTIME** structure and import the resulting value to the **stStandardDate** field.

| Field of PidLidTimeZoneStruct.stStandardDate | Value |
| --- | --- |
| **wYear** | Set to 0x0000 |
| **wMonth** | The month portion of DTSTART |
| **wDayOfWeek** | The day of the week of the date specified by DTSTART. Possible values are specified later in this section. |
| **wDay** | The occurrence of the day of week in the month for the date specified by DTSTART (if this is the 2nd Monday of May, wDay is set to 2). If this is the last occurrence of the day of the week in the month, wDay is set to 0x0005. Possible values are specified later in this section. |
| **wHour** | The hour portion of DTSTART |
| **wMinute** | The minute portion of DTSTART |
| **wSecond** | The second portion of DTSTART |
| **wMilliseconds** | Set to 0x0000 |

The following table lists the possible values of the **wDayOfWeek** subfield of the **stStandardDate** field in the **PidLidTimeZoneStruct** structure.

| wDayOfWeek | Meaning |
| --- | --- |
| 0x0000 | Sunday |
| 0x0001 | Monday |
| 0x0002 | Tuesday |
| 0x0003 | Wednesday |
| 0x0004 | Thursday |
| 0x0005 | Friday |
| 0x0006 | Saturday |

The following table lists the possible values of the **wDay** subfield of the **stStandardDate** field in the **PidLidTimeZoneStruct** structure.

| wDay | Meaning |
| --- | --- |
| 0x0001 | First occurrence of the day of the week |
| 0x0002 | Second occurrence of the day of the week |
| 0x0003 | Third occurrence of the day of the week |
| 0x0004 | Fourth occurrence of the day of the week |
| 0x0005 | Last occurrence of the day of the week |

**Exporting from Calendar objects**

This MUST be set to the onset of the Standard portion of the time zone for some year before the first appointment in the iCalendar.[<57>](#Appendix_A_57" \o "Product behavior note 57) This property is specified in the local time of the VTIMEZONE component, but the TZID parameter of this property is omitted.

Property: RRULE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.5.4

Number of Instances Allowed: 0,1

Format: Recurrence rule ([RFC2445] section 4.3.10)

Brief Description: A rule describing the onset of Standard time for years following DTSTART.

**Importing to Calendar objects**

If this VTIMEZONE component has no DAYLIGHT sub-component, all the bytes in the **stStandardDate** field of the **PidLidTimeZoneStruct** structure MUST be set to 0x00 (as specified in [2.1.3.1.1.19.2.1](#Section_832b62de0dba446ab66eefa0b5f80fac)). The remainder of this subsection only pertains to the case where the VTIMEZONE being imported contains one or more DAYLIGHT sub-components.

For basic information regarding the Recurrence rule format, see [RFC2445] section 4.3.10 and section [2.1.3.2.1](#Section_ed49ded0c28f43e796e72fcd5603cc69) of this document.

Time zone recurrences MUST be of frequency YEARLY and MUST specify either a BYDAY or a BYMONTHDAY, but not both.

If a BYDAY is specified, it MUST specify a single occurrence of a single day of the week (e.g. BYDAY=2MO, but not BYDAY=MO or BYDAY=1MO,3MO). The recurrence is imported into the **stStandardDate** field of the **PidLidTimeZoneStruct** structure using the following table.

| Field of PidLidTimeZoneStruct.stStandardDate | Value |
| --- | --- |
| **wYear** | Set to 0x0000 |
| **wMonth** | The value of the BYMONTH [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5), or, if not present, the month portion of DTSTART property. |
| **wDayOfWeek** | The day of the week specified by the BYDAY recurrence part. See section 2.1.3.1.1.19.2.1 and section [2.1.3.2.1.6](#Section_b8069b8f7a1c4eb8b529102fd49cdb3d). |
| **wDay** | The occurrence of the day of the week specified by the BYDAY recurrence part. See section 2.1.3.1.1.19.2.1 and section 2.1.3.2.1.6. |

If a BYMONTHDAY is specified, it MUST specify a single day of the month (BYMONTHDAY=12, but not BYMONTHDAY=14,15). The recurrence SHOULD[<58>](#Appendix_A_58" \o "Product behavior note 58) be imported into the **stStandardDate** field of the **PidLidTimeZoneStruct** structure as specified in the following table.

| Field of PidLidTimeZoneStruct.stStandardDate | Value |
| --- | --- |
| **wYear** | Set to 0x0001 |
| **wMonth** | The value of the BYMONTH recurrence part, or, if not present, the month portion of DTSTART property. |
| **wDayOfWeek** | Set to 0x0000. |
| **wDay** | The value of the BYMONTHDAY recurrence part. |

**Exporting from Calendar objects**

For basic information regarding the Recurrence rule format, see [RFC2445] section 4.3.10 and section 2.1.3.2.1 of this document.

If the time zone does not observe Daylight Saving Time (DST), this property MUST be omitted.

If the time zone transitions between Daylight Saving Time and Standard Time based on an occurrence of a day of the week, this property MUST be of the form FREQ=YEARLY;BYDAY=byday;BYMONTH=bymonth.

If the time zone transitions between Daylight Saving Time and Standard Time based on a specific day of the month, this property SHOULD[<59>](#Appendix_A_59" \o "Product behavior note 59) be of the form FREQ=YEARLY;BYMONTHDAY=bymonthday;BYMONTH=bymonth.

Property: TZNAME

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.2

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The name of the standard portion of the time zone.

**Importing to Calendar objects**

This property SHOULD be ignored on import.

**Exporting from Calendar objects**

This property SHOULD[<60>](#Appendix_A_60" \o "Product behavior note 60) be omitted.

Property: TZOFFSETFROM

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.3

Number of Instances Allowed: 1

Format: UTC-Offset ([RFC2445] section 4.3.14)

Brief Description: The UTC-Offset of the Daylight portion of the time zone.

**Importing to Calendar objects**

This property SHOULD be ignored on import.

**Exporting from Calendar objects**

This property MUST be the UTC-Offset representation of (-1 \* (**PidLidTimeZoneStruct**.**lBias** + **PidLidTimeZoneStruct**.**lDaylightBias**)).

Property: TZOFFSETTO

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.4

Number of Instances Allowed: 1

Format: UTC-Offset ([RFC2445] section 4.3.14)

Brief Description: The UTC-Offset of the Standard portion of the time zone.

**Importing to Calendar objects**

The **lBias** field of the **PidLidTimeZoneStruct** structure MUST be set to (-1 \* offsetMinutes), where offsetMinutes is the value of TZOFFSETTO in minutes.

**Exporting from Calendar objects**

This property MUST be the UTC-Offset representation of (-1 \* (**PidLidTimeZoneStruct**.**lBias** + **PidLidTimeZoneStruct**.**lStandardBias**)).

Component: DAYLIGHT

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.6.5

Number of Instances Allowed: 0+

Brief Description: A specification of the Daylight portion of the time zone.

**Importing to Calendar objects**

If more than one DAYLIGHT component is defined in the VTIMEZONE, only the DAYLIGHT component with the largest DTSTART SHOULD[<61>](#Appendix_A_61" \o "Product behavior note 61) be parsed. Alternatively, implementers MAY[<62>](#Appendix_A_62" \o "Product behavior note 62) parse the first DAYLIGHT component found within the VTIMEZONE, MAY[<63>](#Appendix_A_63" \o "Product behavior note 63) parse all STANDARD components found within the VTIMEZONE that have unique years in their DTSTART subcomponents, or MAY[<64>](#Appendix_A_64" \o "Product behavior note 64) fail to parse the iCalendar stream if more than one DAYLIGHT component is defined in the VTIMEZONE.

If no DAYLIGHT components are defined in the VTIMEZONE then all the bytes in the **lDaylightBias**, **lStandardBias**, **stDaylightDate**, and **stStandardDate** fields of the **PidLidTimeZoneStruct** MUST be set to 0x00.

**Exporting from Calendar objects**

If this time zone observes Daylight Saving Time, exactly one DAYLIGHT component MUST be exported for each VTIMEZONE.

If this time zone does not observe DST, this component SHOULD[<65>](#Appendix_A_65" \o "Product behavior note 65) be omitted.

Property: DTSTART

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.2.4

Number of Instances Allowed: 1

Format: Date-Time ([RFC2445] section 4.3.5)

Brief Description: The effective start date of this onset of Daylight Saving Time.

**Importing to and Exporting from Calendar objects**

The behavior of this property is identical to the behavior of the DTSTART property of the STANDARD component (section [2.1.3.1.1.19.2.1](#Section_832b62de0dba446ab66eefa0b5f80fac)) with the exception that **stDaylightDate** is modified instead of **stStandardDate**.

Property: RRULE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.5.4

Number of Instances Allowed: 0,1

Format: Recurrence rule ([RFC2445] section 4.3.10)

Brief Description: A rule describing the onset of Daylight Saving Time for years following DTSTART.

**Importing to and Exporting from Calendar objects**

The behavior of this property is identical to the behavior of the RRULE property of the STANDARD component (section [2.1.3.1.1.19.2.2](#Section_9b81b75323fc4635a4f016445897d22b)) with the exception that **stDaylightDate** is modified instead of **stStandardDate**.

Property: TZNAME

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.2

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The name of the daylight portion of the time zone.

**Importing to Calendar objects**

This property MUST be ignored on import.

**Exporting from Calendar objects**

This property SHOULD[<66>](#Appendix_A_66" \o "Product behavior note 66) be omitted.

Property: TZOFFSETFROM

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.3

Number of Instances Allowed: 1

Format: UTC-Offset ([RFC2445] section 4.3.14)

Brief Description: The UTC-Offset of the Standard portion of the time zone.

**Importing to Calendar objects**

This property SHOULD be ignored on import.

**Exporting from Calendar objects**

This property MUST be the UTC-Offset representation of (-1 \* (**PidLidTimeZoneStruct**.**lBias** + **PidLidTimeZoneStruct**.**lStandardBias**)).

Property: TZOFFSETTO

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.3.4

Number of Instances Allowed: 1

Format: UTC-Offset ([RFC2445] section 4.3.14)

Brief Description: The UTC-Offset of the Daylight portion of the time zone.

**Importing to Calendar objects**

The **lDaylightBias** field of **PidLidTimeZoneStruct** structure MUST be set to (-1 \* offsetMinutes - **lBias**), where offsetMinutes is the value of TZOFFSETTO measured in minutes.

**Exporting from Calendar objects**

This property MUST be the UTC-Offset representation of (-1 \* (**PidLidTimeZoneStruct**.**lBias** + **PidLidTimeZoneStruct**.**lDaylightBias**)).

###### Component: VEVENT

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.6.1

Number of Instances Allowed: 1+

Brief Description: A specification of an appointment or an exception to a recurring appointment.

**Importing to Calendar objects**

With the exception of those containing RECURRENCE-ID properties (section [2.1.3.1.1.20.20](#Section_6911f0f9a26b44bdbe7e0fe38059fae0)), all VEVENT components MUST map to a new [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18).

**Exporting from Calendar objects**

Each Calendar object MUST be exported to its own VEVENT component. Certain exceptions to recurring appointments can also be exported as separate VEVENT components as specified in section 2.1.3.1.1.20.20.

Property: ATTACH

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.1

Number of Instances Allowed: 0+

Format: [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) ([RFC2445] section 4.3.13), Binary ([RFC2445] section 4.3.1)

Brief Description: An attachment to the appointment.

**Importing to Calendar objects**

If the VALUE parameter (as specified in section [2.1.3.1.1.20.1.3](#Section_533177d0cd7942d3bc5b8d2b6bb9b0cb)) of this property is BINARY, then this property SHOULD[<67>](#Appendix_A_67" \o "Product behavior note 67) be parsed as a stream encoded with [**base64 encoding**](#gt_179b9392-9019-45a3-880b-26f6890522b7) (as specified in [[RFC2045]](https://go.microsoft.com/fwlink/?LinkId=90307) section 6.8), decoded into its raw binary form, and stored in **PidTagAttachDataBinary** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.589) of a new [**Attachment object**](#gt_6ab4cacc-0e1a-4843-b9e5-4f1fee5a695a) with properties specified in the following table.

| Attachment object property | Value |
| --- | --- |
| **PidTagAttachDataBinary** | See the preceding paragraph |
| **PidTagAttachEncoding** ([MS-OXPROPS] section 2.591) | Set to an empty **PtypBinary** |
| **PidTagAttachExtension** ([MS-OXPROPS] section 2.592) | Set to the substring following the last instance of a '.' character ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+002E) in X-FILENAME (section [2.1.3.1.1.20.1.4](#Section_27e3c742502045d59ff9de1c2ac564fb)). If no instances of a period exist in X-FILENAME, set to a zero-length string (""). |
| **PidTagAttachFilename** ([MS-OXPROPS] section 2.593) | Set to the value of X-FILENAME (section 2.1.3.1.1.20.1.4) |
| **PidTagAttachFlags** ([MS-OXPROPS] section 2.594) | Set to 0x00000000 |
| **PidTagAttachLongFilename** ([MS-OXPROPS] section 2.595) | Set to the value of X-FILENAME (section 2.1.3.1.1.20.1.4) |
| **PidTagAttachMethod** ([MS-OXPROPS] section 2.601) | Set to 0x00000001 |
| **PidTagAttachMimeTag** ([MS-OXPROPS] section 2.602) | Imported from FMTTYPE (section [2.1.3.1.1.20.1.2](#Section_8e62c8353abc419cb311b9670da49633)) |
| **PidTagAttachmentContactPhoto** ([MS-OXPROPS] section 2.597) | Set to FALSE |
| **PidTagAttachmentFlags** ([MS-OXPROPS] section 2.598) | Set to 0x00000000 |
| **PidTagAttachmentHidden** ([MS-OXPROPS] section 2.599) | Set to FALSE |
| **PidTagAttachmentLinkId** ([MS-OXPROPS] section 2.600) | Set to 0x00000000 |
| **PidTagDisplayName** | Set to the value of X-FILENAME (section 2.1.3.1.1.20.1.4) |
| **PidTagExceptionEndTime** ([MS-OXPROPS] section 2.685) | Set to 0x0CB34557A3DD4000 |
| **PidTagExceptionStartTime** ([MS-OXPROPS] section 2.687) | Set to 0x0CB34557A3DD4000 |
| **PidTagRenderingPosition** ([MS-OXPROPS] section 2.915) | Set to 0xFFFFFFFF |

If the VALUE parameter of this property is "URI" or not defined, then this property SHOULD[<68>](#Appendix_A_68" \o "Product behavior note 68) be parsed as a URI. CID URIs (as specified in [[RFC2392]](https://go.microsoft.com/fwlink/?LinkId=193298)) SHOULD[<69>](#Appendix_A_69" \o "Product behavior note 69) be used, for the case in which the iCalendar is embedded in a multi-part [**MIME**](#gt_af6ba277-34c1-493d-8103-71d2af36ce30) e-mail to determine which attachments from the MIME will be imported into the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18). Other URIs SHOULD[<70>](#Appendix_A_70" \o "Product behavior note 70) be imported into a new Attachment object with properties specified in the following table.

| Attachment object property | Value |
| --- | --- |
| **PidTagAttachDataBinary** | Set to an 8-bit text stream, containing the following text encoded in the active [**code page**](#gt_210637d9-9634-4652-a935-ded3cd434f38) (line breaks are encoded as 0x0D followed by 0x0A):   1. [InternetShortcut] 2. URL=urivalue |
| **PidTagAttachEncoding** | Set to an empty **PtypBinary** |
| **PidTagAttachExtension** | Set to ".url" |
| **PidTagAttachFilename** | Set to the filename parsed from the URI with a. url extension added. With respect to [[RFC3986]](https://go.microsoft.com/fwlink/?LinkId=90453), the filename is the last segment in the higher-part of the URI. |
| **PidTagAttachFlags** | Set to 0x00000000 |
| **PidTagAttachLongFilename** | Same as **PidTagAttachFilename** |
| **PidTagAttachMethod** | Set to 0x00000001 |
| **PidTagAttachMimeTag** | Set to the value of FMTTYPE (section 2.1.3.1.1.20.1.2) |
| **PidTagAttachmentContactPhoto** | Set to FALSE |
| **PidTagAttachmentFlags** | Set to 0x00000000 |
| **PidTagAttachmentHidden** | Set to FALSE |
| **PidTagAttachmentLinkId** | Set to 0x00000000 |
| **PidTagDisplayName** | Same as **PidTagAttachFilename** |
| **PidTagExceptionEndTime** | Set to 0x0CB34557A3DD4000 |
| **PidTagExceptionStartTime** | Set to 0x0CB34557A3DD4000 |
| **PidTagRenderingPosition** | Set to 0xFFFFFFFF |

**Exporting from Calendar objects**

If this iCalendar is being generated as part of a MIME [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0), all attachments in the [**attachments table**](#gt_84534866-2990-4b91-80bc-c90655ee3f9c) that meet the constraints in the following table SHOULD[<71>](#Appendix_A_71" \o "Product behavior note 71) be exported as a CID URI (as specified in [RFC2392]). In this case, the value of this property MUST be a CID URI generated by treating **PidTagAttachContentId** ([MS-OXPROPS] section 2.587) as a CID. If **PidTagAttachContentId** does not exist, an [RFC2392]-compliant CID SHOULD[<72>](#Appendix_A_72" \o "Product behavior note 72) be generated and stored in **PidTagAttachContentId**.

If this iCalendar is being generated as part of a calendar export, all attachments in the attachments table that meet the constraints in the following table SHOULD[<73>](#Appendix_A_73" \o "Product behavior note 73) be exported as binary streams encoded with base64 encoding. The value of this property MUST be the base64 encoding of **PidTagAttachDataBinary** (base64 encoding is specified in [RFC2045] section 6.8).

| Attachment Object Property | Constraint |
| --- | --- |
| **PidTagAttachmentFlags** | MUST NOT have any bits set to 1 in the bit mask 0x00000007 |
| **PidTagAttachmentHidden** | MUST be unset or, if set, MUST be FALSE |
| **PidTagAttachMethod** | MUST be 0x00000001 |

Parameter: ENCODING

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.7

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the encoding of a binary attachment.

**Importing to and Exporting from Calendar objects**

If the VALUE parameter of this ATTACH is BINARY, then the value of this parameter MUST be "base64". Otherwise, this parameter MUST be omitted.

Parameter: FMTTYPE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.8

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the [**MIME**](#gt_af6ba277-34c1-493d-8103-71d2af36ce30) content type of an attachment.

**Importing to Calendar objects**

This parameter SHOULD[<74>](#Appendix_A_74" \o "Product behavior note 74) be imported as **PidTagAttachMimeTag**.

**Exporting from Calendar objects**

This parameter MAY take the value of **PidTagAttachMimeTag**.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Distinguishes encoded binary attachments from [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) attachments.

**Importing to Calendar objects**

This parameter distinguishes attachments encoded in the iCalendar from URIs referencing resources outside the iCalendar. See section [2.1.3.1.1.20.1](#Section_87f0ef4dc1af41c19b0747083627cc43).

**Exporting from Calendar objects**

If this iCalendar is being generated as part of a [**MIME**](#gt_af6ba277-34c1-493d-8103-71d2af36ce30) [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0), this parameter SHOULD be omitted.

If this iCalendar is being generated as part of a calendar export, this parameter SHOULD be BINARY.

Parameter: X-FILENAME

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Supplies a filename for an encoded binary attachment.

**Importing to Calendar objects**

If the VALUE parameter of this ATTACH is BINARY, this X-FILENAME parameter SHOULD[<75>](#Appendix_A_75" \o "Product behavior note 75) be sanitized as specified in [[MS-OXCMAIL]](%5bMS-OXCMAIL%5d.pdf#Section_b60d48db183f4bf5a908f584e62cb2d4) section 2.2.3.4.1.1 and imported as **PidTagAttachFilename**, **PidTagAttachLongFilename**, and **PidTagDisplayName**. The filename extension parsed from this parameter is imported as **PidTagAttachExtension** as specified in section [2.1.3.1.1.20.1](#Section_87f0ef4dc1af41c19b0747083627cc43).

Otherwise, the X-FILENAME parameter is ignored.

**Exporting from Calendar objects**

If the VALUE parameter of this ATTACH is BINARY, then this parameter SHOULD[<76>](#Appendix_A_76" \o "Product behavior note 76) take the value of **PidTagAttachLongFilename**.

Otherwise, this parameter SHOULD be omitted.

Property: ATTENDEE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.4.1

Number of Instances Allowed: 0+

Format: Calendar User Address ([RFC2445] section 4.3.3)

Brief Description: An attendee for a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to Calendar objects**

If this property has the special value 'invalid:nomail', then the [**CN**](#gt_a86706d6-bcdf-4107-be38-d2f08a7eaa68) of this attendee SHOULD[<77>](#Appendix_A_77" \o "Product behavior note 77) be added to a list delimited by "; " ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+003B followed by U+0020) in the appropriate string property, as specified in the following table. If an attendee matches more than one row in the following table, the first matching row applies.

| CUTYPE | ROLE | Append CN to... |
| --- | --- | --- |
| RESOURCE | (any) | **PidLidNonSendableBcc** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.177) |
| ROOM | (any) | **PidLidNonSendableBcc** |
| (any) | OPT-PARTICIPANT | **PidLidNonSendableCc** ([MS-OXPROPS] section 2.178) |
| (any) | NON-PARTICIPANT | SHOULD[<78>](#Appendix_A_78" \o "Product behavior note 78) import to **PidLidNonSendableBcc**, MAY[<79>](#Appendix_A_79" \o "Product behavior note 79) import to **PidLidNonSendableCc** |
| (any) | (any) | **PidLidNonSendableTo** ([MS-OXPROPS] section 2.179) |

If this property is not 'invalid:nomail', it SHOULD[<80>](#Appendix_A_80" \o "Product behavior note 80) be parsed as a valid mailto [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) (as specified in [[RFC2368]](https://go.microsoft.com/fwlink/?LinkId=113487)). The resulting [**SMTP**](#gt_0678be67-e739-4e33-97fe-2b03b903a379) address SHOULD[<81>](#Appendix_A_81" \o "Product behavior note 81) be resolved against the [**address book**](#gt_d16f7b78-c5a6-48f4-9e0f-3b205b5598b5) [[MS-OXOABK]](%5bMS-OXOABK%5d.pdf#Section_f4cf9b4c923245069e712270de217614). If no match was found, a [**one-off EntryID**](#gt_942d283a-8a03-43bb-b911-34d8d14d7fd9) ([[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8) section 2.2.5.1) MUST be created using the SMTP address and the CN parameter. The [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) MUST be added to the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712) of the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) with properties specified in the following table.

| Recipient Table Property | Value |
| --- | --- |
| **PidTagAddressType** ([MS-OXPROPS] section 2.576) | Resolved from the address book (see above). In the case of a one-off, set to 'SMTP'. |
| **PidTagDisplayName** | Resolved from the address book (see above). In the case of a one-off, set to the value of the CN parameter. |
| **PidTagDisplayType** ([MS-OXPROPS] section 2.680) | Set to 0x00000000[<82>](#Appendix_A_82" \o "Product behavior note 82) |
| **PidTagEmailAddress** ([MS-OXPROPS] section 2.682) | Resolved from the address book (see above). In the case of a one-off, set to the SMTP address parsed from the mailto URI. |
| **PidTagEntryId** ([MS-OXPROPS] section 2.684) | Resolved from the address book (see above). In the case of a one-off, use the one-off EntryID. |
| **PidTagRecipientDisplayName** ([MS-OXPROPS] section 2.900) | Copy of **PidTagDisplayName**[<83>](#Appendix_A_83" \o "Product behavior note 83) |
| **PidTagRecipientEntryId** ([MS-OXPROPS] section 2.901) | Copy of **PidTagEntryId**[<84>](#Appendix_A_84" \o "Product behavior note 84) |
| **PidTagRecipientFlags** ([MS-OXPROPS] section 2.902) | Set to 0x00000001[<85>](#Appendix_A_85" \o "Product behavior note 85) |
| **PidTagRecipientType** ([MS-OXPROPS] section 2.910) | See the next table.[<86>](#Appendix_A_86" \o "Product behavior note 86) |
| **PidTagRecipientTrackStatus** ([MS-OXPROPS] section 2.908) | Import from PARTSTAT as follows:[<87>](#Appendix_A_87" \o "Product behavior note 87)   | PARTSTAT | PidTagRecipientTrackStatus | | --- | --- | | ACCEPTED | 0x00000003 | | DECLINED | 0x00000004 | | TENTATIVE | 0x00000002 | | (Any other value) | 0x00000000 | |
| **PidTagRecipientTrackStatusTime** ([MS-OXPROPS] section 2.909) | Import from X-MS-OLK-RESPTIME (as specified in section [2.1.3.1.1.20.2.6](#Section_7d88dd7b1a844ef48051f74ed89f7a27)) if present.[<88>](#Appendix_A_88" \o "Product behavior note 88) |

The correct value of **PidTagRecipientType** SHOULD[<89>](#Appendix_A_89" \o "Product behavior note 89) be determined based on the CUTYPE and ROLE (as specified in section [2.1.3.1.1.20.2.4](#Section_b75dacb75f754a25bf29a6b1423a6676)) parameters as specified in the following table. If an attendee matches more than one row in the following table, the first matching row applies.

| CUTYPE | ROLE | PidTagRecipientType |
| --- | --- | --- |
| (Any) | CHAIR | 0x00000001 |
| (Any) | REQ-PARTICIPANT | 0x00000001 |
| (Any) | OPT-PARTICIPANT | 0x00000002 |
| RESOURCE | (Any) | 0x00000003 |
| ROOM | (Any) | 0x00000003 |
| (Any) | NON-PARTICIPANT | 0x00000003[<90>](#Appendix_A_90" \o "Product behavior note 90) |
| (Any) | (Any) | 0x00000001 |

**Exporting from Calendar objects**

If the 0x00000001 flag of **PidLidAppointmentStateFlags** ([MS-OXPROPS] section 2.30) is 0, then attendee properties SHOULD NOT[<91>](#Appendix_A_91" \o "Product behavior note 91) be exported.

Each row in the recipient table of the Calendar object that satisfies the constraints in the following table MUST be exported as an attendee property. The value of the property MUST be a mailto URI (as specified in [RFC2368]) with the SMTP address of the [**recipient**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b) from the address book [MS-OXOABK]. If the recipient does not have an SMTP address, then the value of the property SHOULD[<92>](#Appendix_A_92" \o "Product behavior note 92) be set to 'invalid:nomail'.

| Recipient Table Property | Constraint |
| --- | --- |
| **PidTagRecipientFlags** | The bit denoted by 0x00000020 MUST be 0 and the bit denoted by 0x00000002 MUST be 0 |
| **PidTagRecipientType** | MUST NOT be 0x00000000 |

In addition, each of the semicolon-delimited entries in **PidLidNonSendableTo** and **PidLidNonSendableCc** SHOULD[<93>](#Appendix_A_93" \o "Product behavior note 93) be exported with a URI of 'invalid:nomail'. For handling of **PidLidNonSendableBcc**, see [2.1.3.1.1.20.21](#Section_b2a30a4382c7497ba7026ff8b5a00767).

Parameter: CN

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.2

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The display name of an attendee.

**Importing to Calendar objects**

See section [2.1.3.1.1.20.2.2](#Section_67ff347bf29147bea15792e5d882502c).

**Exporting from Calendar objects**

For attendees exported from the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712), this parameter SHOULD be exported from the **PidTagDisplayName** from the [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) (falling back on the **PidTagDisplayName** from the recipient table, if necessary).

For attendees exported from **PidLidNonSendableTo** and **PidLidNonSendableCc**, this parameter SHOULD[<94>](#Appendix_A_94" \o "Product behavior note 94) be taken from the semicolon-delimited lists.

Parameter: CUTYPE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.3

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The type of attendee.

**Importing to Calendar objects**

See section [2.1.3.1.1.20.2](#Section_fe87b9d5c0054b92b54bfe6f1504c3a0).

**Exporting from Calendar objects**

For attendees exported from the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712), this parameter SHOULD[<95>](#Appendix_A_95" \o "Product behavior note 95) only be exported if the **PidTagRecipientType** is 0x00000003. In this case, the CUTYPE SHOULD[<96>](#Appendix_A_96" \o "Product behavior note 96) be set to "RESOURCE".

For attendees exported from **PidLidNonSendableTo** and **PidLidNonSendableCc**, this parameter SHOULD be omitted.

Parameter: PARTSTAT

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.12

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The attendee's response status.

**Importing to Calendar objects**

Import behavior for the PARTSTAT parameter into the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712) is specified in section [2.1.3.1.1.20.2](#Section_fe87b9d5c0054b92b54bfe6f1504c3a0).

For calendars with a METHOD of COUNTER or REPLY, the PARTSTAT parameter is used in conjunction with the METHOD property to determine the **PidTagMessageClass** of the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18). See section [2.1.3.1.1.1](#Section_7befe35d0652447fa780d5fd5b879d38).

For calendars with a METHOD of PUBLISH, if the attendee is the user, the PARTSTAT parameter SHOULD[<97>](#Appendix_A_97" \o "Product behavior note 97) also be imported to the **PidLidResponseStatus** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.231) of the Calendar object as follows.

| PARTSTAT | PidLidResponseStatus |
| --- | --- |
| ACCEPTED | 0x00000003 |
| DECLINED | 0x00000004 |
| TENTATIVE | 0x00000002 |
| (Any other value) | Not imported |

**Exporting from Calendar objects**

For calendars with a METHOD of COUNTER or REPLY, the PARTSTAT parameter MUST be exported based on the **PidTagMessageClass** of the Calendar object. See section 2.1.3.1.1.1.

For calendars with a METHOD of PUBLISH, if the attendee is being exported from a row in the recipient table, the PARTSTAT parameter SHOULD[<98>](#Appendix_A_98" \o "Product behavior note 98) be exported from the **PidTagRecipientTrackStatus** of the [**recipient**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b) as specified in the following table. If **PidTagRecipientTrackStatus** could not be exported because it is unset or 0 and the attendee is the user, then the **PidLidResponseStatus** of the Calendar object SHOULD[<99>](#Appendix_A_99" \o "Product behavior note 99) be exported instead as specified in the following table.

| PidTagRecipientTrackStatus or PidLidResponseStatus | PARTSTAT |
| --- | --- |
| 0x00000003 | ACCEPTED |
| 0x00000004 | DECLINED |
| 0x00000002 | TENTATIVE |
| (Other) | (Not exported) |

Parameter: ROLE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.16

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The participation role of the attendee.

**Importing to Calendar objects**

See section [2.1.3.1.1.20.2](#Section_fe87b9d5c0054b92b54bfe6f1504c3a0).

**Exporting from Calendar objects**

For ATTENDEES exported from the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712), this parameter SHOULD be exported based on the **PidTagRecipientType**, as specified in the following table.

| PidTagRecipientType | ROLE |
| --- | --- |
| 0x00000002 | OPT-PARTICIPANT |
| 0x00000003 | NON-PARTICIPANT |
| (otherwise) | (omit)[<100>](#Appendix_A_100" \o "Product behavior note 100) |

For ATTENDEES exported from **PidLidNonSendableTo**, this parameter SHOULD be omitted.

For ATTENDEES exported from **PidLidNonSendableCc**, this parameter SHOULD[<101>](#Appendix_A_101" \o "Product behavior note 101) be exported as OPT-PARTICIPANT.

Parameter: RSVP

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.17

Number of Instances Allowed: 0,1

Format: Boolean ([RFC2445] section 4.3.2)

Brief Description: To specify whether there is an expectation of a reply from this attendee.

**Importing to Calendar objects**

If any ATTENDEE property in the VEVENT has its RSVP parameter set to TRUE or if the VEVENT is being imported with a **PidTagMessageClass** of "IPM.Appointment", then **PidTagResponseRequested** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.931) and **PidTagReplyRequested** ([MS-OXPROPS] section 2.918) on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) MUST both be set to TRUE. Otherwise, **PidTagResponseRequested** and **PidTagReplyRequested** MUST both be set to FALSE.

**Exporting from Calendar objects**

For ATTENDEES exported from the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712), this parameter MUST be exported from **PidTagResponseRequested** on the Calendar object.

For ATTENDEES exported from **PidLidNonSendableTo** and **PidLidNonSendableCc**, this parameter SHOULD be omitted.

Parameter: X-MS-OLK-RESPTIME

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: The time that the ATTENDEE responded to the [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0).

**Importing to Calendar objects**

Section [2.1.3.1.1.20.2](#Section_fe87b9d5c0054b92b54bfe6f1504c3a0) specifies how X-MS-OLK-RESPTIME is imported into the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712).

For calendars with a METHOD of PUBLISH, if the attendee is the user, the X-MS-OLK-RESPTIME parameter SHOULD also be imported to the **PidLidAppointmentReplyTime** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.24) of the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18).[<102>](#Appendix_A_102" \o "Product behavior note 102)

**Exporting from Calendar objects**

For calendars with a METHOD of PUBLISH, if the attendee is being exported from a row in the recipient table, the X-MS-OLK-RESPTIME parameter MAY be exported in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) format from the **PidTagRecipientTrackStatusTime** of the [**recipient**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b). If **PidTagRecipientTrackStatus** could not be exported as specified in section [2.1.3.1.1.20.2.3](#Section_3e139c25767e49a298ed1e0c4776de90) because it is unset or 0 and the attendee is the user, the **PidLidAppointmentReplyTime** of the Calendar object SHOULD be exported in UTC format instead.[<103>](#Appendix_A_103" \o "Product behavior note 103)

Property: CATEGORIES

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.2

Number of Instances Allowed: 0+

Format: Text ([RFC2445] section 4.3.11)

Brief Description: A list of categories assigned to the appointment.

**Importing to Calendar objects**

All instances of the CATEGORIES property SHOULD be parsed into a single array of strings. Several rules apply to the import of categories:

* All separator characters, semicolon ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+003B), comma (Unicode character U+002C), Arabic semicolon (Unicode character U+061B), small semicolon (Unicode character U+FE54), full-width semicolon (Unicode character U+FF1B), SHOULD[<104>](#Appendix_A_104" \o "Product behavior note 104) be removed.
* All contiguous sequences of whitespace[<105>](#Appendix_A_105" \o "Product behavior note 105) characters SHOULD[<106>](#Appendix_A_106" \o "Product behavior note 106) be truncated to a single space (Unicode character U+0020) character.
* Whitespace at the start and end of each string SHOULD be trimmed.
* Strings SHOULD[<107>](#Appendix_A_107" \o "Product behavior note 107) be truncated to a length of 255 WCHARs if the length exceeds 255 WCHARs, but the truncation SHOULD NOT[<108>](#Appendix_A_108" \o "Product behavior note 108) split surrogate pairs.
* All case-insensitive duplicate occurrences and zero-length strings in the array SHOULD[<109>](#Appendix_A_109" \o "Product behavior note 109) be removed.

The resulting string array is stored in **PidNameKeywords** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.451).

**Exporting from Calendar objects**

**PidNameKeywords** SHOULD be exported as a comma-delimited list in the CATEGORIES property.

Property: CLASS

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.3

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The privacy or classification level of an appointment.

**Importing to and Exporting from Calendar objects**

The CLASS property MUST map to **PidTagSensitivity** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.1011) as specified in the following table.

| CLASS | PidTagSensitivity |
| --- | --- |
| PRIVATE | 0x00000002 |
| CONFIDENTIAL | 0x00000003 |
| PUBLIC | 0x00000000 |
| X-PERSONAL[<110>](#Appendix_A_110" \o "Product behavior note 110) | 0x00000001[<111>](#Appendix_A_111" \o "Product behavior note 111) |

Property: COMMENT

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.4 and [[RFC2446]](https://go.microsoft.com/fwlink/?LinkId=90354) section 3.2.3

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In a meeting response, this property represents an optional plain-text message from the attendee intended for the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb).

**Importing to and Exporting from Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'REPLY' or 'COUNTER', this property SHOULD[<112>](#Appendix_A_112" \o "Product behavior note 112) be mapped directly to **PidTagBody** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.618). The COMMENT property SHOULD be ignored for other values of METHOD.

Also see the documentation for DESCRIPTION in section [2.1.3.1.1.20.11](#Section_1b69f2ac8f1249b9b91cb7b44b89b451).

Property: CONTACT

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.4.2

Number of Instances Allowed: 0+

Format: Text ([RFC2445] section 4.3.11)

Brief Description: A [**contact**](#gt_48d3e923-3081-4b1c-a8b4-db07cc022128) for an appointment.

**Importing to Calendar objects**

All instances of the CONTACT property SHOULD[<113>](#Appendix_A_113" \o "Product behavior note 113) be appended to single array of strings. Several rules apply to the import of contacts.

* All semicolons ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+003B) SHOULD[<114>](#Appendix_A_114" \o "Product behavior note 114) be removed.
* All contiguous sequences of whitespace[<115>](#Appendix_A_115" \o "Product behavior note 115) characters SHOULD[<116>](#Appendix_A_116" \o "Product behavior note 116) be truncated to a single space (Unicode character U+0020) character.
* Whitespace at the start and end of each string SHOULD[<117>](#Appendix_A_117" \o "Product behavior note 117) be trimmed.
* Strings SHOULD[<118>](#Appendix_A_118" \o "Product behavior note 118) be truncated to a length of 500 WCHARs if their length exceeds 500 WCHARs, but the truncation SHOULD NOT[<119>](#Appendix_A_119" \o "Product behavior note 119) split surrogate pairs.
* All case-insensitive duplicate occurrences and zero-length strings in the array SHOULD[<120>](#Appendix_A_120" \o "Product behavior note 120) be removed.

The resulting string array is stored in **PidLidContacts** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.77).

**Exporting from Calendar objects**

Each string in the array of strings in **PidLidContacts** SHOULD[<121>](#Appendix_A_121" \o "Product behavior note 121) be exported as a new CONTACT property.

Property: CREATED

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.7.1

Number of Instances Allowed: 0, 1

Format: Date-Time ([RFC2445] section 4.3.5)

Brief Description: The creation time of an appointment.

**Importing to Calendar objects**

This property SHOULD be ignored.

**Exporting from Calendar objects**

The **PidTagCreationTime** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.655) of a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) SHOULD[<122>](#Appendix_A_122" \o "Product behavior note 122) be exported as a CREATED property, specified in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7).

Property: DTEND

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.2.2

Number of Instances Allowed: 1

Format: Date-Time ([RFC2445] section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: The end time of an appointment. If the item is a [**counter proposal**](#gt_0152aa38-6cc8-4088-929b-2b895b8a28ba), then this is the proposed end time of the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'COUNTER', then this property SHOULD be imported as **PidLidAppointmentProposedEndWhole** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.20).[<123>](#Appendix_A_123" \o "Product behavior note 123)

If the METHOD property of the VCALENDAR component is not set to 'COUNTER', or if either X-MS-OLK-ORIGINALEND or X-MS-OLK-ORIGINALSTART is not specified, then this property SHOULD[<124>](#Appendix_A_124" \o "Product behavior note 124) be imported as **PidLidAppointmentEndWhole** ([MS-OXPROPS] section 2.14), and **PidLidAppointmentDuration** ([MS-OXPROPS] section 2.11) SHOULD[<125>](#Appendix_A_125" \o "Product behavior note 125) be set to the number of minutes between DTSTART and DTEND.

If DTSTART and DTEND are both specified in [**floating**](#gt_fe9b0a4f-452f-4ed4-98fb-f423027f6f24) time, and if both occur at midnight of their respective days, then the appointment SHOULD[<126>](#Appendix_A_126" \o "Product behavior note 126) be imported as an all-day appointment: **PidLidAppointmentSubType** ([MS-OXPROPS] section 2.31) MUST be set to 0x00000001. Note that this logic SHOULD[<127>](#Appendix_A_127" \o "Product behavior note 127) also be triggered by X-MICROSOFT-CDO-ALLDAYEVENT (section [2.1.3.1.1.20.28](#Section_0f262da6c5fd459e9f18145eba86b5d2)) and X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT (section [2.1.3.1.1.20.41](#Section_d775d2f2d45446f3955c8ebb20721ada)).

**Exporting from Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'COUNTER', then **PidLidAppointmentProposedEndWhole** SHOULD[<128>](#Appendix_A_128" \o "Product behavior note 128) be exported as a new DTEND property. For other values of METHOD, the **PidLidAppointmentEndWhole** of a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) SHOULD[<129>](#Appendix_A_129" \o "Product behavior note 129) be exported as a new DTEND property.

If this is an all-day appointment, then this property SHOULD[<130>](#Appendix_A_130" \o "Product behavior note 130) be exported in floating time with the Date format ([RFC2445] section 4.3.4).

If this is a recurring non-all-day appointment, then this property MUST be specified as a local time with a TZID parameter.

Non-recurring non-all-day appointments SHOULD[<131>](#Appendix_A_131" \o "Product behavior note 131) be specified as a local time with a TZID parameter.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

**Importing to Calendar objects**

If this appointment is recurring, and if there is a TZID parameter, and if neither **PidLidTimeZoneStruct** nor **PidLidTimeZoneDescription** has been imported from DTSTART (section [2.1.3.1.1.20.10](#Section_43d2f45b031140059a9d519bdcc747fc)), then **PidLidTimeZoneStruct** MUST be imported from the VTIMEZONE referenced by the TZID parameter, **PidLidTimeZoneDescription** MUST be imported from the TZID parameter, and **PidLidAppointmentTimeZoneDefinitionRecur** SHOULD[<132>](#Appendix_A_132" \o "Product behavior note 132) be imported from the VTIMEZONE referenced by the TZID parameter. Otherwise, this parameter SHOULD be ignored.

Furthermore, **PidLidAppointmentTimeZoneDefinitionEndDisplay** SHOULD[<133>](#Appendix_A_133" \o "Product behavior note 133) be imported from the VTIMEZONE referenced by the TZID parameter.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

**Exporting from Calendar objects**

If this is a recurring non-all-day appointment, then the DTEND property MUST be specified as a local time. It MUST be accompanied by a TZID parameter that is equal to the TZID property of the VTIMEZONE described by **PidLidAppointmentTimeZoneDefinitionRecur**[<134>](#Appendix_A_134" \o "Product behavior note 134) or the combination of **PidLidTimeZoneDescription** and **PidLidTimeZoneStruct**.

If this is a non-recurring non-all-day appointment and if **PidLidAppointmentTimeZoneDefinitionEndDisplay** is set, then the DTEND property SHOULD[<135>](#Appendix_A_135" \o "Product behavior note 135) be specified as a local time. It MUST be accompanied by a TZID parameter that is equal to the TZID property of the VTIMEZONE described by **PidLidAppointmentTimeZoneDefinitionEndDisplay**.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD[<136>](#Appendix_A_136" \o "Product behavior note 136) be ignored since a parser can determine whether a property is in the Date format ([RFC2445] section 4.3.4) or Date-Time format ([RFC2445] section 4.3.5) without an explicit declaration in the VALUE parameter.

**Exporting from Calendar objects**

If the DTEND property is specified in the Date format ([RFC2445] section 4.3.4), the VALUE parameter MUST be exported as 'DATE'. If the DTEND property is specified in the Date-Time format ([RFC2445] section 4.3.5), the VALUE parameter SHOULD be omitted, but MAY be exported as 'DATE-TIME'.

Property: DTSTAMP

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.7.2

Number of Instances Allowed: 1

Format: Date-Time ([RFC2445] section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: The creation time of the iCalendar.

**Importing to Calendar objects**

If the METHOD (specified in section [2.1.3.1.1.1](#Section_7befe35d0652447fa780d5fd5b879d38)) is 'REPLY' or 'COUNTER', then this property SHOULD be imported as **PidLidAttendeeCriticalChange** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.37).[<137>](#Appendix_A_137" \o "Product behavior note 137)

If the METHOD is not 'REPLY' or 'COUNTER', then this property MUST be imported as **PidLidOwnerCriticalChange** ([MS-OXPROPS] section 2.199).

**Exporting from Calendar objects**

If the METHOD (specified in section 2.1.3.1.1.1) is 'REPLY' or 'COUNTER', then **PidLidAttendeeCriticalChange** MUST be exported as DTSTAMP.

If the METHOD is not 'REPLY' or 'COUNTER', then **PidLidOwnerCriticalChange** MUST be exported as DTSTAMP. If **PidLidOwnerCriticalChange** is undefined, the current system time SHOULD be used.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

Property: DTSTART

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.2.4

Number of Instances Allowed: 1

Format: Date-Time ([RFC2445] section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: The start time of an appointment. If the item is a [**counter proposal**](#gt_0152aa38-6cc8-4088-929b-2b895b8a28ba), this is the proposed start time of the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'COUNTER', then this property SHOULD[<138>](#Appendix_A_138" \o "Product behavior note 138) be imported as **PidLidAppointmentProposedStartWhole** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.21).

If the METHOD property of the VCALENDAR component is not set to 'COUNTER' or if either X-MS-OLK-ORIGINALEND or X-MS-OLK-ORIGINALSTART is not specified, then this property SHOULD[<139>](#Appendix_A_139" \o "Product behavior note 139) be imported as **PidLidAppointmentStartWhole** ([MS-OXPROPS] section 2.29), and **PidLidAppointmentDuration** SHOULD[<140>](#Appendix_A_140" \o "Product behavior note 140) be set to the number of minutes between DTSTART and DTEND.

If DTSTART and DTEND are both specified in [**floating**](#gt_fe9b0a4f-452f-4ed4-98fb-f423027f6f24) time, and if both occur at midnight of their respective days, then the appointment SHOULD[<141>](#Appendix_A_141" \o "Product behavior note 141) be imported as an all-day appointment: **PidLidAppointmentSubType** MUST be set to 0x00000001. Note that this logic SHOULD[<142>](#Appendix_A_142" \o "Product behavior note 142) also be triggered by X-MICROSOFT-CDO-ALLDAYEVENT (section [2.1.3.1.1.20.28](#Section_0f262da6c5fd459e9f18145eba86b5d2)) and X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT (section [2.1.3.1.1.20.41](#Section_d775d2f2d45446f3955c8ebb20721ada)).

If the DTEND and DURATION properties are not specified in the VEVENT, the value of DTSTART MAY[<143>](#Appendix_A_143" \o "Product behavior note 143) be used to derive the end time based on the format of the DTSTART property based on the following rules.

* If the format of the DTSTART property is a Date-Time, the end time is treated as being equal to the value of DTSTART, and is imported as specified in section [2.1.3.1.1.20.8](#Section_7ca3f3d6d38a4432bf1dacaa9da4df88).
* If the format of the DTSTART property is a Date, the end time is treated as being equal to the value of DTSTART + 1 day, and is imported as specified in section 2.1.3.1.1.20.8.

**Exporting from Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'COUNTER', then **PidLidAppointmentProposedStartWhole** SHOULD[<144>](#Appendix_A_144" \o "Product behavior note 144) be exported as a new DTSTART property. For other values of METHOD, the **PidLidAppointmentStartWhole** of a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) SHOULD[<145>](#Appendix_A_145" \o "Product behavior note 145) be exported as a DTSTART property.

If this is an all-day appointment, then this property SHOULD[<146>](#Appendix_A_146" \o "Product behavior note 146) be exported in floating time with the Date format.

If this is a recurring non-all-day appointment, then this property MUST be specified as a local time with a TZID parameter.

Non-recurring non-all-day appointments SHOULD[<147>](#Appendix_A_147" \o "Product behavior note 147) be specified as a local time with a TZID parameter.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

**Importing to Calendar objects**

If this appointment is recurring, and if there is a TZID parameter, then **PidLidTimeZoneStruct** MUST be imported from the VTIMEZONE referenced by the TZID parameter, **PidLidTimeZoneDescription** MUST be imported from the TZID parameter, and **PidLidAppointmentTimeZoneDefinitionRecur** SHOULD[<148>](#Appendix_A_148" \o "Product behavior note 148) be imported from the VTIMEZONE referenced by the TZID parameter.

Furthermore, **PidLidAppointmentTimeZoneDefinitionStartDisplay** SHOULD[<149>](#Appendix_A_149" \o "Product behavior note 149) be imported from the VTIMEZONE referenced by the TZID parameter.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

**Exporting from Calendar objects**

If this is a recurring non-all-day appointment, then the DTSTART property MUST be specified as a local time. It MUST be accompanied by a TZID parameter referencing the VTIMEZONE described by **PidLidAppointmentTimeZoneDefinitionRecur**[<150>](#Appendix_A_150" \o "Product behavior note 150) or the combination of **PidLidTimeZoneDescription** and **PidLidTimeZoneStruct**.

If this is a non-recurring non-all-day appointment and if **PidLidAppointmentTimeZoneDefinitionStartDisplay** is set, then the DTSTART property SHOULD[<151>](#Appendix_A_151" \o "Product behavior note 151) be specified as a local time. It MUST be accompanied by a TZID parameter referencing the VTIMEZONE described by **PidLidAppointmentTimeZoneDefinitionStartDisplay**.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD[<152>](#Appendix_A_152" \o "Product behavior note 152) be ignored since a parser can determine whether a property is in the Date format ([RFC2445] section 4.3.4) or Date-Time format ([RFC2445] section 4.3.5) without an explicit declaration in the VALUE parameter.

**Exporting from Calendar objects**

If the DTSTART property is specified in the Date format ([RFC2445] section 4.3.4), the VALUE parameter MUST be exported as 'DATE'. If the DTSTART property is specified in the Date-Time format ([RFC2445] section 4.3.4), the VALUE parameter SHOULD be omitted, but MAY be exported as 'DATE-TIME'.

Property: DESCRIPTION

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.5

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the plain-text body of an appointment.

**Importing to and Exporting from Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'REPLY' or 'COUNTER', this property SHOULD[<153>](#Appendix_A_153" \o "Product behavior note 153) be ignored. For other values of METHOD, this property MUST be mapped directly to **PidTagBody**.

Also see the documentation for COMMENT in section [2.1.3.1.1.20.5](#Section_f2fcce4d515c4f839a1de12dd68d590f).

Parameter: LANGUAGE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.10

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the language of the property.

**Importing to Calendar objects**

This parameter SHOULD[<154>](#Appendix_A_154" \o "Product behavior note 154) be interpreted as a language tag as specified in [[RFC1766]](https://go.microsoft.com/fwlink/?LinkId=120475) and stored in **PidTagMessageLocaleId** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.794) as the corresponding language code identifier, as specified in [[MS-LCID]](%5bMS-LCID%5d.pdf#Section_70feba9f294e491eb6eb56532684c37f).

**Exporting from Calendar objects**

This parameter SHOULD NOT be exported (see section [2.1.3.1.1.20.24.1](#Section_2f5f4b0893d743599d0909431c0b5b60)).

Property: DURATION

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.2.5

Number of Instances Allowed: 0, 1

Format: Duration ([RFC2445] section 4.3.6)

Brief Description: Specifies the duration of an appointment.

**Importing to Calendar objects**

If only one of DTSTART and DTEND is present, the DURATION property SHOULD[<155>](#Appendix_A_155" \o "Product behavior note 155) be used to compute the missing property.

**Exporting from Calendar objects**

This parameter SHOULD NOT be exported.

Property: EXDATE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.5.1

Number of Instances Allowed: 0+

Format: Date-Time ([RFC2445] section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: Specifies the original start time of instances of the recurring appointment which have been deleted.

**Importing to Calendar objects**

If this property is specified, an RRULE MUST also be specified in the same VEVENT.

All valid EXDATEs SHOULD[<156>](#Appendix_A_156" \o "Product behavior note 156) be gathered into the **DeletedInstanceDates** field of the **RecurrencePattern** structure embedded within the **AppointmentRecurrencePattern** structure ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) after the following validation:

* All EXDATEs SHOULD[<157>](#Appendix_A_157" \o "Product behavior note 157) be converted to the time zone specified by **PidLidTimeZoneStruct**.
* The time information MUST be stripped off (all entries MUST fall on midnight).
* All duplicate entries MUST be removed.
* All entries that do not have a date matching the start date of an instance in the [**recurrence pattern**](#gt_4275047f-9935-46db-b9b8-8ca605d16649) MUST be removed.
* The **DeletedInstanceDates** field of the **RecurrencePattern** structure MUST be sorted chronologically with the earliest dates at the start.

Note that additional EXDATEs could be derived from the RECURRENCE-IDs of other VEVENTs (see section [2.1.3.1.1.20.20](#Section_6911f0f9a26b44bdbe7e0fe38059fae0)).

**Exporting from Calendar objects**

The EXDATE property MUST NOT be exported for non-recurring appointments or exceptions of recurring appointments.

In certain cases, an X-MICROSOFT-EXDATE SHOULD[<158>](#Appendix_A_158" \o "Product behavior note 158) be exported in place of an EXDATE. See section [2.1.3.1.1.20.39](#Section_4518dacf35f044d887a839bc57dad5c7).

If there are entries in the **DeletedInstanceDates** field, the date-times of each day specified by the **DeletedInstanceDates** field SHOULD[<159>](#Appendix_A_159" \o "Product behavior note 159) be added with the time specified by the **StartTimeOffset** field of the **RecurrencePattern** structure and exported in a multi-valued EXDATE property. However, exceptions exported as a separate VEVENT with a RECURRENCE-ID (see section 2.1.3.1.1.20.20) SHOULD NOT also be exported as an EXDATE.

If the recurrence is an all-day recurrence, the EXDATEs MUST be specified in the Date format.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD[<160>](#Appendix_A_160" \o "Product behavior note 160) be ignored since a parser can determine whether a property is in the Date format ([RFC2445] section 4.3.4) or Date-Time format ([RFC2445] section 4.3.5) without an explicit declaration in the VALUE parameter.

**Exporting from Calendar objects**

If the EXDATE property is specified in the Date format ([RFC2445] section 4.3.4), the VALUE parameter MUST be exported as 'DATE'. If the EXDATE property is specified in the Date-Time format ([RFC2445] section 4.3.5), the VALUE parameter SHOULD be omitted, but MAY be exported as 'DATE-TIME'.

Property: LAST-MODIFIED

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.7.3

Number of Instances Allowed: 0, 1

Format: Date-Time ([RFC2445] section 4.3.5)

Brief Description: The last modification time of an appointment.

**Importing to Calendar object**

This property SHOULD be ignored.[<161>](#Appendix_A_161" \o "Product behavior note 161)

**Exporting from Calendar objects**

The **PidTagLastModificationTime** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.765) of a [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) SHOULD[<162>](#Appendix_A_162" \o "Product behavior note 162) be exported as a LAST-MODIFIED property, specified in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7).

Property: LOCATION

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.7

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the location of an appointment.

**Importing to Calendar objects**

This property SHOULD[<163>](#Appendix_A_163" \o "Product behavior note 163) be stripped of all carriage returns ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+000D) and line feeds (Unicode character U+000A), and SHOULD[<164>](#Appendix_A_164" \o "Product behavior note 164) be truncated to a length of 255 WCHARs if its length exceeds 255 WCHARs. The truncation SHOULD NOT[<165>](#Appendix_A_165" \o "Product behavior note 165) split surrogate pairs. This property MUST be stored in **PidLidLocation** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.159).

**Exporting from Calendar objects**

**PidLidLocation** MUST be exported as a LOCATION property.

Parameter: ALTREP

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.1

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies an alternate text representation of the property value.

**Importing to Calendar objects**

This parameter MAY[<166>](#Appendix_A_166" \o "Product behavior note 166) be imported to the **PidNameLocationUrl** (section [2.1.3.4.3](#Section_eceb81bed7854e9f828b10357845d4c7))property.

**Exporting from Calendar objects**

This parameter MAY[<167>](#Appendix_A_167" \o "Product behavior note 167) be exported from the **PidNameLocationUrl** property.

Parameter: LANGUAGE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.10

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the language of the property.

**Importing to Calendar objects**

This parameter SHOULD[<168>](#Appendix_A_168" \o "Product behavior note 168) be interpreted as a language tag as specified in [[RFC1766]](https://go.microsoft.com/fwlink/?LinkId=120475) and stored in **PidTagMessageLocaleId** as the corresponding language code identifier, as specified in [[MS-LCID]](%5bMS-LCID%5d.pdf#Section_70feba9f294e491eb6eb56532684c37f).

**Exporting from Calendar objects**

This parameter SHOULD NOT be exported. See section [2.1.3.1.1.20.24.1](#Section_2f5f4b0893d743599d0909431c0b5b60).

Property: ORGANIZER

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.4.3

Number of Instances Allowed: 0, 1

Format: Calendar User Address ([RFC2445] section 4.3.3)

Brief Description: The [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) of a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to Calendar objects**

This property SHOULD[<169>](#Appendix_A_169" \o "Product behavior note 169) be parsed as a valid mailto [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) as specified in [[RFC2368]](https://go.microsoft.com/fwlink/?LinkId=113487). The resulting [**SMTP**](#gt_0678be67-e739-4e33-97fe-2b03b903a379) address SHOULD be resolved against the address book, as specified in [[MS-OXOABK]](%5bMS-OXOABK%5d.pdf#Section_f4cf9b4c923245069e712270de217614). If no match was found, a [**one-off EntryID**](#gt_942d283a-8a03-43bb-b911-34d8d14d7fd9) ([[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8) section 2.2.5.1) MUST be created using the SMTP address and the CN parameter. The [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) MUST be added to the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712) of the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) with properties specified in the following table.

| Recipient Table Property | Value |
| --- | --- |
| **PidTagAddressType** | Resolved from the [**address book**](#gt_d16f7b78-c5a6-48f4-9e0f-3b205b5598b5) (see previous paragraph). |
| **PidTagDisplayName** | Resolved from the address book (see previous paragraph). |
| **PidTagDisplayType** | Set to 0x00000000[<170>](#Appendix_A_170" \o "Product behavior note 170) |
| **PidTagEmailAddress** | Resolved from the address book (see previous paragraph). |
| **PidTagEntryId** | Resolved from the address book (see previous paragraph). |
| **PidTagRecipientDisplayName** | Copy of **PidTagDisplayName**[<171>](#Appendix_A_171" \o "Product behavior note 171) |
| **PidTagRecipientEntryId** | Copy of **PidTagEntryId**[<172>](#Appendix_A_172" \o "Product behavior note 172) |
| **PidTagRecipientFlags** | Set to 0x00000003. |
| **PidTagRecipientType** | Set to 0x00000001. |

**Exporting from Calendar objects**

If the 0x00000001 flag of **PidLidAppointmentStateFlags** is 0, then an ORGANIZER property MUST NOT be exported.

The row in the recipient table of the Calendar object that satisfies the constraints in the following table SHOULD[<173>](#Appendix_A_173" \o "Product behavior note 173) be exported as an ORGANIZER property. The value of the property MUST be a mailto URI as specified in [RFC2368] with the SMTP address of the [**recipient**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b) from the address book, as specified in [MS-OXOABK]. If the recipient does not have an SMTP address, then the value of the property SHOULD[<174>](#Appendix_A_174" \o "Product behavior note 174) be set to 'invalid:nomail'.

| Recipient Table Property | Constraint |
| --- | --- |
| **PidTagRecipientFlags** | The bit denoted by 0x00000020 MUST be 0 |
| **PidTagRecipientFlags**  or **PidTagRecipientType** | The bit denoted by 0x00000002 of **PidTagRecipientFlags** MUST be 1  or  The **PidTagRecipientType** MUST be 0x00000000 |

Parameter: CN

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.2

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The display name of the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb).

**Importing to Calendar objects**

See section [2.1.3.1.1.20.16](#Section_088b8ca4199c4a93bd5f590dc9126319).

**Exporting from Calendar objects**

This parameter SHOULD be exported from the **PidTagDisplayName** from the [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) (falling back on the **PidTagDisplayName** from the [**recipient table**](#gt_fd259652-8346-4a2a-94f7-33143038f712), if necessary).

Property: PRIORITY

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.9

Number of Instances Allowed: 0, 1

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the importance of an appointment.

**Importing to Calendar objects**

If **PidTagImportance** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.739) cannot be imported from X-MICROSOFT-CDO-IMPORTANCE (section [2.1.3.1.1.20.32](#Section_38b4e7a98dec488aa90185cfe71171d8)) or X-MICROSOFT-MSNCALENDAR-IMPORTANCE (section [2.1.3.1.1.20.43](#Section_6aea4ffe019343f0b2cd8dfa11e9f772)), then this property MUST be imported into **PidTagImportance** as specified by the following table.

| PRIORITY | PidTagImportance |
| --- | --- |
| 0 | (unset) |
| 1 | 0x00000002 |
| 2 | 0x00000002 |
| 3 | 0x00000002 |
| 4 | 0x00000002 |
| 5 | 0x00000001 |
| 6 | 0x00000000 |
| 7 | 0x00000000 |
| 8 | 0x00000000 |
| 9 | 0x00000000 |

**Exporting from Calendar objects**

**PidTagImportance** MUST be exported as the PRIORITY property as specified by the following table.

| PidTagImportance | PRIORITY |
| --- | --- |
| 0x00000002 | 1 |
| 0x00000001 | 5 |
| 0x00000000 | 9 |

Property: RDATE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.5.3

Number of Instances Allowed: 0+

Format: Date-Time ([RFC2445] section 4.3.5), Date ([RFC2445] section 4.3.4), Period of Time ([RFC2445] section 4.3.9)

Brief Description: Specifies the start time of additional instances of the recurring appointment which have been created by the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb).

**Importing to Calendar objects**

If this property is specified, an RRULE MUST also be specified in the same VEVENT.

RDATEs in Period of Time format SHOULD be ignored. All valid RDATEs SHOULD[<175>](#Appendix_A_175" \o "Product behavior note 175) be gathered into the **ModifiedInstanceDates** field of the **RecurrencePattern** structure ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1) embedded within the **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44), after the following validation:

* All RDATEs MUST be converted to the time zone specified by **PidLidTimeZoneStruct**.
* The time-of-day information MUST be stripped off (all entries MUST fall on midnight).
* All duplicate entries MUST be removed.
* Each RDATE MUST be pairable with an EXDATE to represent a moved instance of a recurring appointment. The moved instance obeys the following rules:
  + An instance MUST NOT be moved before the previous instance or after the next instance.
  + An instance MUST NOT be moved such that the intersection of its span with the span of any other instance of the appointment has a non-zero duration.
  + An instance MUST NOT be moved such that its start time falls on the same calendar day as that of another instance.
* The **ModifiedInstanceDates** field in the **RecurrencePattern** structure MUST be sorted chronologically with the earliest dates at the start.

In addition, all valid RDATEs SHOULD[<176>](#Appendix_A_176" \o "Product behavior note 176) be stored in the **ExceptionInfo** field of the **AppointmentRecurrencePattern** structure. The contents of each **ExceptionInfo** block MUST be set as specified in the following table.

| ExceptionInfo Field | Value |
| --- | --- |
| **StartDateTime** | Set to the RDATE value, in the time zone specified by **PidLidTimeZoneStruct** |
| **EndDateTime** | Set to **StartDateTime** + the duration of the appointment |
| **OriginalStartDate** | Set to the paired EXDATE value, in the time zone specified by **PidLidTimeZoneStruct** |
| **OverrideFlags** | Set to 0x00000000 |
| **SubjectLength**/**Subject** | (unset) |
| **MeetingType** | (unset) |
| **ReminderDelta** | (unset) |
| **ReminderSet** | (unset) |
| **LocationLength**/**Location** | (unset) |
| **BusyStatus** | (unset) |
| **Attachment** | (unset) |
| **SubType** | (unset) |
| **AppointmentColor** | (unset) |

Note that additional RDATEs could be derived from the DTSTARTs of other VEVENTs. See section [2.1.3.1.1.20.20](#Section_6911f0f9a26b44bdbe7e0fe38059fae0). For exceptions generated by RECURRENCE-IDs, fields in the **ExceptionInfo** structure MUST be set according to the following table.

| ExceptionInfo Field | Value |
| --- | --- |
| **StartDateTime** | Set to **PidLidAppointmentStartWhole** from the exception [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18), in the time zone specified by **PidLidTimeZoneStruct** |
| **EndDateTime** | Set to **PidLidAppointmentEndWhole** from the exception Calendar object, in the time zone specified by **PidLidTimeZoneStruct** |
| **OriginalStartDate** | Set to **PidLidExceptionReplaceTime** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.117) from the exception Calendar object, in the time zone specified by **PidLidTimeZoneStruct** |
| **OverrideFlags** | Set the appropriate flags specified in the next table. |
| **SubjectLength**/**Subject** | Set to **PidTagSubject** ([MS-OXPROPS] section 2.1034) from the exception Calendar object, leave unset if **PidTagSubject** is not present |
| **MeetingType** | (unset) |
| **ReminderDelta** | Set to **PidLidReminderDelta** ([MS-OXPROPS] section 2.218) from the exception Calendar object, leave unset if **PidLidReminderDelta** is not present |
| **ReminderSet** | Set to FALSE if **PidLidReminderDelta** is not present, leave unset otherwise |
| **LocationLength**/**Location** | Set to **PidLidLocation** from the exception Calendar object, leave unset if **PidLidLocation** is not present |
| **BusyStatus** | Set to **PidLidBusyStatus** ([MS-OXPROPS] section 2.47) from the exception Calendar object, leave unset if **PidLidBusyStatus** is not present |
| **Attachment** | (unset) |
| **SubType** | Set to **PidLidAppointmentSubType** from the exception Calendar object, leave unset if **PidLidAppointmentSubType** is not present |
| **AppointmentColor** | (unset) |

The following table specifies the valid values for the **OverrideFlags** field of the **ExceptionInfo** structure.

| OverrideFlags Flag | Meaning |
| --- | --- |
| 0x0001 | **SubjectLength** and **Subject** are set. |
| 0x0004 | **ReminderDelta** is set. |
| 0x0008 | **ReminderSet** is set. |
| 0x0010 | **LocationLength** and **Location** are set. |
| 0x0020 | **BusyStatus** is set. |
| 0x0080 | **SubType** is set. |
| 0x0200 | **PidTagRtfCompressed** ([MS-OXPROPS] section 2.942) or **PidTagBody** from the exception Calendar object is present. |

**Exporting from Calendar objects**

The RDATE property MUST NOT be exported for non-recurring appointments or exceptions of recurring appointments.

If there are entries in the **ModifiedInstanceDates** field in the **RecurrencePattern** structure embedded within the **AppointmentRecurrencePattern** structure, the date-times of all instances of the [**recurrence pattern**](#gt_4275047f-9935-46db-b9b8-8ca605d16649) falling on the days specified by the **ModifiedInstanceDates** field in the **RecurrencePattern** structure SHOULD[<177>](#Appendix_A_177" \o "Product behavior note 177) be exported in an RDATE, but exceptions exported as a separate VEVENT with a RECURRENCE-ID (see section 2.1.3.1.1.20.20) MUST NOT also be exported as an RDATE.

If the exception is an all-day appointment, the RDATE MUST be specified in the Date format.

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD[<178>](#Appendix_A_178" \o "Product behavior note 178) be ignored since a parser can determine whether a property is in the Date format ([RFC2445] section 4.3.4) or Date-Time format ([RFC2445] section 4.3.5) without an explicit declaration in the VALUE parameter.

**Exporting from Calendar objects**

If the RDATE property is specified in the Date format ([RFC2445] section 4.3.4), the VALUE parameter MUST be exported as 'DATE'. If the RDATE property is specified in the Date-Time format ([RFC2445] section 4.3.5), the VALUE parameter SHOULD be omitted, but MAY be exported as 'DATE-TIME'.

Property: RRULE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.5.4

Number of Instances Allowed: 0, 1

Format: Recurrence rule ([RFC2445] section 4.3.10)

Brief Description: Specifies the [**recurrence pattern**](#gt_4275047f-9935-46db-b9b8-8ca605d16649) of a recurring appointment.

**Importing to and Exporting from Calendar objects**

Section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4) specifies how the RRULE property is imported and exported.

Property: RECURRENCE-ID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.4.4

Number of Instances Allowed: 0, 1

Format: Date-Time ([RFC2445] section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: The original starting time of a moved exception of a recurring appointment.

**Importing to Calendar objects**

This property MUST be imported into **PidLidExceptionReplaceTime**, in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7).

In addition, if the VCALENDAR contains a recurring VEVENT with the same UID, but no RECURRENCE-ID, this entire VEVENT SHOULD[<179>](#Appendix_A_179" \o "Product behavior note 179) be treated as an exception of the recurring VEVENT. In particular:

* Instead of creating a new [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) in the [**Folder object**](#gt_0682daa7-c1b8-419b-8a32-6048833d0b72) for this VEVENT, a new [**Attachment object**](#gt_6ab4cacc-0e1a-4843-b9e5-4f1fee5a695a) in the [**Recurring Calendar object**](#gt_f2454cd9-84bd-4726-bba1-bd0ae07bd237) SHOULD[<180>](#Appendix_A_180" \o "Product behavior note 180) be created (with properties specified in the following table), and **PidTagAttachDataObject** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.590) SHOULD[<181>](#Appendix_A_181" \o "Product behavior note 181) be opened as a Calendar object and used to import this VEVENT.
* The **PidTagMessageClass** of this Calendar object SHOULD[<182>](#Appendix_A_182" \o "Product behavior note 182) be overwritten to 'IPM.OLE.CLASS.{00061055-0000-0000-C000-000000000046}'.
* The recurring VEVENT SHOULD[<183>](#Appendix_A_183" \o "Product behavior note 183) treat this VEVENT's RECURRENCE-ID as an EXDATE, and this VEVENT's DTSTART as an RDATE. See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) for the effect of this exception on **PidLidAppointmentRecur**.

| Attachment Object Property | Value |
| --- | --- |
| **PidTagAttachDataObject** | Open this property as a Calendar object interface and import the VEVENT |
| **PidTagAttachMethod** | Set to 0x00000005 |
| **PidTagRenderingPosition** | Set to 0xFFFFFFFF |
| **PidTagDisplayName** | Set to the **PidTagSubject** of this Calendar object. |
| **PidTagExceptionStartTime** | Set to the **PidLidAppointmentStartWhole** of this Calendar object, local to the time zone specified by **PidLidTimeZoneStruct** of this Calendar object. |
| **PidTagAttachEncoding** | Set to an empty **PtypBinary** |
| **PidTagExceptionEndTime** | Set to the **PidLidAppointmentEndWhole** of this Calendar object, local to the time zone specified by **PidLidTimeZoneStruct** of this Calendar object. |
| **PidTagAttachmentFlags** | Set to 0x00000002 |
| **PidTagAttachmentLinkId** | Set to 0x00000000 |
| **PidTagAttachFlags** | Set to 0x00000000 |
| **PidTagAttachmentHidden** | Set to TRUE |
| **PidTagAttachmentContactPhoto** | Set to FALSE |

**Exporting from Calendar objects**

If **PidLidExceptionReplaceTime** is set, then it MUST be exported as a RECURRENCE-ID. Otherwise, if an InstanceDate can be parsed from the 17th, 18th, 19th, and 20th bytes of **PidLidGlobalObjectId** ([MS-OXPROPS] section 2.142) as specified in section [2.1.3.1.1.20.26](#Section_ac8c1e68de584230a2e279aae754a055), then that date combined with the time in **PidLidStartRecurrenceTime** ([MS-OXPROPS] section 2.304) in the time zone specified by **PidLidTimeZoneStruct** MUST be exported as a RECURRENCE-ID.

In addition, exceptions to recurring appointments SHOULD[<184>](#Appendix_A_184" \o "Product behavior note 184) be exported as a separate VEVENTs with a RECURRENCE-ID under either of the conditions below. Exceptions that do not fit either of these conditions MAY instead be exported as an RDATE (see section 2.1.3.1.1.20.18).

* Exceptions stored as an Attachment object with **PidTagAttachMethod** set to 0x00000005 and with the bit denoted by 0x00000002 set to 1 in **PidTagAttachmentFlags**.
* Exceptions which do anything other than, or in addition to, moving the start time of an instance without changing the duration.

The RECURRENCE-ID of new VEVENTs MUST be exported from the **OriginalStartDate** field of the corresponding **ExceptionInfo** block. Furthermore, the new VEVENTs MUST export the same UID as the recurring VEVENT. The remaining properties MUST be exported from the Calendar object embedded in **PidTagAttachDataObject** of the Attachment object. If no Attachment object exists for this exception, then the **ExceptionInfo**'s fields MUST be exported as properties of the new VEVENT as specified in the following table.

| ExceptionInfo Field | Export as... |
| --- | --- |
| **StartDateTime / MeetingType** | Export as DTSTART (see section [2.1.3.1.1.20.10](#Section_43d2f45b031140059a9d519bdcc747fc)) |
| **EndDateTime / MeetingType** | Export as DTEND (see section [2.1.3.1.1.20.8](#Section_7ca3f3d6d38a4432bf1dacaa9da4df88)) |
| **fOriginalStartDate** | Export as RECURRENCE-ID |
| **SubjectLength / Subject** | Export as SUMMARY (see section [2.1.3.1.1.20.24](#Section_f9f57d5c98fc4e6b96f1652d0a5f1105)), if **Subject** is set |
| **ReminderDelta / ReminderSet** | Export as a VALARM sub-component (see section [2.1.3.1.1.20.62](#Section_9710b22cba2e4581be59e143a952708a)), if **ReminderDelta** is set and if **ReminderSet** is not FALSE |
| **LocationLength / Location** | Export as LOCATION (see section [2.1.3.1.1.20.15](#Section_9b79606a2a56415ebbfb45001039c4f9)), if **Location** is set |
| **BusyStatus** | Export as TRANSP (see section [2.1.3.1.1.20.25](#Section_54d3000ca6b343c0b4b0543578f86fa0)) and X-MICROSOFT-CDO-BUSYSTATUS (see section [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736)), if **BusyStatus** is set |

If RECURRENCE-ID is exported (as specified above) and the recurring parent is not all-day, RECURRENCE-ID MUST be specified local to the time zone specified in **PidLidTimeZoneStruct**.

If RECURRENCE-ID is exported (as specified above) and the recurring parent is all-day, then the RECURRENCE-ID MUST be specified in the Date format ([RFC2445] section 4.3.4).

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD[<185>](#Appendix_A_185" \o "Product behavior note 185) be ignored since a parser can determine whether a property is in the Date format ([RFC2445] section 4.3.4) or Date-Time format ([RFC2445] section 4.3.5) without an explicit declaration in the VALUE parameter.

**Exporting from Calendar objects**

If the RECURRENCE-ID property is specified in the Date format ([RFC2445] section 4.3.4), the VALUE parameter MUST be exported as 'DATE'. If the RECURRENCE-ID property is specified in the Date-Time format ([RFC2445] section 4.3.5), the VALUE parameter SHOULD be omitted, but MAY be exported as 'DATE-TIME'.

Property: RESOURCES

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.10

Number of Instances Allowed: 0+

Format: Text ([RFC2445] section 4.3.11)

Brief Description: A resource (such as rooms or equipment) for a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to Calendar objects**

All instances of the RESOURCES property SHOULD[<186>](#Appendix_A_186" \o "Product behavior note 186) be parsed as a comma-delimited list of strings into a string array. For each string in the array:

* All semicolons ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+003B) MUST be filtered out.
* All adjacent sequences of whitespace[<187>](#Appendix_A_187" \o "Product behavior note 187) MUST be compressed to a single space (Unicode character U+0020).
* All whitespace[<188>](#Appendix_A_188" \o "Product behavior note 188) at the beginning and end of the string MUST be filtered out.
* Zero-length strings MUST be ignored.

All remaining strings in the array SHOULD[<189>](#Appendix_A_189" \o "Product behavior note 189) be added to a list delimited by "; " (Unicode character U+003B followed by U+0020) in **PidLidNonSendableBcc**.

**Exporting from Calendar objects**

The semicolon-delimited entries in **PidLidNonSendableBcc** SHOULD[<190>](#Appendix_A_190" \o "Product behavior note 190) be exported as a comma-delimited list in a RESOURCES property.

Property: SEQUENCE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.7.4

Number of Instances Allowed: 0, 1

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the revision sequence number of the [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0).

**Importing to Calendar objects**

If **PidLidAppointmentSequence** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.25) cannot be imported from X-MICROSOFT-CDO-APPT-SEQUENCE (section [2.1.3.1.1.20.29](#Section_71f425bec850458ebc99037247d51d5b)), then this property MUST be imported into **PidLidAppointmentSequence**. If no SEQUENCE property exists, **PidLidAppointmentSequence** SHOULD[<191>](#Appendix_A_191" \o "Product behavior note 191) be left unset.

**Exporting from Calendar objects**

**PidLidAppointmentSequence** MUST be exported as the SEQUENCE property. If **PidLidAppointmentSequence** is not set, the SEQUENCE property MUST be exported as 0.

Property: STATUS

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.11

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the confirmation level of the appointment.

**Importing to Calendar objects**

If **PidLidBusyStatus** cannot be imported from TRANSP (section [2.1.3.1.1.20.25](#Section_54d3000ca6b343c0b4b0543578f86fa0)), X-MICROSOFT-CDO-BUSYSTATUS (section [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736)), or X-MICROSOFT-MSNCALENDAR-BUSYSTATUS (section [2.1.3.1.1.20.42](#Section_b9b97ee604274dd3b25faea42453e414)), this property SHOULD[<192>](#Appendix_A_192" \o "Product behavior note 192) be imported into **PidLidBusyStatus** as specified in the following table.

| STATUS | PidLidBusyStatus |
| --- | --- |
| CANCELLED | 0x00000000 |
| TENTATIVE | 0x00000001 |
| CONFIRMED | 0x00000002 |

**Exporting from Calendar objects**

This property SHOULD NOT be exported.

Property: SUMMARY

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.12

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the subject of an appointment.

**Importing to Calendar objects**

This property SHOULD[<193>](#Appendix_A_193" \o "Product behavior note 193) be stripped of all carriage returns ([**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) character U+000D) and line feeds (Unicode character U+000A), and SHOULD[<194>](#Appendix_A_194" \o "Product behavior note 194) be truncated to a length of 255 WCHARs if its length exceeds 255 WCHARs. The truncation SHOULD NOT[<195>](#Appendix_A_195" \o "Product behavior note 195) split surrogate pairs. This property MUST be stored in **PidTagSubject**. If this property could not be imported, **PidTagSubject** SHOULD[<196>](#Appendix_A_196" \o "Product behavior note 196) be set to the zero-length string.

**Exporting from Calendar objects**

**PidTagSubject** MUST be exported as a SUMMARY property. If **PidTagSubject** is not set, then the zero-length string SHOULD[<197>](#Appendix_A_197" \o "Product behavior note 197) be exported as a SUMMARY property.

Parameter: LANGUAGE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.10

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the language of the property.

**Importing to Calendar objects**

This parameter SHOULD[<198>](#Appendix_A_198" \o "Product behavior note 198) be parsed as a language tag (as specified in [[RFC1766]](https://go.microsoft.com/fwlink/?LinkId=120475)) and stored in **PidTagMessageLocaleId** as the corresponding [[MS-LCID]](%5bMS-LCID%5d.pdf#Section_70feba9f294e491eb6eb56532684c37f) language code identifier.

**Exporting from Calendar objects**

**PidTagMessageLocaleId** SHOULD[<199>](#Appendix_A_199" \o "Product behavior note 199) be converted from an [MS-LCID] language code identifier to an [RFC1766] language tag and exported as a LANGUAGE parameter.

Property: TRANSP

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.2.7

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies whether or not this appointment is intended to be visible in availability searches.

**Importing to Calendar objects**

If **PidLidBusyStatus** cannot be imported from X-MICROSOFT-CDO-BUSYSTATUS (section [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736)) or X-MICROSOFT-MSNCALENDAR-BUSYSTATUS (section [2.1.3.1.1.20.42](#Section_b9b97ee604274dd3b25faea42453e414)), this property SHOULD[<200>](#Appendix_A_200" \o "Product behavior note 200) be imported into **PidLidBusyStatus** as specified in the following table.

| STATUS | PidLidBusyStatus |
| --- | --- |
| TRANSPARENT | 0x00000000 |
| OPAQUE | 0x00000002 |

**Exporting from Calendar objects**

This property SHOULD[<201>](#Appendix_A_201" \o "Product behavior note 201) be exported from **PidLidBusyStatus** as specified in the following table.

| PidLidBusyStatus | STATUS |
| --- | --- |
| 0x00000000 | TRANSPARENT |
| 0x00000001 | OPAQUE |
| 0x00000002 | OPAQUE |
| 0x00000003 | OPAQUE |
| 0x00000004[<202>](#Appendix_A_202" \o "Product behavior note 202) | TRANSPARENT |

Property: UID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.4.7

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Provides a globally unique identifier for the appointment.

**Importing to Calendar objects**

There are two supported forms of textual representation of the UID property. The [**Augmented Backus-Naur Form (ABNF)**](#gt_24ddbbb4-b79e-4419-96ec-0fdd229c9ebf) syntax, as specified in [[RFC5234]](https://go.microsoft.com/fwlink/?LinkId=123096), for this value is shown in the following example.

1. UID = EncodedGlobalId / ThirdPartyGlobalId
2. EncodedGlobalId = Header GlobalIdData
3. ThirdPartyGlobalId = 1\*UTF8-octets ; Assuming UTF-8 is the encoding
4. Header = ByteArrayID InstanceDate CreationDateTime Padding DataSize
5. ByteArrayID = "040000008200E00074C5B7101A82E008"
6. InstanceDate = InstanceYear InstanceMonth InstanceDay
7. InstanceYear = 4\*4HEXDIG ; UInt16
8. InstanceMonth = 2\*2HEXDIG ; UInt8
9. InstanceDay = 2\*2HEXDIG ; UInt8
10. CreationDateTime = FileTime
11. FileTime = 16\*16HEXDIG ; UInt64
12. Padding = 16\*16HEXDIG ; "0000000000000000" recommended
13. DataSize = 8\*8HEXDIG ; UInt32 little-endian
14. GlobalIdData = 2\*HEXDIG
15. UTF8-octets = \*( UTF8-char )
16. UTF8-char = UTF8-1 / UTF8-2 / UTF8-3 / UTF8-4
17. UTF8-1 = %x00-7F
18. UTF8-2 = %xC2-DF UTF8-tail
19. UTF8-3 = %xE0 %xA0-BF UTF8-tail / %xE1-EC 2( UTF8-tail ) /
20. %xED %x80-9F UTF8-tail / %xEE-EF 2( UTF8-tail )
21. UTF8-4 = %xF0 %x90-BF 2( UTF8-tail ) / %xF1-F3 3( UTF8-tail ) /
22. %xF4 %x80-8F 2( UTF8-tail )
23. UTF8-tail = %x80-BF

To be of type **EncodedGlobalId**, the value of the UID property MUST satisfy the following constraints:

* Every character MUST be a HEXDIG.
* The length of the string MUST be eighty-two (82) characters or more.
* The length of the string MUST be evenly divisible by 2.
* The first thirty-two characters MUST match (case insensitive)[<203>](#Appendix_A_203" \o "Product behavior note 203) "040000008200E00074C5B7101A82E008".

Otherwise, the UID property is of type **ThirdPartyGlobalId**.

If the UID is of type **EncodedGlobalId**, then the data MUST be decoded to its binary representation (every two HEXDIGs compose one byte).

A temporary variable *EffectiveInstanceDate* is defined as follows:

* If the UID is of type **EncodedGlobalId** and if the **InstanceDate** portion of the UID is a valid date in the range of January 1st, 1601 to December 31st, 4500 (inclusive), then the *EffectiveInstanceDate* is the **ThirdPartyGlobalId** portion of the UID.
* If the UID is of type **EncodedGlobalId** but the **ThirdPartyGlobalId** portion of the UID is not a valid date in the range of January 1st, 1601 to December 31st, 4500 (inclusive), then the *EffectiveInstanceDate* is the date from the RECURRENCE-ID property (in its local time zone). In the case where RECURRENCE-ID property is not present, the *EffectiveInstanceDate* is zero (Year = Month = Day = 0).
* If the UID is of type **ThirdPartyGlobalId**, then the *EffectiveInstanceDate* is the date from the RECURRENCE-ID property (in its local time zone). In the case where RECURRENCE-ID property is not present, the *EffectiveInstanceDate* is zero (Year = Month = Day = 0).

If the UID is of type **EncodedGlobalId**, it MUST be imported into **PidLidGlobalObjectId** as specified below. The **PidLidGlobalObjectId** structure is specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.27.

* The **Byte Array ID** field MUST be set to: 0x04, 0x00, 0x00, 0x00, 0x82, 0x00, 0xE0, 0x00, 0x74, 0xC5, 0xB7, 0x10, 0x1A, 0x82, 0xE0, 0x08.
* The **YH** field MUST be set to the high byte of the *EffectiveInstanceDate*'s year.
* The **YL** field MUST be set to the low byte of the *EffectiveInstanceDate*'s year.
* The **M** field MUST be set to the value of the *EffectiveInstanceDate*'s month.
* The **D** field MUST be set to the value of the *EffectiveInstanceDate*'s day.
* The **Creation Time** field MUST be set to the CreationDateTime value.
* The **X** field MUST be set to the Padding value.
* The **Size** field MUST be set to the DataSize value.
* The **Data** field MUST be set to the binary value of GlobalIdData.

If the UID is of type **EncodedGlobalId**, it MUST also be imported into **PidLidCleanGlobalObjectId** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.57) as specified below. The **PidLidCleanGlobalObjectId** structure is specified in [MS-OXOCAL] section 2.2.1.28.

* The **Byte Array ID** field MUST be set to: 0x04, 0x00, 0x00, 0x00, 0x82, 0x00, 0xE0, 0x00, 0x74, 0xC5, 0xB7, 0x10, 0x1A, 0x82, 0xE0, 0x08.
* The **YH** field MUST be set to 0x00.
* The **YL** field MUST be set to 0x00.
* The **M** field MUST be set to 0x00.
* The **D** field MUST be set to 0x00.
* The **Creation Time** field MUST be set to the CreationDateTime value.
* The **X** field MUST be set to the Padding value.
* The **Size** field MUST be set to the DataSize value.
* The **Data** field MUST be set to the binary value of GlobalIdData.

If the UID is of type **ThirdPartyGlobalId**, it MUST be imported into **PidLidGlobalObjectId** as specified below.

* The **Byte Array ID** field MUST be set to: 0x04, 0x00, 0x00, 0x00, 0x82, 0x00, 0xE0, 0x00, 0x74, 0xC5, 0xB7, 0x10, 0x1A, 0x82, 0xE0, 0x08.
* The **YH** field MUST be set to the high byte of the *EffectiveInstanceDate*'s year.
* The **YL** field MUST be set to the low byte of the *EffectiveInstanceDate*'s year.
* The **M** field MUST be set to the value of the *EffectiveInstanceDate*'s month.
* The **D** field MUST be set to the value of the *EffectiveInstanceDate*'s day.
* The **Creation Time** field MUST be set to 0x0000000000000000.
* The **X** field MUST be set to 0x0000000000000000.
* The **Size** field MUST be set to the number of OCTETS in **ThirdPartyGlobalId** (UTF-8 encoded length) + 0x0000000C.
* The **Data** field MUST be set to the following bytes: 0x76, 0x43, 0x61, 0x6C, 0x2D, 0x55, 0x69, 0x64, 0x01, 0x00, 0x00, 0x00, followed by the value of **ThirdPartyGlobalId** (encoded in UTF-8).

If the UID is of type **ThirdPartyGlobalId**, it MUST also be imported into **PidLidCleanGlobalObjectId** as specified below.

* The **Byte Array ID** field MUST be set to: 0x04, 0x00, 0x00, 0x00, 0x82, 0x00, 0xE0, 0x00, 0x74, 0xC5, 0xB7, 0x10, 0x1A, 0x82, 0xE0, 0x08.
* The **YH** field MUST be set to 0x00.
* The **YL** field MUST be set to 0x00.
* The **M** field MUST be set to 0x00.
* The **D** field MUST be set to 0x00.
* The **Creation Time** field MUST be set to 0x0000000000000000.
* The **X** field MUST be set to 0x0000000000000000.
* The **Size** field MUST be set to the number of OCTETS in **ThirdPartyGlobalId** (UTF-8 encoded length) + 0x0000000C.
* The **Data** field MUST be set to the following bytes: 0x76, 0x43, 0x61, 0x6C, 0x2D, 0x55, 0x69, 0x64, 0x01, 0x00, 0x00, 0x00, followed by the value of **ThirdPartyGlobalId** (encoded in UTF-8).

**Exporting from Calendar objects**

If the **Data** field of **PidLidGlobalObjectId** begins with the following 12 bytes: 0x76, 0x43, 0x61, 0x6C, 0x2D, 0x55, 0x69, 0x64, 0x01, 0x00, 0x00, 0x00, the remainder of the **Data** field (starting at the 13th byte) MUST be treated as a UTF-8 encoded string and exported directly as the UID property.

Otherwise, a modified copy of **PidLidGlobalObjectId**, with the **YH**, **YL**, **M**, and **D** fields set to 0x00, MUST be encoded as a hexadecimal string, and exported as the UID property.

Property: X-ALT-DESC

RFC Reference: N/A

Number of Instances Allowed: 0+

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Provides an alternate format for the DESCRIPTION property (an [**HTML**](#gt_549c4960-e8be-4c24-bc2b-b86530f1c1bf) body).

**Importing to Calendar objects**

If the FMTTYPE parameter is 'text/HTML', then the HTML SHOULD[<204>](#Appendix_A_204" \o "Product behavior note 204) be converted to encapsulated [**RTF**](#gt_a9aa8673-7798-4eba-a048-8b7c95a7b080) as specified in [[MS-OXRTFEX]](%5bMS-OXRTFEX%5d.pdf#Section_411d0d5849f7496cb8c35859b045f6cf) and stored in **PidTagRtfCompressed,** as specified in [[MS-OXRTFCP]](%5bMS-OXRTFCP%5d.pdf#Section_65dfe2df1b6943fc8ebd21819a7463fb).

If the FMTTYPE parameter is absent or undocumented, then the X-ALT-DESC property SHOULD be ignored.

**Exporting from Calendar objects**

**PidTagRtfCompressed** SHOULD[<205>](#Appendix_A_205" \o "Product behavior note 205) be converted to HTML and exported as an X-ALT-DESC property with a FMTTYPE parameter of 'text/HTML'.

Parameter: FMTTYPE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.8

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the text format of the X-ALT-DESC property.

**Importing to and Exporting from Calendar objects**

See section [2.1.3.1.1.20.27](#Section_d7f285da9c7a4597803bb74193c898a8).

Property: X-MICROSOFT-CDO-ALLDAYEVENT

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether an appointment is intended to be treated as all-day.

**Importing to Calendar objects**

If this property is set to TRUE and if DTSTART and DTEND are both specified as local times falling at midnight in their respective[<206>](#Appendix_A_206" \o "Product behavior note 206) time zones, then this appointment SHOULD[<207>](#Appendix_A_207" \o "Product behavior note 207) be imported as an all-day appointment. Specifically, **PidLidAppointmentSubType** SHOULD[<208>](#Appendix_A_208" \o "Product behavior note 208) be set to 0x00000001 and **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole** SHOULD[<209>](#Appendix_A_209" \o "Product behavior note 209) be set to fall on midnight of the current system time zone (in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7)).

**Exporting from Calendar objects**

This property SHOULD NOT[<210>](#Appendix_A_210" \o "Product behavior note 210) be exported. Section [2.1.3.1.1.20.10](#Section_43d2f45b031140059a9d519bdcc747fc) specifies how to correctly export all-day events.

Property: X-MICROSOFT-CDO-APPT-SEQUENCE

RFC Reference: N/A

Number of Instances Allowed: 0,1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Specifies the sequence number of the [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0).

**Importing to Calendar objects**

This property SHOULD[<211>](#Appendix_A_211" \o "Product behavior note 211) be imported into **PidLidAppointmentSequence**.

**Exporting from Calendar objects**

This property SHOULD NOT[<212>](#Appendix_A_212" \o "Product behavior note 212) be exported. Section [2.1.3.1.1.20.22](#Section_c9d1e1c74356462fbce0fbf6ce57d214) specifies how to correctly export **PidLidAppointmentSequence** using the SEQUENCE property.

Property: X-MICROSOFT-CDO-ATTENDEE-CRITICAL-CHANGE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Specifies the time at which the attendee accepted, tentatively accepted, or declined the [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0).

**Importing to Calendar objects**

This property MAY[<213>](#Appendix_A_213" \o "Product behavior note 213) be imported as **PidLidAttendeeCriticalChange**.

**Exporting from Calendar objects**

**PidLidAttendeeCriticalChange** MAY[<214>](#Appendix_A_214" \o "Product behavior note 214) be exported as X-MICROSOFT-CDO-ATTENDEE-CRITICAL-CHANGE.

Property: X-MICROSOFT-CDO-BUSYSTATUS

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the BUSY status of an appointment.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<215>](#Appendix_A_215" \o "Product behavior note 215) be mapped into **PidLidBusyStatus** as specified by the following table.

| X-MICROSOFT-CDO-BUSYSTATUS | PidLidBusyStatus |
| --- | --- |
| FREE | 0x00000000 |
| TENTATIVE | 0x00000001 |
| BUSY | 0x00000002 |
| OOF | 0x00000003 |

Property: X-MICROSOFT-CDO-IMPORTANCE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Specifies the importance of an appointment.

**Importing to Calendar objects**

This property SHOULD be imported into **PidTagImportance** as specified by the following table.

| X-MICROSOFT-CDO-IMPORTANCE | PidTagImportance |
| --- | --- |
| 0 | 0x00000000 |
| 1 | 0x00000001 |
| 2 | 0x00000002 |

**Exporting from Calendar objects**

This property SHOULD be exported as specified in the preceding table.

Property: X-MICROSOFT-CDO-INSTTYPE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Indicates whether the VEVENT represents a non-recurring appointment, a recurring appointment, or an exception to a recurring appointment.

**Importing to Calendar objects**

This property SHOULD be ignored.

**Exporting from Calendar objects**

This property SHOULD NOT[<216>](#Appendix_A_216" \o "Product behavior note 216) be exported. The instance type of a VEVENT can be correctly determined based on the existence of the RRULE and RECURRENCE-ID properties.

Property: X-MICROSOFT-CDO-INTENDEDSTATUS

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the busy status that the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) intends the attendee's copy of the meeting to have.

**Importing to Calendar objects**

This property SHOULD[<217>](#Appendix_A_217" \o "Product behavior note 217) be imported into **PidLidIntendedBusyStatus** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.151) using the same import mapping as X-MICROSOFT-CDO-BUSYSTATUS as specified in section [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736).

If the METHOD property is REQUEST and an X-MICROSOFT-CDO-INTENDEDSTATUS property is present, the value of the **PidLidBusyStatus** property ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.2) MAY[<218>](#Appendix_A_218" \o "Product behavior note 218) be set to 0x00000001.

If the METHOD property is REQUEST and an X-MICROSOFT-CDO-INTENDEDSTATUS property is absent, then **PidLidIntendedBusyStatus** SHOULD[<219>](#Appendix_A_219" \o "Product behavior note 219) copy the value of **PidLidBusyStatus**, defaulting to 0x00000002 if **PidLidBusyStatus** was not set, and **PidLidBusyStatus** SHOULD[<220>](#Appendix_A_220" \o "Product behavior note 220) be set to 0x00000001.

**Exporting from Calendar objects**

If the METHOD property is REQUEST, **PidLidIntendedBusyStatus** SHOULD[<221>](#Appendix_A_221" \o "Product behavior note 221) be exported as X-MICROSOFT-CDO-INTENDEDSTATUS using the same export mapping as X-MICROSOFT-CDO-BUSYSTATUS specified in section 2.1.3.1.1.20.31.

Property: X-MICROSOFT-CDO-OWNERAPPTID

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Provides an identifier for the appointment which is unique in the scope of the [**organizer's**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55).

**Importing to and Exporting from Calendar objects**

This property SHOULD[<222>](#Appendix_A_222" \o "Product behavior note 222) be directly imported to and exported from **PidTagOwnerAppointmentId** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.857).

Property: X-MICROSOFT-CDO-OWNER-CRITICAL-CHANGE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Specifies the time at which the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) requested, updated, or cancelled the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to Calendar objects**

When present, this property MAY[<223>](#Appendix_A_223" \o "Product behavior note 223) be imported as **PidLidOwnerCriticalChange**.

**Exporting from Calendar objects**

**PidLidOwnerCriticalChange** MAY[<224>](#Appendix_A_224" \o "Product behavior note 224) be exported as X-MICROSOFT-CDO-OWNER-CRITICAL-CHANGE.

Property: X-MICROSOFT-CDO-REPLYTIME

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5)

Brief Description: Specifies the time in which the attendee responded to a [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0).

**Importing to Calendar objects**

This property MAY[<225>](#Appendix_A_225" \o "Product behavior note 225) be imported as **PidLidAppointmentReplyTime**.

**Exporting from Calendar objects**

**PidLidAppointmentReplyTime** MAY[<226>](#Appendix_A_226" \o "Product behavior note 226) be exported as X-MICROSOFT-CDO-REPLYTIME.

Property: X-MICROSOFT-DISALLOW-COUNTER

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether or not the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) is willing to receive counter-proposals.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<227>](#Appendix_A_227" \o "Product behavior note 227) be directly imported to and exported from **PidLidAppointmentNotAllowPropose** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.17).

Property: X-MICROSOFT-EXDATE

RFC Reference: N/A

Number of Instances Allowed: 0+

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: Specifies the original start time of instances of the recurring appointment which have been deleted.

**Importing to Calendar objects**

If this property is specified, an X-MICROSOFT-RRULE MUST also be specified in the same VEVENT.

This property SHOULD[<228>](#Appendix_A_228" \o "Product behavior note 228) be imported in the same way that the EXDATE property is imported. See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c).

**Exporting from Calendar objects**

The X-MICROSOFT-EXDATE property MUST NOT be exported for non-recurring appointments or exceptions of recurring appointments.

If the **CalendarType** field of the **RecurrencePattern** field of the **AppointmentRecurrencePattern** structure ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) is non-zero or if the **PatternType** field is 0x000A or 0x000B, this property SHOULD[<229>](#Appendix_A_229" \o "Product behavior note 229) be exported in place of the EXDATE property. If exported, the value of this property MUST be exactly what the value of the EXDATE property would have been (see section 2.1.3.1.1.20.13).

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD be ignored.

**Exporting from Calendar objects**

This parameter MUST be exported as 'DATE-TIME'.

Property: X-MICROSOFT-ISDRAFT

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether an appointment is a draft.

**Importing to Calendar objects**

For iCalendar files with a METHOD of REQUEST, REPLY, CANCEL, or COUNTER, **PidLidFInvited** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.135) MUST be set to TRUE regardless of the value of X-MICROSOFT-ISDRAFT.

For iCalendar files with a METHOD of PUBLISH, **PidLidFInvited** SHOULD[<230>](#Appendix_A_230" \o "Product behavior note 230) be set to TRUE if the VEVENT is a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) and X-MICROSOFT-ISDRAFT is not set to TRUE. Otherwise, **PidLidFInvited** SHOULD be set to FALSE.

**Exporting from Calendar objects**

For iCalendar files with a METHOD of PUBLISH, if the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) of the meeting is the user and if **PidLidFInvited** is not TRUE, then X-MICROSOFT-ISDRAFT SHOULD[<231>](#Appendix_A_231" \o "Product behavior note 231) be exported as TRUE.

For all other cases, X-MICROSOFT-ISDRAFT MUST NOT be exported.

Property: X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether an appointment is intended to be treated as all day.

**Importing to and Exporting from Calendar objects**

This property is synonymous with X-MICROSOFT-CDO-ALLDAYEVENT.[<232>](#Appendix_A_232" \o "Product behavior note 232) See section [2.1.3.1.1.20.28](#Section_0f262da6c5fd459e9f18145eba86b5d2) for usage.

Property: X-MICROSOFT-MSNCALENDAR-BUSYSTATUS

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the busy status of an appointment.

**Importing to Calendar objects**

This property is synonymous with X-MICROSOFT-CDO-BUSYSTATUS (see section [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736)) and SHOULD[<233>](#Appendix_A_233" \o "Product behavior note 233) be imported into **PidLidBusyStatus** as specified in section 2.1.3.1.1.20.31.

**Exporting from Calendar objects**

This property SHOULD NOT be exported.

Property: X-MICROSOFT-MSNCALENDAR-IMPORTANCE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Specifies the importance of an appointment.

**Importing to and Exporting from Calendar objects**

This property is synonymous[<234>](#Appendix_A_234" \o "Product behavior note 234) with X-MICROSOFT-CDO-IMPORTANCE. See section [2.1.3.1.1.20.32](#Section_38b4e7a98dec488aa90185cfe71171d8) for usage.

Property: X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the busy status that the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) intends the attendee's copy of the meeting to have.

**Importing to Calendar objects**

This property is synonymous with X-MICROSOFT-CDO-INTENDEDSTATUS (see section [2.1.3.1.1.20.34](#Section_df1c798899084ee695b0fcd180b02b44)) and SHOULD[<235>](#Appendix_A_235" \o "Product behavior note 235) be imported into **PidLidIntendedBusyStatus** as specified in section [2.1.3.1.1.20.31](#Section_cd68eae7ed654dd38ea7ad585c76c736).

**Exporting from Calendar objects**

This property SHOULD NOT be exported.

Property: X-MICROSOFT-RRULE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Recurrence rule ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10)

Brief Description: Specifies the [**recurrence pattern**](#gt_4275047f-9935-46db-b9b8-8ca605d16649) of a recurring appointment.

**Importing to and Exporting from Calendar objects**

Section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4) specifies how the X-MICROSOFT-RRULE property is imported and exported.

If this property is specified, an X-MICROSOFT-CALSCALE MUST also be specified in the same VEVENT.

Parameter: VALUE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.20

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the format of this property.

**Importing to Calendar objects**

This parameter SHOULD be ignored.

**Exporting from Calendar objects**

This parameter MUST be exported as 'RECUR'.

Parameter: X-MICROSOFT-ISLEAPMONTH

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether the month specified in a yearly non-Gregorian recurrence is a leap month of that calendar.

**Importing to Calendar objects**

This parameter SHOULD be ignored. The month of a yearly recurrence is determined from DTSTART.

**Exporting from Calendar objects**

If the recurrence is a Yearly (section [2.1.3.2.2.5](#Section_7c0b03d645d64607a78f99c00e6815c2)) or Yearly Nth (section [2.1.3.2.2.6](#Section_0f3eb29da3b346e498db5658f14d5ca8)), this property SHOULD[<236>](#Appendix_A_236" \o "Product behavior note 236) be exported as a Boolean ([RFC2445] section 4.3.2) indicating whether or not the month of the recurrence is a leap month.

Property: X-MS-OLK-ALLOWEXTERNCHECK

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether attendees not directly invited by the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb) can connect to the conferencing instance.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<237>](#Appendix_A_237" \o "Product behavior note 237) be directly imported to and exported from **PidLidAllowExternalCheck** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.6).

Property: X-MS-OLK-APPTLASTSEQUENCE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Specifies the last-known maximum sequence number of a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

**Importing to and Exporting from Calendar objects**

This property SHOULD[<238>](#Appendix_A_238" \o "Product behavior note 238) be directly imported to and exported from **PidLidAppointmentLastSequence** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.15).

Property: X-MS-OLK-APPTSEQTIME

RFC Reference: N/A

Number of Instances Allowed: 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: The creation time of the iCalendar.

**Importing to Calendar objects**

This property SHOULD[<239>](#Appendix_A_239" \o "Product behavior note 239) be imported (in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7)) to **PidLidAppointmentSequenceTime** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.26).

**Exporting from Calendar objects**

**PidLidAppointmentSequenceTime** SHOULD[<240>](#Appendix_A_240" \o "Product behavior note 240) be exported as this property (in UTC).

Parameter: TZID

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.19

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: In conjunction with a matching VTIMEZONE, specifies the time zone of a Date-Time property provided in local time.

Refer to [RFC2445] section 4.2.19 for additional details on the TZID parameter.

Property: X-MS-OLK-AUTOFILLLOCATION

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether the location is being automatically populated with [**recipients**](#gt_53dfe4f3-05d0-41aa-8217-ecd1962b340b) of type RESOURCE.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<241>](#Appendix_A_241" \o "Product behavior note 241) be directly imported to and exported from **PidLidAutoFillLocation** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.38).

Property: X-MS-OLK-AUTOSTARTCHECK

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether or not to automatically start the conferencing application when a [**reminder**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a) for the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) fires.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<242>](#Appendix_A_242" \o "Product behavior note 242) be directly imported to and exported from **PidLidAutoStartCheck** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.41).

Property: X-MS-OLK-COLLABORATEDOC

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the path to the conferencing collaboration document.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<243>](#Appendix_A_243" \o "Product behavior note 243) be directly imported to and exported from **PidLidCollaborateDoc** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.61).

Property: X-MS-OLK-CONFCHECK

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Boolean ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.2)

Brief Description: Specifies whether or not conferencing is enabled on this appointment.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<244>](#Appendix_A_244" \o "Product behavior note 244) be directly imported to and exported from **PidLidConferencingCheck** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.65).

Property: X-MS-OLK-CONFTYPE

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Integer ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.8)

Brief Description: Specifies the type of conferencing that is enabled on the appointment.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<245>](#Appendix_A_245" \o "Product behavior note 245) be directly imported to and exported from **PidLidConferencingType** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.66).

Property: X-MS-OLK-DIRECTORY

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the path to the conferencing server.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<246>](#Appendix_A_246" \o "Product behavior note 246) be directly imported to and exported from **PidLidDirectory** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.94).

Property: X-MS-OLK-MWSURL

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the [**URL**](#gt_433a4fb7-ef84-46b0-ab65-905f5e3a80b1) of the [**Meeting Workspace**](#gt_e4d1696a-97ed-42c2-b5d7-67ce1ecaa6e1).

**Importing to and Exporting from Calendar objects**

This property SHOULD[<247>](#Appendix_A_247" \o "Product behavior note 247) be directly imported to and exported from **PidLidMeetingWorkspaceUrl** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.171).

Property: X-MS-OLK-NETSHOWURL

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the [**URL**](#gt_433a4fb7-ef84-46b0-ab65-905f5e3a80b1) of the NetShow conference.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<248>](#Appendix_A_248" \o "Product behavior note 248) be directly imported to and exported from **PidLidNetShowUrl** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.175).

Property: X-MS-OLK-ONLINEPASSWORD

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the password to the conferencing instance.

**Importing to and Exporting from Calendar objects**

This property SHOULD[<249>](#Appendix_A_249" \o "Product behavior note 249) be directly imported to and exported from **PidLidOnlinePassword** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.193).

Property: X-MS-OLK-ORGALIAS

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Text ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.11)

Brief Description: Specifies the e-mail address of the conferencing instance's [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb).

**Importing to and Exporting from Calendar objects**

This property SHOULD[<250>](#Appendix_A_250" \o "Product behavior note 250) be directly imported to and exported from **PidLidOrganizerAlias** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.195).

Property: X-MS-OLK-ORIGINALEND

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: Specifies the original end time of a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) on a [**counter proposal**](#gt_0152aa38-6cc8-4088-929b-2b895b8a28ba).

**Importing to and Exporting from Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'COUNTER', this property SHOULD[<251>](#Appendix_A_251" \o "Product behavior note 251) be directly mapped to **PidLidAppointmentEndWhole**, and **PidLidAppointmentDuration** SHOULD[<252>](#Appendix_A_252" \o "Product behavior note 252) be set to the number of minutes between X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND.

For other values of METHOD, X-MS-OLK-ORIGINALEND MUST be ignored and MUST NOT be exported.

Property: X-MS-OLK-ORIGINALSTART

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: Date-Time ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.5), Date ([RFC2445] section 4.3.4)

Brief Description: Specifies the original start time of a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) on a [**counter proposal**](#gt_0152aa38-6cc8-4088-929b-2b895b8a28ba).

**Importing to and Exporting from Calendar objects**

If the METHOD property of the VCALENDAR component is set to 'COUNTER', this property SHOULD[<253>](#Appendix_A_253" \o "Product behavior note 253) be directly mapped to **PidLidAppointmentStartWhole**, and **PidLidAppointmentDuration** SHOULD[<254>](#Appendix_A_254" \o "Product behavior note 254) be set to the number of minutes between X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND.

For other values of METHOD, X-MS-OLK-ORIGINALSTART MUST be ignored and MUST NOT be exported.

Property: X-MS-OLK-SENDER

RFC Reference: N/A

Number of Instances Allowed: 0, 1

Format: URI ([[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.13)

Brief Description: The [**delegate**](#gt_eeac1cee-185f-47d9-ace5-555e3a2a6930) sending the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) on behalf of the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb).

**Importing to Calendar objects**

This property SHOULD[<255>](#Appendix_A_255" \o "Product behavior note 255) be parsed as a valid mailto [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95), as specified in [[RFC2368]](https://go.microsoft.com/fwlink/?LinkId=113487). The resulting [**SMTP**](#gt_0678be67-e739-4e33-97fe-2b03b903a379) address SHOULD[<256>](#Appendix_A_256" \o "Product behavior note 256) be resolved against the [**address book**](#gt_d16f7b78-c5a6-48f4-9e0f-3b205b5598b5), as specified in[[MS-OXOABK]](%5bMS-OXOABK%5d.pdf#Section_f4cf9b4c923245069e712270de217614). If no match was found, a [**one-off EntryID**](#gt_942d283a-8a03-43bb-b911-34d8d14d7fd9) ([[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8) section 2.2.5.1) SHOULD[<257>](#Appendix_A_257" \o "Product behavior note 257) be created using the SMTP address and the CN parameter. If resolved successfully, the [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) SHOULD[<258>](#Appendix_A_258" \o "Product behavior note 258) be imported into **PidTagSenderAddressType** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.1001), **PidTagSenderEmailAddress** ([MS-OXPROPS] section 2.1002), **PidTagSenderEntryId** ([MS-OXPROPS] section 2.1003), and **PidTagSenderName** ([MS-OXPROPS] section 2.1005).

**Exporting from Calendar objects**

If the 0x00000001 flag of **PidLidAppointmentStateFlags** is 0, then an X-MS-OLK-SENDER property MUST NOT be exported. Also, if **PidTagSenderEntryId** refers to the same Address Book object as the organizer, then the X-MS-OLK-SENDER property SHOULD NOT be exported.

The value of this property SHOULD[<259>](#Appendix_A_259" \o "Product behavior note 259) be a mailto URI, as specified in [RFC2368], with the SMTP address of the Address Book object, as specified in [MS-OXOABK], referenced by **PidTagSenderEntryId**. If the Address Book object does not have an SMTP address, then the value of the property SHOULD[<260>](#Appendix_A_260" \o "Product behavior note 260) be set to 'invalid:nomail'.

Parameter: CN

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.2.2

Number of Instances Allowed: 0,1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: The display name of the [**delegate**](#gt_eeac1cee-185f-47d9-ace5-555e3a2a6930) sending the [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) on behalf of the [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb).

**Importing to Calendar objects**

See section [2.1.3.1.1.20.61](#Section_c069cac13ebe4f69b9042ad47f46650f).

**Exporting from Calendar objects**

This parameter SHOULD[<261>](#Appendix_A_261" \o "Product behavior note 261) be exported from the **PidTagDisplayName** from the [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) (falling back on the **PidTagSenderName** from the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18), if necessary).

Component: VALARM

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.6.6

Number of Instances Allowed: 0, 1

Brief Description: Specifies a [**reminder**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a) for an appointment.

**Importing to Calendar objects**

If there is a VALARM component with a TRIGGER property specified as a Duration ([RFC2445] section 4.3.6) or a Date-Time ([RFC2445] section 4.3.5), then it MUST be parsed according to the following table.

| Named Property | Value |
| --- | --- |
| **PidLidReminderDelta** | If TRIGGER is specified as a Duration, **PidLidReminderDelta** MUST be set to the absolute value of the number of minutes specified by the TRIGGER property. If TRIGGER is specified as a Date-Time, **PidLidReminderDelta** SHOULD[<262>](#Appendix_A_262" \o "Product behavior note 262) be set to the difference in minutes between DTSTART and the value of TRIGGER. If no such TRIGGER property could be parsed, **PidLidReminderDelta** SHOULD[<263>](#Appendix_A_263" \o "Product behavior note 263) be set to 0x0000000F for non-all day appointments and 0x00000438 for all day appointments. |
| **PidLidReminderTime** ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.224) | MUST be set to the next instance of the appointment, in [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7). If all instances of the appointment are in the past, then this property SHOULD NOT be set. |
| **PidLidReminderSignalTime** ([MS-OXPROPS] section 2.223) | If TRIGGER is specified as a Duration, **PidLidReminderSignalTime** SHOULD[<264>](#Appendix_A_264" \o "Product behavior note 264) be set to **PidLidReminderDelta** minutes earlier than **PidLidReminderTime**. If TRIGGER is specified as a Date-Time, **PidLidReminderSignalTime** SHOULD[<265>](#Appendix_A_265" \o "Product behavior note 265) be set to the value of TRIGGER in UTC. If **PidLidReminderTime** is not set, then this property SHOULD NOT be set. |
| **PidLidReminderSet** ([MS-OXPROPS] section 2.222) | MUST be set to TRUE if and only if **PidLidReminderDelta** was successfully parsed from a TRIGGER property and **PidLidReminderTime** was set. |

**Exporting from Calendar objects**

If **PidLidReminderSet** is TRUE, then a VALARM component MUST be exported with the properties specified in the following table.

| VALARM Property | Value |
| --- | --- |
| TRIGGER | MUST be set to a Duration ([RFC2445] section 4.3.6) representing the number of minutes specified by **PidLidReminderDelta**. If **PidLidReminderDelta** is set to 0x5AE980E1, TRIGGER MUST be exported as 15 minutes. |
| ACTION | MUST be set to 'DISPLAY' |
| DESCRIPTION | MUST be set to 'Reminder' |

Property: TRIGGER

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.6.3

Number of Instances Allowed: 1

Format: Duration ([RFC2445] section 4.3.6), Date-Time ([RFC2445] section 4.3.5)

Brief Description: Specifies the [**signal time**](#gt_828db620-a56b-4e5a-abb7-545e1fd9c7d4) of the [**reminder**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a) as an interval, in minutes, before the beginning of an instance of the appointment.

**Importing to and Exporting from Calendar objects**

See [2.1.3.1.1.20.62](#Section_9710b22cba2e4581be59e143a952708a).

Property: ACTION

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.6.1

Number of Instances Allowed: 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the action to take when the [**reminder**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a) is signaled.

**Importing to Calendar objects**

This property SHOULD be ignored on import.

**Exporting from Calendar objects**

See [2.1.3.1.1.20.62](#Section_9710b22cba2e4581be59e143a952708a).

Property: DESCRIPTION

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.8.1.5

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Provides a plain-text description for the [**reminder**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a).

**Importing to Calendar objects**

This property SHOULD be ignored on import.

**Exporting from Calendar objects**

See [2.1.3.1.1.20.62](#Section_9710b22cba2e4581be59e143a952708a).

#### Additional Information on Recurrences

Additional information that is necessary to specify a mapping from iCalendar RRULEs to **PidLidAppointmentRecur** can be found below.

##### iCalendar Recurrence Syntax

An iCalendar recurrence data type is a semicolon-delimited list of [**recurrence parts**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5). The ordering of these recurrence parts does not matter, but a single iCalendar recurrence MUST NOT contain more than one instance of the same recurrence part.

###### Recurrence Part: FREQ

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 1

Format: Text ([RFC2445] section 4.3.11)

Brief Description: Specifies the frequency of the recurrence.

The FREQ [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be set to one of the values defined in the following table.

| FREQ Value | Meaning |
| --- | --- |
| DAILY | The appointment occurs every <interval> days. Supported configurations of DAILY recurrences are specified in section [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f). |
| WEEKLY | The appointment occurs every <interval> weeks. Supported configurations of WEEKLY recurrences are specified in section [2.1.3.2.2.2](#Section_305b728b8fb248d287097dab1686b9cc). |
| MONTHLY | The appointment occurs every <interval> months. Supported configurations of MONTHLY recurrences are specified in section [2.1.3.2.2.3](#Section_7d3e36469f9b4665aca77f9260b74424) and section [2.1.3.2.2.4](#Section_47624472cffc4d8db1c8ca55e1b404b6). |
| YEARLY | The appointment occurs every <interval> years. Supported configurations of YEARLY recurrences are specified in section [2.1.3.2.2.5](#Section_7c0b03d645d64607a78f99c00e6815c2) and section [2.1.3.2.2.6](#Section_0f3eb29da3b346e498db5658f14d5ca8). |

###### Recurrence Part: INTERVAL

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 0, 1

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies a multiplier for the period of a recurrence.

The INTERVAL [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be within the bounds defined in the following table. If an INTERVAL is omitted, the recurrence MUST be parsed as though the INTERVAL were 1.

| FREQ Value | Minimum INTERVAL | Maximum INTERVAL |
| --- | --- | --- |
| DAILY | 1 | 999 |
| WEEKLY | 1 | 99 |
| MONTHLY | 1 | 99 |
| YEARLY | 1 | 8[<266>](#Appendix_A_266" \o "Product behavior note 266) |

###### Recurrence Part: BYMINUTE

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 0, 1

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the minute(s) on which a recurrence occurs.

The BYMINUTE [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be an integer between 0 and 59 (inclusive). Furthermore, the BYMINUTE recurrence part MUST NOT specify more than one value. If no BYMINUTE is specified, the minute from the DTSTART property MUST be used.

###### Recurrence Part: BYHOUR

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 0, 1

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the hour(s) on which a recurrence occurs.

The BYHOUR [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be an integer between 0 and 23 (inclusive). Furthermore, the BYHOUR recurrence part MUST NOT specify more than one value. If no BYHOUR is specified, the hour from the DTSTART property MUST be used.

###### Recurrence Part: BYMONTHDAY

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: Dependent on the recurrence template (section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4)

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the day(s) of the month on which a recurrence occurs.

The BYMONTHDAY [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be -1, or an integer between 1 and 31 (inclusive). Furthermore, the BYMONTHDAY recurrence part MUST NOT specify more than one value. If no BYMONTHDAY is specified, the day of month from the DTSTART property MUST be used.

###### Recurrence Part: BYDAY

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: Dependent on the recurrence template (section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4))

Format: Text ([RFC2445] section 4.3.8)

Brief Description: Specifies the day(s) of the week on which a recurrence occurs.

The BYDAY [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be a comma-delimited list of elements consisting of an optional week number followed by a mandatory 2-character code for the day of week. A BYDAY recurrence part with no week number will be termed [**week independent**](#gt_4b4d3b38-996f-4888-bb53-892abbd68de4).

The following table specifies the possible values for the mandatory character code for the day of the week.

| Day of Week Character Code | Meaning |
| --- | --- |
| SU | Sunday |
| MO | Monday |
| TU | Tuesday |
| WE | Wednesday |
| TH | Thursday |
| FR | Friday |
| SA | Saturday |

The following table specifies the possible values for the optional week number.

| Week Number | Meaning |
| --- | --- |
| -1 | Last instance |
| 1 | First instance |
| 2 | Second instance |
| 3 | Third instance |
| 4 | Fourth instance |

###### Recurrence Part: BYMONTH

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: Dependent on the recurrence template (section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4))

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the month(s) on which a recurrence occurs.

The BYMONTH [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be an integer between 1 and 12 (inclusive). Furthermore, the BYMONTH recurrence part MUST NOT specify more than one value. If no BYMONTH is specified, the month from the DTSTART property MUST be used.

###### Recurrence Part: BYSETPOS

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: Dependent on the recurrence template (section [2.1.3.2.2](#Section_2b9345c96cd6494e9b28473d61ac44e4))

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the instances of a multi-BYDAY appointment to use each INTERVAL (see section [2.1.3.2.2.4](#Section_47624472cffc4d8db1c8ca55e1b404b6) and [2.1.3.2.2.6](#Section_0f3eb29da3b346e498db5658f14d5ca8)).

The BYSETPOS [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be -1 or an integer between 1 and 4 (inclusive), as specified in the following table. Furthermore, the BYSETPOS recurrence part MUST NOT specify more than one value.

| BYSETPOS Value | Meaning |
| --- | --- |
| -1 | Last instance |
| 1 | First instance |
| 2 | Second instance |
| 3 | Third instance |
| 4 | Fourth instance |

###### Recurrence Part: WKST

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 0, 1

Format: Text ([RFC2445] section 4.3.8)

Brief Description: Specifies the day of week on which a week is considered to start.

The WKST [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST one of the day of week character codes specified in section [2.1.3.2.1.6](#Section_b8069b8f7a1c4eb8b529102fd49cdb3d). If no WKST recurrence part is specified, 'SU' MUST be used.

###### Recurrence Part: UNTIL

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 0, 1

Format: Date-Time ([RFC2445] section 4.3.5)

Brief Description: Specifies the time of the last instance of a recurring appointment (inclusive).

The UNTIL [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be a Date-Time occurring after the DTSTART property. The UNTIL recurrence part MUST NOT be specified in conjunction with the COUNT recurrence part. If neither an UNTIL nor a COUNT is specified, the recurrence MUST be treated as infinitely recurring. If the last instance of a recurring appointment would occur on or after January 1, 4501 in the time zone specified by **PidLidTimeZoneStruct**, the recurrence SHOULD[<267>](#Appendix_A_267" \o "Product behavior note 267) be treated as infinitely recurring.

###### Recurrence Part: COUNT

RFC Reference: [[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) section 4.3.10

Number of Instances Allowed: 0, 1

Format: Integer ([RFC2445] section 4.3.8)

Brief Description: Specifies the number of instances in a recurring appointment.

The COUNT [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be an Integer between 1 and 999 (inclusive). The COUNT recurrence part MUST NOT be specified in conjunction with the UNTIL recurrence part. If neither an UNTIL nor a COUNT is specified, the recurrence MUST be treated as infinitely recurring. If the last instance of a recurring appointment would occur on or after January 1, 4501, the recurrence SHOULD[<268>](#Appendix_A_268" \o "Product behavior note 268) be treated as infinitely recurring.

##### Recurrence Templates

The RRULE and X-MICROSOFT-RRULE properties MUST NOT be exported for non-recurring appointments or exceptions of recurring appointments.

Although the syntax permits a wide variety of recurrences, only RRULE properties and X-MICROSOFT-RRULE properties fitting the templates enumerated in this section SHOULD[<269>](#Appendix_A_269" \o "Product behavior note 269) be mapped into the **AppointmentRecurrencePattern** structure ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44).

Implementations SHOULD gracefully fail to map any recurrences that do not fit the templates enumerated in this section.

Once a recurrence has been successfully mapped into the **AppointmentRecurrencePattern** structure, implementations SHOULD[<270>](#Appendix_A_270" \o "Product behavior note 270) also set the **PidLidClipStart** property ([MS-OXOCAL] section 2.2.1.14) to the value of the **StartDate** field of the **AppointmentRecurrencePattern** structure and set the **PidLidClipEnd** property ([MS-OXOCAL] section 2.2.1.15) to the value of the **EndDate** field of the **AppointmentRecurrencePattern** structure.

The following sections express the templates in [**ABNF**](#gt_24ddbbb4-b79e-4419-96ec-0fdd229c9ebf) notation, as specified in [[RFC5234]](https://go.microsoft.com/fwlink/?LinkId=123096). The following code shows common rules used in the templates.

1. common-parts = [interval-part] [byhour-part] [byminute-part]
2. [(until-part / count-part)] [wkst-part]
3. interval-part = ";INTERVAL=" 1\*DIGIT ; See 2.3.1.2
4. byminute-part = ";BYMINUTE=" 1\*2DIGIT ; See 2.3.1.3
5. byhour-part = ";BYHOUR=" 1\*2DIGIT ; See 2.3.1.4
6. bymonthday-part = ";BYMONTHDAY=" ["-"]1\*2DIGIT ; See 2.3.1.5
7. byday-part = ";BYDAY=" byday-list ; See 2.3.1.6
8. byday-nth-part = ";BYDAY=" byday-nth-list ; See 2.3.1.6
9. bymonth-part = ";BYMONTH=" 1\*2DIGIT ; See 2.3.1.7
10. bysetpos-part = ";BYSETPOS=" weeknum ; See 2.3.1.8
11. wkst-part = ";WKST=" dayofweek ; See 2.3.1.9
12. until-part = ";UNTIL=" datetime ; See 2.3.1.10
13. count-part = ";COUNT=" 1\*3DIGIT ; See 2.3.1.11
14. byday-list = byday-elm \*("," byday-elm)
15. byday-elm = [weeknum] dayofweek
16. dayofweek = "SU" / "MO" / "TU" / "WE" / "TH" / "FR" / "SA"
17. weeknum = "-1" / "1" / "2" / "3" / "4"
18. byday-nth-list = dayofweek
19. byday-nth-list =/ "SA,SU" ; Any ordering
20. byday-nth-list =/ "MO,TU,WE,TH,FR" ; Any ordering
21. byday-nth-list =/ "SU,MO,TU,WE,TH,FR,SA" ; Any ordering
22. datetime = year month day "T" hour minute second ["Z"]
23. year = 4DIGIT
24. month = 2DIGIT
25. day = 2DIGIT
26. hour = 2DIGIT
27. minute = 2DIGIT
28. second = "00"

###### Template: Daily Recurrences

**ABNF Description**

1. daily-template= "FREQ=DAILY" [common-parts]

**Template Examples**

Every day:

1. FREQ=DAILY

Every day at 3:30 P.M.:

1. FREQ=DAILY;BYMINUTE=30;BYHOUR=15

Every 3 days:

1. FREQ=DAILY;INTERVAL=3

Every 3 days at 3:30 P.M.:

1. FREQ=DAILY;INTERVAL=3;BYMINUTE=30;BYHOUR=15

Every 3 days at 3:30 P.M. for 30 instances:

1. FREQ=DAILY;INTERVAL=3;BYMINUTE=30;BYHOUR=15;COUNT=30

**Importing to Calendar objects**

An RRULE or X-MICROSOFT-RRULE matching this template SHOULD[<271>](#Appendix_A_271" \o "Product behavior note 271) be imported into **PidLidAppointmentRecur** as specified in the following table. A VEVENT MUST NOT specify both an RRULE and an X-MICROSOFT-RRULE.

| AppointmentRecurrencePattern Field | Value |
| --- | --- |
| **ReaderVersion** | Set to 0x3004 |
| **WriterVersion** | Set to 0x3004 |
| **RecurFrequency** | Set to 0x200A |
| **PatternType** | Set to 0x0000. Can be overridden by X-MICROSOFT-CALSCALE, see section [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac). |
| **CalendarType** | Imported from X-MICROSOFT-CALSCALE (see section 2.1.3.1.1.8). |
| **FirstDateTime** | Set as specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1. |
| **Period** | Set to (1440 \* INTERVAL) |
| **SlidingFlag** | Set to 0x00000000 |
| **PatternTypeSpecific.Week.Sa-Su** | (unset) |
| **PatternTypeSpecific.Month.Day** | (unset) |
| **PatternTypeSpecific.MonthNth.Sa-Su** | (unset) |
| **PatternTypeSpecific.MonthNth.N** | (unset) |
| **EndType** | If the recurrence is infinite, set **EndType** to 0x00002023. If the recurrence is specified with a COUNT, set **EndType** to 0x00002022. Otherwise, set **EndType** to 0x00002021. |
| **OccurrenceCount** | Set to the number of occurrences of the recurrence based on UNTIL or COUNT. If the recurrence is infinite, set OccurrenceCount to 0x0000000A. |
| **FirstDOW** | Set to the correct value based on WKST (see the following table for how to map WKST values to **FirstDOW** values) |
| **DeletedInstanceCount** / **DeletedInstanceDates** | See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c) |
| **ModifiedInstanceCount** / **ModifiedInstanceDates** | See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) |
| **StartDate** | Set to the date portion of DTSTART, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight January 1, 1601. Note that this value MUST be evenly divisible by 1440. |
| **EndDate** | Set to the start date of the last instance of a recurrence, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight January 1, 1601. If the recurrence is infinite, set **EndDate** to 0x5AE980DF. Note that this value MUST be evenly divisible by 1440, except for the special value 0x5AE980DF. |
| **ReaderVersion2** | Set to 0x00003006 |
| **WriterVersion2** | Set to 0x00003009 |
| **StartTimeOffset** | Set to (60\*BYHOUR + BYMINUTE) |
| **EndTimeOffset** | Set to (**StartTimeOffset** + **PidLidAppointmentDuration**) |
| **ExceptionCount** / **ExceptionInfo** | See section 2.1.3.1.1.20.18 |
| (**ReservedBlocks** and **ExtendedExceptions**) | Refer to [MS-OXOCAL] |

The following table specifies how to map WKST values to **FirstDOW** values.

| WKST Value | FirstDOW Value |
| --- | --- |
| SU | 0x00000000 |
| MO | 0x00000001 |
| TU | 0x00000002 |
| WE | 0x00000003 |
| TH | 0x00000004 |
| FR | 0x00000005 |
| SA | 0x00000006 |

**Exporting From Calendar objects**

The **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) SHOULD[<272>](#Appendix_A_272" \o "Product behavior note 272) be exported as the property specified in the following table. If a case matches more than one row, the first matching row applies.

| CalendarType field | PatternType field | Recurrence property |
| --- | --- | --- |
| 0x0000 | 0x0000 | RRULE |
| 0x0000 | 0x0001 | RRULE |
| 0x0000 | 0x0002 | RRULE |
| 0x0000 | 0x0003 | RRULE |
| 0x0000 | 0x000A | X-MICROSOFT-RRULE |
| 0x0000 | 0x000B | X-MICROSOFT-RRULE |
| (any) | 0x0000 | RRULE[<273>](#Appendix_A_273" \o "Product behavior note 273) |
| (any) | 0x0001 | RRULE[<274>](#Appendix_A_274" \o "Product behavior note 274) |
| 0x0001 | (any) | RRULE |
| 0x0002 | (any) | RRULE |
| 0x0003 | (any) | RRULE |
| 0x0004 | (any) | RRULE |
| 0x0005 | (any) | RRULE |
| 0x0006 | (any) | X-MICROSOFT-RRULE |
| 0x0007 | (any) | RRULE |
| 0x0008 | (any) | X-MICROSOFT-RRULE |
| 0x0009 | (any) | RRULE |
| 0x000A | (any) | RRULE |
| 0x000B | (any) | RRULE |
| 0x000C | (any) | RRULE |
| 0x000E | (any) | X-MICROSOFT-RRULE |
| 0x000F | (any) | X-MICROSOFT-RRULE |
| 0x0010 | (any) | X-MICROSOFT-RRULE |
| 0x0011 | (any) | X-MICROSOFT-RRULE |
| 0x0012 | (any) | X-MICROSOFT-RRULE |
| 0x0013 | (any) | X-MICROSOFT-RRULE |
| 0x0014 | (any) | X-MICROSOFT-RRULE |
| 0x0017 | (any) | X-MICROSOFT-RRULE |

The exported property MUST be assigned the value generated by the recurrence template specified in the following table.

| PatternType field | Period field | Recurrence template |
| --- | --- | --- |
| 0x0000 | (any) | Daily Recurrence (section 2.1.3.2.2.1) |
| 0x0001 | (any) | Weekly Recurrence (section [2.1.3.2.2.2](#Section_305b728b8fb248d287097dab1686b9cc)) |
| 0x0002 | (not evenly divisible by 12) | Monthly Recurrence (section [2.1.3.2.2.3](#Section_7d3e36469f9b4665aca77f9260b74424)) |
| 0x0002 | (evenly divisible by 12) | Yearly Recurrence (section [2.1.3.2.2.5](#Section_7c0b03d645d64607a78f99c00e6815c2)) |
| 0x0003 | (not evenly divisible by 12) | Monthly Nth Recurrence (section [2.1.3.2.2.4](#Section_47624472cffc4d8db1c8ca55e1b404b6)) |
| 0x0003 | (evenly divisible by 12) | Yearly Nth Recurrence (section [2.1.3.2.2.6](#Section_0f3eb29da3b346e498db5658f14d5ca8)) |
| 0x000A | (not evenly divisible by 12) | Monthly Recurrence (section 2.1.3.2.2.3) |
| 0x000A | (evenly divisible by 12) | Yearly Recurrence (section 2.1.3.2.2.5) |
| 0x000B | (not evenly divisible by 12) | Monthly Nth Recurrence (section 2.1.3.2.2.4) |
| 0x000B | (evenly divisible by 12) | Yearly Nth Recurrence (section 2.1.3.2.2.6) |

If **PidLidAppointmentRecur** is being exported with the Daily Recurrence template, it MUST contain the [**recurrence parts**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) specified in the following table.

| Recurrence Part | Value |
| --- | --- |
| FREQ | Set to 'DAILY' |
| INTERVAL | Set to (Period / 1440). If the value is 1, omit this recurrence part. |
| COUNT | If EndType is 0x00002022, set to **OccurrenceCount**. Otherwise, omit this recurrence part. |
| UNTIL | If **EndType** is 0x00002021, SHOULD[<275>](#Appendix_A_275" \o "Product behavior note 275) be set to (**EndDate** + **StartTimeOffset**), converted from the time zone specified by **PidLidTimeZoneStruct** to the [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time zone. Alternatively, MAY[<276>](#Appendix_A_276" \o "Product behavior note 276) be set to midnight on the date specified by **EndDate**. If **EndType** is not 0x00002021, omit this recurrence part. |
| WKST | The WKST recurrence part SHOULD[<277>](#Appendix_A_277" \o "Product behavior note 277) be omitted. |

###### Template: Weekly Recurrences

**ABNF Description**

1. weekly-template= "FREQ=WEEKLY" [byday-part] [common-parts]

**Template Examples**

Every Monday and Tuesday:

1. FREQ=WEEKLY;BYDAY=MO,TU

Every Monday and Tuesday at 3:30 P.M:

1. FREQ=WEEKLY;BYDAY=MO,TU;BYMINUTE=30;BYHOUR=15

The Monday and Tuesday of every two weeks, for 7 occurrences:

1. FREQ=WEEKLY;BYDAY=MO,TU;INTERVAL=2;COUNT=7

The Sunday and Monday of every two weeks, as interpreted by someone who considers a week to start on Monday (common in European Union countries). This is different in that, after a Sunday instance, there will be a seven-day gap before the next instance on a Monday:

1. FREQ=WEEKLY;BYDAY=SU,MO;INTERVAL=2;WKST=MO

**Importing to Calendar objects**

An RRULE or X-MICROSOFT-RRULE matching this template SHOULD[<278>](#Appendix_A_278" \o "Product behavior note 278) be imported into **PidLidAppointmentRecur** as specified in the following table. A VEVENT MUST NOT specify both an RRULE and an X-MICROSOFT-RRULE. The BYDAY [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) MUST be [**week independent**](#gt_4b4d3b38-996f-4888-bb53-892abbd68de4).

| AppointmentRecurrencePattern field | Value |
| --- | --- |
| **ReaderVersion** | Set to 0x3004 |
| **WriterVersion** | Set to 0x3004 |
| **RecurFrequency** | Set to 0x200B |
| **PatternType** | Set to 0x0001. Can be overridden by X-MICROSOFT-CALSCALE, see section [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac). |
| **CalendarType** | Imported from X-MICROSOFT-CALSCALE (see section 2.1.3.1.1.8). |
| **FirstDateTime** | Set as specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1. |
| **Period** | Set to the value of INTERVAL |
| **SlidingFlag** | Set to 0x00000000 |
| **PatternTypeSpecific.Week.Sa-Su** | Set to a bitmask representation of BYDAY as specified in the table that follows this table. If no BYDAY is specified, the day of week for DTSTART (in the time zone specified by **PidLidTimeZoneStruct**) MUST be used. |
| **PatternTypeSpecific.Month.Day** | (unset) |
| **PatternTypeSpecific.MonthNth.Sa-Su** | (unset) |
| **PatternTypeSpecific.MonthNth.N** | (unset) |
| **EndType** | If the recurrence is infinite, set **EndType** to 0x00002023. If the recurrence is specified with a COUNT, set **EndType** to 0x00002022. Otherwise, set **EndType** to 0x00002021. |
| **OccurrenceCount** | Set to the number of occurrences of the recurrence based on UNTIL or COUNT. If the recurrence is infinite, set **OccurrenceCount** to 0x0000000A. |
| **FirstDOW** | Set to the correct value based on WKST as specified in section [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f). |
| **DeletedInstanceCount** / **DeletedInstanceDates** | See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c) |
| **ModifiedInstanceCount** / **ModifiedInstanceDates** | See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) |
| **StartDate** | Set to the date portion of DTSTART, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. Note that this value MUST be evenly divisible by 1440. |
| **EndDate** | Set to the start date of the last instance of a recurrence, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight January 1, 1601. If the recurrence is infinite, set **EndDate** to 0x5AE980DF. Note that this value MUST be evenly divisible by 1440, except for the special value 0x5AE980DF. |
| **ReaderVersion2** | Set to 0x00003006 |
| **WriterVersion2** | Set to 0x00003009 |
| **StartTimeOffset** | Set to (60\*BYHOUR + BYMINUTE) |
| **EndTimeOffset** | Set to (**StartTimeOffset** + **PidLidAppointmentDuration**) |
| **ExceptionCount** / **ExceptionInfo** | See section 2.1.3.1.1.20.18 |
| (**ReservedBlocks** and **ExtendedExceptions**) | Refer to [MS-OXOCAL] |

The following table specifies how to map BYDAY values to a **PatternTypeSpecific.Week.Sa-Su** bitmask.

| BYDAY value | PatternTypeSpecific.Week.Sa-Su bit |
| --- | --- |
| SU | 0x00000001 |
| MO | 0x00000002 |
| TU | 0x00000004 |
| WE | 0x00000008 |
| TH | 0x00000010 |
| FR | 0x00000020 |
| SA | 0x00000040 |

**Exporting from Calendar objects**

The **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) SHOULD[<279>](#Appendix_A_279" \o "Product behavior note 279) be exported as the property specified by the table of recurrence properties in section 2.1.3.2.2.1. The exported property MUST be assigned the value generated by the Recurrence template specified by the table of recurrence templates specified in section 2.1.3.2.2.1.

If **PidLidAppointmentRecur** is being exported with the Weekly Recurrence template, then it MUST contain the recurrence parts specified in the following table.

| Recurrence part | Value |
| --- | --- |
| FREQ | Set to 'WEEKLY' |
| INTERVAL | Set to Period. If the value is 1, omit this recurrence part. |
| BYDAY | Set to the BYDAY representation of the **PatternTypeSpecific.Week.Sa-Su** bitmask. |
| COUNT | If **EndType** is 0x00002022, set to **OccurrenceCount**. Otherwise, omit this recurrence part. |
| UNTIL | If **EndType** is 0x00002021, SHOULD[<280>](#Appendix_A_280" \o "Product behavior note 280) be set to (**EndDate** + **StartTimeOffset**), converted from the time zone specified by **PidLidTimeZoneStruct** to the [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time zone. Alternatively, MAY[<281>](#Appendix_A_281" \o "Product behavior note 281) be set to midnight on the date specified by **EndDate**. If **EndType** is not 0x00002021, omit this recurrence part. |
| WKST | If **Period** is greater than 1, **FirstDOW** MUST be exported as the WKST recurrence part as specified in section 2.1.3.2.2.1. Otherwise, the WKST recurrence part SHOULD[<282>](#Appendix_A_282" \o "Product behavior note 282) be omitted. |

###### Template: Monthly Recurrences

**ABNF Description**

1. monthly-template= "FREQ=MONTHLY" [bymonthday-part] [common-parts]

**Template Examples**

The last day of every month:

1. FREQ=MONTHLY;BYMONTHDAY=-1

The 10th day of every month at 3:30 P.M:

1. FREQ=MONTHLY;BYMONTHDAY=10;BYMINUTE=30;BYHOUR=15

The 15th day of every 3 months, for 7 occurrences:

1. FREQ=MONTHLY;BYMONTHDAY=15;INTERVAL=3;COUNT=7

**Importing to Calendar objects**

An RRULE or X-MICROSOFT-RRULE matching this template SHOULD[<283>](#Appendix_A_283" \o "Product behavior note 283) be imported into **PidLidAppointmentRecur** as specified in the following table. A VEVENT MUST NOT specify both an RRULE and an X-MICROSOFT-RRULE.

| AppointmentRecurrencePattern field | Value |
| --- | --- |
| **ReaderVersion** | Set to 0x3004 |
| **WriterVersion** | Set to 0x3004 |
| **RecurFrequency** | Set to 0x200C. If the INTERVAL is evenly divisible by 12, **RecurFrequency** MAY[<284>](#Appendix_A_284" \o "Product behavior note 284) be set to 0x200D. |
| **PatternType** | Set to 0x0002. Can be overridden by X-MICROSOFT-CALSCALE, see section [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac). |
| **CalendarType** | Imported from X-MICROSOFT-CALSCALE (see section 2.1.3.1.1.8). |
| **FirstDateTime** | Set as specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1. |
| **Period** | Set to the value of INTERVAL |
| **SlidingFlag** | Set to 0x00000000 |
| **PatternTypeSpecific.Week.Sa-Su** | (unset) |
| **PatternTypeSpecific.Month.Day** | Set to the value of BYMONTHDAY. If the value of BYMONTHDAY is -1, **PatternTypeSpecific.Month.Day** SHOULD[<285>](#Appendix_A_285" \o "Product behavior note 285) be set to 0x0000001F. |
| **PatternTypeSpecific.MonthNth.Sa-Su** | (unset) |
| **PatternTypeSpecific.MonthNth.N** | (unset) |
| **EndType** | If the recurrence is infinite, set **EndType** to 0x00002023. If the recurrence is specified with a COUNT, set **EndType** to 0x00002022. Otherwise, set **EndType** to 0x00002021. |
| **OccurrenceCount** | Set to the number of occurrences of the recurrence based on UNTIL or COUNT. If the recurrence is infinite, set **OccurrenceCount** to 0x0000000A. |
| **FirstDOW** | Set to the correct value based on WKST as specified in section [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f). |
| **DeletedInstanceCount** / **DeletedInstanceDates** | See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c). |
| **ModifiedInstanceCount** / **ModifiedInstanceDates** | See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d). |
| **StartDate** | Set to the date portion of DTSTART, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. Note that this value MUST be evenly divisible by 1440. If the BYMONTHDAY is specified, it MUST override the day portion of DTSTART. |
| **EndDate** | Set to the start date of the last instance of a recurrence, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. If the recurrence is infinite, set **EndDate** to 0x5AE980DF. Note that this value MUST be evenly divisible by 1440, except for the special value 0x5AE980DF. |
| **ReaderVersion2** | Set to 0x00003006 |
| **WriterVersion2** | Set to 0x00003009 |
| **StartTimeOffset** | Set to (60\*BYHOUR + BYMINUTE) |
| **EndTimeOffset** | Set to (**StartTimeOffset** + **PidLidAppointmentDuration**) |
| **ExceptionCount** / **ExceptionInfo** | See section 2.1.3.1.1.20.18 |
| (**ReservedBlocks** and **ExtendedExceptions**) | Refer to [MS-OXOCAL] |

**Exporting from Calendar objects**

The **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) SHOULD[<286>](#Appendix_A_286" \o "Product behavior note 286) be exported as the property specified by the table of recurrence properties in section 2.1.3.2.2.1. The exported property MUST be assigned the value generated by the Recurrence template specified by the table of Recurrence templates specified in section 2.1.3.2.2.1.

If **PidLidAppointmentRecur** is being exported with the Monthly Recurrence Template, it MUST contain the [**recurrence parts**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) specified in the following table.

| Recurrence part | Value |
| --- | --- |
| FREQ | Set to 'MONTHLY' |
| INTERVAL | Set to **Period**. If the value is 1, omit this recurrence part. |
| BYMONTHDAY | Set to **PatternTypeSpecific.Month.Day**. If **PatternTypeSpecific.Month.Day** is 0x0000001F, BYMONTHDAY SHOULD[<287>](#Appendix_A_287" \o "Product behavior note 287) be set to -1. |
| COUNT | If **EndType** is 0x00002022, set to **OccurrenceCount**. Otherwise, omit this recurrence part. |
| UNTIL | If **EndType** is 0x00002021, SHOULD[<288>](#Appendix_A_288" \o "Product behavior note 288) be set to (**EndDate** + **StartTimeOffset**), converted from the time zone specified by **PidLidTimeZoneStruct** to the [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time zone. Alternatively, MAY[<289>](#Appendix_A_289" \o "Product behavior note 289) be set to midnight on the date specified by **EndDate**. If **EndType** is not 0x00002021, omit this recurrence part. |
| WKST | The WKST recurrence part SHOULD[<290>](#Appendix_A_290" \o "Product behavior note 290) be omitted. |

###### Template: Monthly Nth Recurrences

**ABNF Description**

1. monthlynth-template= "FREQ=MONTHLY" monthlynth-args
2. monthlynth-args= byday-nth-part bysetpos-part [common-parts]

**Template Examples**

The 3rd Sunday of every month:

1. FREQ=MONTHLY;BYDAY=SU;BYSETPOS=3

The last weekday of every month at 3:30 P.M.:

1. FREQ=MONTHLY;BYDAY=MO,TU,WE,TH,FR;BYSETPOS=-1;BYMINUTE=30;BYHOUR=15

The first Monday of every month, for 7 occurrences:

1. FREQ=MONTHLY;BYDAY=MO;BYSETPOS=1;COUNT=7

**Importing to Calendar objects**

An RRULE or X-MICROSOFT-RRULE matching this template SHOULD[<291>](#Appendix_A_291" \o "Product behavior note 291) be imported into **PidLidAppointmentRecur** as specified in the following table. A VEVENT MUST NOT specify both an RRULE and an X-MICROSOFT-RRULE.

| AppointmentRecurrencePattern field | Value |
| --- | --- |
| **ReaderVersion** | Set to 0x3004 |
| **WriterVersion** | Set to 0x3004 |
| **RecurFrequency** | Set to 0x200C. If the INTERVAL is evenly divisible by 12, **RecurFrequency** MAY[<292>](#Appendix_A_292" \o "Product behavior note 292) be set to 0x200D. |
| **PatternType** | Set to 0x0003. Can be overridden by X-MICROSOFT-CALSCALE, see section [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac). |
| **CalendarType** | Imported from X-MICROSOFT-CALSCALE (see section 2.1.3.1.1.8). |
| **FirstDateTime** | Set as specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1. |
| **Period** | Set to the value of INTERVAL |
| **SlidingFlag** | Set to 0x00000000 |
| **PatternTypeSpecific.Week.Sa-Su** | (unset) |
| **PatternTypeSpecific.Month.Day** | (unset) |
| **PatternTypeSpecific.MonthNth.Sa-Su** | Set to a bitmask representation of BYDAY as specified in section [2.1.3.2.2.2](#Section_305b728b8fb248d287097dab1686b9cc). |
| **PatternTypeSpecific.MonthNth.N** | Set to the value of BYSETPOS. If the value of BYSETPOS is -1, **PatternTypeSpecific.MonthNth.N** MUST be set to 0x00000005. |
| **EndType** | If the recurrence is infinite, set **EndType** to 0x00002023. If the recurrence is specified with a COUNT, set **EndType** to 0x00002022. Otherwise, set **EndType** to 0x00002021. |
| **OccurrenceCount** | Set to the number of occurrences of the recurrence based on UNTIL or COUNT. If the recurrence is infinite, set **OccurrenceCount** to 0x0000000A. |
| **FirstDOW** | Set to the correct value based on WKST as specified in section [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f). |
| **DeletedInstanceCount** / **DeletedInstanceDates** | See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c) |
| **ModifiedInstanceCount** / **ModifiedInstanceDates** | See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) |
| **StartDate** | Set to the date portion of DTSTART, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight January 1, 1601. Note that this value MUST be evenly divisible by 1440. |
| **EndDate** | Set to the start date of the last instance of a recurrence, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight January 1, 1601. If the recurrence is infinite, set **EndDate** to 0x5AE980DF. Note that this value MUST be evenly divisible by 1440, except for the special value 0x5AE980DF. |
| **ReaderVersion2** | Set to 0x00003006 |
| **WriterVersion2** | Set to 0x00003009 |
| **StartTimeOffset** | Set to (60\*BYHOUR + BYMINUTE) |
| **EndTimeOffset** | Set to (**StartTimeOffset** + **PidLidAppointmentDuration**) |
| **ExceptionCount** / **ExceptionInfo** | See section 2.1.3.1.1.20.18 |
| (**ReservedBlocks** and **ExtendedExceptions**) | Refer to [MS-OXOCAL] |

**Exporting from Calendar objects**

The **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) SHOULD[<293>](#Appendix_A_293" \o "Product behavior note 293) be exported as the property specified by the table of recurrence properties in section 2.1.3.2.2.1. The exported property MUST be assigned the value generated by the Recurrence template specified by the table of recurrence templates specified in section 2.1.3.2.2.1.

If **PidLidAppointmentRecur** is being exported with the Monthly Nth Recurrence template, then it MUST contain the [**recurrence parts**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) specified in the following table.

| Recurrence part | Value |
| --- | --- |
| FREQ | Set to 'MONTHLY' |
| INTERVAL | Set to **Period**. If the value is 1, omit this recurrence part. |
| BYDAY | Set to the BYDAY representation of the **PatternTypeSpecific.MonthNth.Sa-Su** bitmask as specified in section 2.1.3.2.2.2. |
| BYSETPOS | Set to **PatternTypeSpecific.MonthNth.N**. If **PatternTypeSpecific.MonthNth.N** is 0x00000005, set BYSETPOS to -1. |
| COUNT | If **EndType** is 0x00002022, set to **OccurrenceCount**. Otherwise, omit this recurrence part. |
| UNTIL | If **EndType** is 0x00002021, SHOULD[<294>](#Appendix_A_294" \o "Product behavior note 294) be set to (**EndDate** + **StartTimeOffset**), converted from the time zone specified by **PidLidTimeZoneStruct** to the [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time zone. Alternatively, MAY[<295>](#Appendix_A_295" \o "Product behavior note 295) be set to midnight on the date specified by **EndDate**. If **EndType** is not 0x00002021, omit this recurrence part. |
| WKST | The WKST recurrence part SHOULD[<296>](#Appendix_A_296" \o "Product behavior note 296) be omitted. |

###### Template: Yearly Recurrences

**ABNF Description**

1. yearly-template= "FREQ=YEARLY" yearly-args
2. yearly-args= [bymonthday-part] [bymonth-part] [common-parts]

**Template Examples**

The last day of every September:

1. FREQ=YEARLY;BYMONTHDAY=-1;BYMONTH=9

The 10th day of every January at 3:30 P.M.:

1. FREQ=YEARLY;BYMONTHDAY=10;BYMONTH=1;BYMINUTE=30;BYHOUR=15

The 15th day of March, every 3 years, for 7 occurrences:

1. FREQ=YEARLY;BYMONTHDAY=15;BYMONTH=3;INTERVAL=3;COUNT=7

**Importing to Calendar objects**

An RRULE or X-MICROSOFT-RRULE matching this template SHOULD[<297>](#Appendix_A_297" \o "Product behavior note 297) be imported into **PidLidAppointmentRecur** as specified in the following table. A VEVENT MUST NOT specify both an RRULE and an X-MICROSOFT-RRULE.

| AppointmentRecurrencePattern field | Value |
| --- | --- |
| **ReaderVersion** | Set to 0x3004 |
| **WriterVersion** | Set to 0x3004 |
| **RecurFrequency** | Set to 0x200D. If the INTERVAL is not 1, **RecurFrequency** SHOULD[<298>](#Appendix_A_298" \o "Product behavior note 298) be set to 0x200C. |
| **PatternType** | Set to 0x0002. Can be overridden by X-MICROSOFT-CALSCALE, see section [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac). |
| **CalendarType** | Imported from X-MICROSOFT-CALSCALE (see section 2.1.3.1.1.8). |
| **FirstDateTime** | Set as specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1. |
| **Period** | Set to (12 \* INTERVAL) |
| **SlidingFlag** | Set to 0x00000000 |
| **PatternTypeSpecific.Week.Sa-Su** | (unset) |
| **PatternTypeSpecific.Month.Day** | Set to the value of BYMONTHDAY. If the value of BYMONTHDAY is -1, **PatternTypeSpecific.Month.Day** SHOULD[<299>](#Appendix_A_299" \o "Product behavior note 299) be set to 0x0000001F. |
| **PatternTypeSpecific.MonthNth.Sa-Su** | (unset) |
| **PatternTypeSpecific.MonthNth.N** | (unset) |
| **EndType** | If the recurrence is infinite, set **EndType** to 0x00002023. If the recurrence is specified with a COUNT, set **EndType** to 0x00002022. Otherwise, set **EndType** to 0x00002021. |
| **OccurrenceCount** | Set to the number of occurrences of the recurrence based on UNTIL or COUNT. If the recurrence is infinite, set **OccurrenceCount** to 0x0000000A. |
| **FirstDOW** | Set to the correct value based on WKST as specified in section [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f). |
| **DeletedInstanceCount** / **DeletedInstanceDates** | See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c) |
| **ModifiedInstanceCount** / **ModifiedInstanceDates** | See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) |
| **StartDate** | Set to the date portion of DTSTART, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. Note that this value MUST be evenly divisible by 1440. If BYMONTH is specified, it MUST override the month portion of DTSTART. If the BYMONTHDAY is specified, it MUST override the day portion of DTSTART. |
| **EndDate** | Set to the start date of the last instance of a recurrence, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. If the recurrence is infinite, set **EndDate** to 0x5AE980DF. Note that this value MUST be evenly divisible by 1440, except for the special value 0x5AE980DF. |
| **ReaderVersion2** | Set to 0x00003006 |
| **WriterVersion2** | Set to 0x00003009 |
| **StartTimeOffset** | Set to (60\*BYHOUR + BYMINUTE) |
| **EndTimeOffset** | Set to (**StartTimeOffset** + **PidLidAppointmentDuration**) |
| **ExceptionCount** / **ExceptionInfo** | See section 2.1.3.1.1.20.18 |
| (**ReservedBlocks** and **ExtendedExceptions**) | Refer to [MS-OXOCAL] |

**Exporting from Calendar objects**

The **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) SHOULD[<300>](#Appendix_A_300" \o "Product behavior note 300) be exported as the property specified by the table of recurrence properties in section 2.1.3.2.2.1. The exported property MUST be assigned the value generated by the Recurrence template specified by the table of Recurrence templates specified in section 2.1.3.2.2.1.

If **PidLidAppointmentRecur** is being exported with the Yearly Recurrence Template, then it MUST contain the [**recurrence parts**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) specified in the following table.

| Recurrence part | Value |
| --- | --- |
| FREQ | Set to 'YEARLY' |
| INTERVAL | Set to (**Period** / 12). If the value is 1, omit this recurrence part. |
| BYMONTHDAY | Set to **PatternTypeSpecific.Month.Day**. If **PatternTypeSpecific.Month.Day** is 0x0000001F, BYMONTHDAY SHOULD[<301>](#Appendix_A_301" \o "Product behavior note 301) be set to -1. |
| BYMONTH | Set to the month from **FirstDateTime**. |
| COUNT | If **EndType** is 0x00002022, set to **OccurrenceCount**. Otherwise, omit this recurrence part. |
| UNTIL | If **EndType** is 0x00002021, SHOULD[<302>](#Appendix_A_302" \o "Product behavior note 302) be set to (**EndDate** + **StartTimeOffset**), converted from the time zone specified by **PidLidTimeZoneStruct** to the [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time zone. Alternatively, MAY[<303>](#Appendix_A_303" \o "Product behavior note 303) be set to midnight on the date specified by **EndDate**. If **EndType** is not 0x00002021, omit this recurrence part. |
| WKST | The WKST recurrence part SHOULD[<304>](#Appendix_A_304" \o "Product behavior note 304) be omitted. |

###### Template: Yearly Nth Recurrences

**ABNF Description**

1. yearlynth-template= "FREQ=YEARLY" yearlynth-args [common-parts]
2. yearlynth-args= byday-nth-part bysetpos-part bymonth-part

**Template Examples**

The 3rd Sunday of every June:

1. FREQ=YEARLY;BYDAY=SU;BYSETPOS=3;BYMONTH=6

The last weekday of every April at 3:30 P.M.:

1. FREQ=YEARLY;BYDAY=MO,TU,WE,TH,FR;BYSETPOS=-1;BYMONTH=4;BYMINUTE=30;BYHOUR=15

The first Monday of every October, every 3 years, for 7 occurrences:

1. FREQ=YEARLY;BYDAY=MO;BYSETPOS=1;BYMONTH=10;INTERVAL=3;COUNT=7

**Importing to Calendar objects**

An RRULE or X-MICROSOFT-RRULE matching this template SHOULD[<305>](#Appendix_A_305" \o "Product behavior note 305) be imported into **PidLidAppointmentRecur** as specified in the following table. A VEVENT MUST NOT specify both an RRULE and an X-MICROSOFT-RRULE.

| AppointmentRecurrencePattern field | Value |
| --- | --- |
| **ReaderVersion** | Set to 0x3004 |
| **WriterVersion** | Set to 0x3004 |
| **RecurFrequency** | Set to 0x200D. If the INTERVAL is not 1, **RecurFrequency** SHOULD[<306>](#Appendix_A_306" \o "Product behavior note 306) be set to 0x200C. |
| **PatternType** | Set to 0x0003. Can be overridden by X-MICROSOFT-CALSCALE, see section [2.1.3.1.1.8](#Section_e2870a3f9f9c4fa68e6cd0858c0eb9ac). |
| **CalendarType** | Imported from X-MICROSOFT-CALSCALE (see section 2.1.3.1.1.8). |
| **FirstDateTime** | Set as specified in [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.44.1. |
| **Period** | Set to (12 \* INTERVAL) |
| **SlidingFlag** | Set to 0x00000000 |
| **PatternTypeSpecific.Week.Sa-Su** | (unset) |
| **PatternTypeSpecific.Month.Day** | (unset) |
| **PatternTypeSpecific.MonthNth.Sa-Su** | Set to a bitmask representation of BYDAY as specified in section [2.1.3.2.2.2](#Section_305b728b8fb248d287097dab1686b9cc). |
| **PatternTypeSpecific.MonthNth.N** | Set to the value of BYSETPOS. If the value of BYSETPOS is -1, **PatternTypeSpecific.MonthNth.N** MUST be set to 0x00000005. |
| **EndType** | If the recurrence is infinite, set **EndType** to 0x00002023. If the recurrence is specified with a COUNT, set **EndType** to 0x00002022. Otherwise, set **EndType** to 0x00002021. |
| **OccurrenceCount** | Set to the number of occurrences of the recurrence based on UNTIL or COUNT. If the recurrence is infinite, set **OccurrenceCount** to 0x0000000A. |
| **FirstDOW** | Set to the correct value based on WKST as specified in section [2.1.3.2.2.1](#Section_cd57790cefda4d4c8e8d1df7efa7bc2f). |
| **DeletedInstanceCount** / **DeletedInstanceDates** | See section [2.1.3.1.1.20.13](#Section_a881e6ef2dfb490fb45f3cce4e23834c) |
| **ModifiedInstanceCount** / **ModifiedInstanceDates** | See section [2.1.3.1.1.20.18](#Section_ed2f4b8228034232a3ba253898a9885d) |
| **StartDate** | Set to the date portion of DTSTART, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. Note that this value MUST be evenly divisible by 1440. If BYMONTH is specified, it MUST override the month portion of DTSTART. |
| **EndDate** | Set to the start date of the last instance of a recurrence, in the time zone specified by **PidLidTimeZoneStruct**. This date is stored in minutes after midnight Jan 1, 1601. If the recurrence is infinite, set **EndDate** to 0x5AE980DF. Note that this value MUST be evenly divisible by 1440, except for the special value 0x5AE980DF. |
| **ReaderVersion2** | Set to 0x00003006 |
| **WriterVersion2** | Set to 0x00003009 |
| **StartTimeOffset** | Set to (60\*BYHOUR + BYMINUTE) |
| **EndTimeOffset** | Set to (**StartTimeOffset** + **PidLidAppointmentDuration**) |
| **ExceptionCount** / **ExceptionInfo** | See section 2.1.3.1.1.20.18 |
| (**ReservedBlocks** and **ExtendedExceptions**) | Refer to [MS-OXOCAL] |

**Exporting from Calendar objects**

The **AppointmentRecurrencePattern** structure ([MS-OXOCAL] section 2.2.1.44.5) in the **PidLidAppointmentRecur** property ([MS-OXOCAL] section 2.2.1.44) SHOULD[<307>](#Appendix_A_307" \o "Product behavior note 307) be exported as the property specified by the table of recurrence properties in section 2.1.3.2.2.1. The exported property MUST be assigned the value generated by the Recurrence template specified by the table of Recurrence templates specified in section 2.1.3.2.2.1.

If **PidLidAppointmentRecur** is being exported with the Yearly Nth Recurrence Template, it MUST contain the [**recurrence parts**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) specified in the following table.

| Recurrence part | Value |
| --- | --- |
| FREQ | Set to 'YEARLY' |
| INTERVAL | Set to (**Period** / 12). If the value is 1, omit this recurrence part. |
| BYDAY | Set to the BYDAY representation of the **PatternTypeSpecific.MonthNth.Sa-Su** bitmask as specified in section 2.1.3.2.2.2. |
| BYSETPOS | Set to **PatternTypeSpecific.MonthNth.N**. If **PatternTypeSpecific.MonthNth.N** is 0x00000005, set BYSETPOS to -1. |
| BYMONTH | Set to the month from **FirstDateTime**. |
| COUNT | If **EndType** is 0x00002022, set to **OccurrenceCount**. Otherwise, omit this recurrence part. |
| UNTIL | If **EndType** is 0x00002021, SHOULD[<308>](#Appendix_A_308" \o "Product behavior note 308) be set to (**EndDate** + **StartTimeOffset**), converted from the time zone specified by **PidLidTimeZoneStruct** to the [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) time zone. Alternatively, MAY[<309>](#Appendix_A_309" \o "Product behavior note 309) be set to midnight on the date specified by **EndDate**. If **EndType** is not 0x00002021, omit this recurrence part. |
| WKST | The WKST recurrence part SHOULD[<310>](#Appendix_A_310" \o "Product behavior note 310) be omitted. |

##### End-of-Month Concerns

[[RFC2445]](https://go.microsoft.com/fwlink/?LinkId=112504) specifies that Monthly Recurrences (section [2.1.3.2.2.3](#Section_7d3e36469f9b4665aca77f9260b74424)) in which the BYMONTHDAY [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) is 29, 30, or 31 MUST skip over months that do not have a sufficient number of days. Conversely, [[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) specifies that Monthly Recurrences with a **PatternTypeSpecific.Month.Day** of 0x0000001D, 0x0000001E, or 0x0000001F MUST occur on the last day of months that do not have a sufficient number of days.

##### Legacy UNTIL Concerns

If the PRODID property (see section [2.1.3.1.1.2](#Section_9fafdc54b0e44692a8f94919878036a1)) indicates that a version of the MIMEDIR between 1 and 11 (inclusive) generated the iCalendar file and if the UNTIL [**recurrence part**](#gt_49133482-bfd3-4885-bbe9-d996efd8a9c5) is specified with a trailing 'Z', it SHOULD NOT[<311>](#Appendix_A_311" \o "Product behavior note 311) be treated as a [**UTC**](#gt_f2369991-a884-4843-a8fa-1505b6d5ece7) Date-time. Instead, only the year, month, and day of the Date-time SHOULD[<312>](#Appendix_A_312" \o "Product behavior note 312) be retained, and the UNTIL recurrence part SHOULD[<313>](#Appendix_A_313" \o "Product behavior note 313) be interpreted as 11:59 P.M. of that day (in the time zone specified by **PidLidTimeZoneStruct**).

#### Additional Rules for MIME Messages

For import scenarios where the original iCalendar data is contained in a [**MIME message**](#gt_bcc83734-de00-4cd2-a344-4455ac688da9), implementations MAY[<314>](#Appendix_A_314" \o "Product behavior note 314) set additional properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18), as specified in the following table.

| Property | Value |
| --- | --- |
| **PidLidInboundICalStream** (section [2.1.3.4.1](#Section_fe3d4c465e7c4b0e983195607d20db56)) | The value of this property is set to the contents of the [**MIME part**](#gt_f432738f-5a3c-4c58-9139-836d3aa981c0) of the original MIME message that has a Content-Type header value of "text/calendar". |
| **PidLidSingleBodyICal** (section [2.1.3.4.2](#Section_60e7dcf0ad2e4ffeb25ccd7a1b556650)) | The value of this property is set to TRUE if the original MIME message contained only one MIME part, and the Content-Type header value for that MIME part was "text/calendar". |

#### Calendar Object Properties

This algorithm specifies the following additional properties for [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18).

* **PidLidInboundICalStream (**section [2.1.3.4.1](#Section_fe3d4c465e7c4b0e983195607d20db56))
* **PidLidSingleBodyICal** (section [2.1.3.4.2](#Section_60e7dcf0ad2e4ffeb25ccd7a1b556650))
* **PidNameLocationUrl** (section [2.1.3.4.3](#Section_eceb81bed7854e9f828b10357845d4c7))

##### PidLidInboundICalStream

Type: **PtypBinary** ([[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8) section 2.11.1)

The **PidLidInboundICalStream** property ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.148) is an optional property on [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that were converted from [**MIME messages**](#gt_bcc83734-de00-4cd2-a344-4455ac688da9). It contains the contents of the iCalendar [**MIME part**](#gt_f432738f-5a3c-4c58-9139-836d3aa981c0) of the original MIME message.

##### PidLidSingleBodyICal

Type: **PtypBoolean** ([[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8) section 2.11.1)

The **PidLidSingleBodyICal** property ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.300) is an optional property on [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that were converted from [**MIME messages**](#gt_bcc83734-de00-4cd2-a344-4455ac688da9). A value of TRUE indicates that the original MIME message contained a single [**MIME part**](#gt_f432738f-5a3c-4c58-9139-836d3aa981c0).

##### PidNameLocationUrl

Type: **PtypString** ([[MS-OXCDATA]](%5bMS-OXCDATA%5d.pdf#Section_1afa0cd9b1a04520b623bf15030af5d8) section 2.11.1)

The **PidNameLocationUrl** property ([[MS-OXPROPS]](%5bMS-OXPROPS%5d.pdf#Section_f6ab1613aefe447da49c18217230b148) section 2.457) is an optional property on [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18). It contains a [**URL**](#gt_433a4fb7-ef84-46b0-ab65-905f5e3a80b1) where attendees can access location information in [**HTML**](#gt_549c4960-e8be-4c24-bc2b-b86530f1c1bf) format.

# Algorithm Examples

The following subsections contain annotated iCalendar files representing several example scenarios.

## Birthday Calendar for 2008

In this example, Elizabeth has a non-[**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55) containing the birthdays of herself (October 12, 1975) and her closest friends: Shu (February 27, 1978) and Anne (July 7, 1982). Elizabeth sets 7-day [**reminders**](#gt_8188a44f-a319-4d5c-9b3d-d65c4726045a) on all the birthdays so she has enough time to prepare. The following tables represent the contents of the Birthday calendar's [**Folder object**](#gt_0682daa7-c1b8-419b-8a32-6048833d0b72) and its three [**Calendar objects**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18).

The following table shows the property on the Folder object.

| Property name | Value |
| --- | --- |
| **PidTagDisplayName** | Birthdays |

The following table lists the properties on the Calendar object for Elizabeth's Birthday.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 1440 |
| **PidLidAppointmentEndWhole** | 07:00:00.000 AM 10/13/1975 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300D2002000000A0FF05000C000000000000000C000000232000000A00000000000000000000000000000080B4BF0BDF80E95A063000000930000000000000A005000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 07:00:00.000 AM 10/12/1975 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | TRUE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000020C397BAB068C801000000000000000010000000D4429044CA28924C8FD122A133685E4A |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000020C397BAB068C801000000000000000010000000D4429044CA28924C8FD122A133685E4A |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** |  |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidReminderDelta** | 10080 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 07:00:00.000 AM 10/5/2008 |
| **PidLidReminderTime** | 07:00:00.000 AM 10/12/1975 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | Happy Birthday to me! |
| **PidTagCreationTime** | 07:08:02.739 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:08:02.739 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5487 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Elizabeth's Birthday |

The following table lists the properties on the Calendar object for Shu's Birthday.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 1440 |
| **PidLidAppointmentEndWhole** | 08:00:00.000 AM 2/28/1978 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300D200200000060AE00000C000000000000001B000000232000000A000000000000000000000000000000A0CCD20BDF80E95A063000000930000000000000A005000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 AM 2/27/1978 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | TRUE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0243DD0B068C801000000000000000010000000EE6CCE82EE4BC14BB01478A948D182FB |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0243DD0B068C801000000000000000010000000EE6CCE82EE4BC14BB01478A948D182FB |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** |  |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidReminderDelta** | 10080 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 08:00:00.000 AM 2/20/2008 |
| **PidLidReminderTime** | 08:00:00.000 AM 2/27/1978 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | Gift ideas: Baseball tickets |
| **PidTagCreationTime** | 07:09:26.913 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:09:26.913 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5488 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Shu's Birthday |

The following table lists the properties on the Calendar object for Anne's Birthday.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 1440 |
| **PidLidAppointmentEndWhole** | 07:00:00.000 AM 7/8/1982 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300D200200000020FA03000C0000000000000007000000232000000A00000000000000000000000000000000C2F50BDF80E95A063000000930000000000000A005000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 07:00:00.000 AM 7/7/1982 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | TRUE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000307DD3F5B068C801000000000000000010000000FC39CE77217D824FB608D84F4FDFE22B |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000307DD3F5B068C801000000000000000010000000FC39CE77217D824FB608D84F4FDFE22B |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** |  |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidReminderDelta** | 10080 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 07:00:00.000 AM 6/30/2008 |
| **PidLidReminderTime** | 07:00:00.000 AM 7/7/1982 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | Gift ideas: New camera phone |
| **PidTagCreationTime** | 07:10:03.026 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:10:03.026 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5487 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Anne's Birthday |

Elizabeth saves her calendar to share with Shu. The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:PUBLISH
5. X-CALSTART:19751012T000000
6. X-WR-RELCALID:{00000018-0E80-EBB5-82FB-58F695E239B2}
7. X-WR-CALNAME:Birthdays
8. BEGIN:VEVENT
9. CLASS:PUBLIC
10. CREATED:20080206T190802Z
11. DESCRIPTION:Happy Birthday to me!\n
12. DTEND;VALUE=DATE:19751013
13. DTSTAMP:20080206T191251Z
14. DTSTART;VALUE=DATE:19751012
15. LAST-MODIFIED:20080206T190802Z
16. PRIORITY:5
17. RRULE:FREQ=YEARLY;BYMONTHDAY=12;BYMONTH=10
18. SEQUENCE:0
19. SUMMARY;LANGUAGE=en-us:Elizabeth's Birthday
20. TRANSP:TRANSPARENT
21. UID:040000008200E00074C5B7101A82E0080000000020C397BAB068C801000000000000000
22. 010000000D4429044CA28924C8FD122A133685E4A
23. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
24. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
25. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
26. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
27. ri">Happy Birthday to me!</FONT></SPAN><SPAN LANG="en-us"></SPAN></P>\n\n<
28. /BODY>\n</HTML>
29. X-MICROSOFT-CDO-BUSYSTATUS:FREE
30. X-MICROSOFT-CDO-IMPORTANCE:1
31. X-MICROSOFT-DISALLOW-COUNTER:FALSE
32. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
33. X-MS-OLK-CONFTYPE:0
34. BEGIN:VALARM
35. TRIGGER:-PT10080M
36. ACTION:DISPLAY
37. DESCRIPTION:Reminder
38. END:VALARM
39. END:VEVENT
40. BEGIN:VEVENT
41. CLASS:PUBLIC
42. CREATED:20080206T190926Z
43. DESCRIPTION:Gift ideas: Baseball tickets\n
44. DTEND;VALUE=DATE:19780228
45. DTSTAMP:20080206T191251Z
46. DTSTART;VALUE=DATE:19780227
47. LAST-MODIFIED:20080206T190926Z
48. PRIORITY:5
49. RRULE:FREQ=YEARLY;BYMONTHDAY=27;BYMONTH=2
50. SEQUENCE:0
51. SUMMARY;LANGUAGE=en-us:Shu's Birthday
52. TRANSP:TRANSPARENT
53. UID:040000008200E00074C5B7101A82E00800000000E0243DD0B068C801000000000000000
54. 010000000EE6CCE82EE4BC14BB01478A948D182FB
55. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
56. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
57. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
58. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
59. ri">Gift ideas: Baseball tickets</FONT></SPAN><SPAN LANG="en-us"></SPAN></
60. P>\n\n</BODY>\n</HTML>
61. X-MICROSOFT-CDO-BUSYSTATUS:FREE
62. X-MICROSOFT-CDO-IMPORTANCE:1
63. X-MICROSOFT-DISALLOW-COUNTER:FALSE
64. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
65. X-MS-OLK-CONFTYPE:0
66. BEGIN:VALARM
67. TRIGGER:-PT10080M
68. ACTION:DISPLAY
69. DESCRIPTION:Reminder
70. END:VALARM
71. END:VEVENT
72. BEGIN:VEVENT
73. CLASS:PUBLIC
74. CREATED:20080206T191003Z
75. DESCRIPTION:Gift ideas: New camera phone\n
76. DTEND;VALUE=DATE:19820708
77. DTSTAMP:20080206T191251Z
78. DTSTART;VALUE=DATE:19820707
79. LAST-MODIFIED:20080206T191003Z
80. PRIORITY:5
81. RRULE:FREQ=YEARLY;BYMONTHDAY=7;BYMONTH=7
82. SEQUENCE:0
83. SUMMARY;LANGUAGE=en-us:Anne's Birthday
84. TRANSP:TRANSPARENT
85. UID:040000008200E00074C5B7101A82E00800000000307DD3F5B068C801000000000000000
86. 010000000FC39CE77217D824FB608D84F4FDFE22B
87. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
88. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
89. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
90. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
91. ri">Gift ideas: New camera phone</FONT></SPAN><SPAN LANG="en-us"></SPAN></
92. P>\n\n</BODY>\n</HTML>
93. X-MICROSOFT-CDO-BUSYSTATUS:FREE
94. X-MICROSOFT-CDO-IMPORTANCE:1
95. X-MICROSOFT-DISALLOW-COUNTER:FALSE
96. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
97. X-MS-OLK-CONFTYPE:0
98. BEGIN:VALARM
99. TRIGGER:-PT10080M
100. ACTION:DISPLAY
101. DESCRIPTION:Reminder
102. END:VALARM
103. END:VEVENT
104. END:VCALENDAR

Shu opens the iCalendar file. The following tables represent the contents of the Birthday calendar's Folder object and its three Calendar objects in Shu's [**message store**](#gt_fda94a53-448d-48d5-9991-176c530ff597).

The following table shows the property on the Folder object.

| Property name | Value |
| --- | --- |
| **PidTagDisplayName** | Birthdays |

The following table lists the properties on the Calendar object for Elizabeth's Birthday.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 1440 |
| **PidLidAppointmentEndWhole** | 07:00:00.000 AM 10/13/1975 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300D2002000000A0FF05000C000000000000000C000000232000000A00000000000000000000000000000080B4BF0BDF80E95A063000000930000000000000A005000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 07:00:00.000 AM 10/12/1975 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | TRUE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000020C397BAB068C801000000000000000010000000D4429044CA28924C8FD122A133685E4A |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000020C397BAB068C801000000000000000010000000D4429044CA28924C8FD122A133685E4A |
| **PidLidLocation** |  |
| **PidLidOwnerCriticalChange** | 07:12:51.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 10080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 07:00:00.000 AM 10/5/2008 |
| **PidLidReminderTime** | 07:00:00.000 AM 10/12/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | Happy Birthday to me! |
| **PidTagCreationTime** | 07:14:57.374 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:14:57.374 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagRtfCompressed** | cb: 652 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Elizabeth's Birthday |

The following table lists the properties on the Calendar object for Shu's Birthday.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 1440 |
| **PidLidAppointmentEndWhole** | 08:00:00.000 AM 2/28/1978 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300D200200000060AE00000C000000000000001B000000232000000A000000000000000000000000000000A0CCD20BDF80E95A063000000930000000000000A005000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 AM 2/27/1978 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | TRUE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0243DD0B068C801000000000000000010000000EE6CCE82EE4BC14BB01478A948D182FB |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0243DD0B068C801000000000000000010000000EE6CCE82EE4BC14BB01478A948D182FB |
| **PidLidLocation** |  |
| **PidLidOwnerCriticalChange** | 07:12:51.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 10080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 08:00:00.000 AM 2/20/2008 |
| **PidLidReminderTime** | 08:00:00.000 AM 2/27/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | Gift ideas: Baseball tickets |
| **PidTagCreationTime** | 07:14:57.405 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:14:57.405 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagRtfCompressed** | cb: 660 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Shu's Birthday |

The following table lists the properties on the Calendar object for Anne's Birthday.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 1440 |
| **PidLidAppointmentEndWhole** | 07:00:00.000 AM 7/8/1982 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300D200200000020FA03000C0000000000000007000000232000000A00000000000000000000000000000000C2F50BDF80E95A063000000930000000000000A005000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 07:00:00.000 AM 7/7/1982 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | TRUE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000307DD3F5B068C801000000000000000010000000FC39CE77217D824FB608D84F4FDFE22B |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000307DD3F5B068C801000000000000000010000000FC39CE77217D824FB608D84F4FDFE22B |
| **PidLidLocation** |  |
| **PidLidOwnerCriticalChange** | 07:12:51.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 10080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 07:00:00.000 AM 6/30/2008 |
| **PidLidReminderTime** | 07:00:00.000 AM 7/7/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | Gift ideas: New camera phone |
| **PidTagCreationTime** | 07:14:57.421 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:14:57.421 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagRtfCompressed** | cb: 656 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Anne's Birthday |

## Schedule for the Week of June 16, 2008

In this example, Elizabeth's [**primary calendar**](#gt_9bf68675-bcc4-4938-8a84-04aea52d2f55) contains her schedule for the work-week of June 16, 2008.

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) for Elizabeth's lunch break.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 07:00:00.000 PM 6/16/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300B2001000000C021000001000000000000003E000000222000000500000000000000000000000000000080F8C50C000FC60C0630000009300000B2020000D002000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 06:30:00.000 PM 6/16/2008 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000C0FE0C40B268C801000000000000000010000000DD26B2AEDF5D2145BCE907145185EA4D |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000C0FE0C40B268C801000000000000000010000000DD26B2AEDF5D2145BCE907145185EA4D |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** |  |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 06:15:00.000 PM 6/16/2008 |
| **PidLidReminderTime** | 06:30:00.000 PM 6/16/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** |  |
| **PidTagCreationTime** | 07:19:19.224 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:30:58.552 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5468 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Lunch |

The following table lists the properties on the Calendar object for Elizabeth's doctor appointment.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 60 |
| **PidLidAppointmentEndWhole** | 04:00:00.000 PM 6/16/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 03:00:00.000 PM 6/16/2008 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 3 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0E7F7AAB268C801000000000000000010000000D3BDD3F67FDD814E823B9EE04A816204 |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0E7F7AAB268C801000000000000000010000000D3BDD3F67FDD814E823B9EE04A816204 |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** | 4567 Main St., Buffalo, NY 98052 |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidReminderDelta** | 720 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 03:00:00.000 AM 6/16/2008 |
| **PidLidReminderTime** | 03:00:00.000 PM 6/16/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidTagBody** |  |
| **PidTagCreationTime** | 07:20:46.387 PM 2/6/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 09:40:42.099 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5515 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 2 |
| **PidTagSubject** | Doctor's Appointment |

The following table lists the properties on the Calendar object for the Fabrikam Project pre-[**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 05:00:00.000 PM 6/18/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 04:30:00.000 PM 6/18/2008 |
| **PidLidAppointmentStateFlags** | 1 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 07:30:17.980 PM 2/6/2008 |
| **PidLidAttendeeCriticalChange** | 12:00:00.000 AM 1/1/4501 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000005019899AB368C8010000000000000000100000005D7DB73EA4A89A4894F5C022C6CAA58F |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000005019899AB368C8010000000000000000100000005D7DB73EA4A89A4894F5C022C6CAA58F |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** | Patrick's Office |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 07:30:17.980 PM 2/6/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 04:15:00.000 PM 6/18/2008 |
| **PidLidReminderTime** | 04:30:00.000 PM 6/18/2008 |
| **PidLidResponseStatus** | 1 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidTagBody** | Hey Patrick\,\n\nCan we sync up before the upcoming Fabrikam status meeting?\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 07:27:11.156 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 07:30:18.762 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 1246111704 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5666 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Pre-status meeting sync-up |

The following table lists the properties on the Calendar object for the Fabrikam Project meeting.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 60 |
| **PidLidAppointmentEndWhole** | 06:00:00.000 PM 6/18/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 05:00:00.000 PM 6/18/2008 |
| **PidLidAppointmentStateFlags** | 1 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 07:33:34.236 PM 2/6/2008 |
| **PidLidAttendeeCriticalChange** | 12:00:00.000 AM 1/1/4501 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000B0CF8013B468C801000000000000000010000000FB83BE9C4AADB5439C06943C06CF7548 |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000B0CF8013B468C801000000000000000010000000FB83BE9C4AADB5439C06943C06CF7548 |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** | Conference Room 234 |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 07:33:34.236 PM 2/6/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 04:45:00.000 PM 6/18/2008 |
| **PidLidReminderTime** | 05:00:00.000 PM 6/18/2008 |
| **PidLidResponseStatus** | 1 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidTagBody** | Hey team\,\n\nLet's meet up to discuss the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 07:31:09.578 PM 2/6/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 07:33:34.361 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 1252403160 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5635 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 70 lpb: 00000000812B1FA4BEA310199D6E00DD010F540200000000456C697A616265746820416E64657273656E00534D54500065616E64657273656E40636F6E746F736F2E636F6D00 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Fabrikam status meeting |

Elizabeth saves her calendar to share with Shu. The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:PUBLISH
5. X-CALSTART:20080616T150000Z
6. X-CALEND:20080620T190000Z
7. X-CLIPSTART:20080616T070000Z
8. X-CLIPEND:20080621T070000Z
9. X-WR-RELCALID:{00000018-47DA-D2D5-82FB-58F6F5E139B2}
10. X-WR-CALNAME:Elizabeth Andersen
11. X-PRIMARY-CALENDAR:TRUE
12. X-OWNER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
13. X-MS-OLK-WKHRSTART;TZID="Pacific Time (US & Canada)":080000
14. X-MS-OLK-WKHREND;TZID="Pacific Time (US & Canada)":170000
15. X-MS-OLK-WKHRDAYS:MO,TU,WE,TH,FR
16. BEGIN:VTIMEZONE
17. TZID:Pacific Time (US & Canada)
18. BEGIN:STANDARD
19. DTSTART:16011104T020000
20. RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=11
21. TZOFFSETFROM:-0700
22. TZOFFSETTO:-0800
23. END:STANDARD
24. BEGIN:DAYLIGHT
25. DTSTART:16010311T020000
26. RRULE:FREQ=YEARLY;BYDAY=2SU;BYMONTH=3
27. TZOFFSETFROM:-0800
28. TZOFFSETTO:-0700
29. END:DAYLIGHT
30. END:VTIMEZONE
31. BEGIN:VEVENT
32. CLASS:PUBLIC
33. CREATED:20080206T191919Z
34. DESCRIPTION:\n
35. DTEND;TZID="Pacific Time (US & Canada)":20080616T120000
36. DTSTAMP:20080206T215757Z
37. DTSTART;TZID="Pacific Time (US & Canada)":20080616T113000
38. LAST-MODIFIED:20080206T193058Z
39. PRIORITY:5
40. RRULE:FREQ=WEEKLY;COUNT=5;BYDAY=MO,TU,WE,TH,FR
41. SEQUENCE:0
42. SUMMARY;LANGUAGE=en-us:Lunch
43. TRANSP:OPAQUE
44. UID:040000008200E00074C5B7101A82E00800000000C0FE0C40B268C801000000000000000
45. 010000000DD26B2AEDF5D2145BCE907145185EA4D
46. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
47. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
48. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
49. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"></SPAN></P>\n\n</
50. BODY>\n</HTML>
51. X-MICROSOFT-CDO-BUSYSTATUS:TENTATIVE
52. X-MICROSOFT-CDO-IMPORTANCE:1
53. X-MICROSOFT-DISALLOW-COUNTER:FALSE
54. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
55. X-MS-OLK-AUTOSTARTCHECK:FALSE
56. X-MS-OLK-CONFTYPE:0
57. END:VEVENT
58. BEGIN:VEVENT
59. CLASS:PRIVATE
60. CREATED:20080206T192046Z
61. DESCRIPTION:\n
62. DTEND:20080616T160000Z
63. DTSTAMP:20080206T215757Z
64. DTSTART:20080616T150000Z
65. LAST-MODIFIED:20080206T214042Z
66. LOCATION:4567 Main St.\, Buffalo\, NY 98052
67. PRIORITY:1
68. SEQUENCE:0
69. SUMMARY;LANGUAGE=en-us:Doctor's Appointment
70. TRANSP:OPAQUE
71. UID:040000008200E00074C5B7101A82E00800000000E0E7F7AAB268C801000000000000000
72. 010000000D3BDD3F67FDD814E823B9EE04A816204
73. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
74. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
75. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
76. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"></SPAN></P>\n\n</
77. BODY>\n</HTML>
78. X-MICROSOFT-CDO-BUSYSTATUS:OOF
79. X-MICROSOFT-CDO-IMPORTANCE:2
80. X-MICROSOFT-DISALLOW-COUNTER:FALSE
81. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
82. X-MS-OLK-AUTOFILLLOCATION:FALSE
83. X-MS-OLK-CONFTYPE:0
84. BEGIN:VALARM
85. TRIGGER:-PT720M
86. ACTION:DISPLAY
87. DESCRIPTION:Reminder
88. END:VALARM
89. END:VEVENT
90. BEGIN:VEVENT
91. ATTENDEE;CN=pcook@contoso.com;RSVP=TRUE:mailto:pcook@contoso.com
92. CLASS:PUBLIC
93. CREATED:20080206T192711Z
94. DESCRIPTION:Hey Patrick\,\n\nCan we sync up before the upcoming Fabrikam st
95. atus meeting?\n\nThanks\,\nElizabeth\n
96. DTEND:20080618T170000Z
97. DTSTAMP:20080206T193017Z
98. DTSTART:20080618T163000Z
99. LAST-MODIFIED:20080206T193018Z
100. LOCATION:Patrick's Office
101. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
102. PRIORITY:5
103. SEQUENCE:0
104. SUMMARY;LANGUAGE=en-us:Pre-status meeting sync-up
105. TRANSP:OPAQUE
106. UID:040000008200E00074C5B7101A82E008000000005019899AB368C801000000000000000
107. 0100000005D7DB73EA4A89A4894F5C022C6CAA58F
108. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
109. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
110. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
111. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
112. ri">Hey</FONT></SPAN><SPAN LANG="en-us"> <FONT FACE="Calibri">Patrick</FON
113. T></SPAN><SPAN LANG="en-us"><FONT FACE="Calibri">\,</FONT></SPAN></P>\n\n<
114. P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Can we sync up before th
115. </FONT></SPAN><SPAN LANG="en-us"><FONT FACE="Calibri">e upcoming</FONT></S
116. PAN><SPAN LANG="en-us"><FONT FACE="Calibri"></FONT></SPAN><SPAN LANG="en-u
117. s"> <FONT FACE="Calibri">Fabrikam</FONT></SPAN><SPAN LANG="en-us"><FONT FA
118. CE="Calibri"> status meeting?</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="
119. en-us"><FONT FACE="Calibri">Thanks\,</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN
120. LANG="en-us"><FONT FACE="Calibri">Elizabeth</FONT></SPAN><SPAN LANG="en-u
121. s"></SPAN></P>\n\n</BODY>\n</HTML>
122. X-MICROSOFT-CDO-BUSYSTATUS:BUSY
123. X-MICROSOFT-CDO-IMPORTANCE:1
124. X-MICROSOFT-DISALLOW-COUNTER:FALSE
125. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
126. X-MS-OLK-APPTSEQTIME:20080206T193017Z
127. X-MS-OLK-AUTOFILLLOCATION:FALSE
128. X-MS-OLK-CONFTYPE:0
129. BEGIN:VALARM
130. TRIGGER:-PT15M
131. ACTION:DISPLAY
132. DESCRIPTION:Reminder
133. END:VALARM
134. END:VEVENT
135. BEGIN:VEVENT
136. ATTENDEE;CN=sito@contoso.com;RSVP=TRUE:mailto:sito@contoso.com
137. ATTENDEE;CN=pcook@contoso.com;RSVP=TRUE:mailto:pcook@contoso.com
138. ATTENDEE;CN=aweiler@contoso.com;RSVP=TRUE:mailto:aweiler@contoso.com
139. CLASS:PUBLIC
140. CREATED:20080206T193109Z
141. DESCRIPTION:Hey team\,\n\nLet's meet up to discuss the status of the Fabr
142. ikam Project.\n\nThanks\,\nElizabeth\n
143. DTEND:20080618T180000Z
144. DTSTAMP:20080206T193334Z
145. DTSTART:20080618T170000Z
146. LAST-MODIFIED:20080206T193334Z
147. LOCATION:Conference Room 234
148. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
149. PRIORITY:1
150. SEQUENCE:0
151. SUMMARY;LANGUAGE=en-us:Fabrikam status meeting
152. TRANSP:OPAQUE
153. UID:040000008200E00074C5B7101A82E00800000000B0CF8013B468C801000000000000000
154. 010000000FB83BE9C4AADB5439C06943C06CF7548
155. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
156. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
157. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
158. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
159. ri">Hey team\,</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FA
160. CE="Calibri">Let</FONT></SPAN><SPAN LANG="en-us"><FONT FACE="Calibri">'<
161. /FONT></SPAN><SPAN LANG="en-us"><FONT FACE="Calibri">s meet up to discuss
162. the status of the Fabrikam Project</FONT></SPAN><SPAN LANG="en-us"><FONT F
163. ACE="Calibri">.</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT F
164. ACE="Calibri">Thanks\,</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us">
165. <FONT FACE="Calibri">Elizabeth</FONT></SPAN><SPAN LANG="en-us"></SPAN></P>
166. \n\n</BODY>\n</HTML>
167. X-MICROSOFT-CDO-BUSYSTATUS:BUSY
168. X-MICROSOFT-CDO-IMPORTANCE:2
169. X-MICROSOFT-DISALLOW-COUNTER:FALSE
170. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
171. X-MS-OLK-APPTSEQTIME:20080206T193334Z
172. X-MS-OLK-AUTOFILLLOCATION:FALSE
173. X-MS-OLK-CONFTYPE:0
174. BEGIN:VALARM
175. TRIGGER:-PT15M
176. ACTION:DISPLAY
177. DESCRIPTION:Reminder
178. END:VALARM
179. END:VEVENT

END:VCALENDAR

Shu opens the iCalendar file. The following tables represent the contents of Shu's copy of Elizabeth's Schedule.

The following table lists the properties on the Calendar object for Elizabeth's lunch break.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 07:00:00.000 PM 6/16/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300B2001000000C021000001000000000000003E000000222000000500000000000000000000000000000080F8C50C000FC60C0630000009300000B2020000D002000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 06:30:00.000 PM 6/16/2008 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000C0FE0C40B268C801000000000000000010000000DD26B2AEDF5D2145BCE907145185EA4D |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000C0FE0C40B268C801000000000000000010000000DD26B2AEDF5D2145BCE907145185EA4D |
| **PidLidLocation** |  |
| **PidLidOwnerCriticalChange** | 09:57:57.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 1080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 12:30:00.000 AM 6/16/2008 |
| **PidLidReminderTime** | 06:30:00.000 PM 6/16/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** |  |
| **PidTagCreationTime** | 10:35:40.383 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 10:35:40.383 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagRtfCompressed** | cb: 556 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Lunch |

The following table lists the properties on the Calendar object for Elizabeth's doctor appointment.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 60 |
| **PidLidAppointmentEndWhole** | 04:00:00.000 PM 6/16/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 03:00:00.000 PM 6/16/2008 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 3 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0E7F7AAB268C801000000000000000010000000D3BDD3F67FDD814E823B9EE04A816204 |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000E0E7F7AAB268C801000000000000000010000000D3BDD3F67FDD814E823B9EE04A816204 |
| **PidLidLocation** | 4567 Main St., Buffalo, NY 98052 |
| **PidLidOwnerCriticalChange** | 09:57:57.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 720 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 03:00:00.000 AM 6/16/2008 |
| **PidLidReminderTime** | 03:00:00.000 PM 6/16/2008 |
| **PidLidResponseStatus** | 0 |
| **PidTagBody** |  |
| **PidTagCreationTime** | 10:35:40.398 PM 2/6/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 10:35:40.398 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagRtfCompressed** | cb: 556 lpb|
| **PidTagSensitivity** | 2 |
| **PidTagSubject** | Doctor's Appointment |

The following table lists the properties on the Calendar object for the Fabrikam Project pre-meeting.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 05:00:00.000 PM 6/18/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 04:30:00.000 PM 6/18/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 07:30:17.000 PM 2/6/2008 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000005019899AB368C8010000000000000000100000005D7DB73EA4A89A4894F5C022C6CAA58F |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000005019899AB368C8010000000000000000100000005D7DB73EA4A89A4894F5C022C6CAA58F |
| **PidLidLocation** | Patrick's Office |
| **PidLidOwnerCriticalChange** | 07:30:17.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 04:15:00.000 PM 6/18/2008 |
| **PidLidReminderTime** | 04:30:00.000 PM 6/18/2008 |
| **PidLidResponseStatus** | 5 |
| **PidTagBody** | Hey Patrick\,\n\nCan we sync up before the upcoming Fabrikam status meeting?\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 10:35:40.414 PM 2/6/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 10:35:40.414 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 4294967295 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 1033 lpb:  |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Pre-status meeting sync-up |

The following table lists the properties on the Calendar object for the Fabrikam Project meeting.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 60 |
| **PidLidAppointmentEndWhole** | 06:00:00.000 PM 6/18/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 05:00:00.000 PM 6/18/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 07:33:34.000 PM 2/6/2008 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000B0CF8013B468C801000000000000000010000000FB83BE9C4AADB5439C06943C06CF7548 |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00800000000B0CF8013B468C801000000000000000010000000FB83BE9C4AADB5439C06943C06CF7548 |
| **PidLidLocation** | Conference Room 234 |
| **PidLidOwnerCriticalChange** | 07:33:34.000 PM 2/6/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 04:45:00.000 PM 6/18/2008 |
| **PidLidReminderTime** | 05:00:00.000 PM 6/18/2008 |
| **PidLidResponseStatus** | 5 |
| **PidTagBody** | Hey team\,\n\nLet's meet up to discuss the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 10:35:40.429 PM 2/6/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 10:35:40.429 PM 2/6/2008 |
| **PidTagMessageClass** | IPM.Appointment |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 4294967295 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 953 lpb|
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Fabrikam status meeting |

## Single Meeting Scenario

This subsection describes a multi-step scenario in which an [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb), Elizabeth, sets up a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) with an attendee, Shu, but later decides to cancel it.

### Organizer's Meeting Request

Elizabeth invites Shu to lunch at Fourth Coffee from noon to 12:30 P.M. (Pacific Time) on February 8, 2008.

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Elizabeth sends.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 08:30:00.000 PM 2/8/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 PM 2/8/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAttendeeCriticalChange** | 05:39:55.801 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidIntendedBusyStatus** | 2 |
| **PidLidLocation** | Fourth Coffee |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 05:39:55.801 PM 2/8/2008 |
| **PidLidReminderDelta** | 1525252321 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidReminderTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidTagBody** | When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Fourth Coffee\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nI haven't had a raspberry scone in forever! Want to head down to Fourth Coffee for lunch?\n |
| **PidTagCreationTime** | 05:39:55.801 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 05:39:55.910 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Request |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 2758289368 |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5750 lpb:  |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Lunch? |

The following shows the resulting iCalendar file.

BEGIN:VCALENDAR

1. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
2. VERSION:2.0
3. METHOD:REQUEST
4. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
5. BEGIN:VEVENT
6. ATTENDEE;CN=sito@contoso.com;RSVP=TRUE:mailto:sito@contoso.com
7. CLASS:PUBLIC
8. CREATED:20080208T173955Z
9. DESCRIPTION:When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00)
10. Pacific Time (US & Canada).\nWhere: Fourth Coffee\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\
11. n\nI haven't had a raspberry scone in forever! Want to head down to Fou
12. rth Coffee for lunch?\n
13. DTEND:20080208T203000Z
14. DTSTAMP:20080208T173955Z
15. DTSTART:20080208T200000Z
16. LAST-MODIFIED:20080208T173955Z
17. LOCATION:Fourth Coffee
18. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
19. PRIORITY:5
20. SEQUENCE:0
21. SUMMARY;LANGUAGE=en-us:Lunch?
22. TRANSP:OPAQUE
23. UID:040000008200E00074C5B7101A82E0080000000010C4F838346AC801000000000000000
24. 0100000002009EB53F098B249AD66CBE6BB3B8B99
25. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
26. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
27. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
28. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
29. ri">When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00) Pacifi
30. c Time (US &amp\; Canada).</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-
31. us"><FONT FACE="Calibri">Where: Fourth Coffee</FONT></SPAN></P>\n\n<P DIR=
32. LTR><SPAN LANG="en-us"><FONT FACE="Calibri">\*~\*~\*~\*~\*~\*~\*~\*~\*~\*</FONT></SP
33. AN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">I haven't
34. had a raspberry scone in forever!&nbsp\; Want to head down to Fourth Coffe
35. e for lunch?</FONT></SPAN><SPAN LANG="en-us"></SPAN></P>\n\n</BODY>\n</HTM
36. L>
37. X-MICROSOFT-CDO-BUSYSTATUS:TENTATIVE
38. X-MICROSOFT-CDO-IMPORTANCE:1
39. X-MICROSOFT-CDO-INTENDEDSTATUS:BUSY
40. X-MICROSOFT-DISALLOW-COUNTER:FALSE
41. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
42. X-MS-OLK-AUTOSTARTCHECK:FALSE
43. X-MS-OLK-CONFTYPE:0
44. X-MS-OLK-SENDER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
45. BEGIN:VALARM
46. TRIGGER:-PT15M
47. ACTION:DISPLAY
48. DESCRIPTION:Reminder
49. END:VALARM
50. END:VEVENT
51. END:VCALENDAR

The following table lists the properties on the Calendar object that Shu receives.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 08:30:00.000 PM 2/8/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 PM 2/8/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidIntendedBusyStatus** | 2 |
| **PidLidLocation** | Fourth Coffee |
| **PidLidOwnerCriticalChange** | 05:39:55.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 07:45:00.000 PM 2/8/2008 |
| **PidLidReminderTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidResponseStatus** | 5 |
| **PidTagBody** | When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Fourth Coffee\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nI haven't had a raspberry scone in forever! Want to head down to Fourth Coffee for lunch?\n |
| **PidTagCreationTime** | 05:43:51.254 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 05:43:53.051 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Request |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 997 lpb|
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Lunch? |

### Attendee's Meeting Acceptance

Shu accepts Elizabeth's [**meeting request**](#gt_85d4db24-1560-4ac1-aa9b-6cd96f36c0e0).

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Shu sends.

| Property name | Value |
| --- | --- |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 08:30:00.000 PM 2/8/2008 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 PM 2/8/2008 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAttendeeCriticalChange** | 05:44:34.941 PM 2/8/2008 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** | Fourth Coffee |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 05:39:55.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 0 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidReminderTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidTagCreationTime** | 05:44:34.926 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 05:44:39.254 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Resp.Pos |
| **PidTagMessageLocaleId** | 0 |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Accepted: Lunch? |

The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:REPLY
5. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
6. BEGIN:VEVENT
7. ATTENDEE;PARTSTAT=ACCEPTED:mailto:sito@contoso.com
8. CLASS:PUBLIC
9. CREATED:20080208T174434Z
10. DTEND:20080208T203000Z
11. DTSTAMP:20080208T174434Z
12. DTSTART:20080208T200000Z
13. LAST-MODIFIED:20080208T174439Z
14. LOCATION:Fourth Coffee
15. PRIORITY:5
16. SEQUENCE:0
17. SUMMARY:Accepted: Lunch?
18. TRANSP:OPAQUE
19. UID:040000008200E00074C5B7101A82E0080000000010C4F838346AC801000000000000000
20. 0100000002009EB53F098B249AD66CBE6BB3B8B99
21. X-MICROSOFT-CDO-BUSYSTATUS:BUSY
22. X-MICROSOFT-CDO-IMPORTANCE:1
23. X-MS-OLK-AUTOFILLLOCATION:FALSE
24. X-MS-OLK-CONFTYPE:0
25. END:VEVENT
26. END:VCALENDAR

The following table lists the properties on the Calendar object that Elizabeth receives.

| Property name | Value |
| --- | --- |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 08:30:00.000 PM 2/8/2008 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 PM 2/8/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAttendeeCriticalChange** | 05:44:34.000 PM 2/8/2008 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidLocation** | Fourth Coffee |
| **PidLidReminderDelta** | 1080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 02:00:00.000 AM 2/8/2008 |
| **PidLidReminderTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidResponseStatus** | 3 |
| **PidTagCreationTime** | 05:47:43.269 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 05:47:43.769 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Resp.Pos |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | sito@contoso.com |
| **PidTagSenderEntryId** | cb: 84 lpb: 00000000812B1FA4BEA310199D6E00DD010F5402000001805300680075002000490074006F00000053004D005400500000007300690074006F00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Shu Ito |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Accepted: Lunch? |

### Organizer's Cancellation

Elizabeth realizes that she has a conflicting [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94), so she cancels her lunch with Shu.

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Elizabeth sends.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 08:30:00.000 PM 2/8/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 1 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 PM 2/8/2008 |
| **PidLidAppointmentStateFlags** | 7 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 05:48:33.676 PM 2/8/2008 |
| **PidLidAttendeeCriticalChange** | 05:52:48.957 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidIntendedBusyStatus** | 0 |
| **PidLidLocation** | Fourth Coffee |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 05:52:48.957 PM 2/8/2008 |
| **PidLidReminderDelta** | 1525252321 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidReminderTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidTagBody** | When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Fourth Coffee\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nOops! Forgot I have a meeting today. Maybe we can try again sometime next week.\n |
| **PidTagCreationTime** | 05:52:48.926 PM 2/8/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 05:52:49.301 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Canceled |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 2758289368 |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5760 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Canceled: Lunch? |

The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:CANCEL
5. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
6. BEGIN:VEVENT
7. ATTENDEE;CN=sito@contoso.com;RSVP=TRUE:mailto:sito@contoso.com
8. CLASS:PUBLIC
9. CREATED:20080208T175248Z
10. DESCRIPTION:When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00)
11. Pacific Time (US & Canada).\nWhere: Fourth Coffee\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\
12. n\nOops! Forgot I have a meeting today. Maybe we can try again sometime
13. next week.\n
14. DTEND:20080208T203000Z
15. DTSTAMP:20080208T175248Z
16. DTSTART:20080208T200000Z
17. LAST-MODIFIED:20080208T175249Z
18. LOCATION:Fourth Coffee
19. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
20. PRIORITY:1
21. SEQUENCE:1
22. SUMMARY;LANGUAGE=en-us:Canceled: Lunch?
23. TRANSP:TRANSPARENT
24. UID:040000008200E00074C5B7101A82E0080000000010C4F838346AC801000000000000000
25. 0100000002009EB53F098B249AD66CBE6BB3B8B99
26. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
27. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
28. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
29. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
30. ri">When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00) Pacifi
31. c Time (US &amp\; Canada).</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-
32. us"><FONT FACE="Calibri">Where: Fourth Coffee</FONT></SPAN></P>\n\n<P DIR=
33. LTR><SPAN LANG="en-us"><FONT FACE="Calibri">\*~\*~\*~\*~\*~\*~\*~\*~\*~\*</FONT></SP
34. AN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Oops!&nbsp\;
35. Forgot I have a meeting today.&nbsp\; Maybe we can try again sometime nex
36. t week.</FONT></SPAN><SPAN LANG="en-us"></SPAN></P>\n\n</BODY>\n</HTML>
37. X-MICROSOFT-CDO-BUSYSTATUS:FREE
38. X-MICROSOFT-CDO-IMPORTANCE:2
39. X-MICROSOFT-DISALLOW-COUNTER:FALSE
40. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
41. X-MS-OLK-APPTSEQTIME:20080208T174833Z
42. X-MS-OLK-AUTOSTARTCHECK:FALSE
43. X-MS-OLK-CONFTYPE:0
44. X-MS-OLK-SENDER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
45. END:VEVENT
46. END:VCALENDAR

The following table lists the properties on the Calendar object that Shu receives.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 08:30:00.000 PM 2/8/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 1 |
| **PidLidAppointmentStartWhole** | 08:00:00.000 PM 2/8/2008 |
| **PidLidAppointmentStateFlags** | 7 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 05:48:33.000 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E0080000000010C4F838346AC8010000000000000000100000002009EB53F098B249AD66CBE6BB3B8B99 |
| **PidLidLocation** | Fourth Coffee |
| **PidLidOwnerCriticalChange** | 05:52:48.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 1080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 02:00:00.000 AM 2/8/2008 |
| **PidLidReminderTime** | 08:00:00.000 PM 2/8/2008 |
| **PidLidResponseStatus** | 5 |
| **PidTagBody** | When: Friday\, February 08\, 2008 12:00 PM-12:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Fourth Coffee\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nOops! Forgot I have a meeting today. Maybe we can try again sometime next week.\n |
| **PidTagCreationTime** | 05:57:02.941 PM 2/8/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 05:57:03.222 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Canceled |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 1001 lpb|
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Canceled: Lunch? |

## Recurring Meeting Scenario

This subsection describes a multi-step scenario in which an [**organizer**](#gt_34c00c47-5322-4cef-ae7e-bf04643b21bb), Elizabeth, sets up a recurring [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) with Shu, Patrick, and Anne, but cancels an instance that coincides with the company picnic. Shortly thereafter, Elizabeth corrects a typo in the Location field.

This section also documents Shu's tentative acceptance of the meeting series.

### Organizer's Meeting Request

Elizabeth organizes a weekly status [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) for Project Northwind on Wednesdays at 2:00 P.M. with Shu, Patrick, and Anne.

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Elizabeth sends.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 10:30:00.000 PM 2/13/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300B2001000000C0210000010000000000000008000000232000000A000000000000000000000000000000003FC30CDF80E95A0630000009300000480300006603000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 10:00:00.000 PM 2/13/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAttendeeCriticalChange** | 09:33:20.275 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidIntendedBusyStatus** | 2 |
| **PidLidLocation** | Conference Room 123 |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 09:33:20.275 PM 2/8/2008 |
| **PidLidReminderDelta** | 1525252321 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidReminderTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM to 2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room 123\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nHey all\,\n\nLet's meet up every Wednesday to sync up on the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 09:33:20.275 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 09:33:21.243 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Request |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 3249022936 |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5789 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Fabrikam Project Status Meeting |

The following code shows the iCalendar generated to send over the wire.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:REQUEST
5. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
6. BEGIN:VTIMEZONE
7. TZID:Pacific Time (US & Canada)
8. BEGIN:STANDARD
9. DTSTART:16011104T020000
10. RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=11
11. TZOFFSETFROM:-0700
12. TZOFFSETTO:-0800
13. END:STANDARD
14. BEGIN:DAYLIGHT
15. DTSTART:16010311T020000
16. RRULE:FREQ=YEARLY;BYDAY=2SU;BYMONTH=3
17. TZOFFSETFROM:-0800
18. TZOFFSETTO:-0700
19. END:DAYLIGHT
20. END:VTIMEZONE
21. BEGIN:VEVENT
22. ATTENDEE;CN=sito@contoso.com;RSVP=TRUE:mailto:sito@contoso.com
23. ATTENDEE;CN=pcook@contoso.com;RSVP=TRUE:mailto:pcook@contoso.com
24. ATTENDEE;CN=aweiler@contoso.com;RSVP=TRUE:mailto:aweiler@contoso.com
25. CLASS:PUBLIC
26. CREATED:20080208T213320Z
27. DESCRIPTION:When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM t
28. o 2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room
29. 123\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nHey all\,\n\nLet's meet up every Wednesday
30. to sync up on the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\
31. n
32. DTEND;TZID="Pacific Time (US & Canada)":20080213T143000
33. DTSTAMP:20080208T213320Z
34. DTSTART;TZID="Pacific Time (US & Canada)":20080213T140000
35. LAST-MODIFIED:20080208T213321Z
36. LOCATION:Conference Room 123
37. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
38. PRIORITY:5
39. RRULE:FREQ=WEEKLY;BYDAY=WE
40. SEQUENCE:0
41. SUMMARY;LANGUAGE=en-us:Fabrikam Project Status Meeting
42. TRANSP:OPAQUE
43. UID:040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000
44. 010000000622C639E40D09342B747A1672730CBBA
45. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
46. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
47. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
48. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
49. ri">When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM to 2:30
50. PM (GMT-08:00) Pacific Time (US &amp\; Canada).</FONT></SPAN></P>\n\n<P DI
51. R=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Where: Conference Room 123</
52. FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">\*~\*
53. ~\*~\*~\*~\*~\*~\*~\*~\*</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT
54. FACE="Calibri">Hey all\,</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us
55. "><FONT FACE="Calibri">Let's meet up every Wednesday to sync up on the s
56. tatus of the Fabrikam Project.</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG=
57. "en-us"><FONT FACE="Calibri">Thanks\,</FONT></SPAN></P>\n\n<P DIR=LTR><SPA
58. N LANG="en-us"><FONT FACE="Calibri">Elizabeth</FONT></SPAN><SPAN LANG="en-
59. us"></SPAN></P>\n\n</BODY>\n</HTML>
60. X-MICROSOFT-CDO-BUSYSTATUS:TENTATIVE
61. X-MICROSOFT-CDO-IMPORTANCE:1
62. X-MICROSOFT-CDO-INTENDEDSTATUS:BUSY
63. X-MICROSOFT-DISALLOW-COUNTER:FALSE
64. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
65. X-MS-OLK-AUTOSTARTCHECK:FALSE
66. X-MS-OLK-CONFTYPE:0
67. X-MS-OLK-SENDER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
68. BEGIN:VALARM
69. TRIGGER:-PT15M
70. ACTION:DISPLAY
71. DESCRIPTION:Reminder
72. END:VALARM
73. END:VEVENT
74. END:VCALENDAR

The following table lists the properties on the Calendar object that Shu receives.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 02:30:00.000 PM 2/13/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 80 lpb: 043004300B2001000000C0210000010000000000000008000000232000000A000000000000000000000000000000003FC30CDF80E95A0630000009300000480300006603000000000000000000000000 |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 02:00:00.000 PM 2/13/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidIntendedBusyStatus** | 2 |
| **PidLidLocation** | Conference Room 123 |
| **PidLidOwnerCriticalChange** | 09:33:20.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 09:45:00.000 PM 2/13/2008 |
| **PidLidReminderTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM to 2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room 123\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nHey all\,\n\nLet's meet up every Wednesday to sync up on the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 09:46:20.686 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 09:46:21.388 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Request |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 1170 lpb|
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Fabrikam Project Status Meeting |

### Organizer's Cancellation of an Instance

Elizabeth cancels the May 28th instance of the status [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) because it conflicts with the company picnic.

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Elizabeth sends.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 09:30:00.000 PM 5/28/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 09:00:00.000 PM 5/28/2008 |
| **PidLidAppointmentStateFlags** | 7 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 09:33:20.275 PM 2/8/2008 |
| **PidLidAttendeeCriticalChange** | 09:34:55.904 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00807D8051C3046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidIntendedBusyStatus** | 0 |
| **PidLidLocation** | Conference Room 123 |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 09:34:56.904 PM 2/8/2008 |
| **PidLidReminderDelta** | 1525252321 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 09:00:00.000 PM 5/28/2008 |
| **PidLidReminderTime** | 09:00:00.000 PM 5/28/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | When: Wednesday\, May 28\, 2008 2:00 PM-2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room 123\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nCancelling the May 28th meeting due to a conflict with the Company Picnic.\n |
| **PidTagCreationTime** | 09:34:55.888 PM 2/8/2008 |
| **PidTagImportance** | 2 |
| **PidTagLastModificationTime** | 09:34:56.013 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Canceled |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 3249022936 |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5773 lpb:  |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Canceled: Fabrikam Project Status Meeting |

The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:CANCEL
5. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
6. BEGIN:VTIMEZONE
7. TZID:Pacific Standard Time
8. BEGIN:STANDARD
9. DTSTART:16011104T020000
10. RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=11
11. TZOFFSETFROM:-0700
12. TZOFFSETTO:-0800
13. END:STANDARD
14. BEGIN:DAYLIGHT
15. DTSTART:16010311T020000
16. RRULE:FREQ=YEARLY;BYDAY=2SU;BYMONTH=3
17. TZOFFSETFROM:-0800
18. TZOFFSETTO:-0700
19. END:DAYLIGHT
20. END:VTIMEZONE
21. BEGIN:VEVENT
22. ATTENDEE;CN=sito@contoso.com;RSVP=TRUE:mailto:sito@contoso.com
23. ATTENDEE;CN=pcook@contoso.com;RSVP=TRUE:mailto:pcook@contoso.com
24. ATTENDEE;CN=aweiler@contoso.com;RSVP=TRUE:mailto:aweiler@contoso.com
25. CLASS:PUBLIC
26. CREATED:20080208T213455Z
27. DESCRIPTION:When: Wednesday\, May 28\, 2008 2:00 PM-2:30 PM (GMT-08:00) Pac
28. ific Time (US & Canada).\nWhere: Conference Room 123\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~
29. \*\n\nCancelling the May 28th meeting due to a conflict with the Company Pi
30. cnic.\n
31. DTEND;TZID="Pacific Standard Time":20080528T143000
32. DTSTAMP:20080208T213456Z
33. DTSTART;TZID="Pacific Standard Time":20080528T140000
34. LAST-MODIFIED:20080208T213456Z
35. LOCATION:Conference Room 123
36. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
37. PRIORITY:1
38. RECURRENCE-ID;TZID="Pacific Standard Time":20080528T140000
39. SEQUENCE:0
40. SUMMARY;LANGUAGE=en-us:Canceled: Fabrikam Project Status Meeting
41. TRANSP:TRANSPARENT
42. UID:040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000
43. 010000000622C639E40D09342B747A1672730CBBA
44. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
45. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
46. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
47. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
48. ri">When: Wednesday\, May 28\, 2008 2:00 PM-2:30 PM (GMT-08:00) Pacific Ti
49. me (US &amp\; Canada).</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us">
50. <FONT FACE="Calibri">Where: Conference Room 123</FONT></SPAN></P>\n\n<P DI
51. R=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">\*~\*~\*~\*~\*~\*~\*~\*~\*~\*</FONT></
52. SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Cancelling
53. the May 28</FONT></SPAN><SPAN LANG="en-us"><SUP><FONT FACE="Calibri">th</
54. FONT></SUP></SPAN><SPAN LANG="en-us"><FONT FACE="Calibri"> meeting due to
55. a conflict with the Company Picnic.</FONT></SPAN><SPAN LANG="en-us"></SPAN
56. ></P>\n\n</BODY>\n</HTML>
57. X-MICROSOFT-CDO-BUSYSTATUS:FREE
58. X-MICROSOFT-CDO-IMPORTANCE:2
59. X-MICROSOFT-DISALLOW-COUNTER:FALSE
60. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
61. X-MS-OLK-APPTSEQTIME:20080208T213320Z
62. X-MS-OLK-AUTOSTARTCHECK:FALSE
63. X-MS-OLK-CONFTYPE:0
64. X-MS-OLK-SENDER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
65. END:VEVENT
66. END:VCALENDAR

The following table lists the properties on the Calendar object that Shu receives.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 09:30:00.000 PM 5/28/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentSequence** | 0 |
| **PidLidAppointmentStartWhole** | 09:00:00.000 PM 5/28/2008 |
| **PidLidAppointmentStateFlags** | 7 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 09:33:20.000 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 0 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidConferencingType** | 0 |
| **PidLidExceptionReplaceTime** | 09:00:00.000 PM 5/28/2008 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E00807D8051C3046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidLocation** | Conference Room 123 |
| **PidLidOwnerCriticalChange** | 09:34:56.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 1080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 03:00:00.000 AM 5/28/2008 |
| **PidLidReminderTime** | 09:00:00.000 PM 5/28/2008 |
| **PidLidResponseStatus** | 5 |
| **PidTagBody** | When: Wednesday\, May 28\, 2008 2:00 PM-2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room 123\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\nCancelling the May 28th meeting due to a conflict with the Company Picnic.\n |
| **PidTagCreationTime** | 09:46:20.655 PM 2/8/2008 |
| **PidTagImportance** | 2 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Canceled |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 1049 lpb|
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Canceled: Fabrikam Project Status Meeting |

### Organizer's Location Change of an Instance

Elizabeth realizes that she mistyped the Conference Room number, and sends out a [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94) update.

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Elizabeth sends.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 10:30:00.000 PM 2/13/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 84 lpb: 043004300B2001000000C0210000010000000000000008000000232000000A0000000000000001000000A08DC50C00000000003FC30CDF80E95A0630000009300000480300006603000000000000000000000000 |
| **PidLidAppointmentSequence** | 1 |
| **PidLidAppointmentStartWhole** | 10:00:00.000 PM 2/13/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 09:33:20.275 PM 2/8/2008 |
| **PidLidAttendeeCriticalChange** | 09:36:00.420 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidIntendedBusyStatus** | 2 |
| **PidLidLocation** | Conference Room 1234 |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 09:36:00.420 PM 2/8/2008 |
| **PidLidReminderDelta** | 1525252321 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidReminderTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTaskVersion** | 1 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM to 2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room 1234\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\n(Corrected a typo in the Conference Room number)\n\nHey all\,\n\nLet's meet up every Wednesday to sync up on the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 09:36:00.374 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 09:36:00.561 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Request |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagOwnerAppointmentId** | 3249022936 |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 5832 lpb|
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Fabrikam Project Status Meeting |

The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:REQUEST
5. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
6. BEGIN:VTIMEZONE
7. TZID:Pacific Time (US & Canada)
8. BEGIN:STANDARD
9. DTSTART:16011104T020000
10. RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=11
11. TZOFFSETFROM:-0700
12. TZOFFSETTO:-0800
13. END:STANDARD
14. BEGIN:DAYLIGHT
15. DTSTART:16010311T020000
16. RRULE:FREQ=YEARLY;BYDAY=2SU;BYMONTH=3
17. TZOFFSETFROM:-0800
18. TZOFFSETTO:-0700
19. END:DAYLIGHT
20. END:VTIMEZONE
21. BEGIN:VEVENT
22. ATTENDEE;CN=sito@contoso.com;RSVP=TRUE:mailto:sito@contoso.com
23. ATTENDEE;CN=pcook@contoso.com;RSVP=TRUE:mailto:pcook@contoso.com
24. ATTENDEE;CN=aweiler@contoso.com;RSVP=TRUE:mailto:aweiler@contoso.com
25. CLASS:PUBLIC
26. CREATED:20080208T213600Z
27. DESCRIPTION:When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM t
28. o 2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room
29. 1234\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\n(Corrected a typo in the Conference Room nu
30. mber)\n\nHey all\,\n\nLet's meet up every Wednesday to sync up on the st
31. atus of the Fabrikam Project.\n\nThanks\,\nElizabeth\n
32. DTEND;TZID="Pacific Time (US & Canada)":20080213T143000
33. DTSTAMP:20080208T213600Z
34. DTSTART;TZID="Pacific Time (US & Canada)":20080213T140000
35. EXDATE;TZID="Pacific Time (US & Canada)":20080528T140000
36. LAST-MODIFIED:20080208T213600Z
37. LOCATION:Conference Room 1234
38. ORGANIZER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
39. PRIORITY:5
40. RRULE:FREQ=WEEKLY;BYDAY=WE
41. SEQUENCE:1
42. SUMMARY;LANGUAGE=en-us:Fabrikam Project Status Meeting
43. TRANSP:OPAQUE
44. UID:040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000
45. 010000000622C639E40D09342B747A1672730CBBA
46. X-ALT-DESC;FMTTYPE=text/html:<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//E
47. N">\n<HTML>\n<HEAD>\n<META NAME="Generator" CONTENT="MS Exchange Server ve
48. rsion 08.00.0681.000">\n<TITLE></TITLE>\n</HEAD>\n<BODY>\n<!-- Converted f
49. rom text/rtf format -->\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calib
50. ri">When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM to 2:30
51. PM (GMT-08:00) Pacific Time (US &amp\; Canada).</FONT></SPAN></P>\n\n<P DI
52. R=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Where: Conference Room 1234<
53. /FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">\*~
54. \*~\*~\*~\*~\*~\*~\*~\*~\*</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT
55. FACE="Calibri">(Corrected a typo in the Conference Room number)</FONT></S
56. PAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Hey all\,</
57. FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibri">Let
58. 's meet up every Wednesday to sync up on the status of the Fabrikam Proj
59. ect.</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE="Calibr
60. i">Thanks\,</FONT></SPAN></P>\n\n<P DIR=LTR><SPAN LANG="en-us"><FONT FACE=
61. "Calibri">Elizabeth</FONT></SPAN><SPAN LANG="en-us"></SPAN></P>\n\n</BODY>
62. \n</HTML>
63. X-MICROSOFT-CDO-BUSYSTATUS:TENTATIVE
64. X-MICROSOFT-CDO-IMPORTANCE:1
65. X-MICROSOFT-CDO-INTENDEDSTATUS:BUSY
66. X-MICROSOFT-DISALLOW-COUNTER:FALSE
67. X-MS-OLK-ALLOWEXTERNCHECK:TRUE
68. X-MS-OLK-APPTSEQTIME:20080208T213320Z
69. X-MS-OLK-AUTOSTARTCHECK:FALSE
70. X-MS-OLK-CONFTYPE:0
71. X-MS-OLK-SENDER;CN="Elizabeth Andersen":mailto:eandersen@contoso.com
72. BEGIN:VALARM
73. TRIGGER:-PT15M
74. ACTION:DISPLAY
75. DESCRIPTION:Reminder
76. END:VALARM
77. END:VEVENT
78. END:VCALENDAR

The following table lists the properties on the Calendar object that Shu receives.

| Property name | Value |
| --- | --- |
| **PidLidAllowExternalCheck** | TRUE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 02:30:00.000 PM 2/13/2008 |
| **PidLidAppointmentNotAllowPropose** | FALSE |
| **PidLidAppointmentRecur** | cb: 84 lpb: 043004300B2001000000C0210000010000000000000008000000232000000A0000000000000001000000A08DC50C00000000003FC30CDF80E95A0630000009300000480300006603000000000000000000000000 |
| **PidLidAppointmentSequence** | 1 |
| **PidLidAppointmentStartWhole** | 02:00:00.000 PM 2/13/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAppointmentSequenceTime** | 09:33:20.000 PM 2/8/2008 |
| **PidLidAutoStartCheck** | FALSE |
| **PidLidBusyStatus** | 1 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | TRUE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidIntendedBusyStatus** | 2 |
| **PidLidLocation** | Conference Room 1234 |
| **PidLidOwnerCriticalChange** | 09:36:00.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 15 |
| **PidLidReminderSet** | TRUE |
| **PidLidReminderSignalTime** | 09:45:00.000 PM 2/13/2008 |
| **PidLidReminderTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidResponseStatus** | 5 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagBody** | When: Occurs every Wednesday effective 2/13/2008 from 2:00 PM to 2:30 PM (GMT-08:00) Pacific Time (US & Canada).\nWhere: Conference Room 1234\n\n\*~\*~\*~\*~\*~\*~\*~\*~\*~\*\n\n(Corrected a typo in the Conference Room number)\n\nHey all\,\n\nLet's meet up every Wednesday to sync up on the status of the Fabrikam Project.\n\nThanks\,\nElizabeth\n |
| **PidTagCreationTime** | 09:46:20.342 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 09:46:20.795 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Request |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | TRUE |
| **PidTagResponseRequested** | TRUE |
| **PidTagRtfCompressed** | cb: 1258 lpb|
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | eandersen@contoso.com |
| **PidTagSenderEntryId** | cb: 116 lpb: 00000000812B1FA4BEA310199D6E00DD010F54020000008045006C0069007A0061006200650074006800200041006E00640065007200730065006E00000053004D00540050000000650061006E00640065007200730065006E00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Elizabeth Andersen |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Fabrikam Project Status Meeting |

### Attendee's Tentative Acceptance of the Series

Shu tentatively accepts the recurring [**meeting**](#gt_cbc56efc-e4f7-4b31-9e5f-9c44e3924d94).

The following table lists the properties on the [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18) that Shu sends.

| Property name | Value |
| --- | --- |
| **PidLidAppointmentCounterProposal** | FALSE |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 02:30:00.000 PM 2/13/2008 |
| **PidLidAppointmentRecur** | cb: 84 lpb: 043004300B2001000000C0210000010000000000000008000000232000000A0000000000000001000000A08DC50C00000000003FC30CDF80E95A0630000009300000480300006603000000000000000000000000 |
| **PidLidAppointmentSequence** | 1 |
| **PidLidAppointmentStartWhole** | 02:00:00.000 PM 2/13/2008 |
| **PidLidAppointmentStateFlags** | 0 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAttendeeCriticalChange** | 09:51:51.956 PM 2/8/2008 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidCollaborateDoc** |  |
| **PidLidConferencingType** | 0 |
| **PidLidDirectory** |  |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidIntendedBusyStatus** | 4294967295 |
| **PidLidLocation** | Conference Room 1234 |
| **PidLidNetShowUrl** |  |
| **PidLidOnlinePassword** |  |
| **PidLidOrganizerAlias** |  |
| **PidLidOwnerCriticalChange** | 09:36:00.000 PM 2/8/2008 |
| **PidLidReminderDelta** | 0 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 02:00:00.000 PM 2/13/2008 |
| **PidLidReminderTime** | 02:00:00.000 PM 2/13/2008 |
| **PidLidResponseStatus** | 0 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagCreationTime** | 09:51:51.940 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 09:51:52.174 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Resp.Tent |
| **PidTagMessageLocaleId** | 0 |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Tentative: Fabrikam Project Status Meeting |

The following shows the resulting iCalendar file.

1. BEGIN:VCALENDAR
2. PRODID:-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN
3. VERSION:2.0
4. METHOD:REPLY
5. X-MS-OLK-FORCEINSPECTOROPEN:TRUE
6. BEGIN:VTIMEZONE
7. TZID:Pacific Time (US & Canada)
8. BEGIN:STANDARD
9. DTSTART:16011104T020000
10. RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=11
11. TZOFFSETFROM:-0700
12. TZOFFSETTO:-0800
13. END:STANDARD
14. BEGIN:DAYLIGHT
15. DTSTART:16010311T020000
16. RRULE:FREQ=YEARLY;BYDAY=2SU;BYMONTH=3
17. TZOFFSETFROM:-0800
18. TZOFFSETTO:-0700
19. END:DAYLIGHT
20. END:VTIMEZONE
21. BEGIN:VEVENT
22. ATTENDEE;PARTSTAT=TENTATIVE:mailto:sito@contoso.com
23. CLASS:PUBLIC
24. CREATED:20080208T215151Z
25. DTEND;TZID="Pacific Time (US & Canada)":20080213T143000
26. DTSTAMP:20080208T215151Z
27. DTSTART;TZID="Pacific Time (US & Canada)":20080213T140000
28. EXDATE;TZID="Pacific Time (US & Canada)":20080528T140000
29. LAST-MODIFIED:20080208T215152Z
30. LOCATION:Conference Room 1234
31. PRIORITY:5
32. RRULE:FREQ=WEEKLY;BYDAY=WE
33. SEQUENCE:1
34. SUMMARY:Tentative: Fabrikam Project Status Meeting
35. TRANSP:OPAQUE
36. UID:040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000
37. 010000000622C639E40D09342B747A1672730CBBA
38. X-MICROSOFT-CDO-BUSYSTATUS:BUSY
39. X-MICROSOFT-CDO-IMPORTANCE:1
40. X-MS-OLK-AUTOFILLLOCATION:FALSE
41. X-MS-OLK-CONFTYPE:0
42. END:VEVENT
43. END:VCALENDAR

The following table lists the properties on the Calendar object that Elizabeth receives.

| Property name | Value |
| --- | --- |
| **PidLidAppointmentDuration** | 30 |
| **PidLidAppointmentEndWhole** | 02:30:00.000 PM 2/13/2008 |
| **PidLidAppointmentRecur** | cb: 84 lpb: 043004300B2001000000C0210000010000000000000008000000232000000A0000000000000001000000A08DC50C00000000003FC30CDF80E95A0630000009300000480300006603000000000000000000000000 |
| **PidLidAppointmentSequence** | 1 |
| **PidLidAppointmentStartWhole** | 02:00:00.000 PM 2/13/2008 |
| **PidLidAppointmentStateFlags** | 3 |
| **PidLidAppointmentSubType** | FALSE |
| **PidLidAttendeeCriticalChange** | 09:51:51.000 PM 2/8/2008 |
| **PidLidAutoFillLocation** | FALSE |
| **PidLidBusyStatus** | 2 |
| **PidLidCleanGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidConferencingType** | 0 |
| **PidLidFInvited** | FALSE |
| **PidLidGlobalObjectId** | cb: 56 lpb: 040000008200E00074C5B7101A82E008000000003046642B576AC801000000000000000010000000622C639E40D09342B747A1672730CBBA |
| **PidLidLocation** | Conference Room 1234 |
| **PidLidReminderDelta** | 1080 |
| **PidLidReminderSet** | FALSE |
| **PidLidReminderSignalTime** | 04:00:00.000 AM 2/13/2008 |
| **PidLidReminderTime** | 10:00:00.000 PM 2/13/2008 |
| **PidLidResponseStatus** | 2 |
| **PidLidTimeZoneDescription** | (GMT-08:00) Pacific Time (US & Canada) |
| **PidLidTimeZoneStruct** | cb: 48 lpb: E001000000000000C4FFFFFF000000000B00000001000200000000000000000000000300000002000200000000000000 |
| **PidTagCreationTime** | 09:56:53.622 PM 2/8/2008 |
| **PidTagImportance** | 1 |
| **PidTagLastModificationTime** | 09:56:53.810 PM 2/8/2008 |
| **PidTagMessageClass** | IPM.Schedule.Meeting.Resp.Tent |
| **PidTagMessageLocaleId** | 1033 |
| **PidTagReplyRequested** | FALSE |
| **PidTagResponseRequested** | FALSE |
| **PidTagSenderAddressType** | SMTP |
| **PidTagSenderEmailAddress** | sito@contoso.com |
| **PidTagSenderEntryId** | cb: 84 lpb: 00000000812B1FA4BEA310199D6E00DD010F5402000001805300680075002000490074006F00000053004D005400500000007300690074006F00400063006F006E0074006F0073006F002E0063006F006D000000 |
| **PidTagSenderName** | Shu Ito |
| **PidTagSensitivity** | 0 |
| **PidTagSubject** | Tentative: Fabrikam Project Status Meeting |

# Security

## Security Considerations for Implementers

Authentication of the source of an iCalendar is not supported. As such, [**Calendar object**](#gt_b9ce8e55-dae6-467b-b5dc-850087d4dc18)(s) resulting from the import of an iCalendar are only as trustworthy as the source of an iCalendar. This has special implications with regard to spoofing the ORGANIZER and ATTENDEE properties.

The FMTTYPE parameter of the ATTACH property (section [2.1.3.1.1.20.1.2](#Section_8e62c8353abc419cb311b9670da49633)) can be mislabeled and it is recommended that it be verified. See [[MS-OXCMAIL]](%5bMS-OXCMAIL%5d.pdf#Section_b60d48db183f4bf5a908f584e62cb2d4) section 4.1.3. Furthermore, since the ATTACH property encodes binary files, it can contain malicious content. This is particularly interesting because virus scanners might not be able to parse iCalendar data.

## Index of Security Parameters

None.

# 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
* Microsoft Exchange Server 2010
* Microsoft Exchange Server 2013
* Microsoft Exchange Server 2016
* Microsoft Exchange Server 2019
* Microsoft Office Outlook 2003
* Microsoft Office Outlook 2007
* Microsoft Outlook 2010
* Microsoft Outlook 2013
* Microsoft Outlook 2016
* Microsoft Outlook 2019
* Microsoft Outlook 2021
* Microsoft Outlook 2024 Preview

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 2.1.3.1.1](#Appendix_A_Target_1): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support multiple VCALENDAR components in an iCalendar stream. Office Outlook 2007 and Microsoft Outlook 2010 only support multiple VCALENDAR components when the METHOD property is PUBLISH.

[<2> Section 2.1.3.1.1.1](#Appendix_A_Target_2): Office Outlook 2003 and Exchange 2003 do not implement the 'COUNTER' value of METHOD. On export, both implementations will use the 'REPLY' value. On import, Office Outlook 2003 will treat the METHOD as 'PUBLISH', while Exchange 2003 will treat the METHOD as 'REPLY'.

[<3> Section 2.1.3.1.1.1](#Appendix_A_Target_3): Note that it is possible for a collection of two or more VEVENT components to represent a single appointment. However, Office Outlook 2003 has limited support for iCalendars with multiple VEVENT components. Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 have no support. Refer to the documentation on the RECURRENCE-ID Property in section [2.1.3.1.1.20.20](#Section_6911f0f9a26b44bdbe7e0fe38059fae0) for additional information.

[<4> Section 2.1.3.1.1.1](#Appendix_A_Target_4): Office Outlook 2003 and Exchange 2003 do not implement the 'COUNTER' value of METHOD. On export, both implementations will use the 'REPLY' value. On import, Office Outlook 2003 will treat the METHOD as 'PUBLISH', while Exchange 2003 will treat the METHOD as 'REPLY'.

[<5> Section 2.1.3.1.1.4](#Appendix_A_Target_5): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<6> Section 2.1.3.1.1.4](#Appendix_A_Target_6): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<7> Section 2.1.3.1.1.5](#Appendix_A_Target_7): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<8> Section 2.1.3.1.1.5](#Appendix_A_Target_8): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<9> Section 2.1.3.1.1.6](#Appendix_A_Target_9): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<10> Section 2.1.3.1.1.6](#Appendix_A_Target_10): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<11> Section 2.1.3.1.1.7](#Appendix_A_Target_11): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<12> Section 2.1.3.1.1.7](#Appendix_A_Target_12): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016 and Exchange 2019 do not support this property.

[<13> Section 2.1.3.1.1.8](#Appendix_A_Target_13): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via [**WebDAV**](#gt_68024ef0-c00a-4ecf-8dba-42371b11bfeb)), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not support the X-MICROSOFT-CALSCALE property.

[<14> Section 2.1.3.1.1.8](#Appendix_A_Target_14): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not support the X-MICROSOFT-CALSCALE property.

[<15> Section 2.1.3.1.1.8](#Appendix_A_Target_15): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not support the X-MICROSOFT-CALSCALE property.

[<16> Section 2.1.3.1.1.8](#Appendix_A_Target_16): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not support the X-MICROSOFT-CALSCALE property.

[<17> Section 2.1.3.1.1.8](#Appendix_A_Target_17): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not support the X-MICROSOFT-CALSCALE property.

[<18> Section 2.1.3.1.1.9](#Appendix_A_Target_18): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<19> Section 2.1.3.1.1.9](#Appendix_A_Target_19): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<20> Section 2.1.3.1.1.10](#Appendix_A_Target_20): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<21> Section 2.1.3.1.1.10](#Appendix_A_Target_21): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<22> Section 2.1.3.1.1.11](#Appendix_A_Target_22): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<23> Section 2.1.3.1.1.11](#Appendix_A_Target_23): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<24> Section 2.1.3.1.1.12](#Appendix_A_Target_24): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<25> Section 2.1.3.1.1.12](#Appendix_A_Target_25): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<26> Section 2.1.3.1.1.13](#Appendix_A_Target_26): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<27> Section 2.1.3.1.1.13](#Appendix_A_Target_27): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<28> Section 2.1.3.1.1.13.1](#Appendix_A_Target_28): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<29> Section 2.1.3.1.1.13.1](#Appendix_A_Target_29): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<30> Section 2.1.3.1.1.14](#Appendix_A_Target_30): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<31> Section 2.1.3.1.1.14](#Appendix_A_Target_31): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<32> Section 2.1.3.1.1.15](#Appendix_A_Target_32): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<33> Section 2.1.3.1.1.15](#Appendix_A_Target_33): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<34> Section 2.1.3.1.1.16](#Appendix_A_Target_34): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<35> Section 2.1.3.1.1.16](#Appendix_A_Target_35): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<36> Section 2.1.3.1.1.16](#Appendix_A_Target_36): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<37> Section 2.1.3.1.1.16](#Appendix_A_Target_37): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<38> Section 2.1.3.1.1.17](#Appendix_A_Target_38): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<39> Section 2.1.3.1.1.17](#Appendix_A_Target_39): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<40> Section 2.1.3.1.1.17](#Appendix_A_Target_40): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<41> Section 2.1.3.1.1.18](#Appendix_A_Target_41): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use this property for purposes outside the scope of this algorithm.

[<42> Section 2.1.3.1.1.18](#Appendix_A_Target_42): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support this property.

[<43> Section 2.1.3.1.1.19](#Appendix_A_Target_43): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support more than one VTIMEZONE component per iCalendar file.

[<44> Section 2.1.3.1.1.19](#Appendix_A_Target_44): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionRecur**, **PidLidAppointmentTimeZoneDefinitionStartDisplay**, or **PidLidAppointmentTimeZoneDefinitionEndDisplay**. These implementations only use **PidLidTimeZoneDescription** and **PidLidTimeZoneStruct** when exporting or importing VTIMEZONE components and TZID parameters.

[<45> Section 2.1.3.1.1.19](#Appendix_A_Target_45): Microsoft Exchange Server 2010 Service Pack 1 (SP1), Exchange 2013, Exchange 2016, and Exchange 2019 set the **wYear** field to 0x0001 for the first **TZRule** structure in the array.

[<46> Section 2.1.3.1.1.19](#Appendix_A_Target_46): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use a case-sensitive TZID comparison function.

[<47> Section 2.1.3.1.1.19](#Appendix_A_Target_47): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionRecur**, **PidLidAppointmentTimeZoneDefinitionStartDisplay**, or **PidLidAppointmentTimeZoneDefinitionEndDisplay**. These implementations only use **PidLidTimeZoneDescription** and **PidLidTimeZoneStruct** when exporting or importing VTIMEZONE components and TZID parameters.

[<48> Section 2.1.3.1.1.19.1](#Appendix_A_Target_48): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use a case-sensitive TZID comparison function.

[<49> Section 2.1.3.1.1.19.1](#Appendix_A_Target_49): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not override **PidLidTimeZoneDescription**.

[<50> Section 2.1.3.1.1.19.2](#Appendix_A_Target_50): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not parse the STANDARD component with the largest DTSTART.

[<51> Section 2.1.3.1.1.19.2](#Appendix_A_Target_51): Office Outlook 2003 parses the first occurrence of the STANDARD component in the VTIMEZONE.

[<52> Section 2.1.3.1.1.19.2](#Appendix_A_Target_52): Exchange 2010 SP1, Exchange 2013, Exchange 2016, and Exchange 2019 parse all STANDARD components in the VTIMEZONE that have unique years in their DTSTART subcomponents.

[<53> Section 2.1.3.1.1.19.2](#Appendix_A_Target_53): Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 fail if more than one STANDARD component is present in a VTIMEZONE.

[<54> Section 2.1.3.1.1.19.2.1](#Appendix_A_Target_54): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not set the fields of the **stStandardDate** field according to the table.

[<55> Section 2.1.3.1.1.19.2.1](#Appendix_A_Target_55): Office Outlook 2003 imports RDATE if RRULE is not present.

[<56> Section 2.1.3.1.1.19.2.1](#Appendix_A_Target_56): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 import DTSTART if RRULE is not present.

[<57> Section 2.1.3.1.1.19.2.1](#Appendix_A_Target_57): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 use the year 1601.

[<58> Section 2.1.3.1.1.19.2.2](#Appendix_A_Target_58): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import VTIMEZONEs with RRULEs that use BYMONTHDAY instead of BYDAY.

[<59> Section 2.1.3.1.1.19.2.2](#Appendix_A_Target_59): For transitions between Daylight Saving Time and Standard Time based on a specific day of the month, Office Outlook 2003 instead omits the RRULE and exports **PidLidTimeZoneStruct**.**stStandardDate** as an RDATE. Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 omit both the RRULE and RDATE, relying on DTSTART to convey the transition date.

[<60> Section 2.1.3.1.1.19.2.3](#Appendix_A_Target_60): Office Outlook 2003 exports the TZNAME property with value 'Standard Time'.

[<61> Section 2.1.3.1.1.19.3](#Appendix_A_Target_61): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not parse the DAYLIGHT component with the largest DTSTART.

[<62> Section 2.1.3.1.1.19.3](#Appendix_A_Target_62): Office Outlook 2003 parses the first occurrence of the DAYLIGHT component in the VTIMEZONE.

[<63> Section 2.1.3.1.1.19.3](#Appendix_A_Target_63): Exchange 2010 SP1, Exchange 2013, Exchange 2016, and Exchange 2019 parse all DAYLIGHT components in the VTIMEZONE that have unique years in their DTSTART subcomponents.

[<64> Section 2.1.3.1.1.19.3](#Appendix_A_Target_64): Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 fail if more than one DAYLIGHT component is present in a VTIMEZONE.

[<65> Section 2.1.3.1.1.19.3](#Appendix_A_Target_65): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do export a DAYLIGHT component for time zones that do not observe DST. In this case, the TZOFFSETFROM and TZOFFSETTO properties for both the DAYLIGHT and STANDARD components are all set to the same value.

[<66> Section 2.1.3.1.1.19.3.3](#Appendix_A_Target_66): Office Outlook 2003 exports the TZNAME property with value 'Daylight Saving Time'.

[<67> Section 2.1.3.1.1.20.1](#Appendix_A_Target_67): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore ATTACH properties.

[<68> Section 2.1.3.1.1.20.1](#Appendix_A_Target_68): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore ATTACH properties.

[<69> Section 2.1.3.1.1.20.1](#Appendix_A_Target_69): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Exchange 2007 (when parsing iCalendar submitted via [**MIME**](#gt_af6ba277-34c1-493d-8103-71d2af36ce30)), Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore ATTACH properties specified as CID URIs and, instead, import all of the MIME attachments into the [**Message object**](#gt_b6c15d0c-d992-421d-ba96-99d3b63894cf), regardless of whether or not they are referenced in the iCalendar stream.

[<70> Section 2.1.3.1.1.20.1](#Appendix_A_Target_70): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore ATTACH properties.

[<71> Section 2.1.3.1.1.20.1](#Appendix_A_Target_71): Prior to Microsoft Exchange Server 2007 Service Pack 1 (SP1), Exchange 2007 (when parsing iCalendar submitted via MIME) does not export ATTACH properties specified as CID URIs.

[<72> Section 2.1.3.1.1.20.1](#Appendix_A_Target_72): Prior to Exchange 2007 SP1, Exchange 2007 (when parsing iCalendar submitted via MIME) does not export ATTACH properties specified as CID URIs.

[<73> Section 2.1.3.1.1.20.1](#Appendix_A_Target_73): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export ATTACH properties encoded with [**base64 encoding**](#gt_179b9392-9019-45a3-880b-26f6890522b7).

[<74> Section 2.1.3.1.1.20.1.2](#Appendix_A_Target_74): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore ATTACH properties.

[<75> Section 2.1.3.1.1.20.1.4](#Appendix_A_Target_75): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore ATTACH properties.

[<76> Section 2.1.3.1.1.20.1.4](#Appendix_A_Target_76): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export ATTACH properties encoded with base64 encoding.

[<77> Section 2.1.3.1.1.20.2](#Appendix_A_Target_77): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not parse attendee properties with value 'invalid:nomail'.

[<78> Section 2.1.3.1.1.20.2](#Appendix_A_Target_78): Office Outlook 2007 does not import attendees with a CUTYPE other than "RESOURCE" or "ROOM" and a ROLE of "NON-PARTICIPANT" to **PidLidNonSendableBcc**.

[<79> Section 2.1.3.1.1.20.2](#Appendix_A_Target_79): Office Outlook 2007 imports attendees with a CUTYPE other than "RESOURCE" or "ROOM" and a ROLE of "NON-PARTICIPANT" to **PidLidNonSendableCc**.

[<80> Section 2.1.3.1.1.20.2](#Appendix_A_Target_80): Office Outlook 2003 imports only one attendee property when the METHOD property has value 'REPLY'. For any other value of METHOD, Office Outlook 2003 does not import any attendee properties.

[<81> Section 2.1.3.1.1.20.2](#Appendix_A_Target_81): Office Outlook 2003 does not perform [**address book**](#gt_d16f7b78-c5a6-48f4-9e0f-3b205b5598b5) lookups on attendee properties. A one-off EntryID is created.

[<82> Section 2.1.3.1.1.20.2](#Appendix_A_Target_82): Office Outlook 2003 does not set this property.

[<83> Section 2.1.3.1.1.20.2](#Appendix_A_Target_83): Office Outlook 2003 does not set this property.

[<84> Section 2.1.3.1.1.20.2](#Appendix_A_Target_84): Office Outlook 2003 does not set this property.

[<85> Section 2.1.3.1.1.20.2](#Appendix_A_Target_85): Office Outlook 2003 incorrectly adds the RECIP\_ORGANIZER (0x00000002) bit to this property.

[<86> Section 2.1.3.1.1.20.2](#Appendix_A_Target_86): Office Outlook 2003 uses MAPI\_TO (0x00000001).

[<87> Section 2.1.3.1.1.20.2](#Appendix_A_Target_87): Office Outlook 2003, Exchange 2003, Office Outlook 2007, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import the PARTSTAT parameter as **PidTagRecipientTrackStatus**.

[<88> Section 2.1.3.1.1.20.2](#Appendix_A_Target_88): Office Outlook 2003, Exchange 2003, Office Outlook 2007, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import the X-MS-OLK-RESPTIME parameter.

[<89> Section 2.1.3.1.1.20.2](#Appendix_A_Target_89): Exchange 2003 does not use this table.

[<90> Section 2.1.3.1.1.20.2](#Appendix_A_Target_90): Office Outlook 2007 sets **PidTagRecipientType** to 0x00000002 for attendees with a CUTYPE other than "RESOURCE" or "ROOM" and a ROLE of "NON-PARTICIPANT".

[<91> Section 2.1.3.1.1.20.2](#Appendix_A_Target_91): Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not check **PidLidAppointmentStateFlags** before exporting attendee properties.

[<92> Section 2.1.3.1.1.20.2](#Appendix_A_Target_92): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, and Exchange 2013, Exchange 2016, and Exchange 2019 omit the attendee property if no [**SMTP**](#gt_0678be67-e739-4e33-97fe-2b03b903a379) address is available.

[<93> Section 2.1.3.1.1.20.2](#Appendix_A_Target_93): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export **PidLidNonSendableTo**, **PidLidNonSendableCc**, or **PidLidNonSendableBcc**.

[<94> Section 2.1.3.1.1.20.2.1](#Appendix_A_Target_94): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export **PidLidNonSendableTo**, **PidLidNonSendableCc**, or **PidLidNonSendableBcc**.

[<95> Section 2.1.3.1.1.20.2.2](#Appendix_A_Target_95): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export the CUTYPE parameter.

[<96> Section 2.1.3.1.1.20.2.2](#Appendix_A_Target_96): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export the CUTYPE parameter.

[<97> Section 2.1.3.1.1.20.2.3](#Appendix_A_Target_97): Office Outlook 2003, Exchange 2003, Office Outlook 2007, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import the PARTSTAT parameter for calendars with a METHOD of PUBLISH.

[<98> Section 2.1.3.1.1.20.2.3](#Appendix_A_Target_98): Office Outlook 2003, Exchange 2003, Office Outlook 2007, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export the PARTSTAT parameter for calendars with a METHOD of PUBLISH.

[<99> Section 2.1.3.1.1.20.2.3](#Appendix_A_Target_99): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export the PARTSTAT parameter for calendars with a METHOD of PUBLISH.

[<100> Section 2.1.3.1.1.20.2.4](#Appendix_A_Target_100): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export a ROLE of 'REQ-PARTICIPANT' instead of omitting the ROLE parameter.

[<101> Section 2.1.3.1.1.20.2.4](#Appendix_A_Target_101): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export **PidLidNonSendableTo**, **PidLidNonSendableCc**, or **PidLidNonSendableBcc**.

[<102> Section 2.1.3.1.1.20.2.6](#Appendix_A_Target_102): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, Exchange 2019, Office Outlook 2003, and Office Outlook 2007 do not import the X-MS-OLK-RESPTIME parameter.

[<103> Section 2.1.3.1.1.20.2.6](#Appendix_A_Target_103): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, Exchange 2019, Office Outlook 2003, and Office Outlook 2007 do not export the X-MS-OLK-RESPTIME parameter from **PidLidAppointmentReplyTime**.

[<104> Section 2.1.3.1.1.20.3](#Appendix_A_Target_104): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<105> Section 2.1.3.1.1.20.3](#Appendix_A_Target_105): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 consider all of the following to be whitespace characters: [**Unicode**](#gt_c305d0ab-8b94-461a-bd76-13b40cb8c4d8) characters U+0009, U+000A, U+000B, U+000C, U+000D, U+0020, U+0085, U+00A0, U+1680, U+2000, U+2001, U+2002, U+2003, U+2004, U+2005, U+2006, U+2007, U+2008, U+2009, U+200A, U+200B, U+2028, U+2029, U+202F, U+3000.

[<106> Section 2.1.3.1.1.20.3](#Appendix_A_Target_106): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<107> Section 2.1.3.1.1.20.3](#Appendix_A_Target_107): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<108> Section 2.1.3.1.1.20.3](#Appendix_A_Target_108): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<109> Section 2.1.3.1.1.20.3](#Appendix_A_Target_109): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<110> Section 2.1.3.1.1.20.4](#Appendix_A_Target_110): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 map SENSITIVITY\_PERSONAL (0x00000001) to the 'PERSONAL' value of the CLASS property.

[<111> Section 2.1.3.1.1.20.4](#Appendix_A_Target_111): Office Outlook 2003 does not support the 'X-PERSONAL' value of the CLASS property. SENSITIVITY\_PERSONAL (0x00000001) is exported as 'PRIVATE'.

[<112> Section 2.1.3.1.1.20.5](#Appendix_A_Target_112): Exchange 2007 (when parsing iCalendar submitted via WebDAV) and Office Outlook 2003 do not import or export the COMMENT property. For backwards compatibility, if the METHOD property of the VCALENDAR component is set to 'REPLY' or 'COUNTER', then Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 will export **PidTagBody** as both COMMENT and DESCRIPTION. In this same case, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 will import **PidTagBody** from COMMENT, falling back on DESCRIPTION if a COMMENT is not specified. Regardless of the METHOD property of the VCALENDAR, Exchange 2007 (when parsing iCalendar submitted via MIME) will import **PidTagBody** from DESCRIPTION, falling back on the COMMENT property if no DESCRIPTION is specified. Exchange 2010 will import **PidTagBody** from DESCRIPTION and ignore COMMENT. Microsoft Exchange Server 2010 Service Pack 2 (SP2), Exchange 2013, Exchange 2016, and Exchange 2019 will import **PidTagBody** from COMMENT only if the METHOD property is set to 'REPLY' or 'COUNTER' and the DESCRIPTION property is not specified.

[<113> Section 2.1.3.1.1.20.6](#Appendix_A_Target_113): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the CONTACT property.

[<114> Section 2.1.3.1.1.20.6](#Appendix_A_Target_114): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<115> Section 2.1.3.1.1.20.6](#Appendix_A_Target_115): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016 and Outlook 2019 consider all of the following to be whitespace characters: Unicode characters U+0009, U+000A, U+000B, U+000C, U+000D, U+0020, U+0085, U+00A0, U+1680, U+2000, U+2001, U+2002, U+2003, U+2004, U+2005, U+2006, U+2007, U+2008, U+2009, U+200A, U+200B, U+2028, U+2029, U+202F, U+3000.

[<116> Section 2.1.3.1.1.20.6](#Appendix_A_Target_116): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<117> Section 2.1.3.1.1.20.6](#Appendix_A_Target_117): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<118> Section 2.1.3.1.1.20.6](#Appendix_A_Target_118): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<119> Section 2.1.3.1.1.20.6](#Appendix_A_Target_119): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<120> Section 2.1.3.1.1.20.6](#Appendix_A_Target_120): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not apply this filter.

[<121> Section 2.1.3.1.1.20.6](#Appendix_A_Target_121): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the contact property.

[<122> Section 2.1.3.1.1.20.7](#Appendix_A_Target_122): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the CREATED property.

[<123> Section 2.1.3.1.1.20.8](#Appendix_A_Target_123): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<124> Section 2.1.3.1.1.20.8](#Appendix_A_Target_124): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<125> Section 2.1.3.1.1.20.8](#Appendix_A_Target_125): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not set **PidLidAppointmentDuration**.

[<126> Section 2.1.3.1.1.20.8](#Appendix_A_Target_126): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 require that X-MICROSOFT-CDO-ALLDAYEVENT be set to 'TRUE' if the Calendar object is to be imported as all day. Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day.

[<127> Section 2.1.3.1.1.20.8](#Appendix_A_Target_127): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-ALLDAYEVENT or X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT properties.

[<128> Section 2.1.3.1.1.20.8](#Appendix_A_Target_128): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<129> Section 2.1.3.1.1.20.8](#Appendix_A_Target_129): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<130> Section 2.1.3.1.1.20.8](#Appendix_A_Target_130): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export all day appointments in floating time.

[<131> Section 2.1.3.1.1.20.8](#Appendix_A_Target_131): Office Outlook 2007 exports non-recurring, non-all day appointments in UTC time.

[<132> Section 2.1.3.1.1.20.8.1](#Appendix_A_Target_132): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionRecur**.

[<133> Section 2.1.3.1.1.20.8.1](#Appendix_A_Target_133): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionEndDisplay**.

[<134> Section 2.1.3.1.1.20.8.1](#Appendix_A_Target_134): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionRecur**.

[<135> Section 2.1.3.1.1.20.8.1](#Appendix_A_Target_135): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionEndDisplay**.

[<136> Section 2.1.3.1.1.20.8.2](#Appendix_A_Target_136): Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day.

[<137> Section 2.1.3.1.1.20.9](#Appendix_A_Target_137): Exchange 2003 and Exchange 2007 import DTSTAMP as **PidLidAttendeeCriticalChange**.

[<138> Section 2.1.3.1.1.20.10](#Appendix_A_Target_138): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<139> Section 2.1.3.1.1.20.10](#Appendix_A_Target_139): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<140> Section 2.1.3.1.1.20.10](#Appendix_A_Target_140): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not set **PidLidAppointmentDuration**.

[<141> Section 2.1.3.1.1.20.10](#Appendix_A_Target_141): Exchange 2003, Exchange 2007, and Exchange 2010 require that X-MICROSOFT-CDO-ALLDAYEVENT be set to 'TRUE' if the Calendar object is to be imported as all day. Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day. Exchange 2010 SP1, Exchange 2013, Exchange 2016, and Exchange 2019 import an appointment as an all-day appointment if the VALUE parameter is set to 'DATE' for the DTSTART property and the DTEND and DURATION properties are missing.

[<142> Section 2.1.3.1.1.20.10](#Appendix_A_Target_142): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-ALLDAYEVENT or X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT properties.

[<143> Section 2.1.3.1.1.20.10](#Appendix_A_Target_143): Exchange 2010 SP2, Exchange 2013, Exchange 2016, and Exchange 2019 use the value of DTSTART to derive the end time if both the DTEND and DURATION properties are not specified.

[<144> Section 2.1.3.1.1.20.10](#Appendix_A_Target_144): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<145> Section 2.1.3.1.1.20.10](#Appendix_A_Target_145): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<146> Section 2.1.3.1.1.20.10](#Appendix_A_Target_146): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export all day appointments in floating time.

[<147> Section 2.1.3.1.1.20.10](#Appendix_A_Target_147): Office Outlook 2007 exports non-recurring, non-all day appointments in UTC time.

[<148> Section 2.1.3.1.1.20.10.1](#Appendix_A_Target_148): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionRecur**.

[<149> Section 2.1.3.1.1.20.10.1](#Appendix_A_Target_149): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionStartDisplay**.

[<150> Section 2.1.3.1.1.20.10.1](#Appendix_A_Target_150): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionRecur**.

[<151> Section 2.1.3.1.1.20.10.1](#Appendix_A_Target_151): Office Outlook 2003, Office Outlook 2007, Exchange 2003, Exchange 2007, and the initial release version of Exchange 2010 do not export or import **PidLidAppointmentTimeZoneDefinitionStartDisplay**.

[<152> Section 2.1.3.1.1.20.10.2](#Appendix_A_Target_152): Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day.

[<153> Section 2.1.3.1.1.20.11](#Appendix_A_Target_153): For backwards compatibility, if the METHOD property of the VCALENDAR component is set to 'REPLY' or 'COUNTER', then Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 will export **PidTagBody** as both COMMENT and DESCRIPTION. In this same case, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 will import **PidTagBody** from DESCRIPTION if a COMMENT is not specified. Regardless of the METHOD property of the VCALENDAR, Exchange 2007 (when parsing iCalendar submitted via MIME) will import **PidTagBody** from DESCRIPTION, falling back on the COMMENT property if no DESCRIPTION is specified. Exchange 2010 will import **PidTagBody** from DESCRIPTION. Exchange 2010 SP2, Exchange 2013, Exchange 2016, and Exchange 2019 will import **PidTagBody** from COMMENT only if the METHOD property is set to 'REPLY' or 'COUNTER' and the DESCRIPTION property is not specified.

[<154> Section 2.1.3.1.1.20.11.1](#Appendix_A_Target_154): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the LANGUAGE parameter.

[<155> Section 2.1.3.1.1.20.12](#Appendix_A_Target_155): Office Outlook 2003 does not import or export the DURATION property.

[<156> Section 2.1.3.1.1.20.13](#Appendix_A_Target_156): Exchange 2003, Exchange 2007, Exchange 2007 SP1, Microsoft Exchange Server 2007 Service Pack 2 (SP2), Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 ignore all instances of EXDATE except the last one in the VEVENT. Exchange 2003, Exchange 2007 SP2, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 also ignore instances of EXDATE that have more than one value.

[<157> Section 2.1.3.1.1.20.13](#Appendix_A_Target_157): The initial release version of Exchange 2010 and Exchange 2010 SP1 ignore values of EXDATE that are specified in a time zone other than the time zone specified by **PidLidTimeZoneStruct**. Exchange 2010 SP2, Exchange 2013, Exchange 2016, and Exchange 2019 convert values of EXDATE to the time zone specified by **PidLidTimeZoneStruct**.

[<158> Section 2.1.3.1.1.20.13](#Appendix_A_Target_158): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not support the X-MICROSOFT-EXDATE property.

[<159> Section 2.1.3.1.1.20.13](#Appendix_A_Target_159): In certain cases, RecurrencePattern.DeletedInstanceDates will be exported as a X-MICROSOFT-EXDATE instead of an EXDATE. See section [2.1.3.1.1.20.39](#Section_4518dacf35f044d887a839bc57dad5c7). Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export EXDATEs with times set to noon in the time zone specified by **PidLidTimeZoneStruct**.

[<160> Section 2.1.3.1.1.20.13.2](#Appendix_A_Target_160): Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day.

[<161> Section 2.1.3.1.1.20.14](#Appendix_A_Target_161): Exchange 2003 and Exchange 2007 import LAST-MODIFIED as **PidLidAttendeeCriticalChange**.

[<162> Section 2.1.3.1.1.20.14](#Appendix_A_Target_162): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the LAST-MODIFIED property.

[<163> Section 2.1.3.1.1.20.15](#Appendix_A_Target_163): Office Outlook 2003 does not apply this filter.

[<164> Section 2.1.3.1.1.20.15](#Appendix_A_Target_164): Office Outlook 2003 does not apply this filter.

[<165> Section 2.1.3.1.1.20.15](#Appendix_A_Target_165): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<166> Section 2.1.3.1.1.20.15.1](#Appendix_A_Target_166): Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 import the ALTREP parameter on the LOCATION property to the **PidNameLocationUrl** (section [2.1.3.4.3](#Section_eceb81bed7854e9f828b10357845d4c7)) property.

[<167> Section 2.1.3.1.1.20.15.1](#Appendix_A_Target_167): Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export the **PidNameLocationUrl** property to the ALTREP parameter on the LOCATION property.

[<168> Section 2.1.3.1.1.20.15.2](#Appendix_A_Target_168): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the LANGUAGE parameter.

[<169> Section 2.1.3.1.1.20.16](#Appendix_A_Target_169): Office Outlook 2003 does not import the organizer property when the METHOD property has a value of 'REPLY'.

[<170> Section 2.1.3.1.1.20.16](#Appendix_A_Target_170): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export ATTACH properties encoded with base64 encoding.

[<171> Section 2.1.3.1.1.20.16](#Appendix_A_Target_171): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export ATTACH properties encoded with base64 encoding.

[<172> Section 2.1.3.1.1.20.16](#Appendix_A_Target_172): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not export ATTACH properties encoded with base64 encoding.

[<173> Section 2.1.3.1.1.20.16](#Appendix_A_Target_173): If the METHOD property of the iCalendar is 'REPLY', Office Outlook 2003 exports the first entry in the recipient table as an organizer, ignoring the constraints specified in section [2.1.3.1.1.20.16](#Section_088b8ca4199c4a93bd5f590dc9126319). For other values of the METHOD property, Office Outlook 2003 exports the [**Address Book object**](#gt_4792b6d3-b01a-43f6-aca4-42fc4e79a633) specified by **PidTagSentRepresentingEntryId** as an organizer.

[<174> Section 2.1.3.1.1.20.16](#Appendix_A_Target_174): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 omit the organizer property if no SMTP address is available.

[<175> Section 2.1.3.1.1.20.18](#Appendix_A_Target_175): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support RDATEs.

[<176> Section 2.1.3.1.1.20.18](#Appendix_A_Target_176): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support RDATEs.

[<177> Section 2.1.3.1.1.20.18](#Appendix_A_Target_177): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not support RDATEs.

[<178> Section 2.1.3.1.1.20.18.2](#Appendix_A_Target_178): Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day.

[<179> Section 2.1.3.1.1.20.20](#Appendix_A_Target_179): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 only import or export the RECURRENCE-ID property in the context of a VCALENDAR component with exactly one VEVENT child and with a METHOD property of value 'REQUEST', 'REPLY', or 'CANCEL'.

[<180> Section 2.1.3.1.1.20.20](#Appendix_A_Target_180): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 only import or export the RECURRENCE-ID property in the context of a VCALENDAR component with exactly one VEVENT child and with a METHOD property of value 'REQUEST', 'REPLY', or 'CANCEL'.

[<181> Section 2.1.3.1.1.20.20](#Appendix_A_Target_181): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 only import or export the RECURRENCE-ID property in the context of a VCALENDAR component with exactly one VEVENT child and with a METHOD property of value 'REQUEST', 'REPLY', or 'CANCEL'.

[<182> Section 2.1.3.1.1.20.20](#Appendix_A_Target_182): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 only import or export the RECURRENCE-ID property in the context of a VCALENDAR component with exactly one VEVENT child and with a METHOD property of value 'REQUEST', 'REPLY', or 'CANCEL'.

[<183> Section 2.1.3.1.1.20.20](#Appendix_A_Target_183): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 only import or export the RECURRENCE-ID property in the context of a VCALENDAR component with exactly one VEVENT child and with a METHOD property of value 'REQUEST', 'REPLY', or 'CANCEL'.

[<184> Section 2.1.3.1.1.20.20](#Appendix_A_Target_184): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 only import or export the RECURRENCE-ID property in the context of a VCALENDAR component with exactly one VEVENT child and with a METHOD property of value 'REQUEST', 'REPLY', or 'CANCEL'.

[<185> Section 2.1.3.1.1.20.20.2](#Appendix_A_Target_185): Office Outlook 2003 requires that a VALUE parameter be set to 'DATE' for both DTSTART and DTEND if the Calendar object is to be imported as all day.

[<186> Section 2.1.3.1.1.20.21](#Appendix_A_Target_186): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the RESOURCES property.

[<187> Section 2.1.3.1.1.20.21](#Appendix_A_Target_187): Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 consider all of the following to be whitespace characters: Unicode characters U+0009, U+000A, U+000B, U+000C, U+000D, U+0020, U+0085, U+00A0, U+1680, U+2000, U+2001, U+2002, U+2003, U+2004, U+2005, U+2006, U+2007, U+2008, U+2009, U+200A, U+200B, U+2028, U+2029, U+202F, U+3000.

[<188> Section 2.1.3.1.1.20.21](#Appendix_A_Target_188): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the RESOURCES property.

[<189> Section 2.1.3.1.1.20.21](#Appendix_A_Target_189): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the LAST-MODIFIED property.

[<190> Section 2.1.3.1.1.20.21](#Appendix_A_Target_190): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the RESOURCES property.

[<191> Section 2.1.3.1.1.20.22](#Appendix_A_Target_191): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Exchange 2003, and Exchange 2007 (when parsing iCalendar submitted via WebDAV) import a **PidLidAppointmentSequence** of 0x00000000 if no SEQUENCE property is specified.

[<192> Section 2.1.3.1.1.20.23](#Appendix_A_Target_192): Office Outlook 2003 does not import or export the STATUS property.

[<193> Section 2.1.3.1.1.20.24](#Appendix_A_Target_193): Office Outlook 2003 does not apply these filters.

[<194> Section 2.1.3.1.1.20.24](#Appendix_A_Target_194): Office Outlook 2003 does not apply these filters.

[<195> Section 2.1.3.1.1.20.24](#Appendix_A_Target_195): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<196> Section 2.1.3.1.1.20.24](#Appendix_A_Target_196): Office Outlook 2003 leaves **PidTagSubject** unset when no SUMMARY is present.

[<197> Section 2.1.3.1.1.20.24](#Appendix_A_Target_197): Office Outlook 2003 omits the SUMMARY property if **PidTagSubject** is unset or empty.

[<198> Section 2.1.3.1.1.20.24.1](#Appendix_A_Target_198): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the LANGUAGE parameter.

[<199> Section 2.1.3.1.1.20.24.1](#Appendix_A_Target_199): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the LANGUAGE parameter.

[<200> Section 2.1.3.1.1.20.25](#Appendix_A_Target_200): **Exchange 2003**, Exchange 2007, and Exchange 2010 map the TRANSP property directly to **PidNameCalendarTransparent**. Update Rollup 7 for Exchange Server 2007 Service Pack 3 (SP3), Update Rollup 2 for Exchange Server 2010 Service Pack 2 (SP2), Exchange 2013, Exchange 2016, and Exchange 2019 import the TRANSP property into **PidLidBusyStatus** if the X-MICROSOFT-CDO-BUSYSTATUS and X-MICROSOFT-MSNCALENDAR-BUSYSTATUS properties are absent.

[<201> Section 2.1.3.1.1.20.25](#Appendix_A_Target_201): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 map the TRANSP property directly to **PidNameCalendarTransparent**.

[<202> Section 2.1.3.1.1.20.25](#Appendix_A_Target_202): **Exchange 2003**, Exchange 2007, Exchange 2010, Office Outlook 2003, Office Outlook 2007, and Outlook 2010 do not support the value 0x00000004 for the **PidLidBusyStatus** property ([[MS-OXOCAL]](%5bMS-OXOCAL%5d.pdf#Section_09861fdec8e440289346e7c214cfdba1) section 2.2.1.2).

[<203> Section 2.1.3.1.1.20.26](#Appendix_A_Target_203): The ByteArrayID is case-sensitive in Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019.

[<204> Section 2.1.3.1.1.20.27](#Appendix_A_Target_204): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-ALT-DESC property.

[<205> Section 2.1.3.1.1.20.27](#Appendix_A_Target_205): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-ALT-DESC property.

[<206> Section 2.1.3.1.1.20.28](#Appendix_A_Target_206): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 check to see if DTEND falls on midnight in the time zone specified by DTSTART.

[<207> Section 2.1.3.1.1.20.28](#Appendix_A_Target_207): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-ALLDAYEVENT or X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT properties.

[<208> Section 2.1.3.1.1.20.28](#Appendix_A_Target_208): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<209> Section 2.1.3.1.1.20.28](#Appendix_A_Target_209): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not have logic to avoid splitting surrogate pairs.

[<210> Section 2.1.3.1.1.20.28](#Appendix_A_Target_210): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export X-MICROSOFT-CDO-ALLDAYEVENT.

[<211> Section 2.1.3.1.1.20.29](#Appendix_A_Target_211): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not import or export X-MICROSOFT-CDO-APPT-SEQUENCE.

[<212> Section 2.1.3.1.1.20.29](#Appendix_A_Target_212): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE.

[<213> Section 2.1.3.1.1.20.30](#Appendix_A_Target_213): Exchange 2003 and Exchange 2007 (when parsing iCalendar submitted via WebDAV) import and export the X-MICROSOFT-CDO-ATTENDEE-CRITICAL-CHANGE property.

[<214> Section 2.1.3.1.1.20.30](#Appendix_A_Target_214): Exchange 2003 and Exchange 2007 (when parsing iCalendar submitted via WebDAV) import and export the X-MICROSOFT-CDO-ATTENDEE-CRITICAL-CHANGE property.

[<215> Section 2.1.3.1.1.20.31](#Appendix_A_Target_215): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-BUSYSTATUS property.

[<216> Section 2.1.3.1.1.20.33](#Appendix_A_Target_216): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export an X-MICROSOFT-CDO-INSTTYPE with values: 0 if the appointment is non-recurring, 1 if the appointment is recurring, and 3 if the appointment is an exception of a recurring appointment.

[<217> Section 2.1.3.1.1.20.34](#Appendix_A_Target_217): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<218> Section 2.1.3.1.1.20.34](#Appendix_A_Target_218): Update Rollup 2 for Exchange 2010 SP2, Exchange 2013, Exchange 2016, and Exchange 2019 set the value of **PidLidBusyStatus** to 0x00000001 if the METHOD property is REQUEST and the X-MICROSOFT-CDO-INTENDEDSTATUS property is present.

[<219> Section 2.1.3.1.1.20.34](#Appendix_A_Target_219): Exchange 2010 does not copy the value of **PidLidBusyStatus** into the **PidLidIntendedBusyStatus** property. Update Rollup 2 for Exchange 2010 SP2, Exchange 2013, Exchange 2016, and Exchange 2019 do copy the value of **PidLidBusyStatus** into the **PidLidIntendedBusyStatus** property. Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<220> Section 2.1.3.1.1.20.34](#Appendix_A_Target_220): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<221> Section 2.1.3.1.1.20.34](#Appendix_A_Target_221): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<222> Section 2.1.3.1.1.20.35](#Appendix_A_Target_222): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not import or export the X-MICROSOFT-CDO-OWNERAPPTID property.

[<223> Section 2.1.3.1.1.20.36](#Appendix_A_Target_223): Exchange 2003 and Exchange 2007 (when parsing iCalendar submitted via WebDAV) import and export the X-MICROSOFT-CDO-OWNER-CRITICAL-CHANGE property.

[<224> Section 2.1.3.1.1.20.36](#Appendix_A_Target_224): Exchange 2003 and Exchange 2007 (when parsing iCalendar submitted via WebDAV) import and export the X-MICROSOFT-CDO-OWNER-CRITICAL-CHANGE property.

[<225> Section 2.1.3.1.1.20.37](#Appendix_A_Target_225): If the METHOD property has value 'REPLY', Exchange 2003 and Exchange 2007 (when parsing iCalendar submitted via WebDAV) will import X-MICROSOFT-CDO-REPLYTIME as **PidLidAttendeeCriticalChange** in addition to **PidLidAppointmentReplyTime**.

[<226> Section 2.1.3.1.1.20.37](#Appendix_A_Target_226): Exchange 2003 and Exchange 2007 (when parsing iCalendar submitted via WebDAV) import and export the X-MICROSOFT-CDO-REPLYTIME property.

[<227> Section 2.1.3.1.1.20.38](#Appendix_A_Target_227): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MICROSOFT-DISALLOW-COUNTER property.

[<228> Section 2.1.3.1.1.20.39](#Appendix_A_Target_228): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not import or export the X-MICROSOFT-EXDATE property.

[<229> Section 2.1.3.1.1.20.39](#Appendix_A_Target_229): Exchange 2003, Exchange 2007 (when parsing iCalendar submitted via WebDAV), Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not import or export the X-MICROSOFT-EXDATE property.

[<230> Section 2.1.3.1.1.20.40](#Appendix_A_Target_230): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, Exchange 2019, Office Outlook 2003, and Office Outlook 2007 do not import or export the X-MICROSOFT-ISDRAFT property. Specifically, on import, those implementations treat X-MICROSOFT-ISDRAFT as unset.

[<231> Section 2.1.3.1.1.20.40](#Appendix_A_Target_231): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, Exchange 2019, Office Outlook 2003, and Office Outlook 2007 do not import or export the X-MICROSOFT-ISDRAFT property. Specifically, on import, those implementations treat X-MICROSOFT-ISDRAFT as unset.

[<232> Section 2.1.3.1.1.20.41](#Appendix_A_Target_232): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MICROSOFT-MSNCALENDAR-ALLDAYEVENT property.

[<233> Section 2.1.3.1.1.20.42](#Appendix_A_Target_233): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MICROSOFT-MSNCALENDAR-BUSYSTATUS property.

[<234> Section 2.1.3.1.1.20.43](#Appendix_A_Target_234): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MICROSOFT-MSNCALENDAR-IMPORTANCE property.

[<235> Section 2.1.3.1.1.20.44](#Appendix_A_Target_235): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<236> Section 2.1.3.1.1.20.45.2](#Appendix_A_Target_236): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Exchange 2003, and Exchange 2007 (when parsing iCalendar submitted via WebDAV) do not import or export the X-MICROSOFT-RRULE property.

[<237> Section 2.1.3.1.1.20.46](#Appendix_A_Target_237): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-ALLOWEXTERNCHECK property.

[<238> Section 2.1.3.1.1.20.47](#Appendix_A_Target_238): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-APPTLASTSEQUENCE property.

[<239> Section 2.1.3.1.1.20.48](#Appendix_A_Target_239): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-APPTSEQTIME property.

[<240> Section 2.1.3.1.1.20.48](#Appendix_A_Target_240): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-APPTSEQTIME property.

[<241> Section 2.1.3.1.1.20.49](#Appendix_A_Target_241): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-AUTOFILLLOCATION property.

[<242> Section 2.1.3.1.1.20.50](#Appendix_A_Target_242): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-AUTOSTARTCHECK property.

[<243> Section 2.1.3.1.1.20.51](#Appendix_A_Target_243): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-COLLABORATEDOC property.

[<244> Section 2.1.3.1.1.20.52](#Appendix_A_Target_244): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-CONFCHECK property.

[<245> Section 2.1.3.1.1.20.53](#Appendix_A_Target_245): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-CONFTYPE property.

[<246> Section 2.1.3.1.1.20.54](#Appendix_A_Target_246): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-DIRECTORY property.

[<247> Section 2.1.3.1.1.20.55](#Appendix_A_Target_247): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-MWSURL property.

[<248> Section 2.1.3.1.1.20.56](#Appendix_A_Target_248): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-NETSHOWURL property.

[<249> Section 2.1.3.1.1.20.57](#Appendix_A_Target_249): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-ONLINEPASSWORD property.

[<250> Section 2.1.3.1.1.20.58](#Appendix_A_Target_250): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-ORGALIAS property.

[<251> Section 2.1.3.1.1.20.59](#Appendix_A_Target_251): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<252> Section 2.1.3.1.1.20.59](#Appendix_A_Target_252): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not set **PidLidAppointmentDuration**.

[<253> Section 2.1.3.1.1.20.60](#Appendix_A_Target_253): Regardless of the METHOD property of the VCALENDAR, Exchange 2003 and Office Outlook 2003 map DTSTART and DTEND to **PidLidAppointmentStartWhole** and **PidLidAppointmentEndWhole**, respectively. Exchange 2003 and Office Outlook 2003 ignore X-MS-OLK-ORIGINALSTART and X-MS-OLK-ORIGINALEND. Furthermore, Exchange 2003 and Office Outlook 2003 never export **PidLidAppointmentProposedStartWhole** or **PidLidAppointmentProposedEndWhole**.

[<254> Section 2.1.3.1.1.20.60](#Appendix_A_Target_254): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not set **PidLidAppointmentDuration**.

[<255> Section 2.1.3.1.1.20.61](#Appendix_A_Target_255): Office Outlook 2003, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not import or export the X-MS-OLK-SENDER property.

[<256> Section 2.1.3.1.1.20.61](#Appendix_A_Target_256): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE.

[<257> Section 2.1.3.1.1.20.61](#Appendix_A_Target_257): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE.

[<258> Section 2.1.3.1.1.20.61](#Appendix_A_Target_258): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE.

[<259> Section 2.1.3.1.1.20.61](#Appendix_A_Target_259): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE.

[<260> Section 2.1.3.1.1.20.61](#Appendix_A_Target_260): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE.

[<261> Section 2.1.3.1.1.20.61.1](#Appendix_A_Target_261): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export **PidLidAppointmentSequence** as X-MICROSOFT-CDO-APPT-SEQUENCE

[<262> Section 2.1.3.1.1.20.62](#Appendix_A_Target_262): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, and Exchange 2003 ignore TRIGGER properties that are specified as Date-Time.

[<263> Section 2.1.3.1.1.20.62](#Appendix_A_Target_263): In this case, Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 set **PidLidReminderDelta** to 0x0000000F for all Calendar objects.

[<264> Section 2.1.3.1.1.20.62](#Appendix_A_Target_264): Office Outlook 2003 does not set **PidLidReminderSignalTime**.

[<265> Section 2.1.3.1.1.20.62](#Appendix_A_Target_265): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, and Exchange 2003 ignore TRIGGER properties that are specified as Date-Time.

[<266> Section 2.1.3.2.1.2](#Appendix_A_Target_266): For Office Outlook 2003, the maximum INTERVAL of a YEARLY recurrence is 1.

[<267> Section 2.1.3.2.1.10](#Appendix_A_Target_267): Office Outlook 2003 does not apply this filter.

[<268> Section 2.1.3.2.1.11](#Appendix_A_Target_268): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 export an X-MICROSOFT-CDO-INSTTYPE with values: 0 if the appointment is non-recurring, 1 if the appointment is recurring, and 3 if the appointment is an exception of a recurring appointment.

[<269> Section 2.1.3.2.2](#Appendix_A_Target_269): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Exchange 2003, and Exchange 2007 (when parsing iCalendar submitted via WebDAV) do not import or export the X-MICROSOFT-RRULE property.

[<270> Section 2.1.3.2.2](#Appendix_A_Target_270): Exchange 2003, Exchange 2007, and Exchange 2010 do not set the **PidLidClipStart** property ([MS-OXOCAL] section 2.2.1.14) or the **PidLidClipEnd** property ([MS-OXOCAL] section 2.2.1.15). Exchange 2010 SP2, Exchange 2013, Exchange 2016, and Exchange 2019 set the **PidLidClipStart** and **PidLidClipEnd** properties as specified.

[<271> Section 2.1.3.2.2.1](#Appendix_A_Target_271): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<272> Section 2.1.3.2.2.1](#Appendix_A_Target_272): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<273> Section 2.1.3.2.2.1](#Appendix_A_Target_273): Exchange 2007 (when parsing iCalendar submitted via MIME), Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not follow this guidance.

[<274> Section 2.1.3.2.2.1](#Appendix_A_Target_274): Office Outlook 2003, Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 do not import or export the X-MICROSOFT-CDO-OWNERAPPTID property.

[<275> Section 2.1.3.2.2.1](#Appendix_A_Target_275): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 export 0x00002021 **EndType** values as a COUNT part instead of an UNTIL part.

[<276> Section 2.1.3.2.2.1](#Appendix_A_Target_276): If **EndType** is 0x00002021, Exchange 2007, Exchange 2007 SP1, and Exchange 2007 SP2 set the UNTIL recurrence part to midnight on the date specified by **EndDate**.

[<277> Section 2.1.3.2.2.1](#Appendix_A_Target_277): Office Outlook 2003 will export **FirstDOW** as the WKST recurrence part, regardless of whether or not it is relevant.

[<278> Section 2.1.3.2.2.2](#Appendix_A_Target_278): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<279> Section 2.1.3.2.2.2](#Appendix_A_Target_279): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<280> Section 2.1.3.2.2.2](#Appendix_A_Target_280): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 export 0x00002021 **EndType** values as a COUNT part instead of an UNTIL part.

[<281> Section 2.1.3.2.2.2](#Appendix_A_Target_281): If **EndType** is 0x00002021, Exchange 2007, Exchange 2007 SP1, and Exchange 2007 SP2 set the UNTIL recurrence part to midnight on the date specified by **EndDate**.

[<282> Section 2.1.3.2.2.2](#Appendix_A_Target_282): Office Outlook 2003 will export **FirstDOW** as the WKST recurrence part, regardless of whether it is relevant.

[<283> Section 2.1.3.2.2.3](#Appendix_A_Target_283): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<284> Section 2.1.3.2.2.3](#Appendix_A_Target_284): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 will promote MONTHLY recurrences with an INTERVAL of 12 to a YEARLY recurrence.

[<285> Section 2.1.3.2.2.3](#Appendix_A_Target_285): Office Outlook 2003 imports BYMONTHDAY directly into **PatternTypeSpecific.Month.Day**.

[<286> Section 2.1.3.2.2.3](#Appendix_A_Target_286): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<287> Section 2.1.3.2.2.3](#Appendix_A_Target_287): Office Outlook 2003 exports **PatternTypeSpecific.Month.Day** directly as BYMONTHDAY.

[<288> Section 2.1.3.2.2.3](#Appendix_A_Target_288): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 export 0x00002021 **EndType** values as a COUNT part instead of an UNTIL part.

[<289> Section 2.1.3.2.2.3](#Appendix_A_Target_289): If **EndType** is 0x00002021, Exchange 2007, Exchange 2007 SP1, and Exchange 2007 SP2 set the UNTIL recurrence part to midnight on the date specified by **EndDate**.

[<290> Section 2.1.3.2.2.3](#Appendix_A_Target_290): Office Outlook 2003 will export **FirstDOW** as the WKST recurrence part, regardless of whether it is relevant.

[<291> Section 2.1.3.2.2.4](#Appendix_A_Target_291): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<292> Section 2.1.3.2.2.4](#Appendix_A_Target_292): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 will promote MONTHLY recurrences with an INTERVAL of 12 to a YEARLY recurrence.

[<293> Section 2.1.3.2.2.4](#Appendix_A_Target_293): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<294> Section 2.1.3.2.2.4](#Appendix_A_Target_294): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 export 0x00002021 **EndType** values as a COUNT part instead of an UNTIL part.

[<295> Section 2.1.3.2.2.4](#Appendix_A_Target_295): If **EndType** is 0x00002021, Exchange 2007, Exchange 2007 SP1, and Exchange 2007 SP2 set the UNTIL recurrence part to midnight on the date specified by **EndDate**.

[<296> Section 2.1.3.2.2.4](#Appendix_A_Target_296): Office Outlook 2003 will export **FirstDOW** as the WKST recurrence part, regardless of whether or not it is relevant.

[<297> Section 2.1.3.2.2.5](#Appendix_A_Target_297): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<298> Section 2.1.3.2.2.5](#Appendix_A_Target_298): Office Outlook 2003 does not support Yearly Recurrence with an INTERVAL other than 1.

[<299> Section 2.1.3.2.2.5](#Appendix_A_Target_299): Office Outlook 2003 imports BYMONTHDAY directly into **PatternTypeSpecific.Month.Day**.

[<300> Section 2.1.3.2.2.5](#Appendix_A_Target_300): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<301> Section 2.1.3.2.2.5](#Appendix_A_Target_301): Office Outlook 2003 exports **PatternTypeSpecific.Month.Day** directly as BYMONTHDAY.

[<302> Section 2.1.3.2.2.5](#Appendix_A_Target_302): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 export 0x00002021 **EndType** values as a COUNT part instead of an UNTIL part.

[<303> Section 2.1.3.2.2.5](#Appendix_A_Target_303): If **EndType** is 0x00002021, Exchange 2007, Exchange 2007 SP1, and Exchange 2007 SP2 set the UNTIL recurrence part to midnight on the date specified by **EndDate**.

[<304> Section 2.1.3.2.2.5](#Appendix_A_Target_304): Office Outlook 2003 will export **FirstDOW** as the WKST recurrence part, regardless of whether or not it is relevant.

[<305> Section 2.1.3.2.2.6](#Appendix_A_Target_305): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<306> Section 2.1.3.2.2.6](#Appendix_A_Target_306): Office Outlook 2003 does not support Yearly Recurrence with an INTERVAL other than 1.

[<307> Section 2.1.3.2.2.6](#Appendix_A_Target_307): Office Outlook 2003 does not import or export the X-MICROSOFT-CDO-INTENDEDSTATUS or X-MICROSOFT-MSNCALENDAR-INTENDEDSTATUS properties.

[<308> Section 2.1.3.2.2.6](#Appendix_A_Target_308): Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, and Outlook 2019 export 0x00002021 **EndType** values as a COUNT part instead of an UNTIL part.

[<309> Section 2.1.3.2.2.6](#Appendix_A_Target_309): If **EndType** is 0x00002021, Exchange 2007, Exchange 2007 SP1, and Exchange 2007 SP2 set the UNTIL recurrence part to midnight on the date specified by **EndDate**.

[<310> Section 2.1.3.2.2.6](#Appendix_A_Target_310): Office Outlook 2003 will export **FirstDOW** as the WKST recurrence part, regardless of whether it is relevant.

[<311> Section 2.1.3.2.4](#Appendix_A_Target_311): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not implement this compatibility fix for Office Outlook 2003.

[<312> Section 2.1.3.2.4](#Appendix_A_Target_312): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not implement this compatibility fix for Office Outlook 2003.

[<313> Section 2.1.3.2.4](#Appendix_A_Target_313): Exchange 2003, Exchange 2007, Exchange 2010, Exchange 2013, Exchange 2016, and Exchange 2019 do not implement this compatibility fix for Office Outlook 2003.

[<314> Section 2.1.3.3](#Appendix_A_Target_314): Exchange 2007 sets these additional properties.

# Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as Major, Minor, or None.

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

* A document revision that incorporates changes to interoperability requirements.
* A document revision that captures changes to protocol functionality.

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

The revision class **None** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the relevant technical content is identical to the last released version.

The changes made to this document are listed in the following table. For more information, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com).

| Section | Description | Revision class |
| --- | --- | --- |
| [5](#Section_afb90409bcd24a449f1eca9340ec0508) Appendix A: Product Behavior | Updated list of supported products. | Major |

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